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**Datasheet for the decision
of 7 June 2023**

Case Number: T 1295/19 - 3.3.02

Application Number: 07757238.6

Publication Number: 1986494

IPC: A01N25/04, A01N25/28,
A01N25/30, A01N43/80, A01P13/02

Language of the proceedings: EN

Title of invention:

STABLE MIXTURES OF MICROENCAPSULATED AND NON-ENCAPSULATED
PESTICIDES

Patent Proprietor:

FMC CORPORATION

Opponent:

Appelt, Christian W.

Headword:

FMC / ENCAPSULATED CLOMAZONE

Relevant legal provisions:

EPC Art. 100(c), 56
RPBA Art. 12(4)

Keyword:

Added subject-matter (no)

Inventive step - (yes)

Decision by the opposition division on admittance of evidence
- overturned (no)

Decisions cited:

G 0007/93

Catchword:



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 1295/19 - 3.3.02

D E C I S I O N
of Technical Board of Appeal 3.3.02
of 7 June 2023

Appellant: Appelt, Christian W.
(Opponent) Boehmert & Boehmert
Pettenkoferstrasse 20-22
80336 München (DE)

Representative: Engelhard, Markus
Boehmert & Boehmert
Anwaltspartnerschaft mbB
Pettenkoferstrasse 22
80336 München (DE)

Respondent: FMC CORPORATION
(Patent Proprietor) 2929 Walnut Street
Philadelphia, PA 19104 (US)

Representative: Murgitroyd & Company
Murgitroyd House
165-169 Scotland Street
Glasgow G5 8PL (GB)

Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
1 March 2019 concerning maintenance of the
European Patent No. 1986494 in amended form**

Composition of the Board:

Chairman S. Bertrand
Members: M. Maremonti
M. Blasi

Summary of Facts and Submissions

- I. The appeal lodged by the opponent ("appellant") lies from the interlocutory decision of the opposition division, according to which European patent No. 1 986 494 ("the patent") as amended in the form of auxiliary request 1, the claims of which had been filed by letter dated 10 April 2018, and the invention to which it relates, meet the requirements of the EPC.
- II. Claim 1 of the request considered allowable by the opposition division is identical to claim 1 as granted and reads as follows:
- "1. A composition consisting of:*
- i) microencapsulated clomazone,*
 - ii) a dispersant selected from the group consisting of a) a lignin, b) a lignosulfonate salt and c) a lignosulfonate salt combined with the sodium salt of substituted naphthalene sulfonate formaldehyde polymer,*
 - iii) at least one salt selected from the group consisting of magnesium sulfate, sodium chloride, sodium nitrate and calcium chloride;*
 - iv) a non-encapsulated pesticide selected from the group consisting of napropamide, linuron and metribuzin;*
 - v) optionally at least one agent selected from an anti-foam agent, a pH balancing agent, a thickening agent and an anti-microbial agent; and*
 - vi) water."*
- III. An opposition was filed on the grounds of Article 100(a) and (c) EPC. During the opposition

proceedings, reference was made, *inter alia*, to the following documents:

- D1: WO 00/10392 A1
- D8: US 5,783,520
- D9: US 6,218,339 B1
- D10: US 5,049,182
- D13: Comparative examples filed by the patent proprietor with its reply to the notice of opposition
- D14: CA 1,120,745
- D15: GB 1 434 697
- D16: D.A. Knowles, "*Chemistry and technology of Agrochemical Formulations*", Springer Science+Business Media BV, 1998, pages 132 to 146, 154 to 157, 158 to 174 and 188
- D17a: WO 97/01574 A1
- D17b: EP 0 854 675 B1
- D18: Australian Government/Australian Pesticides and Veterinary Medicines Authority: "*Generation of storage stability data for agricultural chemical products*", available at: <https://apvma.gov.au/node/1042#References>
- D19: "*Analysis of Technical and Formulated Pesticides*", CIPAC Handbook, vol. I, 1970, pages 951 to 953

IV. The opposition division came to the following conclusion, *inter alia*, on the claims of the main request (i.e. the patent as granted) and of auxiliary request 1 (i.e. the claims as granted but with claim 2 deleted):

- The ground for opposition under Article 100(c) EPC prejudiced the maintenance of the patent as granted since the subject-matter of claim 2 as granted extended beyond the content of the application as filed.
- The ground for opposition under Article 100(c) EPC did not prejudice the maintenance of the patent on the basis of the claims of auxiliary request 1.
- The subject-matter of claim 1 of auxiliary request 1 involved an inventive step when starting from D1 as the closest prior art.

