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**Datasheet for the decision
of 13 January 2021**

Case Number: T 2607/16 - 3.3.02

Application Number: 11727066.0

Publication Number: 2579714

IPC: A01N25/28, A01N25/06,
A01N37/40, A01N57/20,
B01J13/16, A01N25/04

Language of the proceedings: EN

Title of invention:

MICROENCAPSULATED OILS FOR CONTROLLING PESTICIDE SPRAY DRIFT

Patent Proprietor:

Dow AgroSciences LLC

Opponents:

BASF SE
SYNGENTA LIMITED

Headword:

Relevant legal provisions:

EPC Art. 54, 56, 83, 99(1), 114(2)
EPC R. 42(1)(b), 76(2)(c), 116
RPBA Art. 12(4)

Keyword:

Late submitted material - evidence admitted (no)

Sufficiency of disclosure - (yes)

Novelty - (yes)

Inventive step - (yes)

Decisions cited:

G 0007/93, T 0019/90, T 0890/02, T 0063/06, T 2020/09,

T 0338/10, T 1227/14, T 0467/15, T 0487/16, T 2603/18

Catchword:



Beschwerdekammern

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Case Number: T 2607/16 - 3.3.02

D E C I S I O N
of Technical Board of Appeal 3.3.02
of 13 January 2021

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Decision under appeal: **Interlocutory decision of the Opposition
Division of the European Patent Office posted on
31 October 2016 concerning maintenance of the
European Patent No. 2579714 in amended form.**

Composition of the Board:

Chairman	M. O. Müller
Members:	P. O'Sullivan
	P. de Heij

Summary of Facts and Submissions

I. The appeals of both opponents and the patent proprietor lie from the decision of the opposition division according to which European patent 2 579 714 in a form amended according to the first auxiliary request filed during oral proceedings, met the requirements of the EPC.

II. The patent was opposed under Article 100(a) (novelty and inventive step) and (b) EPC.

III. The following documents, cited during opposition proceedings, were invoked by the parties during appeal proceedings:

- D2: US 5,783,520
- D3: WO 2009/098232 A1
- D8: B. Perrin, Pesticide Outlook - April 2000, 68-71
- D18: US 6,797,673 B1
- D29: WO 02/068111 A1
- D48: Loveland Products, Inc. List of products including Weather Gard Complete, 1998
- D56: S. Wilson et al., Proc. ISAA 2013, 337-343
- D57: N. Western et al., Pesticide Science 1999, 55, 640-642

IV. With its statement of grounds of appeal, opponent 1 filed the following document:

- D64 Production information sheet, Nufarm Li 700®

V. With its statement of grounds of appeal, opponent 2 filed the following documents:

- D62 J-O. Kong *et al.*, Journal of Nematology 39(1), pages 31-36
- D63 Declaration of Dr Martine de Heer dated 24 February 2017

VI. With its reply to the statements of grounds of appeal the patent proprietor filed the following document:

- D65 Patent proprietor's experimental report

VII. The independent claims of the patent as granted read as follows:

"1. A method to reduce spray drift during the application of an aqueous pesticidal spray mixture which comprises incorporating into the aqueous pesticidal spray mixture from 0.01 to 5 percent vol/vol of a microencapsulated oil.

7. An in-can premix aqueous composition which comprises from 5 to 70 weight percent of at least one pesticide and from 0.05 to 10 weight percent of a microencapsulated oil suspended in the composition, in which the capsule size of the microencapsulated oil is from 0.1 to 1 μm [μ]."

VIII. Requests

The patent proprietor requested, as far as relevant to the present decision, that the contested decision be set aside and the patent be maintained as granted (main request), or alternatively on the basis of one of auxiliary requests 1 to 11 filed with the reply to the

statements of grounds of appeal, or auxiliary requests 12 to 15 filed with the letter of 8 December 2020.

The patent proprietor also requested that documents D18, D48, D56, D57 and D64 not be admitted into appeal proceedings.

In their statements of grounds of appeal the opponents requested that the contested decision be set aside and the patent be revoked in its entirety.

Opponent 1 additionally requested that document D57, not admitted by the opposition division, be admitted into the proceedings.

Opponent 2 additionally requested that the opposition division's decision not to admit D18 and D48 be set aside and that said documents be admitted into the proceedings.

- IX. In a communication pursuant to Article 15(1) RPBA sent in preparation for oral proceedings, the board set out its preliminary opinion. Therein, the board *inter alia* provided the opinion that D64 was not to be admitted into appeal proceedings.
- X. With letter dated 24 August 2020 opponent 1 withdrew its appeal - and thus its request that the patent be revoked - and announced that it would not appear at the oral proceedings scheduled for 8 January 2021.

Opponent 1 is therefore party as of right to the present appeal proceedings.

- XI. With letter dated 23 November 2020 opponent 2 informed the board that it would not attend oral proceedings scheduled for 8 January 2021.
- XII. With a letter dated 21 December 2020 the parties were informed of the rescheduling of oral proceedings to 13 January 2021.
- XIII. Oral proceedings were held on 13 January 2021 in the presence of the patent proprietor and in the absence of the opponents. During oral proceedings the arguments of the patent proprietor convinced the board not to admit D18, D48 and D57 into appeal proceedings, which insofar as D57 was concerned was contrary to the board's preliminary opinion as set out in the communication sent pursuant to Article 15(1) RPBA.
- XIV. The opponents' arguments, insofar as relevant to the present decision, may be summarised as follows:

Admittance - documents

D18

The opposition division's decision not to admit D18 into the proceedings was to be overturned. Although not substantiated with the notice of opposition, it was regarded as the closest prior art in examination proceedings, it was thus well known to the patent proprietor. The late substantiation filed with the letter of 27 July 2016 did not constitute an abuse of procedure, nor was it a matter of tactics or strategy. Rather, it was simply an oversight. In any case, two months in advance of oral proceedings provided sufficient time for the patent proprietor to prepare. Furthermore, the opposition division were wrong to

exclude D18 on the basis that it was not a better starting point in the assessment of inventive step than D3 or D8.

