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**Datasheet for the decision
of 3 July 2007**

Case Number: T 0307/03 - 3.3.07

Application Number: 00118123.9

Publication Number: 1053787

IPC: B01J 27/26

Language of the proceedings: EN

Title of invention:

Improved double metal cyanide complex catalysts

Applicants:

ARCO Chemical Technology, L.P.

Headword:

ARCO/Double patenting

Relevant legal provisions:

EPC Art. 60
UK Patents Act 1977: Section 18(5)

Relevant legal provisions (EPC 1973):

EPC Art. 54(3), 60, 125

Keyword:

"Principle of prohibition of double patenting - applicable under EPC (yes)"

"Later claim more broadly formulated - double patenting prohibition applicable (yes)"

Decisions cited:

G 0001/05, G 0001/06, T 0587/98, T 0009/00

Headnote:

1. The principle of prohibition of double patenting, namely that the inventor (or his successor in title) has a right to the grant of one and only one patent from the European Patent

Office for a particular invention as defined in a particular claim is applicable under the EPC, and can be deduced from the provision of Article 60 EPC stating "The right to a European patent shall belong to the inventor or his successor in title" (see point 2.1).

2. Decision T 587/98 (OJ EPO 2000, 497) to the effect (see its point 3.6) that there is no basis in the EPC prohibiting "conflicting claims" not followed (see point 2.7).

3. A double patenting objection can be raised also where the subject matter of the granted claim is encompassed by the subject matter of the claim later put forward, that is where the applicant is seeking to re-patent the subject-matter of the already granted patent claim, and in addition to obtain patent protection for other subject-matter not claimed in the already granted patent. In particular, where the subject matter which would be double patented is the preferred way of carrying out the invention both of the granted patent and of the pending application under consideration, the extent of double patenting cannot be ignored as *de minimis*. To avoid the objection of double patenting the claims of the pending application should be confined to the other subject-matter that is not already patented, to allow the examination procedure to focus on whether a claim to this other subject-matter meets the requirements of the EPC (see points 5.2 to 5.4).



Case Number: T 0307/03 - 3.3.07

D E C I S I O N
of the Technical Board of Appeal 3.3.07
of 3 July 2007

Appellants: ARCO Chemical Technology, L.P.
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Decision under appeal: Decision of the Examining Division of the
European Patent Office posted 13 November 2002
refusing European application No. 00118123.9
pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: S. Perryman
Members: F. Rousseau
G. Santavicca

Summary of Facts and Submissions

- I. The appeal lies from the decision of the Examining Division refusing the European application No. 00 118 123.9 (publication No. 1 053 787 and hereinafter referred to as "the present application"). This was entitled "Improved double metal cyanide complex catalysts", and filed on 28 August 2000 as a divisional application of European application No. 94308612.4 (publication No. 0 654 302), referred to hereinafter as "the parent application". The same contracting states were designated in the present application and the parent application.

- II. By the decision under appeal, which was based on claims 1 to 7 as submitted by the applicants (hereinafter "appellants") during oral proceedings on 23 October 2002, the Examining Division refused the present application on the ground that the subject-matter of claim 1 lacked novelty over the catalysts obtained in examples 18 and 19 of document D4, EP-A-0 555 053.

- III. With their statement setting out the grounds for appeal dated 26 February 2003, the appellants submitted two sets of claims as their then Main and Auxiliary Requests.

- IV. In reply to a communication of the Board in preparation for oral proceedings, expressing *inter alia* concerns about the validity of the claims then on file in relation to the requirements of Articles 123(2), 76(1), 84, 83 and 54 EPC, the appellants submitted with a facsimile letter dated 30 May 2007 two amended sets of

claims as Main and First Auxiliary Request to replace the requests previously on file.

V. During oral proceedings before the Board on 3 July 2007, the appellants further submitted a Second Auxiliary Request, as a response to the indication by the Board that the Main Request and First Auxiliary Request were objectionable for double patenting.