Moreover, the opposition division admitted documents D13, D18 and D19 into the proceedings, but it did not admit documents D14 to D16, D17a and D17b.

- V. In the statement of grounds of appeal and subsequent submissions, the appellant raised objections of added subject-matter and of a lack of inventive step against the claims of auxiliary request 1 underlying the appealed decision. Moreover, the appellant contested the opposition division's decision concerning the admittance/non-admittance of documents D13 to D16, D17a, D17b, D18 and D19.
- VI. In its reply to the appeal, the patent proprietor ("respondent") rebutted the appellant's arguments as regards the alleged lack of inventive step.
- VII. The parties were summoned to oral proceedings as per their requests. In preparation for the oral proceedings, the board issued a communication under Article 15(1) RPBA 2020, in which it expressed, *inter alia*, its preliminary opinion that the subject-matter of the claims of the request found allowable by the opposition division did not extend beyond the content of the application as filed. Moreover, the board

provisionally held that the opposition division exercised its discretion according to the right principles and in a reasonable way when it admitted documents D13, D18 and D19 but did not admit D14 to D16, D17a and D17b into the proceedings.

VIII. In their subsequent letters, the appellant and respondent replied to the board's communication only insofar as inventive step was concerned.

IX. Oral proceedings were held before the board on 7 June 2023 in the presence of both parties.

X. Final requests

The appellant requested that the appealed decision be set aside and that the patent be revoked. The appellant also requested that documents D13, D18 and D19 not be admitted into the proceedings and that documents D14 to D16, D17a and D17b be admitted into the proceedings.

The respondent requested, as its main request, that the appeal be dismissed, i.e. that the patent be maintained as amended in the form of auxiliary request 1 as found allowable by the opposition division, or, alternatively, that the patent be maintained in amended form on the basis of the claims of one of auxiliary requests 2 or 3 as filed before the opposition division by letter dated 4 December 2018. The respondent also requested that documents D13, D18 and D19 be admitted and that documents D14 to D16, D17a and D17b not be admitted into the proceedings.

XI. The appellant's submissions, where relevant to the present decision, are summarised in the following. For further details, reference is made to the reasons for the decision set out below.

Added subject-matter:

- Contrary to the decision of the opposition division, the specification of at least one salt and that of at least one further agent, under items (iii) and (v) of claim 1 of the main request, respectively, were not disclosed in the application as filed.
- Therefore, it had to be concluded that claim 1 of the main request contained added subject-matter.

Admittance/exclusion of documents D13 to D16, D17a, D17b, D18 and D19

- The opposition division erred in considering the late-filed documents D13, D18 and D19 to be *prima facie* relevant. These documents should thus be excluded from the proceedings.
- However, documents D14 to D16, D17a and D17b were highly relevant and should have been admitted.
- Therefore, the opposition division's decision concerning the admittance/exclusion of the aforementioned documents should be overturned.

Inventive step

- Document D1, in particular the composition described on pages 6 to 7, represented the closest prior art.
- The only distinguishing feature of claim 1 of the main request was the absence of alkyl naphthalene sulfonate.
- The only technical effect derivable from the absence of alkyl naphthalene sulfonate was the provision of a less hazardous and less irritant composition.

- The solution provided by claim 1 of the main request was obvious in view of D1 alone or in view of D1 in combination with the common general knowledge as represented by documents D8 to D10, D14 to D16, D17a and D17b.
- It had to be concluded that the subject-matter of claim 1 of the main request lacked an inventive step.

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

Added subject-matter:

- The opposition division correctly decided that claim 1 of the main request did not contain any subject-matter extending beyond the content of the application as filed. This decision should be confirmed.

Admittance/exclusion of documents D13 to D16, D17a, D17b, D18 and D19

- The opposition division correctly decided to admit documents D13, D18 and D19 and not to admit documents D14 to D16, D17a and D17b into the proceedings.
- Therefore, this decision should be upheld.

