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In der Anlage erhalten Sie eine Kopie des Berichtigungsbeschlusses zur Entscheidung

Please find enclosed a copy of the decision correcting errors in the decision

T 384/90-3.3.1

Veuillez trouver en annexe une copie de la décision rectifiant des erreurs dans la décision



Case Number : T 384/90 - 3.3.1

D E C I S I O N
of 20 May 1992
correcting an error in the Decision
of the Technical Board of Appeal 3.3.1
of 15 July 1991

Appellant : Ashland Oil, Inc.
R.C. Willson, Jr.
P.O. Box 391, BL-5
Ashland, Kentucky 41114 (US)

Representative : Miehe, Manfred, Dipl.-Chem.
Falkenried 4
W-1000 Berlin 33 (DE)

Decision under appeal : Decision of Examining Division of the European
Patent Office dated 20 November 1989 refusing
European patent application No. 84 102 541.4
pursuant to Article 97(1) EPC.

Composition of the Board :

Chairman : K.J.A. Jahn
Members : R.W. Andrews
J.C. Saisset

In application of Rule 89 EPC the date of the decision in the appeal T 384/90 - 3.3.1 is hereby corrected.

The correct date of the decision is:

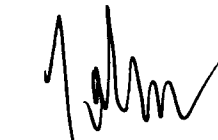
5 September 1991.

The Registrar:



E. Görgmaier

The Chairman:



K. Jahn

Publication in the Official Journal / No

File Number: T 384/90 - 3.3.1

Application No.: 84 102 541.4

Publication No.: 0 124 716

Title of invention: High performance catalysts for carbo-metallic oil
conversion as well as their manufacture and use

Classification: C10G 11/05

DECISION
of ~~X5~~ July 1991
September

Applicant: Ashland Oil, Inc

Headword: Catalyst/Ashland

EPC Article 123(2)

Keyword: "Added subject-matter (no) - after amendment"

Headnote



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Chambres de recours

Case Number : T 384/90 - 3.3.1

D E C I S I O N
of the Technical Board of Appeal - 3.3.1
of ~~X5 July~~ 1991
September

Appellant :

Ashland Oil, Inc
R.C. Wilson, Jr.
P.O. Box 391, BL-5
Ashland, Kentucky 41114 (US)

Representative :

Miehe, Manfred, Dipl.Chem.
Falkenried 4
D-1000 Berlin 33 (DE)

Decision under appeal :

**Decision of Examining Division 029 of the
European Patent Office dated 20 November 1989
refusing European patent application
No. 84 102 541.4 pursuant to Article 97(1) EPC.**

Composition of the Board :

Chairman : K.J.A. Jahn
Members : R.W. Andrews
J.C. Saisset

Summary of Facts and Submissions

- I. European patent application No. 84 102 541.4 which was filed on 9 March 1984, was refused by a decision of the Examining Division 029 of the European Patent Office dated 20 November 1989.
- II. The ground for the refusal was that Claims 3 to 6, 8, 10 to 19, 21 to 23 and 25 to 31 filed on 23 June 1989 did not meet the requirements of Article 123(2) EPC.
- III. An appeal was lodged against this decision on 12 January 1990 with payment of the prescribed fee on 9 January 1990. With his statement of grounds of appeal filed on 21 March 1990, the Appellant filed an amended statement of claim.

In response to two communications from the Rapporteur dated 16 January 1991 and 21 March 1991, the Appellant filed two further sets of claims.

- IV. The Appellant requests that the case be remitted to the Examining Division for further prosecution on the basis of Claims 1 to 4 filed on 21 June 1991, amended as agreed in a telephone conversations on 2 July 1991 and 2 September 1991 between the Rapporteur and the Appellant's representative.

