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DECISION of 24 March 2003

T 0250/00 - 3.3.6 Case Number:

Application Number: 94905667.5

Publication Number: 0680506

C10L 1/18 IPC:

Language of the proceedings: EN

Title of invention:

Fuel Composition

Patentee:

ExxonMobil Chemical Patents Inc., et al

Opponent:

Clariant GmbH Ethyl Corporation Chevron Chemical Company LLC BASF Aktiengesellschaft

Headword:

Ester additive/EXXON

Relevant legal provisions:

EPC Art. 84

Keyword:

"Clarity (main request and auxiliary requests 1 to 3) - no"

Decisions cited:

G 0009/91, T 0728/98, T 0337/95, T 0860/93

Catchword:



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Boards of Appeal

Chambres de recours

Case Number: T 0250/00 - 3.3.6

DECISION
of the Technical Board of Appeal 3.3.6
of 24 March 2003

Appellants 01:

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Decision under appeal: Interlocutory decision of the Opposition Division

of the European Patent Office posted 3 February 2000 concerning maintenance of European patent

No. 0 680 506 in amended form.

Composition of the Board:

Chairman: P. Krasa L. Li Voti C. Rennie-Smith Members:

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Summary of Facts and Submissions

I. The present appeal is from the interlocutory decision of the Opposition Division relating to the maintenance in amended form of European patent No. 0 680 506, concerning a fuel composition.

The patent in suit had been granted with a set of 19 claims comprising an independent product claim and an independent use claim reading, respectively, as follows:

- "1. A fuel oil composition comprising a major proportion of a diesel fuel oil having a sulphur concentration of 0.2% by weight or less, and a minor proportion of an additive comprising an ester of a carboxylic acid and an alcohol wherein the acid has from 2 to 50 carbon atoms and the alcohol has one or more carbon atoms, provided that:
- (A) the additive is not a mixture of a polybasic acid, or a polybasic acid ester, and a partial ester of a polyhydric alcohol and a fatty acid; and
- (B) the additive does not comprise a reaction product between a dicarboxylic acid and an oil insoluble glycol.";
- "17. The use of a fuel oil composition of any of the preceding claims as the fuel in a diesel engine for controlling wear rate in the injection system of the engine in operation of the engine."
- II. Four notices of oppositions were filed against the patent, wherein the Appellants 02, 03 and 04 (Opponents

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01, 02 and 03; hereinafter referred to as OI, OII and OIII) and the Respondent (Opponent 04; hereinafter referred to as OIV) sought revocation of the patent inter alia on the grounds of Article 100(a) EPC, in particular because of the alleged lack of both novelty and inventive step of the claimed subject-matter.

III. In its decision, the Opposition Division found that the claims according to the sets C, D, D-E and E (main request and first to third auxiliary requests) did not comply with the requirements of Article 123(2) EPC.

The claims according to the fourth auxiliary request (set of claims C') was found to comply with the requirements of Articles 123(2) and (3) EPC, to be novel and to involve an inventive step over the cited prior art.

IV. Appeals were filed against this decision by the Appellants 01 (Patent Proprietors, hereinafter referred to as PAT) as well as by OI, OII and OIII.

During the written procedure PAT filed the sets of claims F, D', D-E', E' and F' to be considered as further requests in addition to those already dealt with at first instance.

During the discussion at the oral proceedings held before the Board on 24 March 2003, PAT withdrew the requests based on the sets of claims C, C', D, D', D-E and D-E' and amended the sets of claims E, E', F and F', which were thus to be considered by the Board, respectively, as the main request and the first to third auxiliary requests.

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The set E comprises 10 claims. The independent claims 1 and 2 read as follows:

- "1. The use of an additive comprising glycerol monooleate, provided that
- (A) the additive is not a mixture of a polybasic acid, or a polybasic acid ester, and a partial ester of a polyhydric alcohol and a fatty acid; and
- (B) the additive does not comprise a reaction product between a dicarboxylic acid and an oil insoluble glycol,

in a minor proportion in a fuel oil composition comprising a major proportion of a hydrocarbon distillate diesel fuel having a sulphur concentration of 0.05% by weight or less, for improving the lubricity of said fuel and for controlling wear rate in the injection pump of a diesel engine in operation of the engine.";

"2. The use of an additive comprising an ester of a carboxylic acid having from 2 to 50 carbon atoms and methanol, provided that... (wording as in claim 1)".

The set E' contains 8 claims. The independent claims 1 and 2 differ from the respective claims of request E only insofar as they do not contain the wording "provided that (A)...and (B)...an oil insoluble glycol".

