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**Datasheet for the decision
of 23 April 2021**

Case Number: T 0222/16 - 3.3.06

Application Number: 08788601.6

Publication Number: 2173838

IPC: C10L1/14, C10L1/224, C10L1/22,
C10L10/18

Language of the proceedings: EN

Title of invention:
USE OF A DISPERSANT TO IMPROVE OXIDATION STABILITY OF A FUEL
COMPOSITION

Patent Proprietor:
Innospec Limited

Opponent:
Afton Chemical Corporation

Headword:
Innospec / oxidation stability of biofuels

Relevant legal provisions:
EPC Art. 123(2), 123(3)
RPBA Art. 12(4)

Keyword:

Amendments - added subject-matter (yes) - broadening of claim
(yes)

Request not admitted by the opposition division - admitted

Decisions cited:

T 0712/16

Catchword:



Beschwerdekammern

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Case Number: T 0222/16 - 3.3.06

D E C I S I O N
of Technical Board of Appeal 3.3.06
of 23 April 2021

Appellant: Innospec Limited
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Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 24 November
2015 revoking European patent No. 2173838
pursuant to Article 101(3)(b) EPC.**

Composition of the Board:

Chairman J.-M. Schwaller
Members: R. Elsässer
R. Cramer

Summary of Facts and Submissions

- I. The appeal of the proprietor lies against the decision of the opposition division to revoke European patent EP 2 173 838 *inter alia* under the ground for opposition pursuant to Article 100(c) EPC and for non-compliance with the requirements of Article 123(2) and (3) EPC.
- II. With its grounds of appeal the appellant contested the above decision and filed *inter alia* auxiliary requests 1-6, whereby auxiliary requests 1-3 corresponded to those dealt with in the decision under appeal.
- III. With its reply, the opponent (also respondent) maintained its objections raised in the first instance and requested that the appeal be dismissed.
- IV. In four further submissions, the respondent commented on sufficiency of disclosure, novelty and inventive step and filed documents D51, D52, D54, D55, D56, D56a and D57 to underpin the objections.
- V. In its preliminary opinion, the Board held the main, first and second auxiliary requests as infringing Article 123(2) EPC. The third auxiliary request was held to meet the requirements of Article 123(2) EPC.
- VI. At the oral proceedings, which were held in the absence of the respondent on 23 April 2021, the final requests of the parties were established as follows:

The appellant requested that the decision under appeal be set aside and the patent be maintained as granted, or, in the alternative, that the patent be maintained in amended form, based on one of auxiliary requests 1

to 6, filed with the grounds of appeal dated 23 March 2016.

The respondent requested that the appeal be dismissed and that auxiliary requests 2-6 not be admitted into the proceedings.

Reasons for the Decision

1. Main request - Article 123(2) EPC

1.1 Claim 1 of this request (also claim 1 as granted) reads as follows:

"1. Use of a nitrogen-containing dispersant additive to improve the oxidation stability of a fuel composition containing biodiesel and an antioxidant additive selected from phenolic antioxidants and phenylenediamine antioxidants; wherein the nitrogen-containing dispersant is an acylated nitrogen-containing compound that is made by reacting a poly(isobutene)-substituted succinic acid-derived acylating agent wherein the poly(isobutene) substituent has 12 to 200 carbon atoms with a mixture of ethylene polyamines having 3 to 9 amino nitrogen atoms per ethylene polyamine and 1 to 8 ethylene groups wherein the acylated nitrogen compounds are formed by the reaction of a molar ratio of acylating agent : amino compound of from 2.1 [sic] to 1:2; wherein the phenolic antioxidant is selected from tertiarybutylhydroquinone, pyrogallol, propylgallate, BHT, pyrocatechol and tertiarybutylcatechol; and wherein the poly(isobutene)-substituted succinic acid-derived acylating agent has a PIB molecular weight of from 500 to 2800."

For the board, its subject-matter does not meet the requirements of Article 123(2) EPC for the following reasons.

