

Internal distribution code:

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

**Datasheet for the decision
of 14 February 2017**

Case Number: T 1627/12 - 3.3.10

Application Number: 05746315.0

Publication Number: 1756024

IPC: C07C2/36, C07C11/02

Language of the proceedings: EN

Title of invention:

OLIGOMERISATION OF OLEFINIC COMPOUNDS IN AN ALIPHATIC MEDIUM

Applicant:

Sasol Technology (Pty) Ltd

Headword:

Relevant legal provisions:

EPC Art. 123(2), 54, 111(1)

Keyword:

Main Request: Novelty - (yes)

Remittal to the department of first instance - (yes)

Decisions cited:

Catchword:



Beschwerdekammern
Boards of Appeal
Chambres de recours

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 1627/12 - 3.3.10

D E C I S I O N
of Technical Board of Appeal 3.3.10
of 14 February 2017

Appellant: Sasol Technology (Pty) Ltd
(Applicant) 1 Sturdee Avenue,
Rosebank
2196 Johannesburg (ZA)

Representative: Kador & Partner
Corneliusstraße 15
80469 München (DE)

Decision under appeal: Decision of the Examining Division of the
European Patent Office posted on 19 December
2011 refusing European patent application No.
05746315.0 pursuant to Article 97(2) EPC.

Composition of the Board:

Chairman P. Gryczka
Members: C. Komenda
T. Bokor

Summary of Facts and Submissions

I. The Appellant (Applicant) filed an appeal against the Examining Division's decision to refuse the European Patent application No. 05 746 315.0.

II. In its decision issued according to the state of the file, reference was made *inter alia* to the official communication dated 9 September 2010, where the Examining Division found that the document

(3) WO-A-02/04119

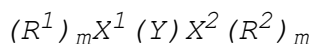
disclosed in Examples 10 and 22 all technical features of claim 1 of the then pending Main request. Thus, the subject-matter of claim 1 was considered to lack novelty.

III. With its statement of the grounds for appeal the Appellant filed a Main Request and Auxiliary Requests 1 to 4. With a letter dated 3 February 2017 he withdrew all of the previous requests and replaced them with another Main Request and twelve Auxiliary Requests. During the oral proceedings held before the Board on 14 February 2017 the Appellant withdrew the Main Request filed on 3 February 2017 and replaced it with a new Main Request, the wording of claim 1 of this new Main Request reads as follows:

"1. A process for producing an oligomeric product by the oligomerisation of ethylene by contacting the ethylene with an oligomerisation catalyst in an aliphatic liquid medium, wherein the aliphatic liquid medium is at least one liquid aliphatic compound, that is an acyclic or a cyclic organic compound, including a saturated and/or an unsaturated carbon compound, but

excluding an aromatic compound, at a reaction temperature of at least 50°C, wherein the catalyst comprises the combination of

- i) a source of a transition metal; and
- ii) a ligating compound of the formula



wherein: X^1 and X^2 are independently selected from the group consisting of N, P, As, Sb, and Bi;

Y is a linking group between X^1 and X^2 ;

wherein Y excludes $(CH_2)_x Z (CH_2)_y$, where Z is - $P(R^8)-$, $-N(R^8)-$, $-As(R^8)-$, $-Sb(R^8)-$ or $S-$ and x and y are individually 1-15 and wherein R^8 is hydrogen or a halogen or a nitro group or a hydrocarbyl or a substituted hydrocarbyl group,

m and n are independently 0, 1 or a larger integer; and R^1 and R^2 are independently hydrogen, a hydrocarbyl group or a heterohydrocarbyl group, and R^1 being the same or different when $m > 1$, and R^2 being the same or different when $n > 1$."

IV. The Appellant brought forward that in the Examples 10 and 22 of Document (3) toluene was used as solvent for the activator and/or the catalyst component and was introduced into the reaction mixture. According to the wording of the new Main Request the presence of aromatic compounds in the aliphatic liquid medium was excluded. Consequently, Document (3) did no longer anticipate the subject-matter of the claims according to the new Main Request.