Inventive step

- Document D1, in particular example 2, represented the closest prior art. However, even when starting from the composition disclosed on pages 6 to 8 of D1 as proposed by the appellant, an inventive step had to be acknowledged.
- The subject-matter of claim 1 differed from this composition of D1 in the use of one of the lignin sulfonates as a dispersant, the absence of alkyl

naphthalene sulfonate, the selection of metribuzin as the second non-encapsulated herbicide and the nature of the calcium or sodium salts.

- The examples of the patent as well as the results reported in D13 demonstrated a reduction in the clomazone volatility achieved by the claimed composition.
- Even if the formulation of the objective technical problem proposed by the appellant, i.e. the provision of a less hazardous and less irritant composition, is accepted, at least the maintenance of the composition's stability should also be part of the formulation of the problem. This was because the composition's stability was directly linked to the maintenance of the integrity of the clomazone capsules, i.e. a low clomazone volatility, as explained in the patent, see paragraph [0005]. The examples of the patent, especially example 10, and the results of D13 demonstrated the maintenance of the composition's stability since a low clomazone volatility had been obtained with compositions falling under claim 1 of the main request.
- Even when looking for a less hazardous and less irritant composition, the skilled person would not have removed alkyl naphthalene sulfonate from the composition of D1 because the presence of this ionic dispersant was disclosed in D1 as being essential, together with a polymer surfactant like calcium lignosulfonate, for the maintenance of the integrity of the clomazone capsules and thus of the composition's stability. The skilled person would not have removed one of the essential components of the composition.

- It was accepted that D8 and D9 disclosed that lignosulfonates could assume the roles of a dispersant and a surfactant. However, lignosulfonate was used in these documents only in the process of preparing clomazone capsules and not to preserve the composition's stability when the clomazone capsules were mixed with a suspension of a second non-encapsulated herbicide.
- Thus, it had to be concluded that the subject-matter of claim 1 of the main request involved an inventive step.

Reasons for the Decision

Main request (auxiliary request 1 underlying the decision under appeal) - claim 1 - added subject-matter

1. Claim 1 of the main request is identical to claim 1 as granted and reads as follows (amendments to claim 1 as filed have been highlighted by the board):

"1. A composition ~~comprising~~ **consisting of:**

*i) a microencapsulated pesticide **clomazone,***

ii) a dispersant selected from the group consisting of a) a lignin, b) a lignosulfonate salt and c) a lignosulfonate salt combined with the sodium salt of substituted naphthalene sulfonate formaldehyde polymer, and

*iii) a **at least one** salt selected from the group consisting of magnesium sulfate, sodium chloride, sodium nitrate and calcium chloride;*

*iv) a non-encapsulated pesticide **selected from the group consisting of napropamide, linuron and metribuzin;***

v) optionally at least one agent selected from an anti-foam agent, a pH balancing agent, a thickening agent and an anti-microbial agent; and

vi) water."

1.1 The appellant objected to features (iii) and (v). These two objections are addressed in the following.

Feature (iii)

1.2 The appellant argued that the application as filed only disclosed "a salt" selected from the cited group of salts. This meant only one salt. The passage bridging pages 3 and 4 of the application as filed, referred to by the opposition division as the basis for the amendment made, mentioned merely an unspecified mixture of salts. The subsequent passage disclosed only one salt or a mixture of two salts. The examples of the application as filed also disclosed compositions including either a single salt or a mixture of two salts. Therefore, the application as filed did not disclose, *inter alia*, that three or even all four salts mentioned in claim 1 of the main request could be present in the composition. These embodiments were, however, covered by claim 1 of the main request. Also, the priority application could be taken as evidence that it was not the intention of the respondent to include an unlimited number of salts in the claimed composition. The priority application was, namely, devoid of any disclosure of mixtures of salts.