VI. The claims of the Main Request read as follows:

"1. A double metal cyanide (DMC) complex having a surface area of less than 30 m²/g, and comprising i) up to 10 wt.% of a crystalline DMC component and ii) at least 90 wt.% of a DMC component which is amorphous to X-rays and which comprises a complexing agent which is a water-soluble aliphatic alcohol.

2. A complex as claimed in claim 1 comprising at least 99 wt.% of said amorphous DMC component.

3. A complex as claimed in claim 1 or 2 having a surface area of less than 20 m²/g.

4. A complex as claimed in any preceding claim wherein the DMC complex is a zinc hexacyanocobaltate.

5. The use of a catalyst as claimed in any preceding claim for polymerizing epoxides, for example to polyether polyols."

VII. The claims of the First Auxiliary Request were the same as those of the Main Request, except that claims 1 to 4 had been further amended so as to specify that the

claimed DMC complex is a DMC complex catalyst. The claims of the First Auxiliary Request read therefore as follows:

- "1. A double metal cyanide (DMC) complex catalyst having a surface area of less than 30 m²/g, and comprising i) up to 10 wt.% of a crystalline DMC component and ii) at least 90 wt.% of a DMC component which is amorphous to X-rays and which comprises a complexing agent which is a water-soluble aliphatic alcohol.
2. A catalyst as claimed in claim 1 comprising at least 99 wt.% of said amorphous DMC component.
3. A catalyst as claimed in claim 1 or 2 having a surface area of less than 20 m²/g.
4. A catalyst as claimed in any preceding claim wherein the DMC complex is a zinc hexacyanocobaltate.
5. The use of a catalyst as claimed in any preceding claim for polymerizing epoxides, for example to polyether polyols."

VIII. The claims of the Second Auxiliary Request read as follows:

- "1. A catalyst having a surface area of less than 30 m²/g, and comprising i) up to 10 wt.% of a highly crystalline double metal cyanide (DMC) compound and ii) at least 90 wt.% of a substantially amorphous DMC complex and which is prepared in the presence of a complexing agent which is a water-soluble alcohol.

2. A catalyst as claimed in claim 1 comprising at least 99 wt.% of said substantially amorphous DMC complex.
 3. A catalyst as claimed in claim 1 or 2 having a surface area of less than 20 m²/g.
 4. A catalyst as claimed in any preceding claim wherein the DMC complex is a zinc hexacyanocobaltate.
 5. The use of a catalyst as claimed in any preceding claim for polymerizing epoxides, for example to polyether polyols."
- IX. The mention of the grant of European patent 654 302 on the parent application appeared on 21 May 2003 in Bulletin 2003/21. Its claims as granted read as follows:
- "1. A double metal cyanide (DMC) complex comprising i) up to 10 wt.% of a crystalline DMC component and ii) at least 90wt.% of a DMC component which is amorphous to X-rays and which comprises a complexing agent which is a water-soluble aliphatic alcohol.
 2. A complex as claimed in claim 1 comprising at least 99 wt.% of said amorphous DMC component.
 3. A complex as claimed in any preceding claim having a surface area of less than 30 m²/g.
 4. A complex as claimed in claim 3 having a surface area of less than 20 m²/g.

5. A complex as claimed in any preceding claim wherein the DMC complex is a zinc hexacyanocobaltate.
6. The use of a catalyst as claimed in any preceding claim for polymerizing epoxides, for example to polyether polyols."
- X. European patent 654 302 was opposed, and revoked by the Opposition Division in a decision posted on 21 December 2006, which is presently under appeal with reference number T 0334/07-3.3.07. The decision related to the claims as granted, and the ground of revocation was lack of novelty over JP-A-4145123 and US 5158922 and the latter's European equivalent EP-A 555 053. The last mentioned document was document D4 in the proceedings before the Examining Division on the present application.
- XI. The appellants requested that the decision under appeal be set aside and that a patent be granted on the basis of the claims of the Main or First Auxiliary Request filed on 30 May 2007 or the claims of the Second Auxiliary Request filed on 3 July 2007.