The sets of claims F and F' differ, respectively, from E and E' insofar as they do not contain claim 1 of those sets of claims.

V. In respect to these requests OI, OII, OIII and OIV submitted in writing and at the oral proceedings inter

alia that

- the wording of the claims according to all sets E, E', F and F' allowed the presence of additional optional unspecified components in the fuel oil composition in which the additive was used; moreover, the sets E and F also allowed the presence of additional optional unspecified components in the composition of the additive itself;
- it was not clear whether the provisos present in claims 1 and 2 of sets E and F excluded the presence of components (A) and (B) only from the composition of the additive or also from that of the fuel oil composition in which the additive was used; moreover, since the sets E' and F' did not contain the provisos of sets E and F, it was not clear if components (A) and (B) could be comprised in the fuel oil composition of the claims according to sets E' and F';
- compositions and also at least some of the specific ester additives of the patent in suit could have more than one function in the final composition and could be, e.g., both lubricating and anti-corrosive, in which case they would also belong to the class of so-called "co-additives" mentioned in the description of the patent in suit; it was thus not possible to ascertain from the final fuel oil composition whether a specific additive had been added for one purpose or another;

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- the claims related to the use of an additive composition in a "minor proportion" in a fuel oil composition comprising a "major proportion" of a hydrocarbon distillate diesel fuel and therefore encompassed the presence of other unspecified proportions of unspecified components;
- it was therefore not clear which components could still be comprised in the fuel oil composition in addition to the ester additive specifically indicated in the claims;
- the claims according to all requests thus lacked clarity.
- VI. PAT argued in writing and during the oral proceedings that the word "additive" in the claim identified an ester component capable of forming at least partial layers on certain surfaces of the engine as explained in the description of the patent in suit (page 3, lines 5 to 8 and 15) and had to be understood as being a distinct component different from those identified as "co-additives" in the description (page 4, lines 41 to 44).

The claimed use thus related to the use of such an ester additive, excluding (A) and (B), in a fuel oil composition comprising a diesel fuel and, optionally, other components such as co-additives.

VII. PAT request that the decision under appeal be set aside and that the patent be maintained on the basis of the set of claims E (main request) or alternatively, as the first to third auxiliary requests, on the basis of the sets of claims E', F and F', all requests as filed

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during the oral proceedings.

OI, OII, OIII and OIV request that PAT's appeal be dismissed. OI, OII and OIII further request that the decision under appeal be set aside and the patent be revoked.

VIII. At the end of the oral proceedings, the chairman announced the decision of the Board.

Reasons for the Decision

1. Admissibility issues.

The requests E, E', F and F', filed by PAT during oral proceedings are found to be admissible by the Board.

Since these requests fail on other grounds further details are unnecessary.

- 2. Main request (Set E)
- 2.1 Clarity
- 2.1.1 Claim 2 relates according to its wording to the use in a minor proportion of a component defined as "an additive comprising an ester of a carboxylic acid having from 2 to 50 carbon atoms and methanol", hereinafter referred to as (X), which component is not (A), a mixture of a polybasic acid, or a polybasic acid ester, and a partial ester of a polyhydric alcohol and a fatty acid or does not comprise (B), a reaction product between a dicarboxylic acid and an oil insoluble glycol, in a fuel oil composition comprising

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a major proportion of a diesel fuel. The above mentioned component is used for improving the lubricity of the fuel oil composition and for controlling the wear of the injection pump in a diesel engine.

Such claim was not contained in the set of claims as granted, which only contained a claim relating to the use of a fuel oil composition (see point I above).

Therefore this amended claim must be examined as to its compliance with all the requirements of the EPC and including Article 84 EPC (see G 9/91, OJ EPO 1993, 408, point 19 of the reasons for the decision).

2.1.2 It is established jurisprudence of the Boards of Appeal of the EPO that, in order to ensure legal certainty, a claim must clearly define the matter for which protection is sought (see T 728/98, OJ EPO 2001, 319, point 3.1 of the reasons for the decision as well as T 337/95, OJ EPO 1996, 628, points 2.2 to 2.5 of the reasons for the decision).

The wording of a claim must moreover be interpreted as it would be understood by the skilled person, giving to the wording used in the claim its generally accepted meaning in the specific technical field, and also having regard to the document as a whole (see T 860/93, OJ EPO 1995, 047, point 5.1 of the reasons for the decision and Case Law of the Boards of Appeal of the EPO, 4th edition, 2001, page 168, point 4.1).