D48

D48 was to be admitted into appeal proceedings. Although it was only substantiated later with the letter of 27 July 2016, it had been cited with the notice of opposition and represented information well known to the skilled person.

D56

The decision of the opposition division to admit D56 into the proceedings was to be upheld. D56 was filed only with the letter of 27 July 2016 because the opponent had not been aware of it before that. It was thus not in a position to file it earlier. D56 was *prima facie* relevant as the authors thereof were the same as the inventors of the contested patent and the subject-matter was the same. Furthermore, the patent proprietor had had sufficient time to study the document.

D57

The opposition division's decision not to admit D57 into the proceedings was to be overturned. D57 was submitted by opponent 1 at such a late stage not for tactical reasons but as a complement to D56, filed by opponent 2 on 27 July 2016, about two weeks earlier. The conclusion of the opposition division that D57 was not more relevant than other cited prior art documents was incorrect. D57 was to be seen as *prima facie*

relevant, and hence the decision not to admit D57 was incorrect.

D64

D64 was to be admitted into appeal proceedings. Since it was cited in D56, and the authors of D56 were the inventors of the contested patent, D64 was well known to the patent proprietor. Furthermore, since D64 was cited in D56 as the starting point for development, it was *prima facie* relevant for the assessment of inventive step.

Main request (patent as granted)

Sufficiency of disclosure - Article 100(b) EPC

The invention defined in claims 1 and 7 of the main request was not sufficiently disclosed. Documents D56 and D63 provided evidence in this regard. The burden of proof lay with the patent proprietor.

Novelty - Articles 100(a) and 54 EPC

The subject-matter of claim 7 lacked novelty over the disclosures in D2, D3 and D29.

Inventive step - Articles 100(a) and 56 EPC

The claimed subject-matter lacked inventive step in view of

- the technical problem not being solved over the whole scope of the claims (claims 1 and 7), or a technical effect lacking (claim 7);
- D3 alone (claim 7) or in combination with D8 (claim 1); and

- D29 alone (claim 7)

XV. The patent proprietor's arguments, insofar as relevant to the present decision, may be summarised as follows:

Admittance - documents

In general

The opponents filed several documents after the expiry of the time limit pursuant to Article 99(1) EPC. Furthermore, opponent 2 in particular had submerged the patent proprietor in a deluge of paper from the outset of proceedings with the notice of opposition, citing thirty-five documents while only providing substantiation for three. Despite the request of both the patent proprietor and the opposition division in opposition proceedings to indicate the relevance of said documents, opponent 2 waited a further seven months to provide said information for only some of the documents cited, without any accompanying justification. These facts clearly indicated a deliberate tactical strategy in order to improve the opponent's case. In particular, the opponents changed their case with regard to inventive step on numerous occasions. A shotgun approach was employed in which the opposition proceedings were treated as a forum within which as many inventive step attacks as desired could be freely developed, at any point in the proceedings, in the hope that one would succeed. Such behaviour was not consistent with the presence of time limits, such as those under Article 99(1) EPC, and Rule 116(1) EPC. These circumstances should be taken into account when exercising discretion and justify the non-admission of the documents in question into the appeal proceedings.

D18

Although filed with the notice of opposition, D18 was only substantiated later with the letter of 27 July 2016 and was therefore to be considered late filed. The opposition division exercised its discretion correctly in not admitting D18 into the proceedings. In particular, in contrast to that stated by opponent 2 in the letter dated 27 July 2016, D18 did not disclose that methyl soyate was used as anti-spray drift agent. It was therefore not *prima facie* relevant. Furthermore, the fairness of the proceedings (*supra*) were negatively affected by the filing behaviour of opponent 2 with regard to D18.

D48

Although D48 was filed with the notice of opposition, it was substantiated only with the letter of opponent 2 dated 27 July 2016 and was thus to be considered late filed. It was not to be admitted into appeal proceedings. The admittance thereof was not even specifically addressed by the opponents in first instance proceedings despite the patent proprietor's request not to admit it. Furthermore, at no point during opposition proceedings had D48 been invoked by the opponents as a potential closest prior art document, such that the attack starting from D48 submitted with the statement of grounds of appeal of opponent 2 was a new attack filed for the first time in appeal proceedings. Finally, the fairness of the proceedings (*supra*) were negatively affected by the filing behaviour of opponent 2 with regard to D48.

D56

Not having been filed within the time limit of Article 99(1) EPC, D56 should not be admitted into appeal proceedings.

D57

D57 neither disclosed the reduction in spray drift of a composition comprising a pesticide, nor the microencapsulation of an oil. The opposition division was therefore correct to decide that D57 was not *prima facie* relevant. In fact, during oral proceedings before the opposition division it had not been submitted as a suitable closest prior art document. Finally, the fairness of the proceedings (*supra*) were negatively affected by the filing behaviour of opponent 2 with regard to D57. Not only was this document filed after the time limit of Article 99(1) EPC, it was also filed after the time limit set under Rule 116(1) EPC.

D64

Document D64 filed by opponent 1 with the statement of grounds of appeal was late filed and not more relevant than D18. It was used by the opponent in a new inventive step attack filed for the first time in appeal proceedings, and was thus not to be admitted by the board.

Main request (patent as granted)

Sufficiency of disclosure - Article 100(b) EPC

The invention defined in claims 1 and 7 of the main request was sufficiently disclosed. D56 was irrelevant

to the question of whether spray drift was reduced during the application of an aqueous pesticidal spray mixture, as required by claim 1. No further evidence had been filed casting doubt on whether the claimed subject-matter could be carried out by the skilled person. The burden of proof in this regard rested with the opponents, and it had not been discharged.

