

**Internal distribution code:**

- (A) [ ] Publication in OJ  
(B) [ ] To Chairmen and Members  
(C) [X] To Chairmen  
(D) [ ] No distribution

**Datasheet for the decision  
of 30 June 2010**

**Case Number:** T 0878/07 - 3.3.06

**Application Number:** 96936259.9

**Publication Number:** 0885275

**IPC:** C10L 1/02

**Language of the proceedings:** EN

**Title of invention:**

Synthetic diesel fuel and process for its production

**Patentee:**

ExxonMobil Research and Engineering Company

**Opponent:**

Shell Internationale Research Maatschappij B.V.

**Headword:**

Synthetic Diesel Fuel/EXXON

**Relevant legal provisions:**

EPC Art. 123(2), 111(1)

**Relevant legal provisions (EPC 1973):**

-

**Keyword:**

"Added subject-matter (no)"  
"Remittal (yes)"

**Decisions cited:**

-

**Catchword:**

T 1067/97



Case Number: T 0878/07 - 3.3.06

**DECISION**  
of the Technical Board of Appeal 3.3.06  
of 30 June 2010

**Appellant:** ExxonMobil Research and Engineering Company  
(Patent Proprietor) 1545 Route 22 East  
P.O. Box 900  
Annandale NJ 08801-0900 (US)

**Representative:** UEXKÜLL & STOLBERG  
Patentanwälte  
Beselerstrasse 4  
D-22607 Hamburg (DE)

(Opponent I) Shell Internationale Research Maatschappij B.V.  
Carel van Bylandtlaan 16  
NL-2596 HR The Hague (NL)

**Representative:** Cramwinckel, Michiel  
Shell International B.V.  
Intellectual Property Services  
Postbus 384  
NL-2501 CJ Den Haag (NL)

**Decision under appeal:** Interlocutory decision of the Opposition  
Division of the European Patent Office posted  
29 March 2007 concerning maintenance of  
European patent No. 0885275 in amended form.

**Composition of the Board:**

**Chairman:** P.-P. Bracke  
**Members:** G. Dischinger-Höppler  
J. Van Moer

## Summary of Facts and Submissions

- I. This appeal is from the interlocutory decision of the Opposition Division concerning maintenance of the European patent No. 0 885 275 in amended form on the basis of the then pending first auxiliary request.
- II. Two notices of opposition had been filed against the granted patent, wherein the Opponents sought revocation of the patent inter alia on the grounds of Article 100(c) EPC for added subject-matter (Article 123(2) EPC).
- III. In its decision, the Opposition Division held that the subject-matter claimed in accordance with the first auxiliary request fulfilled the requirements of the EPC. The higher ranking main request on the basis of the claims as granted was held to be not allowable under Article 123(2) EPC for extension beyond the application as filed of the subject-matter claimed in independent Claims 1, 4 and 8 which read as follows:

"1. A distillate material, useful as fuel heavier than gasoline or as a blending component in or for a distillate fuel, comprising a fraction boiling in a range of from 121 to 371°C (250 to 700°F) derived from a non shifting Fischer-Tropsch catalyst process and containing

- at least 95 wt% paraffins with an iso to normal ratio in a range of from 0.3 to 3.0,
- ≤ 50 ppm(wt) of sulphur and nitrogen,
- less than 2 wt% unsaturates, and
- 0.001 to less than 0.3 wt% of oxygen present primarily as C<sub>5</sub>-C<sub>24</sub> linear alcohols.

4. A process for producing a distillate material comprising: (a) separating the product of a non-shifting Fischer-Tropsch catalyst process into a heavier fraction containing primarily 371°C+ (700°F+) and a lighter fraction containing primarily 371°C- (700°F-), (b) hydroisomerizing the heavier fraction at hydroisomerization conditions and recovering a 371°C- (700°F-) fraction therefrom, (c) blending at least a portion of the recovered fraction of step (b) with at least a portion of the lighter fraction, and (d) recovering from the blended product of step (c) a fraction boiling in a range of from 121 to 371°C (250 to 700°F) containing

- at least 95 wt% paraffins with an iso to normal ratio in a range of from 0.3 to 3.0,
- ≤ 50 ppm(wt) of sulphur and nitrogen,
- less than 2 wt% unsaturates, and
- 0.001 to less than 0.3 wt% of oxygen present primarily as C<sub>5</sub>-C<sub>24</sub> linear alcohols.