1.3 The board disagrees. Claim 1 as filed states that the composition comprises "a salt selected from the group consisting of magnesium sulfate, sodium chloride, sodium nitrate and calcium chloride". The skilled person would have read the expression "a salt" as meaning "at least one salt" and not "only one salt" as argued by the appellant. This view is confirmed by the

disclosure in the passage bridging pages 3 and 4 of the application as filed. This passage starts by stating "*The salt can be present in an amount...*". On account of the use of the words "*The salt*", reference is unambiguously made to the salt contained in the composition of the invention. This is defined previously in the passage bridging pages 2 and 3 of the application as filed and is stated to be selected from the group consisting of magnesium sulfate, sodium chloride, sodium nitrate and calcium chloride. In fact, this passage is followed by the detailed specification on pages 3 and 4 of the further components included in the composition. The sentence above, i.e. "*The salt can be present in an amount...*", is then immediately followed by the sentence specifying that the "*salt can be present as a single salt or a mixture of salts*". Sodium chloride, sodium nitrate and calcium chloride are examples of salts mentioned at the end of the latter sentence. These salts also belong to the group of salts listed in claim 1 as filed (ingredient (iii)). Thus, contrary to the appellant's view, this sentence does not refer to unspecified salts but, for the reasons set out above, to the salts included in the composition of the invention, namely the salts mentioned in claim 1 as filed as well as in claim 1 of the main request. Therefore, the application as filed directly and unambiguously discloses feature (iii) of claim 1 of the main request.

- 1.4 It is further noted that the content of the priority application does not play a role when deciding whether or not a certain claimed subject-matter is directly and unambiguously disclosed in the application as filed.

Feature (v)

- 1.5 The appellant argued that feature (v) was disclosed only on page 4, lines 5 to 6, of the application as filed. Here, however, it was stated that the cited components could only be present in the composition in combination. Claims 14, 15 and 17 as filed provided a disclosure for the inclusion of three of the four components mentioned, namely an anti-foam agent, a pH balancing agent and a thickening agent, but only individually since these claims referred back only to claim 1 as filed. In the examples, these same three components were used in combination. Therefore, the application as filed did not contain a basis for the broadening of feature (v) as defined in claim 1 of the main request to cover any combinations of the cited compounds.
- 1.6 This objection is not convincing either. The passage on page 4, lines 5 to 6, of the application as filed, to which the appellant makes reference, reads: "*The composition can further comprise an anti-foam agent; a pH balancing agent; a thickening agent and an anti-microbial agent*". The board concurs with the opposition division (see the appealed decision, page 8, point 42) that the skilled person would have directly and unambiguously read this sentence as meaning that the composition can optionally comprise one or more of the four components mentioned and not that the four components, if present, had to be included all together. This reading of the above passage on page 4 is confirmed by claims 14, 15 and 17 as filed, which define compositions containing only one of an anti-foam agent, a pH balancing agent and a thickening agent, respectively. Therefore, feature (v) of claim 1 of the main request does not contain subject-matter extending beyond the content of the application as filed.

1.7 For these reasons, the board has concluded that the appellant's objections of added subject-matter in relation to the main request are not convincing.

Documents D13, D18 and D19 - documents D14 to D16, D17a and D17b - admittance into/exclusion from the appeal proceedings

2. Under Article 12(4) RPBA 2007, applicable in the current case pursuant to Articles 24 and 25(1), (2) RPBA 2020, the board has the power to hold inadmissible, *inter alia*, facts or evidence which could have been presented or were not admitted in the first-instance proceedings, even though they were presented with the statement of grounds of appeal or the reply thereto, relate to the case under appeal and meet the requirements of Article 12(2) RPBA 2007.

2.1 The opposition division decided (see the decision under appeal, pages 5 and 6, points 24 to 30) to admit into the proceedings documents D13, D18 and D19 as submitted by the respondent, and decided not to admit documents D14 to D16, D17a and D17b as submitted by the appellant.

2.2 Each party requested that its documents be admitted into the appeal proceedings and that the other party's documents not be admitted; in the case of documents D13, D18 and D19, however, this amounted to a request to exclude them from the proceedings.

2.3 The appellant did not state according to which legal basis documents D13, D18 and D19 should be excluded. It was merely argued that these documents should not have been admitted because they were not *prima facie* relevant.

2.4 The board questions, considering the *ex officio* powers of the opposition division under Article 114 (1) EPC, whether documents admitted and considered by the

opposition division in opposition proceedings can subsequently be excluded by the board on appeal. However, whether or not there is a legal basis for the board to exclude documents D13, D18 and D19 from the proceedings does not need to be addressed in the circumstances of the present case, because the board does not find any fault in the way the opposition division exercised its discretion when deciding on the admittance or non-admittance of the documents.