2.1.3 PAT argued during oral proceedings that the word
 "additive" in the claim identifies a specific ester
 component capable of forming at least partial layers on
 certain surfaces of the engine as explained in the

description of the patent in suit (page 3, lines 5 to 8 and 15) and should be seen as distinct from other possible components of the fuel oil compositions, which are called "co-additives" in the description (page 4, lines 41 to 44).

The claimed use thus relates in PAT's view to the use of such an ester additive, excluding (A) and (B), in a fuel oil composition comprising a hydrocarbon distillate diesel fuel and, optionally, other components such as co-additives.

2.1.4 The Board agrees that the passage on page 3, lines 5 to 8 and 15 of the description relied on by PAT relates to the specific additive considered responsible for the desired effect, i.e. to the specific ester compounds. However, neither this passage nor the rest of the description teaches that the word "additive" in the context of the patent should be interpreted as relating only to these ester additives and excluding e.g. the components called co-additives on page 4, lines 41 to 44, which are e.g. detergents or corrosion inhibitors and thus undisputably known additives of fuel oil compositions.

It is also undisputed that many additives of fuel oil compositions and also at least some of the specific ester additives of the patent in suit may have more than one function in the final composition and can be, e.g., at one and the same time lubricants and corrosion inhibitors or detergents. It is also undisputed that it cannot be determined in the final fuel oil composition if a specific additive has been added for one particular purpose or another.

The term "additive" has therefore no specific functional meaning in itself but just indicates a component which is added to a fuel oil composition for achieving an unspecified effect. Similarly, there is no generally accepted meaning of the word "co-additive", the meaning of which cannot therefore be distinguished from that of "additive".

2.1.5 The Board concludes from the foregoing that the wording of claim 2 does not make clear whether component (X) consists only of the specifically indicated ester component or is a composition possibly comprising other compounds capable of bringing about the same effect, which compounds are not the esters specified in the description and not (A) and (B), explicitly excluded by the provisos.

Moreover, since the fuel oil composition in which component (X) is used can comprise other components without any limitation, components (A) and (B), which are excluded from the list of components in the additive composition (X), could theoretically be comprised in the final fuel. Even though this possibility would apparently contradict the requirement that the additive composition (X) does not comprise (A) or (B), it is apparently encompassed by the wording of the claim since, e.g., a component (B), which should not be present for improving the lubricity of said fuel and for controlling wear rate in the injection pump of a diesel engine in operation of the engine, can still be present as a corrosion inhibitor or detergent, as explained in point 2.1.4 hereinabove.

Finally, the use in the claims of the wordings "minor proportion" and "major proportion" allows the

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theoretical presence of further unspecified components in unspecified proportions which can be greater or smaller than the so-called "minor proportion" or "major proportion".

The description of the patent does not contain any further teaching which could help in interpreting the claim more precisely.

It follows from the above considerations that the environment in which the additive is used is unclear and, consequently, the claimed use as such is unclear.

2.1.6 The Board concludes therefore that, in the circumstances of this case, claim 2 does not clearly define the matter for which protection is sought and thus contravenes the requirements of Article 84 EPC.

Since the main request has to be dismissed on this ground there is no need to discuss the other objections raised against it by OI, OII, OIII or OIV.

3. First auxiliary request (Set E')

Claim 2 of this request differs from that of request E insofar as it does not contain the provisos relating to components (A) and (B) and the used additive is indicated to consist of the specific compound indicated therein.

However, here also, the claim allows the fuel oil composition in which the specific ester additive is used to comprise unspecified proportions of unspecified components, which could be themselves additives having even the same effect as the specific ester compound and

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being themselves esters.

It is therefore not clear which components can be present in the fuel oil composition according to the wording of this claim in addition to the specific ester additive and the hydrocarbon distillate diesel fuel and in which proportions they can be comprised; therefore, the environment in which the additive is used is unclear and, consequently, the claimed use as such is unclear too.

Therefore the same objections raised in points 2.1.4 and 2.1.5 above apply mutatis mutandis to this claim.

Therefore claim 2 of this requests does not clearly define the matter for which protection is sought and thus contravenes the requirements of Article 84 EPC.

These requests must thus be dismissed.

4. Second and third auxiliary requests (Sets F and F')

Since claim 1 of these requests is identical to claim 2 of requests E and E', which claims have been found to lack clarity for the reasons put forward in points 2.1.4, 2.1.5 and 3 above, the same objections raised above apply mutatis mutandis to these requests which must therefore be dismissed.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

G. Rauh P. Krasa