Novelty - Articles 100(a) and 54 EPC

The subject-matter of claim 7 was novel over the disclosures in D2, D3 and D29.

Inventive step - Articles 100(a) and 56 EPC

The claimed subject-matter involved an inventive step over D3. With regard to claim 1, D3 did not address spray drift reduction and hence was not a suitable closest prior art disclosure for the assessment of inventive step. With regard to claim 7, the examples in the patent as well as D65 demonstrated an improved physical stability linked to the capsule size. The problem was thus the provision of an in-can premix aqueous composition with improved physical stability, and the solution provided in claim 7 was not obvious in view of D3.

Reasons for the Decision

Main request (patent as granted)

1. Admittance - D56
 - 1.1 D56 is a journal article filed by opponent 2 with the letter of 27 July 2016 in support of its arguments regarding sufficiency of disclosure and inventive step. D56 was admitted into opposition proceedings by the opposition division.
 - 1.2 The patent proprietor did not specifically request to exclude D56 from the appeal procedure. However, D56 is embraced in the general request set out in its reply to the grounds of appeal (page 1, final paragraph) according to which the non admittance of all documents not filed within the time limit of Article 99(1) EPC was requested.
 - 1.3 The board decided to reject the patent proprietor's request not to admit D56 into the proceedings. Since the decision in the present case is in favour of the patent proprietor, there is no need for the board to provide reasons in this regard.
 - 1.4 Hence, the decision of the opposition division to admit D56 into the proceedings is upheld. D56 is consequently part of the appeal proceedings.

2. Sufficiency of disclosure - Article 100(b) EPC

2.1 Opponent 2 submitted with the statement of grounds of appeal that the invention defined in claims 1 and 7 of the first auxiliary request was not sufficiently disclosed. Since claim 1 of the present main request is identical to that of the first auxiliary request, the same arguments apply. Since claim 7 of the main request is broader than that of the first auxiliary request, it follows that the relevant objection also applies to this claim.

2.2 Claim 1 of the main request is directed to a method to reduce spray drift during the application of an aqueous pesticide spray mixture which comprises incorporating into the aqueous pesticidal spray mixture from 0.01 to 5 percent vol/vol of a microencapsulated oil.

2.3 The arguments of opponent 2 were based on the disclosures of D56 and D63.

2.4 D56 is a journal article concerned with elucidating the (at the time not well understood) mechanism behind the lowering of the fraction of fine particles ("driftable fines") in agricultural sprays when emulsion-based (i.e. oil containing aqueous) spray solutions are employed (abstract). One of several mechanistic proposals theorised in D56 is that the effect was due to elongation or stretching of oil droplets in the spray sheet, caused by sheer forces in the nozzle orifice. The resulting stored energy was released as the droplets rebound to their original spherical shape upon nozzle exit, resulting in a shortening of the spray sheet growth wavelength. This led to break-up closer to the nozzle where the spray sheet was thicker, and explained the formation of larger droplets and thus

of less driftable fines (D56, page 337, last line - page 338, line 15). A key common characteristic of this and other mechanistic proposals was the necessity that the suspended particles be deformable. Thus, the study in D56 is concerned with varying the deformability of emulsion droplets in a systematic manner to determine the impact thereof on spray break-up and resultant fine droplet production. This was achieved in D56 by rendering methyl soyate (the "oil") emulsion droplets systematically more rigid by encapsulating them in a cross-linked polyurea shell (page 338, first full paragraph), and studying the effect of the increased rigidity on droplet size.

- 2.5 According to the authors of D56, the results confirmed the above theory: deformation of the oil droplets was a necessary element enabling the reduction in driftable fines. The deformation was reduced by increasing droplet rigidity by way of encapsulation; the effect increased as the capsule wall thickness increased ("Results and discussion", paragraph bridging pages 339 and 340). The results are also depicted in figure 1.

Thus, in short, D56 teaches that microencapsulation of an oil reduces its ability to reduce spray drift in an emulsion.

- 2.6 As a purpose-directed method claim, claim 1 includes as a functional feature thereof the requirement that spray drift is reduced during application of an aqueous pesticidal spray mixture. Therefore, in order to be able to carry out the invention, the person skilled in the art, based on common general knowledge and/or the information provided in the patent, and without undue effort, must be capable of reducing spray drift by

incorporating the microencapsulated oil within the proportions recited.

- 2.7 The opponent argued that the skilled person was unable to carry out the subject-matter of claim 1 since D56 demonstrated that spray drift actually increased when the wall thickness of the encapsulation of the oil was increased. The capsule wall thickness was therefore an essential feature of the invention which determined whether there was spray drift or not and the invention was not supported over the whole scope of the claim.
- 2.8 This objection is based on a comparison **with aqueous solutions to which non-encapsulated oils were added**. The board however agrees with the patent proprietor that in order for claim 1 to be sufficiently disclosed, all that is required is that the skilled person, given the information in the patent or common general knowledge, is capable of reducing the spray drift of "an aqueous pesticidal spray mixture", since this is the effect that is stated in the claim. Claim 1 does not require that spray drift is reduced compared to a composition of an aqueous pesticidal spray mixture "including an oil", as alleged by the opponents.
- 2.9 Thus, on one hand examples 1-4 of the patent demonstrate that, **compared to an aqueous pesticidal spray mixture**, spray drift is reduced by the addition of a microencapsulated oil, and on the other hand, D56 provides no information in this regard.
- 2.10 The opponent furthermore referred to D63. D63 is an expert declaration which states the opinion that due to the large number of variables in claim 1, undue experimentation, i.e. a research program, would be required to determine whether there would be a

reduction in spray drift or not upon addition of a microencapsulated oil.