2.5 In fact, according to established case law, if a first-instance department is required under the EPC to exercise its discretion in certain circumstances, such a department should have a certain degree of freedom when exercising that discretion, without interference from boards of appeal. Accordingly, it is not within the remit of the board to re-examine the case and to decide whether it would have exercised its own discretion in the same way. The board should only overrule a discretionary decision of an examining or opposition division if it concludes that that division exercised its discretion in accordance with the wrong principles, or without taking into account the right principles, or in an unreasonable way (see G 7/93, OJ EPO 1994, 775, reasons 2.6 and Case Law of the Boards of Appeal, 10th edition, 2022, IV.C.4.5.2).

2.6 In the present case, the opposition division decided (see the appealed decision, pages 5 and 6, points 24 to 30) to admit D13, D18 and D19 into the proceedings and not to admit D14 to D16, D17a and D17b, on the basis of the *prima facie* relevance of these documents. According to the Guidelines for Examination, E-VI.2 (the edition of November 2018, i.e. the version applicable at the time the decision under appeal was taken; see also the edition of March 2023), *prima facie* relevance is the

main criterion an opposition division should use when deciding on the admittance of late-filed evidence.

- 2.7 Therefore, the opposition division exercised its discretion according to the right principles and in a reasonable way.
- 2.8 As regards D13, in particular, it is further noted that this document was filed by the respondent with its reply to the notice of opposition. As a consequence, it was not late-filed and, thus, considerations as to its *prima facie* relevance are inconsequential since the opposition division did not have any discretion of non admitting this document.
- 2.9 In light of the above, the board sees no reason to overrule the decision of the opposition division relating to the admittance/non-admittance of the above documents. Thus, documents D13, D18 and D19 form part of the appeal proceedings, irrespective of whether or not there is a legal basis for excluding them. Documents D14 to D16, D17a and D17b remain excluded from these proceedings.

Main request (auxiliary request 1 underlying the decision under appeal) - claim 1 - inventive step under Article 56 EPC

3. Closest prior art

- 3.1 Both parties agreed that document D1 represented the closest prior art for the claimed subject-matter. In particular, the appellant pointed to the composition disclosed on pages 6 to 8 of D1, arguing that this embodiment had the most features in common with the composition defined in claim 1 of the main request. This embodiment should thus be used as the starting point for assessing inventive step. Although this selection was contested by the respondent, it too

argued inventive step starting from this embodiment of D1.

- 3.2 D1 discloses on page 6, line 6, to page 8, line 3, a composition named "*premixture*", comprising a combination of a clomazone capsule suspension and a suspension of non-encapsulated particles of another agricultural agent, the latter being, *inter alia*, metribuzin (page 6, line 14). The same passage of D1 also discloses the preparation of the particle suspension of the agricultural agent to be combined with the suspension of clomazone capsules. This preparation involves the combination of the non-encapsulated agricultural agent as distinct from clomazone (this agent is termed "*technical material*", see page 7, line 13), a surfactant such as calcium lignosulfonate (page 7, line 14), a dispersing agent such as alkyl naphthalene sulfonate (page 7, line 14), an antifoam agent (page 7, line 15) and water (page 7, line 15). After stirring and milling (page 7, lines 15 to 16), materials like xanthan gum (page 7, line 17, i.e. a thickening agent), propylene glycol, and calcium or sodium salts (page 7, line 18) are added.
- 3.3 According to D1 (page 6, lines 15 to 28), the suspension of clomazone capsules maintains its integrity when admixed with the suspension of the other agricultural agent. Both parties agreed at the oral proceedings that the maintenance of the clomazone capsules' integrity implied a reduction in the clomazone volatility of the composition, which in turn resulted in the composition's stability. A reduction in the clomazone volatility and thus the achievement of a stable composition is an object shared with the application as filed and the patent. In fact, according to the disclosure of the application as filed and of the patent, the integrity of clomazone capsules should

be maintained when these are mixed with a second non-encapsulated agricultural agent (see, in particular, page 2, lines 1 to 18, of the application as filed and paragraphs [0005] and [0006] of the patent).