- 1.2 The application as filed did not disclose any acylating agent having a "PIB molecular weight of 2800" and the value of 2800 was disclosed on page 8, line 14 as filed, exclusively in connection with the number average molecular weight (Mn) of a hydrocarbyl substituent but not with the absolute molecular weight of a hydrocarbyl substituent, let alone of a polyisobutene substituent (PIB).
- 1.3 It is undisputed that the two parameters "molecular weight" and "number average molecular weight" are not the same, in particular when used in connection with oligomeric or polymeric compounds like polyisobutenes.
- 1.4 The appellant argued that the skilled person would immediately recognise from common general knowledge and when taking into account the description that the feature "PIB molecular weight" was to be understood in the sense of "PIB number average molecular weight".
- 1.5 For the board there is however no reason for departing from the literal meaning of the feature "*PIB molecular weight of from 500 to 2800*", which defines the absolute molecular weight of the PIB-substituents. Contrary to the argument of the appellant, it is technically not unreasonable to define the size of a polymeric substituent by a range for its absolute molecular weight. It is undisputed that alternative parameters are used in the technical field, maybe even more frequently, such as the number average molecular weight, the weight average molecular weight or the degree of polymerisation, but that does not mean that

the indication of an upper and a lower limit for the absolute molecular weight is technically implausible. It can be noted in this respect that the patent alternatively defines the size of the substituents by indicating ranges for the number of carbon atoms which follows the same logic as indicating a range for the absolute molecular weight of the substituents.

- 1.6 It is furthermore correct that, according to established jurisprudence, unclear terms in a claim might be interpreted in the light of the description, but in the present case the feature "molecular weight of from 500 to 2800" is not unclear and so there is no need to turn to the description. Moreover in the description both the molecular weight and the number average molecular weight are used and, contrary to the argument of the appellant, it is not directly and unambiguously derivable therefrom that the number average molecular weight is meant also in those cases where the description refers to the molecular weight. Thus, there is no justification for departing from the literal meaning of the claimed feature, so that there is no direct and unambiguous disclosure in the application as filed for the feature that the poly(isobutene)- substituted succinic acid-derived acylating agent has a PIB molecular weight of from 500 to 2800.
- 1.7 It follows that the finding of the opposition division that claim 1 as granted did not meet the requirement of Article 123(2) EPC was correct.
2. First auxiliary request - Article 123(3) EPC

In claim 1 of this request, the expression "*PIB molecular weight of from 500 to 2800*" has been

substituted by "*PIB number average molecular weight of from 500 to 2800*".

- 2.1 In the board's view, this amendment infringes Article 123(3) EPC, because the introduction of the "number average" does not only introduce a new limitation into the claim but it also removes the requirement for the absolute PIB molecular weight to be in the range between 500 and 2800. This leads to an extension of the scope of protection as can be demonstrated with the following example:

- 2.2 An acylating agent comprising i) 50% of PIB groups having 12 carbon atoms, i.e. three isobutylene units and a corresponding molecular weight of about 167, and ii) 50% of PIB groups having 200 carbon atoms, i.e. 50 isobutylene units and a molecular weight of about 2804, has PIB substituents with a number average molecular weight of about 1486. Such an acylating agent would therefore be covered by amended claim 1, but not by claim 1 as granted, because none of the PIB substituents has a molecular weight of from 500 to 2800.

- 2.3 The appellant has argued that granted claim 1 covered several alternative definitions of the molecular weight of the PIB substituents, such as the absolute molecular weight, the number average molecular weight or the weight average molecular weight, so that the amendment merely limited the claim to one of these alternatives. This argument is however not convincing since, as laid out above, claim 1 as granted unambiguously defines the absolute molecular weight of the PIB-substituents. Therefore, the amendment does not remove all but one alternatives from the claim, as suggested by the appellant, but replaces one definition, namely the

absolute molecular weight, by another one, namely the number average molecular weight.

2.4 The argument that the embodiment discussed in point 2.2 was unusual and without commercial value also fails because the prohibition of extending the scope of protection under Article 123(3) EPC is absolute, and whether or not the extension of scope is commercially advantageous for the patentee or not is irrelevant.

2.5 It follows that the decision of the opposition division not to allow the first auxiliary request under Article 123(3) EPC was correct.

3. Second auxiliary request - Article 123(2) EPC

Claim 1 of this request corresponds to that of the first auxiliary request with the additional amendment that the lower limit for the number of carbon atoms of the polyisobutene substituent has been raised from 12 to 50.