2.11 According to the opponent, the statements in D63 (in combination with the evidence in D56) were sufficient to establish, to the appropriate standard of proof, the existence of a serious doubt as to whether the skilled person would be able to work the invention over the scope of the claim, without requiring undue experimentation. As set out in D63, verifiable facts were provided by the examples in the patent, which were extremely limited compared to the broad scope of claim 1, and the fact that the patent lacked any explanation regarding how those examples could be extrapolated to other embodiments falling under the claim.

2.12 The board is of the following view. It is established jurisprudence that a successful objection of lack of sufficiency of disclosure presupposes that there are serious doubts, substantiated by verifiable facts (T 19/90, OJ 1990, 476 and T 890/02, OJ 2005, 497). In order to establish insufficiency of disclosure in *inter-partes* proceedings, the burden of proof lies with the opponent to establish, on the balance of probabilities, that a skilled person reading the patent, using common general knowledge, would be unable to carry out the invention.

2.13 The opponent argued that in the present case, the burden of proof was reversed and lay with the patent proprietor. The board agrees to the extent that in certain circumstances the patent proprietor may be required to provide evidence supporting sufficiency. For example, when the patent does not give any information as to how a feature of the invention can be put into practice, only a weak presumption exists that

the invention is sufficiently disclosed. In such a case, the opponent can discharge his burden by arguing that common general knowledge would not enable the skilled person to put this feature into practice (for example, T 63/06, reasons, 3.3; T 338/10, reasons, 8-13). However, in view of the examples provided in the patent as set out above, this situation does not apply to the present case.

- 2.14 As set out above, there is no evidence on file casting doubt on whether the invention defined in claim 1 can be carried out by the skilled person. The opponent has therefore not discharged the burden of proof.
- 2.15 The opponent furthermore submitted that independent claim 7 was not sufficiently disclosed on the basis that there was no evidence that the composition thereof had improved physical stability, as alleged in the description (patent, paragraph [0024]).
- 2.16 The board disagrees. Claim 7 is directed to an in-can premix aqueous composition which, unlike method claim 1, does not include any effect as a functional technical feature thereof. In order to meet the requirement of sufficient disclosure therefore, it is sufficient for the skilled person to be capable of preparing the composition. Since there is no evidence on file indicating that this may not be possible, the board concludes that claim 7 meets the requirements of sufficient disclosure.
- 2.17 It follows that the invention defined in claims 1 and 7 is disclosed in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

3. Article 100(a) and 54 EPC - Novelty

The subject-matter of claim 7 of the main request was found by the opposition division to lack novelty over the disclosure in D29. In appeal proceedings, the opponents maintained this position and reiterated further objections first raised in opposition proceedings, with regard to a lack of novelty vis à vis D2 and D3.

Claim 7 at issue is directed to an in-can premix aqueous composition which comprises from 5 to 70 weight percent of at least one pesticide and from 0.05 to 10 weight percent of a microencapsulated oil suspended in the composition, in which the capsule size of the microencapsulated oil is from 0.1 to 1 μm .

3.1 D2

3.1.1 Opponent 1 submitted that the subject-matter of claim 7 lacked novelty over the disclosure in patent document D2, which disclosed an aqueous dispersion of oil and herbicide-filled microcapsules (column 2, lines 33-36). Referring to the description of D2 and not the specific examples thereof, it was argued that the capsules of D2 had a diameter of 1-100 μm (column 3, line 60-63). Furthermore, according to the opponent's calculations, the composition disclosed in D2 comprised at least 60g/l encapsulated pesticide, and oil comprised within the capsules comprised at least 0.97 weight percent of the composition (D2, column 2, lines 32-48; section 3.1 of the opponent's statement of grounds of appeal). Accordingly, the ingredients, the capsule size and the amounts of the composition of D2 fell within the scope of claim 7, the subject-matter of which therefore lacked novelty.

3.1.2 The board is of the view that D2 does not directly and unambiguously disclose a composition falling within the scope of claim 7. Rather, D2 lacks a single embodiment disclosing the features of claim 7, and multiple selections are required from generally applicable ranges provided in the description of D2 in order to arrive at the claimed subject-matter. More specifically, even accepting the analysis of opponent 1 provided above, the following selections have to be made:

- a capsule size of 0.1 to 1 microns from the capsule size of 1-100 μm disclosed in column 3, line 60-63 of D2;
- a pesticide amount of 5 to 70 wt%, from the amount of at least 60g/l (about at least 6 wt%), derivable from the opponent's analysis as set out above;
- 0.05 to 10 wt% of a microencapsulated oil, from at least 0.97 weight percent oil derivable from the opponent's analysis as set out above.

3.1.3 Furthermore, the wording of claim 7 has been misconstrued by the opponents. The claim is clearly worded to include two specific components **within** the aqueous composition, namely:

- 5 to 70 weight percent of at least one pesticide;
and
- 0.05 to 10 weight percent of a microencapsulated oil suspended in the composition, in which the capsule size of the microencapsulated oil is from 0.1 to 1 μm .

3.1.4 Claim 7 thus refers to an aqueous composition and defines this composition in its first half sentence ("An in-can premix aqueous composition which comprises

from 5 to 70 weight percent of at least one pesticide") as to comprise 5 to 70 wt% of pesticide. The claim then, in its second half sentence ("and from 0.05 to 10 weight percent of a microencapsulated oil suspended in the composition"), by means of the wording "in the composition", requires that suspended in this composition (which comprises the 5 to 70 wt% pesticide), there is a microencapsulated oil. Hence, the claim defines two phases: the aqueous phase comprising 5 to 70 wt% pesticide, and the microencapsulated oil phase suspended therein. This interpretation is consistent with the examples of the patent in which capsule formation is complete before addition of the desired pesticide, which is consequently present only in the aqueous phase (see example 2, capsule formation in paragraph [0031] and subsequent mixing with an aqueous solution of the pesticide in paragraph [0032]). Claim 7 thus excludes embodiments where the aqueous phase is devoid of pesticide. Consequently, since the pesticide in D2 is exclusively comprised within the microcapsule, this document also for this reason does not disclose the subject-matter of claim 7.