3.4 Distinguishing features

3.4.1 The appellant argued that the subject-matter of claim 1 of the main request differed from the above composition of D1 only in that it did not contain alkyl naphthalene sulfonate.

3.4.2 However, the board notes that claim 1 of the main request requires the presence in the composition of "*at least one salt selected from the group consisting of magnesium sulfate, sodium chloride, sodium nitrate and calcium chloride*", whereas the above composition of D1 contains calcium or sodium salts in general.

3.4.3 Therefore, the distinguishing features of claim 1 at issue are:

- the absence of alkyl naphthalene sulfonate;
- the selection of at least one of sodium chloride, sodium nitrate or calcium chloride as the calcium or sodium salts.

3.5 Objective technical problem

3.5.1 The appellant argued that even if the selection of at least one of sodium chloride, sodium nitrate or calcium chloride was regarded as a distinguishing feature (see second distinguishing feature above), no technical effect was linked to this selection.

3.5.2 As regards the first distinguishing feature, the appellant submitted that neither the examples of the patent nor the results reported in D13 demonstrated any reduction in the volatility of clomazone as a result of the removal of alkyl naphthalene sulfonate. The only

technical effect deriving from the absence of alkyl naphthalene sulfonate could be the provision of a less hazardous and less irritant composition, since alkyl naphthalene sulfonate was known to have a hazardous character and be irritant to eyes, skin and respiratory tract.

- 3.5.3 Therefore, according to the appellant, the objective technical problem was "*the provision of an alternative composition comprising clomazone and a second herbicide selected from the group consisting of napropamide, linuron and metribuzin which composition is less hazardous*".
- 3.5.4 The board agrees with the appellant that no technical effect is described in the application as filed or the patent as deriving from the selection of at least one of sodium chloride, sodium nitrate or calcium chloride as the calcium or sodium salts. Even the respondent did not rely on this distinguishing feature for arguing the presence of an inventive step.
- 3.5.5 As regards the absence of alkyl naphthalene sulfonate, the board can accept, for the sake of argument and in the appellant's favour, that this leads to a less hazardous and less irritant composition. However, the board concurs with the respondent that the examples of the patent and the application as filed, especially example 10 and the results reported in the table bridging pages 6 and 7 of the patent (page 12 of the application as filed), demonstrate that compositions according to claim 1 of the main request (compositions of examples 2, 3 and 5 to 8), i.e. those that do not contain any alkyl naphthalene sulfonate, exhibit low clomazone volatility. In other words, the integrity of the clomazone's capsules is maintained and the

composition remains stable even in the absence of alkyl naphthalene sulfonate.

3.5.6 Therefore, the board concurs with the respondent that the objective technical problem should at least be seen as being the provision of a less irritant and less hazardous composition, while maintaining the integrity of the clomazone capsules and therefore the stability of the composition.

3.6 Obviousness of the solution

3.6.1 As a solution to the above-mentioned objective technical problem, claim 1 of the main request defines a composition, which, *inter alia*, does not contain any alkyl naphthalene sulfonate.

3.6.2 The appellant argued that the skilled person faced with the problem of providing a less hazardous and less irritant composition would inevitably have considered alkyl naphthalene sulfonate as the prime candidate to be omitted from the composition of D1. The skilled person would certainly not have considered leaving out the agricultural agents, i.e. clomazone and the second agricultural agent. The other agents mentioned in the "*premixture*" composition of D1 were calcium lignosulfonate, an antifoam agent, water, xanthan gum, propylene glycol and calcium or sodium salts, none of which were irritant or hazardous. Moreover, the fact that alkyl naphthalene sulfonate was used in the "*premixture*" composition of D1 as a dispersing agent would not have deterred the skilled person from omitting it from the composition either. The reason for this is that the skilled person would have immediately recognised that calcium lignosulfonate was also present in the "*premixture*" of D1. It was known that lignosulfonates acted not only as a surfactant but also as a dispersing agent. In this context, the appellant

referred to documents D8 and D9. D8 disclosed in column 8, lines 51 and 52, that lignosulfonate acted as a surfactant. D9 disclosed in the table in column 11 that sodium lignosulfonate acted as a dispersant, while in claim 15 it was disclosed as a surfactant. Therefore, the skilled person would have recognised that lignosulfonate could assume both roles, namely that of both surfactant and dispersant. Thus, the skilled person would not have expected the removal of alkyl naphthalene sulfonate from the "premixture" of D1 to affect the stability of the composition.