V. The Appellant requested that the decision under appeal be set aside, and a patent be granted on the basis of

the claims according to the Main Request as filed during the oral proceedings, or on the basis of any of the First to Twelfth Auxiliary Requests, all Auxiliary Requests as filed with the letter dated 3 February 2017

VI. At the end of the oral proceedings the decision of the Board was announced.

Reasons for the Decision

1. The appeal is admissible.

Main Request

2. *Amendments (Article 123(2) EPC)*

2.1 The wording of independent claim 1 of the new Main Request is based on claim 1 of the Main Request as filed on 12 April 2010 on which the decision under appeal was based. The amendments consisted in that claim 1 now referred to a process, "wherein the aliphatic liquid medium is at least one liquid aliphatic compound, that is an acyclic or a cyclic organic compound, including a saturated and/or an unsaturated carbon compound, but excluding an aromatic compound" (see paragraph III *supra*). A basis for this amendment is to be found on page 4, lines 12 to 14 of the application documents.

Further, the introductory part of claim 1 was clarified and refers now to a "process for producing an oligomeric product by the oligomerisation of ethylene [...]".

2.2 Both amendments were similarly introduced into independent claim 31, which is directed to the use of

an aliphatic liquid medium in a process for producing an oligomeric product as defined in claim 1.

2.3 Therefore, the Board is satisfied that the amendments fulfil the requirements of Article 123(2) EPC.

3. *Novelty (Article 54 EPC)*

3.1 The decision under appeal rejected the application in suit on the ground that the subject-matter of claim 1 of the then pending Main Request was anticipated by Document (3). In particular, Examples 10 and 22 were cited as disclosing all technical features of claim 1 in combination (see communication of the Examining Division dated 9 September 2010, referred to in the decision under appeal).

3.2 Examples 10 and 22 of document (3) disclose a process for the oligomerisation of ethylene, in the presence of a catalyst as defined in claim 1 of the application in suit. In both examples the catalyst was prepared from its respective starting materials and then suspended in small amounts of toluene. This catalyst dispersion was added to an autoclave filled with isobutane as an aliphatic liquid diluent. Thereafter ethylene was added to the mixture and the oligomerisation reaction started. However, the small amounts of toluene, which were used to disperse the catalysts were not removed from the liquid medium prior to the start of the oligomerisation reaction. Since toluene is an aromatic organic solvent, the aliphatic liquid medium in Examples 10 and 22 contained always a small amount of an aromatic organic compound.

3.3 Due to the amendments made to claim 1 of the Main Request (see paragraph 2.1 *supra*) the presence of

aromatic compounds in the aliphatic liquid medium is, however, excluded. Therefore, the Examples 10 and 22 of document (3) do not anticipate the subject-matter of claim 1 of the Main Request.

- 3.4 Consequently, the Board concludes that the subject-matter of claim 1 of the Main Request is novel in the sense of Article 54 EPC.

The same applies to the subject-matter of the dependent claims and of independent claim 31, which contains the same restrictions as claim 1.

4. *Remittal (Article 111(1) EPC)*

- 4.1 The Appellant requested that the case should not be remitted to the department of first instance, but that the outstanding issues should be decided upon by the Board.

- 4.2 The essential function of an appeal is to review the decision issued by the first-instance department. Hence, a case is normally referred back if essential questions regarding the patentability of the claimed subject-matter have not been decided by the department of first instance. The examination of requirements of patentability not dealt with in the appealed decision is normally left to the Examining Division to consider after a remittal, so that the Appellant has the opportunity for these to be considered without loss of an instance. In particular, remittal is considered by the boards in cases where the Examining Division rejects an application solely upon a particular issue, which leaves other essential issues outstanding.

- 4.3 In the present case the Examining Division refused the application under appeal only on the ground that the subject-matter of claims 1 to 31 according to the then pending Main Request was anticipated by Examples 10 and 22 of Document (3). Concerning its argumentation the Examining Division referred *inter alia* to its communication dated 9 September 2010.
- 4.4 Furthermore, in the contested decision the examining division, by reference to the minutes of the oral proceedings dated 11 August 2010, made observations concerning inventive step of the then pending Auxiliary Request (page 2, middle). However, the subject-matter of the then pending Auxiliary Request focused on the particular choice of the ligating compounds ii), whereas the subject-matter of the new Main Request focused on the aliphatic liquid medium used in the claimed process. The Board considers that the amendments made by the Appellant in the appeal proceedings are substantial compared to the requests as treated by the Examining Division, so that the observations of the examining division with regard to inventive step, may no longer apply to the set of claims filed during the oral proceedings before the Board.
- 4.5 Thus, under the present circumstances the Board finds it appropriate to remit the case to the Examining Division for further prosecution.

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:



C. Rodríguez Rodríguez

P. Gryczka

Decision electronically authenticated