3.2 D3

3.2.1 Opponent 1 submitted that the subject-matter of claim 7 lacked novelty over the disclosure in patent document D3. According to the opponent, the subject-matter of claim 7 at issue was distinguished from the composition of example 8 of D3 only in the capsule size. Example 8 of D3 employed microcapsules produced according to example 2 (D3, page 23, line 18) having a capsule size of 2.68 μm , i.e. outside the range recited in claim 7. However, the description of D3 provided a range for the capsule diameter of from 0.5 to 100 μm (D3, page 3,

lines 33-34), which overlapped with the range recited in claim 7. According to the opponent, there was no indication in D3 that the parameter range recited in the description could not be combined with the teaching of example 8 to arrive at an embodiment falling within the scope of claim 7 at issue. If theoretically D3 were to be amended to include a claim directed to the subject-matter of example 8, but generalised with said capsule diameter range provided in the description, such a claim would not offend against Article 123(2) EPC. Thus, based on the same standard, D3 must be considered to disclose that embodiment, and thus, the subject-matter of claim 7 at issue.

3.2.2 The board disagrees. According to established jurisprudence, in order to conclude a lack of novelty, the claimed subject-matter must be directly and unambiguously derivable from the prior art. In fact, the board does not agree that a generalisation of the teaching of example 8 in the manner described by the opponent would meet the requirements of Article 123(2) EPC, since, as noted by the patent proprietor (reply to the grounds of appeal, page 7, paragraphs 5 and 6), both the surfactant and the oil employed in example 8 would be expected to have an impact on the capsule size obtained. Consequently, there is no basis for the combination of the general feature in the description concerning the capsule size with the specific features of example 8 concerning the surfactant and oil employed.

3.2.3 The subject-matter of claim 7 is thus not directly and unambiguously derivable from the disclosure in D3, and is consequently novel over said disclosure.

3.3 D29

3.3.1 The opponents submitted that example 7 of patent document D29 disclosed a composition according to claim 7.

Example 7 of D29 discloses an aqueous composition comprising microcapsules prepared according to the general procedure of D29, example 3. This composition comprises:

- 23.2 wt% of an oil phase of which 10 wt% is an oil (octyl methyl cinnamate) and 10 wt% is an insecticide (picoxystrobin), the oil phase being in the form of droplets having a diameter of 2-10 microns;
- encapsulation components Beetle-80 and Q43; and
- an aqueous phase containing surfactants NP30 and NP8.

3.3.2 It was not disputed by the opponents that example 7 of D29 related to an embodiment in which the pesticide was present inside the microcapsule. Rather, in arguing a lack of novelty over contested claim 7, the opponents submitted that claim 7 did not distinguish between a situation wherein the pesticide mentioned in claim 7 is present inside or outside the microcapsule recited (opponent 1: reply to the statement of grounds, page 2, second paragraph; opponent 2: statement of grounds of appeal, 3.7-3.10).

3.3.3 As noted above with regard to novelty vis à vis D2, while not excluding the possibility that some pesticide may be present inside the microcapsules (cf. patent, paragraphs [0015] and [0026]), contested claim 7 requires the first ingredient, the pesticide, to be

present in an amount from 5 to 70 weight percent, in the aqueous phase, i.e. outside of the microcapsule.

3.3.4 Since there is no disclosure in example 7 of D29 of pesticides in any amount in the aqueous phase, it must be concluded that at least for this reason, the subject-matter of contested claim 7 is novel over D29.

3.4 It follows from the foregoing that the ground for opposition under Article 100(a) in combination with Article 54 EPC does not prejudice the maintenance of the patent as granted.

4. Admittance - documents relevant to the grounds for opposition under Article 100(a) and 56 EPC

4.1 D18

4.1.1 D18 is a patent document filed by opponent 2 with the notice of opposition. Its relevance to the grounds on which the opposition was based was however not addressed therein. The opposition division decided not to admit D18 into the proceedings on the grounds that it was not *prima facie* more relevant than other documents already admitted into the proceedings (contested decision, page 20, penultimate paragraph). Opponent 2 requested that the opposition division's decision not to admit D18 be set aside and the document be admitted into the proceedings.

4.1.2 In assessing whether to overturn the decision of the opposition division not to admit D18, the board must determine whether the opposition division exercised its discretion correctly. It is not the board's task to re-examine the case and to decide whether it would have exercised discretion in the same way. The board

overrules the decision of the first instance department only if it either failed to exercise its discretion in accordance with the right principles or exercised its discretion in an unreasonable way (G7/93, OJ 1994, 775, reasons 2.6).