3.6.3 The board disagrees. The "premixture" of D1 referred to under item 3.2 above is stated to contain both a copolymer surfactant, "*such as a calcium lignosulfonate*" and an ionic dispersing agent, "*e.g., alkyl naphthalene sulfonate*". This "premixture" of D1 is further illustrated in example 2 of D1 (page 9). Also here, both a polymeric surfactant and alkyl naphthalene sulfonate are contained in the composition comprising clomazone capsules and a second non-encapsulated agricultural agent (sulfentrazone). Hence, according to the teaching of D1 (page 6, lines 18 to 28), it is under these conditions, i.e. in the presence of both a polymeric surfactant and an ionic dispersing agent, especially alkyl naphthalene sulfonate, that the clomazone capsules' integrity and thus the composition's stability are maintained. In other words, both components are disclosed in D1 as being essential for guaranteeing the composition's stability.

3.6.4 As pointed out by the respondent at the oral proceedings, lignosulfonate is used in both D8 and D9 (D8: column 3, lines 10 to 28; D9: column 4, lines 13 to 52) in the process of preparing clomazone capsules. There is no indication in these documents that the use of lignosulfonate alone could preserve the capsules'

integrity even when the clomazone capsules are mixed with a suspension of a second non-encapsulated agricultural agent. In fact, according to both the application as filed (page 2, lines 1 to 12, and the identical passage in paragraph [0005] of the patent) and D1 (page 1, lines 9 to 19, and page 6, lines 15 to 16), it is precisely when this mixing takes place that the capsules' integrity cannot be maintained.

- 3.6.5 As a consequence, the skilled person looking for a solution to the objective technical problem identified above and considering the teaching of D8 and D9 would not have had a reasonable expectation that, by removing alkyl naphthalene sulfonate, the resulting composition, though less hazardous and irritant, would also have maintained its stability in terms of the clomazone capsules' integrity.
- 3.6.6 In the written proceedings (see Annex 2 to the statement of grounds of appeal, pages 2 to 3), the appellant also referred to D10 as being representative of the common general knowledge to be combined with the teaching of D1. It was argued that D10 disclosed combinations of encapsulated pesticides and non-encapsulated napropamide, i.e. one of the non-encapsulated pesticides mentioned in claim 1 of the main request. D10 further disclosed the additional use of adjuvants, including a thickening agent. Therefore, the presence of further agents, e.g. thickening agents, in formulations comprising encapsulated and non-encapsulated herbicides was known in the art.
- 3.6.7 However, as set out above, a composition comprising encapsulated clomazone in combination with a non-encapsulated herbicide and a thickening agent, e.g. xanthan gum, is already known from D1 (see above). The appellant has not explained by means of the problem-solution approach why the skilled person would have

combined the teachings of D1 and D10 when looking for a solution to the aforementioned objective technical problem, and why this combination would have led to the subject-matter of claim 1 of the main request. The board also fails to see how the combination of D1 and D10 would have rendered obvious the subject-matter of claim 1 of the main request.

3.6.8 In the written proceedings (see Annex 2 to the statement of grounds of appeal, pages 3 to 10), the appellant further referred to D14 to D16, D17a and D17b as being representative of the common general knowledge to be combined with the teaching of D1. However, for the reasons given above, these documents remain excluded from these proceedings and therefore do not have to be addressed.

3.7 For these reasons, the board has concluded that the subject-matter of claim 1 of the main request is not obvious when starting from D1 as the closest prior art under consideration of the teachings of D8, D9 and D10.

3.8 No other inventive-step objections were raised by the appellant. Therefore, the board has concluded that the subject-matter of claim 1 of the main request involves an inventive step within the meaning of Article 56 EPC.

Conclusion

4. None of the appellant's objections have been found to be convincing. Therefore, the main request is allowable.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:



N. Maslin

S. Bertrand

Decision electronically authenticated