8. The use as a fuel or as a blending component in or for a diesel engine of a material according to any one of claims 1 to 3."

The Opposition Division argued that the presence of C<sub>5</sub>-C<sub>24</sub> linear alcohols was originally disclosed only for diesel fuel B and, in line with decision T 1067/97, could not be applied to the more general distillate material of Claim 1.

IV. This decision was appealed by the Patent Proprietor, now Appellant, and by Opponent II. The latter withdrew its opposition under cover of a letter dated

8 September 2008. Opponent I did not make any comments during the appeal proceedings.

V. In a communication annexed to the summons of 11 February 2010 for oral proceedings requested by the Appellant, the Board indicated that one issue to be discussed might be the admissibility of the amendments to the claims as granted.

The Board further pointed out that the claimed subject-matter might appear to be obvious in view of documents D6 and D7 as suitable starting points and documents D8, D10, D11 and D13 as relevant common general knowledge.

VI. The oral proceedings before the Board of Appeal were held on 30 June 2010 in the absence of Opponent I as announced by letter of 22 March 2010.

VII. The Appellant submitted in essence that the claims as granted fulfilled the requirements of the EPC. Concerning Article 123(2) EPC, it was argued that the whole disclosure of the application as filed was directed to the finding that the presence of C<sub>5</sub>-C<sub>24</sub> linear alcohols was decisive for the claimed distillate material to be useful as a diesel fuel of improved lubricity. Therefore, the range of C<sub>5</sub>-C<sub>24</sub> linear alcohols was generally disclosed as an essential feature of the invention, hence also for the distillate material recited in any of Claims 1, 4 or 8.

VIII. The Appellant requested that the decision under appeal be set aside and that the case be remitted to the first instance for further prosecution on the basis of the main request.

## Reasons for the Decision

### 1. *Added subject-matter (Article 123(2) EPC)*

- 1.1 The Board agrees with the Opposition Division insofar as it is generally not allowable to restrict the claim to a preferred embodiment by extracting isolated features from a set of features which had originally been disclosed only in combination. According to the established Case Law of the Boards of Appeal of the European Patent Office (5th edition, 2006, chapter III.A.1.1), such kind of amendment would, however, be justified if there is no recognisable functional or structural relationship among those features.

In the case underlying decision T 1067/97 cited by the Opposition Division such a relationship was clearly present (reasons No. 2.1).

- 1.2 The Opposition Division took the view that this applied also to the present case where the particular range of C<sub>5</sub>-C<sub>24</sub> alcohols was disclosed for diesel fuel only and not for the more general distillate material.
- 1.3 It is true that the only reference to C<sub>5</sub>-C<sub>24</sub> alcohols is contained in Example 8, where the lubricity performance of diesel fuels A to G is compared. In this Example 8, it reads: "Diesel Fuel B, which contains a high level of oxygenates as linear, C<sub>5</sub>-C<sub>24</sub> primary alcohols, exhibits significantly superior lubricity properties". It is apparent from the context that the term

'superior' is used in the sense of 'as compared with completely hydrotreated Diesel Fuel A.

Diesel Fuel B is derived from the product of the non-shifting Fischer Tropsch process disclosed on page 9, first paragraph, of the application as filed. This product was isolated in three different fractions, i.e.

- the C<sub>5</sub>-500°F boiling fraction, designated as F-T Cold Separator Liquids;
- the 500-700°F boiling fraction, designated as F-T Hot Separator Liquids; and
- the 700°F+ fraction, designated as F-T Reactor Wax.