- 4.1.3 It is undisputed that the notice of opposition was completely silent with regard to the relevance of D18 (then numbered D7) to the grounds on which the opposition was based. Thus, although it was formally cited within the time limit of Article 99(1) EPC, the opponent did not fulfill its duty in accordance with Rule 76(2)(c) EPC to present its case concerning D18 in the notice of opposition. As a consequence, the board considers D18 duly filed only on the date on which it was substantiated by the opponent, namely with the letter of 27 July 2016. D18 was thus late filed. The opposition division therefore had the discretionary power pursuant to Article 114(2) EPC to decide on the admittance of D18 into the proceedings.
- 4.1.4 As set out above, the opposition division based its decision of not admitting D18 on the ground that it was not *prima facie* relevant. This is a correct principle for assessing the admittance of a late-filed document.
- 4.1.5 Concerning the question of the *prima facie* relevance of D18, it is not the task of the board to put itself into the shoes of the opposition division. Furthermore, "*prima facie*" means "at first sight", which by definition precludes a detailed assessment of the document in question. In the letter dated 27 July 2016 in which the relevance of D18 was first substantiated, the opponent stated that it disclosed the use of methyl soyate (used in the examples of the contested patent as the encapsulated oil) as a spray reducing agent (letter

of 27 July 2016, page 7, first and second paragraphs). However, as noted by the patent proprietor (reply to the statement of grounds of appeal, page 11, second paragraph), this is not an accurate portrayal of the disclosure of D18. D18 rather indicates that lecithin, and not methyl soyate, is the material responsible for drift reduction. A methyl ester (i.e. methyl soyate) is said in D18 to function rather as a viscosity reducing agent (D18, column 3, lines 27-39; column 4, line 66 - column 5, line 5).

- 4.1.6 In view of this observation, the conclusion of the opposition division that D18 was not *prima facie* more relevant than the documents already on file, is not unreasonable.
- 4.1.7 The opposition division therefore exercised its discretion in accordance with the right principles and in a reasonable way. There is therefore no reason for the board to overturn the decision not to admit D18 into the proceedings.
- 4.1.8 Furthermore, as submitted by the proprietor, it is indisputable that the filing behaviour of opponent 2 negatively affected the fairness of the proceedings before the opposition division. Only three of the thirty five documents filed by opponent 2 with its notice of opposition were substantiated therein with regard to their relevance to the grounds on which the opposition was based. With the letter of 6 November 2015 sent in reply to the notices of opposition, the patent proprietor objected to the lack of any reasoned statement with regard to the thirty two remaining documents not substantiated in the notice of opposition, filed detailed arguments in this regard, and requested that said documents not be admitted into

the proceedings (point 2 of said letter). Subsequently, in the annex to the summons to oral proceedings dated 21 December 2015 (point 3), the opposition division stated that the filing of said documents without substantiation ran counter *inter alia* to the principle of good faith, and therein requested that the relevance of the documents be indicated clearly and in detail by opponent 2 in the shortest possible time in order to allow the parties and the opposition division to take position thereon. Despite the patent proprietor's detailed submissions and the explicit request of the opposition division as set out above, a response was filed by opponent 2 only on 27 July 2016, the final day for making written submission pursuant to Rule 116 EPC, and more than eight months after the initial objection was raised by the patent proprietor. This filing behavior was unfair to the patent proprietor and further justifies the decision of the opposition division not to admit D18.

4.1.9 Additionally, whether document D18 was regarded as the closest prior art during examination proceedings, as argued by opponent 2, does not play a role in the question of admittance. Documents which may have played a part in pre-grant proceedings and the objections for which they were previously used are not automatically part of the opposition proceedings. Furthermore, the fact that D18 was cited in the contested patent is also irrelevant, as it was introduced therein during examination to comply with the requirements of Rule 42(1)(b) EPC.

4.1.10 Consequently, the board decided to reject the request of opponent 2 to set aside the opposition division's decision not to admit D18 and to admit the document into the proceedings.

4.2 D48

4.2.1 Similarly to D18, D48 was filed by opponent 2 (then numbered D34) with the notice of opposition, and substantiated only with the letter dated 27 July 2016. In contrast to D18, the admittance of D48 was not addressed at all in the contested decision, despite the patent proprietor's request not to admit it as one of the thirty-two unsubstantiated documents filed with the notice of appeal (supra). This is not surprising, since D48 was neither selected by the opponents as a potential closest prior art document at the oral proceedings (Minutes points 48-51), nor was it invoked as closest prior art in the letter of opponent 2 dated 27 July 2016, in which it was cited merely to "*show as well that methyl soyate is a well-known spray drift control agent*" (page 7, first paragraph).

4.2.2 D48 is a list taken from a compendium of herbicide adjuvants. The product name of one of those adjuvants (table, penultimate entry, second page) is "Weather Gard Complete", and comprises as principle functioning agents "Lecithin, phosphate ester, methyl esters of fatty acid and polydimethylsiloxane" (said entry, third column). The "adjuvant category" (entry, second column) is stated to be "Deposition (Drift Control) and/or retention agent plus defoamer *and* water conditioning agent". Thus the subject-matter of D48, while similar to that of D18, is less relevant, since in contrast to D18 (supra), a specific purpose is not assigned to the respective ingredients of the composition.

4.2.3 As noted above, D48 although cited in the notice of opposition, was only first substantiated in the letter of opponent 2 dated 27 July 2016. As a consequence,

similarly to D18, the board considers D48 duly filed only on the date on which it was substantiated by the opponent, namely with the letter of 27 July 2016. It was therefore submitted after the expiry of the nine month period under Article 99(1) EPC and is late-filed.

- 4.2.4 In the board's view, the provisions of Article 99(1) EPC in conjunction with Rule 76(2)(c) EPC also apply in appeal proceedings. It is therefore at the board's discretion whether to admit D48 into the appeal proceedings or not (Article 114(2) EPC). As set out above, one of the criteria to be applied to the admittance of a late-file document is whether it is *prima facie* relevant. As noted above, the subject-matter of D48 is less relevant than that of D18. Therefore the board decided not to admit D48 into the proceedings pursuant to Article 114(2) EPC (in agreement with T 2020/09, reasons, 6). With regard to the fairness of the proceedings, the same applies to D48 as set out for D18, above (paragraph 4.1.8).
- 4.2.5 In addition, the allegation of fact that the claimed subject-matter lacked inventive step in view of D48 as the closest prior art was submitted for the first time with the statement of grounds of appeal of opponent 2 only. This new objection could and should have been submitted in opposition proceedings. Presenting this objection at the appeal stage merely constitutes an attempt by opponent 2 to use the appeal proceedings as a second opposition proceedings. This runs counter to the main purpose of appeal proceedings, namely to provide a judicial review of the appealed decision (Article 12(2) RPBA 2020). Article 12(4) RPBA 2007 thus also prejudices the admittance of D48.