The amended set of claims reads as follows:

- "1. Low coke, high octane, high activity, high selectivity, metal tolerant, thermally stable, low slurry oil producing catalyst for the conversion of hydrocarbons contaminated with high Conradson carbon and metals to produce lower molecular weight products, characterized by the combination of the following features:

- (a) from about 5 to about 30% by weight of a zeolite comprising a zeolite selected from the group consisting of a HY zeolite and an ultrastable HY zeolite having a silica-alumina mole ratio of at least about 5, and having a cell dimension of about 2.43 - 2.47 nm;
 - (b) from about 20 to about 65 wt% of a clay comprising kaolin having a crystalline size of from about 0.5 to about 2 μm ;
 - (c) from about 30 to about 60% of an acidic silica-alumina-cogel matrix comprising at least about 13 wt% alumina;
 - (d) from about 0.5 to about 3 wt% of rare earths comprising lanthanum and cerium in a ratio of from about 0.5 to about 6;
 - (e) from about 15 to about 60 wt% alumina;
 - (f) wherein the zeolite is partially exchanged with said rare earths from a solution and wherein said zeolite is contained in the acidic matrix and wherein rare earths have been precipitated onto the matrix;
 - (g) the pore volume in the range of 0.2 to 0.7 cm^3/g , the pore size in the range of 10 - 100 nm with additional feed pores in the range of 100 to 600 nm and having a ratio of matrix and zeolite acidity of 1:1.
2. Catalyst according to Claim 1, characterized by a pore volume of approximately 0.45 to 0.55 cm^3/g as determined by water titration.

3. Catalyst according to Claim 1, characterized by the kaolin consisting of a clay having 80% of the particles with a size of less than one μm .

4. A process for the preparation of the catalyst of Claim 1, comprising in combination the steps of:
 - (a) providing a sodium silicate solution having a concentration of 3 to 6% SiO_2 ;

 - (b) dispersing kaolin clay in water in a concentration of about 20 to about 60% and combining with (a) in such proportions as to yield a catalyst containing about 20 to about 65% kaolin;

 - (c) adding a solution of alum to (b) so as to bring the pH to 8 to 10 and holding at 24 to 49°C for 1/2 hour or more;

 - (d) adding a sodium aluminate solution to (c) so as to raise the pH back to 12;

 - (e) adding alum solution to (d) so as to drop the pH to 3;

 - (f) adding a slurry of HY zeolite or ultrastable HY zeolite to (e) so as to produce a final content of 5 to 30% zeolite in the finished catalyst, said zeolite to have been exchanged with rare earths comprising cerium and lanthanum to the extent of 10 to 80% of full rare earth capacity;

 - (g) adding NH_3 to the slurry so as to neutralize the alum and return the pH to 6 to 9 by precipitating alumina gel;

- (h) dewatering (g) by filtration, homogenizing, adjusting visocisity and spray drying to a desired particle size;
- (i) washing said spray dried particles to remove additional sodium and sulfata ions;
- (j) contacting with additional rare earth solution comprising cerium and lanthanum at a pH of about 5 so as to precipitate said rare earths in the matrix;
- (k) rinsing, dewatering and drying to a final product."

Reasons for the Decision

1. The appeal is admissible.
2. In the Board's judgment, there are no formal objections under Article 123(2) EPC to the present Claims 1 to 4 since they do not contain subject-matter which extends beyond the content of the application as filed.
 - 2.1 Thus Claim 1 finds support in original Claim 9 in combination with pages 21, lines 9 to 11, page 33, lines 19 to 21, page 39, lines 4 to 20, page 40, lines 12 to 16, page 41, lines 4 and 5, page 42, lines 5 to 14, page 43, lines 21 to 26, page 45, lines 1 to 3, page 47, lines 14 to 23 and Table III on page 48 of the description.
 - 2.2 Claims 2 and 3 are supported by the page 42, lines 5 to 8 and page 40, lines 6 to 10 respectively of the originally filed description.

2.3 Claim 4 corresponds to the originally filed Claim 10 amended in such a manner as to bring it into conformity with the current Claim 1 in combination with page 39, lines 4 to 26.

3. Since the decision under appeal was founded exclusively on an objection under Article 123(2) EPC, the Board considers it appropriate to make use of the powers conferred on it by Article 111 EPC to remit the case to the first instance 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 first instance for further prosecution on the basis of Claims 1 to 4 filed on 21 June 1991 amended as agreed in the telephone conversations of 2 July 1991 and 2 September 1991.

The Registrar


E. Gorgmaier

The Chairman


K.J.A. Jahn