3.1 The board notes that the application as filed does not disclose a lower limit of 50 carbon atoms for polyisobutene substituents. The value of 50 is indeed disclosed on page 8, line 10 as filed, but this passage relates to hydrocarbyl substituents in general. As the number of carbon atoms of a polyisobutene substituent is always a multiple of 4, the value of 50 is thus manifestly not directly and unambiguously disclosed in connection with and for PIB-substituents, so that claim 1 of this request infringes Article 123(2) EPC either.

4. Third auxiliary request

Vis-à-vis claim 1 as granted, in claim 1 of this

request the upper limit of the PIB molecular weight has been amended in to 1500.

4.1 Admissibility

The Board exercised its discretion under Article 12(4) RPBA 2007 not to hold inadmissible this request, because apart from the deleted dependency of claim 5 to claim 2, the claims of this request are identical to those of the third auxiliary request filed during the first instance oral proceedings but not admitted by the opposition division, on the grounds that it did not constitute a convergent development with auxiliary request 2 and that granted claim 2, on which claim 1 of the third auxiliary request was partly based, was not disclosed in the priority document.

- 4.1.1 According to established case law, a board of appeal should overrule a discretionary decision of the opposition division only if said decision was taken based on the wrong principles, without taking into account the right principles, or in an unreasonable way (Case Law of the Boards of Appeal, 9th edition, V.A. 3.5.1 b)).
- 4.1.2 In the present case it is the board's conviction that the opposition division exercised its discretion in an unreasonable way for the following reasons:
- 4.1.3 A new objection under Article 123(3) EPC was raised by the opponent for the first time on the final date for making submissions set under Rule 116 EPC, namely on 7 September 2015. As the requests then pending could not have taken into account this new objection, the proprietor should have been given at least one opportunity to file a new request, which was not the

case.

- 4.1.4 Furthermore, after the opposition division found that the first auxiliary request then on file infringed Article 123(3) EPC, the proprietor withdrew the then pending auxiliary requests 1a and 2-6 but maintained auxiliary request 7 (found by the opposition division not to meet the requirements of Article 123(2), (3) and 84 EPC) which then became the new second auxiliary request.
- 4.1.5 The board notes that this second auxiliary request was nevertheless NOT a new request per se, let alone a request drafted in the knowledge of the new objection and in order to overcome it. Furthermore, by withdrawing auxiliary requests 1a and 2 to 6 the proprietor acted in the interest of procedural economy and the fact that it maintained the second auxiliary request could not be held against it, since as laid out above, it should have been given at least one opportunity to file a new request in response to the new objection. In denying the proprietor this opportunity, the division exercised its discretion in an unreasonable way.
- 4.1.6 In the decision under appeal, the opposition division refers to its discretion under Rule 116 EPC.
- 4.1.7 However, the board notes that Rule 116(2) EPC states that new documents filed by the proprietor after the final date for making submissions need not be considered unless admitted on the grounds that the subject of the proceedings has changed. In the present case, the new objection under Article 123(3) EPC represented a change of the subject of the proceedings and, given the very late timing of the objection, it

was evidently impossible for the proprietor to file a response before the final date set under Rule 116 EPC.

- 4.1.8 It can further be noted that the passage of the EPO Guidelines (version of November 2015; H-II, 2.7) relied upon by the division also emphasises that requests filed in response to a change of the subject of the proceedings have to be admitted.
- 4.1.9 Finally the Board notes that according to the established jurisprudence, the relevant criterion for deciding on the admissibility of late filed requests is their prima-facie allowability in view of the objection under discussion. This criterion is fulfilled in the present case since the amendment in claim 1 is clearly suitable to overcome the objection under Article 123(3) EPC, because the limitation to an absolute molecular weight is re-instated. The amendment also overcomes the objection under Article 123(2) EPC which the division found pertinent (point 2 of the decision), because the new range for the molecular weight has a clear basis in the application as filed (page 10, line 6-7). Hence the request should have been admitted.
- 4.1.10 For the board, the convergence criterion relied upon by the division is of secondary importance in the context of objections under Article 123(3) EPC, because while a novelty objection can be overcome by limiting a claimed subject-matter even further in a convergent way, this is not necessarily the case for an objection under Article 123(3) EPC.
- 4.1.11 It goes without saying that the non-validity of the priority claim is an unsuitable criterion. In a hypothetical case, the non-validity of the priority might lead to a request being prima-facie not novel but

even in such a case, it would not be the non-validity of the priority claim as such that would potentially lead to the request not being admissible but its prima-facie lack of novelty. Hence, simply pointing out that the priority claim is not valid for a newly filed request is not a reason for not admitting it.