Hence, the board decided not to admit D48 into the appeal proceedings.

4.3 D57

4.3.1 D57 is a journal article filed by opponent 1 with the letter of 11 August 2016 in support of its arguments regarding inventive step. Not being filed within the nine-month time limit under Article 99(1) EPC, D57 is late filed.

4.3.2 It was not admitted into opposition proceedings on the basis that it was not *prima facie* more relevant than other documents on file, in particular D3 and D8, and was therefore not highly likely to change the outcome of the proceedings (contested decision, page 20, penultimate paragraph; concerning document "D56a").

4.3.3 Both opponents requested that the decision of the opposition division not to admit D57 be overturned. The opposition division's conclusion that D57 was not more relevant than other cited prior art was incorrect, and thus D57 was to be seen as *prima facie* relevant.

4.3.4 As noted above, the board overrules the decision of the first instance department only if this either failed to exercise its discretion in accordance with the right principles or exercised its discretion in an unreasonable way. *Prima facie* relevance is a correct criterion to be applied by the opposition division in deciding whether to admit a late-filed document.

4.3.5 As set out above, the assessment of *prima facie* relevance by definition does not require a detailed assessment of the document in question. As noted by the patent proprietor, D57 does not disclose the reduction

of spray drift in a composition comprising a pesticide, nor does it address the microencapsulation of the oil.

- 4.3.6 In consequence, the conclusion of the opposition division that D57 was not *prima facie* more relevant than the documents already on file, is not unreasonable. The opposition division therefore exercised its discretion in accordance with the right principles and in a reasonable way.
- 4.3.7 D57 differs from D18 and D48 (*supra*) *inter alia* in that it was filed by opponent 1 after the final date for making written submissions pursuant to Rule 116(1) EPC. Consequently, the conclusion provided above for D18 regarding the fairness of the proceedings (paragraph 4.1.8) applies *a fortiori* to D57.

The board therefore decided to reject the opponents' request to overturn the decision of the opposition division not to admit D57.

- 4.4 D64
- 4.4.1 D64 is a datasheet for a product named "LI 700". It was filed by opponent 1 with the statement of grounds of appeal. The patent proprietor requested that D64 not be admitted into appeal proceedings.
- 4.4.2 Opponent 1 based an entirely new inventive step objection on D64 as closest prior art (page 4 of the statement of grounds of appeal, third and second last paragraphs). It submitted that since it was cited in D56, and the authors of D56 were the inventors of the contested patent, D64 was well known to the patent proprietor. Furthermore, since D64 was cited in D56 as

the starting point for development, it was *prima facie* relevant for the assessment of inventive step.

4.4.3 According to Article 12(4) RPBA 2007, the board has the discretion to hold inadmissible *inter alia* evidence which could have been presented in the first instance proceedings.

4.4.4 In the same way as for the new objection starting from D48 as closest prior art, the board is of the view that D64 could and should have been filed by opponent 1 in proceedings before the opposition division. There was no justification for filing D64 later with the statement of grounds of appeal.

The board thus decided not to admit D64 into the appeal proceedings pursuant to Article 12(4) RPBA 2007.

5. Articles 100(a) and 56 EPC - Inventive step

5.1 In addition to the inventive step objections based on documents not admitted into the proceedings as set out above, the opponents also submitted that the claimed subject-matter lacked inventive step in view of

- the technical problem not being solved over the whole scope of the claims (claims 1 and 7), or a technical effect being absent (claim 7);
- D3 alone or in combination with D8 (claims 1 and 7); and
- D29 alone (claim 7)

5.2 Regarding the argument that an inventive step was lacking due to the technical problem not being solved over the whole scope of the claims (based on the

evidence in D56), or due to claim 7 lacking any technical effect, the board is of the following view.

It is established jurisprudence that whether or not claimed subject-matter fulfills the requirements of Article 56 EPC can be assessed by applying the "problem and solution approach". This consists essentially of (a) identifying the "closest prior art", (b) assessing the technical results (or effects) achieved by the claimed invention compared to the closest prior art, (c) defining the technical problem to be solved as the object of the invention to achieve these results, and (d) examining whether or not a skilled person, having regard to the state of the art, would have implemented the claimed technical features in order to obtain the results achieved by the claimed invention.

Since steps b) and c) in this approach can only take place after the closest prior art has been established according to step a), the opponent's allegation that a certain technical problem is not solved or a certain effect is not obtained, as such, without the prior identification of the closest prior art from which the assessment is to begin, is not sufficient to deny inventive step.

5.3 D3 as closest prior art

According to the patent, the invention concerns a method to reduce spray drift during the application of agricultural chemicals by incorporating microencapsulated oil compositions into an aqueous spray mixture (paragraph [0001]).

D3 concerns aqueous suspensions of microcapsules comprising an oil within the microcapsules (page 1,

lines 3-5). D3 sets out *inter alia* to provide suspension concentrates with better stability (page 2, lines 29-42). Example 8 of D3 ("Tabelle 2", page 25) concerns the use of microcapsules (prepared according to example 2; D3, page 23, line 18) to prepare a formulation which is more stable compared to a formulation without capsules, having a capsule size of 2.68 μm . D3 does not address spray drift reduction.

5.3.1 Contested claim 1

With regard to claim 1, opponent 2 submitted in writing that in view of the teaching in D8 that microcapsules in formulations can reduce spray drift, the skilled person would have been aware that the microcapsules of example 2 of D3 would also have the effect of reducing spray drift (statement of grounds of appeal, paragraph 4.47).