Reasons for the Decision

1. The appeal is admissible.
2. *Principle of prohibition of double patenting*
 - 2.1 Article 60 EPC (identically worded under the EPC 1973 and 2000) states "The right to a European patent shall belong to the inventor or his successor in title", in

German "Das Recht auf das europäische Patent steht dem Erfinder oder seinem Rechtsnachfolger zu." and in French "Le droit au brevet européen appartient à l'inventeur ou à son ayant cause." From this the Board deduces that under the EPC the principle of prohibition of double patenting applies and that the inventor (or his successor in title) has a right to the grant of one and only one patent from the European Patent Office for a particular invention as defined in a particular claim. Once a patent has been granted to the inventor (or his successor in title) this right to a patent has been exhausted, and the European Patent Office is entitled to refuse to grant a further patent to the inventor (or his successor in title) for the subject-matter for which he has already been granted a patent.

- 2.2 Some national patent laws of Contracting States contain an express provision relating to the prohibition of double patenting, for example the UK Patents Act 1977 (as amended) states in Section 18(5):

"Where two or more applications for a patent for the same invention having the same priority date are filed by the same applicant or his successor in title, the comptroller may on that ground refuse to grant a patent in pursuance of more than one of the applications."

- 2.3 The EPC, unlike certain national legislation, contains neither in the Convention itself nor in the Implementing Regulations thereto any specific provisions relating to double patenting. The Board does not regard this as decisive: double patenting is expensive and most patent proprietors would not wish to

incur the expense. The legislator cannot be expected to have made provisions to regulate what will on grounds of economics alone be a very rare occurrence. The Board can recognize no legitimate interest in anyone having two or more identical patents with the same claims and the same priority dates, yet even this extreme case would have to be allowed if no prohibition of double patenting were considered to exist under the EPC.

2.4 Further since the EPC has the provision of Article 54(3) EPC to make the content of European patent applications with an earlier priority date deemed prior art against European applications with a later date, lack of novelty rather than double patenting would seem the proper objection to raise in situations where the claims of the granted patent have an earlier priority date. This would leave double patenting as an objection to raise where the granted patent and the pending application have the same priority date, whether as a result of one being a divisional of the application of the other, or because they were filed independently on the same date, or claiming the same priority date.

2.5 The Board's conclusions are in line with Enlarged Board of Appeal decisions G 1/05 and G 1/06 (OJ EPO 2008, 271 and 307 respectively), in which point 13.4 acknowledges the existence of the principle of prohibition of double patenting and that an applicant has no legitimate interest in proceedings leading to the grant of a second patent for the same subject-matter if he already possesses one granted patent therefor. This Board's conclusion is also in line with point 9.1 of these Enlarged Board decisions, as the application of the principle of the prohibition of double patenting is

- independent of whether the granted patent and the application were originally co-pendent independent applications or have resulted from one being a divisional of the application for the other.
- 2.6 Also in point is case T 9/00 (OJ EPO 2002, 275) where Board 3.3.2 had to decide on the admissibility of a second opposition by the same legal person, both notices of opposition complying with the requirements of Article 99(1) and Rule 55 EPC. The Board stated as a matter of principle that "No one is entitled to have an administrative authority or a court take a second substantive decision on a case which has already been settled (*ne bis in idem*). If an earlier request is admissible and can be used as the basis for a substantive decision, later requests for the same ruling are inadmissible for lack of legitimate interest.
- 2.7 The Board is aware of decision T 587/98 (OJ EPO 2000, 497) but does not agree with its apparent conclusion (see point 3.6) that there is no basis in the EPC prohibiting "conflicting claims". The Board in T 587/98 concluded that neither Article 125 EPC, which requires the European Patent Office to take into account the principles of procedural law recognized in the Contracting States, in the absence of procedural provisions in the EPC, nor the provisions relating to divisionals prevented "conflicting claims" of the type considered in the case before it. This Board is relying on Article 60 EPC, concerned with the fundamental right to a patent, to deduce the principle of prohibition of double patenting, and is not seeking to import a principle of procedural law solely under Article 125 EPC.