Actually Diesel Fuel B is obtained by mixing definite amounts of hydroisomerised Reactor Wax with Cold and Hot Separator Liquid and separating the 250-700°F fraction by distillation (Example 2).

- 1.4 This scheme for preparing Diesel Fuel B corresponds exactly with the general process for preparing a clean distillate useful as a fuel heavier than gasoline, such as a diesel fuel or a diesel fuel blending stock disclosed on page 2, first and second paragraph. Here, the fraction boiling in the range of 250-700°F is designated as diesel fuel or diesel fuel blending stock.

It also corresponds with the more detailed description of the process on page 3, first and second paragraphs, and page 5, second paragraph, which results in a clean distillate boiling in the range of 250-700°F and which

may be used as a diesel fuel or as a diesel fuel blending component.

Both descriptions of the process refer to the properties of the product boiling in the range of 250-700°F. These properties are described on original page 5, third paragraph, where this product is denoted 'diesel material'. They are identical with the properties of the material of original Claim 1 which is useful as a fuel heavier than gasoline or as a blending component for a distillate fuel comprising a 250-700°F fraction derived from a non-shifting Fischer-Tropsch catalyst process.

Original page 6 (last paragraph) further reveals that the 'product of this invention may be used as a diesel fuel, per se, or blended with other less desirable petroleum or hydrocarbon containing feeds of about the same boiling range'.

- 1.5 Hence, the only relationship between the distillate material and the diesel fuel or diesel fuel blending component which can be gathered from the application as filed is that the distillate material shall be useful as a 'diesel fuel' or a 'diesel fuel blending component'. Nothing in the application as filed suggests that for that purpose the distillate material has to be modified. In particular, there is no indication that the diesel fuel and the diesel fuel blending component might be derivatives of the distillate material and that or how the distillate material and diesel fuel or diesel fuel blending component could be distinguished from each other.



The Board concludes therefore that in the application as filed the terms distillate material, diesel fuel and diesel fuel blending components are rather used like synonyms where the terms diesel fuel and diesel fuel blending component merely indicate how the distillate material may be used.

This means that the distillate material has to fulfil all the requirements of a diesel fuel or diesel fuel blending stock, hence also the presence of small amounts of oxygenates, present primarily as linear alcohols, due to the absence of hydrotreating of the lighter fraction in the processing scheme of the invention (see page 7, last paragraph).

1.6 It may be true that within these alcohols  $C_{12+}$  primary linear alcohols are preferred (page 8, second paragraph). It is however also evident that any short chain alcohols down to  $C_5$  alcohols (see in particular page 5, second paragraph and the discussion of Example 8 in the paragraph bridging pages 13 and 14) must be present within the fraction boiling in the range of 250-700°F.

1.7 Consequently, the Board does not recognise any functional or structural relationship between the fact that the distillate material in Example 2 is referred to a Diesel Fuel B and the presence of  $C_5-C_{24}$  linear alcohols and concludes that it is derivable from the application as filed that the oxygen contained in the distillate material claimed in Claim 1, as well as that produced and used in accordance with Claims 4 and 8 may be present primarily as  $C_5-C_{24}$  linear alcohols as

disclosed specifically for the product referred to as Diesel Fuel B of invention Example 2 (Examples 2 and 8).

The Board is therefore satisfied that the claims as granted meet the requirements of Article 123(2) EPC.

2. *Remittal*

As the Appellant has argued that the case should be remitted for the reason that inventive step of the subject-matter claimed in the main request (as granted) had not yet been assessed by the Opposition Division, and considering further that the only remaining other party, Opponent I, has never advanced any opinion with respect to the Appellant's appeal, the Board deems it inappropriate to deny the Appellant the opportunity to be heard on each opposition ground by two instances Article 111(1) EPC).

**Order**

**For these reasons it is decided that:**

The decision under appeal is set aside.

The case is remitted to the first instance for further prosecution on the basis of the main request.

The Registrar:

The Chairman:

G. Rauh

P.-P. Bracke