The patent proprietor submitted that since D3 did not disclose the reduction of spray drift, it was not a suitable closest prior art disclosure for the subject-matter of claim 1.

The board is unable to understand the objection of the opponent from the very brief arguments provided in this regard as set out above. The opponent failed to explain why, in contrast to the opinion of the patent proprietor, D3 did in fact represent a suitable starting point for the skilled person. Furthermore, neither the specific distinguishing features of claim 1 over D3, the effects thereof, nor the technical problem to be solved in view of that effect (if any) are derivable from the opponent's submissions. Rather, it is merely stated that the skilled person would combine the disclosure of D8 with D3 to arrive at the claimed

subject-matter, without any explanation as to why the skilled person would do so. In this regard, it is not the task of the board, *ex-officio* and on behalf of the opponent, to assess inventive step by developing a problem-solution approach starting from D3. For this reason, the opponent's arguments must fail.

Since no further arguments in this regard were submitted by the opponents, it must be concluded that the subject-matter of claim 1 involves an inventive step.

5.3.2 Contested claim 7

Distinguishing feature and technical problem

The opponents submitted that the subject-matter of claim 7 lacked inventive step in view of D3 as closest prior art.

As set out above under novelty, the subject-matter of claim 7 is distinguished from the disclosure in D3 by the feature whereby the capsule size of the microencapsulated oil is from 0.1 to 1 μm .

Opponent 2 argued that there was no evidence of the alleged technical effect of improved physical stability (paragraph [0024] of the patent) linked to the distinguishing feature, and that as a consequence, the technical problem was the provision of an alternative aqueous composition.

The board disagrees. In the patent, the microcapsules prepared according to examples 1 and 2 have capsule sizes of 0.34 μm and 0.72 μm respectively, thus falling within the capsule size range recited in claim 7.

Emulsions prepared from said capsules did not phase separate after 30 days of storage (example 1, lines 10 and 12-15; example 2, lines 40 and 45-47). In contrast, D65, a phase separation experiment filed by the patent proprietor with its reply to the statements of grounds of appeal, demonstrates photographically that an emulsion comprising encapsulated methyl soyate particles having an average diameter of 2.5 μm separate into a lower aqueous layer and an upper oil layer. As noted in D65 and confirmed by the examples in the patent mentioned above, capsule sizes with an average diameter within the claimed range showed good storage stability. Since there is no evidence casting doubt on this result, the technical effect of improved stability has been demonstrated for the claimed capsule size range.

The objective technical problem underlying claim 7 is therefore the provision of an in-can premix aqueous composition having improved physical stability.

Obviousness

The solution provided in claim 7 is not obvious in view of D3. As noted by the patent proprietor, although D3 teaches a general range for the capsule size of 0,5 to 100 μm , the preferred range is from 1 to 20 μm (claim 7: 0.1 to 1 μm). The capsules of example 2 have a size of 2.68 μm (D3, page 23, line 18), while other exemplified capsules in D3 even have much larger sizes ("Tabelle 1", page 26). Thus D3 does not provide the skilled person faced with the problem as formulated above with any indication that the solution would lie in the provision of a composition according to claim 7 having the specific capsule size recited.

It follows that the subject-matter of both claims 1 and 7 involves an inventive step.

5.3.3 The board furthermore notes in the context of the foregoing that D65 was filed by the patent proprietor with the reply to the statements of grounds of appeal. Its admittance into appeal proceedings was not challenged by the opponents in written proceedings. Even so, the board has discretion pursuant to Article 12(4) RPBA 2007 not to admit a document if it could have been filed during first instance proceedings. The objection regarding inventive step of claim 7 starting from D3 was raised for the first time with the letter of opponent 2 dated 27 July 2016. However, neither the minutes of the oral proceedings nor the contested decision record that D3 was addressed at the oral proceedings in this context. Since the objection was reiterated by opponent 2 with the statement of grounds of appeal (4.43 - 4.46), the filing of D65 with the patent proprietor's reply is considered as a timely response to this objection. Furthermore, D65 does not represent an entirely new defence, and merely supports the statement in the patent that the size range recited in the claim led to improved physical stability. For this reason, the board did not question the admittance of D65 into the proceedings.

5.4 D29 as closest prior art

Opponent 2 submitted that the subject-matter of claim 7 of the first auxiliary request lacked inventive step over example 7 of D29 (statement of grounds of appeal, paragraph 4.48). The subject-matter of claim 7 of the main request differs therefrom in that it specifies a broader weight percent range of at least one pesticide

(5 to 70 weight percent) than claim 7 of the first auxiliary request (20 to 70 weight percent). Hence, the same arguments apply to this claim.

As set out above, the subject-matter of claim 7 is distinguished from example 7 of D29 at least in that it discloses 5-70 weight percent of at least one pesticide in the aqueous phase, while example 7 of D29 does not disclose the presence of pesticides in any amount in the aqueous phase.

The opponents did not submit any arguments with regard to the assessment of inventive step from this viewpoint, in particular the technical problem solved by this distinguishing features and a line of reasoning concerning the non-obviousness of the solution. It is not for the board in inter-partes proceedings to perform the tasks of the opponent. Nor does the board need to assess *ex officio* whether the subject-matter of claim 7 involves an inventive step. For this reason, for lack of any arguments to the contrary, the subject-matter of claim 7 must be held to involve an inventive step over the disclosure in D29.

- 5.5 It follows from the foregoing that the ground for opposition under Article 100(a) EPC in combination with Article 56 EPC does not prejudice the maintenance of the patent as granted.
6. The main request is consequently allowable.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The patent is maintained unamended.

The Registrar:

The Chairman:



N. Maslin

M. O. Müller

Decision electronically authenticated