4.1.12 In view of the above considerations the board exercised its discretion and decided not to exclude the third auxiliary request from the appeal proceedings.

4.2 Amendments - Article 123 EPC

4.2.1 The extension of the scope of protection of claim 1 of the first auxiliary request was caused by the removal of the limitation to a specific absolute molecular weight. As this limitation is re-instated to a narrower range than previously claimed, the scope of protection is no longer extended and the requirements of Article 123(3) EPC are thus met.

4.2.2 The board is further of the opinion that the requirements of Article 123(2) EPC are met as claim 1 at issue is based on original claims 7 and 8 and the passages disclosed on page 10, lines 4 to 8; page 12, lines 7 to 18 and page 21, lines 11 to 13 as filed.

4.2.3 The respondent did not dispute that the individual features are disclosed in the application as filed but argued that selections from several lists were necessary to arrive at the claimed subject-matter.

4.2.4 These arguments are not convincing for the board. According to the respondent, the first and longest list comprises the different classes of nitrogen-containing dispersants (i) to (vii). However, it is disclosed on

page 7, lines 6 and 7 that two of them are most preferred, namely the reaction products of carboxylic acid derived acylating agents and amines (i) and the compounds of class (iii). Furthermore PIB substituted succinic acid derivatives belong into the most preferred class (i) and the passage at page 10, lines 6 to 8 further confirms that PIB substituted succinic acid derivatives are particularly preferred carboxylic acid derived acylating agents. Said passage also discloses the range for the molecular weight, which has been incorporated into the claim.

Likewise, the passage at page 11, lines 29 to 32 confirms that mixtures of ethylene polyamines are preferred amines.

Hence, the passage referring to "typical acylated nitrogen containing compound" on page 12, lines 7 to 18 combines the preferred acylating agents, namely PIB-substituted succinic acid derivatives, and the preferred amines, namely a mixture of ethylene polyamines.

Similar compounds being furthermore used in the examples (example 2, Additive A; example 7, Additive B1) it follows that the nitrogen-containing compounds defined in claim 1 are directly and unambiguously disclosed in the application as filed as a preferred option. They are thus not the result of arbitrary selections from lists, as suggested by the respondent.

Similar considerations apply to the antioxidants mentioned in the claim. The limitation to phenolic and phenylenediamine antioxidants is not based on a selection from a list since both types of antioxidants are disclosed as preferred (page 21, line 11 - 13).

Other antioxidants are also disclosed, but are less preferred ("may be used"; "are also useful").

Moreover, in the board's view, the deletion of one compound from a list, namely 2,5-ditertiarybutyl-hydroquinone from the list of claim 8, is generally accepted by the jurisprudence of the boards of appeal. In the present case, this deletion is further supported by the disclosure on page 24, lines 12 to 16.

The respondent has furthermore correctly pointed out that for the molecular weight of the PIB substituent and for the ratio acylating agent/amine, some alternative values were disclosed. However, the corresponding lists (page 10, lines 6 to 8 and page 12, lines 16 to 18) are short and at least the latter does not concern mutually excluding alternatives but converges towards the most preferred range.

Under these circumstances, the board holds the subject matter of claim 1 to be directly and unambiguously disclosed in the application as filed, which conclusion is furthermore coherent with e.g. decision T 0712/16 (see in particular point 2.2 of the reasons).

5. Remittal

Since the objections under Articles 54, 56 and 100(b) EPC have not been dealt with in the decision under appeal, discussing these issues for the first time in the appeal proceedings would be at odds with the primary object of the appeal proceedings to deliver a judicial review of the decision under appeal (Article 12(2) RPBA 2020).

These circumstances thus constitute special reasons in

the sense of Article 11 RPBA 2020 which justify a remittal of the case to the first instance for further prosecution.

6. Documents D51, D52, D54, D56, D56a and D57

As these documents are unrelated to the matters dealt with in this decision, the board has not decided on their admissibility. The decision is therefore to be taken by the opposition division in the course of the further prosecution of the case.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the department of first instance for further prosecution.

The Registrar:

The Chairman:



A. Pinna

J.-M. Schwaller

Decision electronically authenticated