3. *Main Request*

3.1 Turning to the claims of the Main Request in this case, the subject-matter of its claim 1 corresponds exactly to the subject-matter of claim 3 when dependent on claim 1 of the European patent granted on the parent application. Claim 1 of the Main Request is thus objectionable for double patenting and the Main Request cannot be allowed into the proceedings on this ground alone.

3.2 During the oral proceedings the appellants asked whether it would make any difference if they agreed to abandon the European patent granted on the parent application. The Board considers that once the earlier patent has been granted the double patenting objection exists irrespective of the fate of the granted patent being relied on for the double patenting objection. The background to this appeal illustrates one of the potential evils which the prohibition of double patenting is designed to avoid. If the proprietors of the granted patent wishes to defend a claim in terms of claim 1 of the present Main Request, this should be in the appeal proceedings on the granted patent. To allow the patent proprietors to abandon the granted patent, but continue with some of the same claims in the present application would simply lengthen the time until a final decision is reached and involve more instances of the EPO. Also the so-far successful opponents to the patent granted on the parent application would not have a position as parties in proceedings on the present application, even though the issues to be decided on the granted patent and the

present application appear substantially identical.
This would be unfair on them.

4. *First Auxiliary Request*

4.1 The wording of claim 1 of the First Auxiliary Request differs from the wording of claim 1 of the Main Request only by the insertion of the word "catalyst" in the phrase "double metal cyanide (DMC) complex". This only makes explicit what was before implicit. Given that the granted patent is also concerned with catalysts, the reasoning for not allowing the Main Request into the proceeding also leads to the First Auxiliary Request not being allowed into the proceedings.

5. *Second Auxiliary Request*

5.1 Compared to claim 1 of the Main Request, claim 1 of the Second Auxiliary Request has been, modified in the following respects:

- In order to keep in line with the wording used in the claims as originally filed,:
 - The expression "double metal cyanide (DMC) complex" used in the preamble in order to define the claimed subject-matter in general term is replaced by the term "catalyst".
 - The expressions "a crystalline DMC component" and "a DMC component which is amorphous to X-rays" used for the definition of the components i) and ii) are replaced respectively by the expressions "a highly crystalline double metal

cyanide (DMC) compound" and "a substantially amorphous DMC complex".

- Moreover, the complexing agent is defined as a water-soluble alcohol instead of a water-soluble aliphatic alcohol.
- 5.2 According to the appellants, the subject-matter of present claim 1 differs in substance from the subject-matter of claim 3 of the parent application as granted only in that the complexing agent is defined, in a broader manner, as a water-soluble alcohol instead of a water-soluble aliphatic alcohol. The claim they are now seeking would be re-patenting the subject-matter of claim 3 of the parent application as granted, and seeking protection for additional subject-matter, namely where the water-soluble alcohol is not aliphatic.
- 5.3 This Board considers that the double patenting objection can be raised where subject-matter of the granted claim is encompassed by the subject-matter of the claim later put forward. The Board cannot regard the extent of double patenting here as something that can be ignored as *de minimis*, given that the subject-matter which would be double patented is stated to be the preferred way of carrying out the invention of the present application.
- 5.4 To avoid this objection of double patenting the appellants would have had to confine the claimed subject-matter in the present application to subject-matter not already patented in the patent granted on the parent application. This would then allow the examination procedure to focus on the question of

whether this claimed subject-matter (for which there is not already a granted patent) meets the requirements of Articles 123(2) and 83 EPC, as well as the other requirements of the EPC.

5.5 The Second Auxiliary Request too is not allowed into the proceedings.

6. As there are no other requests the appeal must be dismissed.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar

The Chairman

C. Eickhoff

S. Perryman