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**Datasheet for the decision  
of 13 December 2007**

**Case Number:** T 0795/05 - 3.3.03

**Application Number:** 95924038.3

**Publication Number:** 0766702

**IPC:** C08F 10/00

**Language of the proceedings:** EN

**Title of invention:**

Polymerization catalyst systems, their production and use

**Patentee:**

ExxonMobil Chemical Patents Inc.

**Opponent:**

THE DOW CHEMICAL COMPANY

**Headword:**

-

**Relevant legal provisions:**

EPC Art. 54(3), 84, 123(2), 123(3)

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

EPC Art. 54(3),(4)

**Keyword:**

"Main request, first-seventh, ninth auxiliary requests: -  
added subject-matter - yes"

"Fourth, fifth, sixth, eighth, ninth auxiliary requests -  
amendments - extension beyond patent as granted - yes"

"Sixth, seventh, eighth, ninth auxiliary requests - claims -  
clarity - no"

**Decisions cited:**

G 0009/91, G 0002/98, G 0001/03, T 0004/80, T 0002/81,  
T 0852/98, T 1050/99, T 1102/00, T 1139/00, T 0236/01,  
T 0868/04

**Catchword:**

Admissibility of disclaimer directed to subject-matter disclosed as belonging to the invention (Reasons, 7.1, in particular 7.1.8, 7.1.9, 7.1.13, 7.1.13, 7.1.14, 7.1.21



Case Number: T 0795/05 - 3.3.03

**D E C I S I O N**  
of the Technical Board of Appeal 3.3.03  
of 13 December 2007

(Opponent)

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**Decision under appeal:**

Interlocutory decision of the Opposition  
Division of the European Patent Office dated  
13 April 2005 and posted 3 May 2005 concerning  
maintenance of European patent No. 0766702 in  
amended form.

**Composition of the Board:**

**Chairman:**

C. Idez

**Members:**

M. C. Gordon

H. Preglau

## Summary of Facts and Submissions

I. Mention of the grant of European Patent No. 0 766 702 in the name ExxonMobil Chemical Patents Inc. in respect of European patent application No. 95924038.3 filed on 21 June 1995 as international application No. PCT/US95/07910, published as WO-A-96/00245 on 4 January 1996 and claiming priorities of US 08/265 533, dated 24 June 1994 and US 08/412 810, dated 29 March 1995, was announced on 17 October 2001 (Bulletin 2001/42) on the basis of 9 claims.

Claim 1 read as follows:

"1. A method of forming a supported catalyst system, the method comprising:

(a) contacting a porous support with a metallocene solution and an activator solution wherein the total volume of the metallocene solution and the activator solution is less than three times the total pore volume of the porous support and more than one times the total pore volume of the porous support, wherein the metallocene solution and the activator solution are combined first before being contacted with the porous support or wherein the metallocene solution is contacted with the porous support followed by addition of the activator solution or wherein the activator solution is contacted with the porous support first before being contacted with the metallocene solution; and drying the resulting catalyst system to a free flowing powder, the mole ratio of the metal of the activator component to the transition metal of the metallocene component being from 0.3:1 to 1000:1 and the mole ratio of aluminum in any alumoxane activator to the transition metal being above 100."

Claims 2-7 were directed to preferred embodiments of the method of claim 1.

Claims 8 and 9 read as follows:

"8. A process for polymerizing olefins alone or in combination [sic] with one or more other olefin monomers, said process comprising [sic] polymerizing in the presence of a supported catalyst system prepared by the method of any of the preceding claims."

"9. A supported catalyst system obtainable by a method according to any of claims 1 to 7."

II. An opposition against the grant of the patent was filed on 15 July 2002 by The Dow Chemical Company on the grounds of Art. 100(a) and (c) EPC.

With respect to Art. 100(c) EPC it was submitted that the final phrase of claim 1 constituted an inadmissible disclaimer with respect to document

D8: WO-A-95/12622.

During the course of the opposition proceedings the following documents were additionally cited:

D10: Chien J.C.W et al "Olefin Copolymerization with Metallocene Catalysts. III. Supported Metallocene/Methylaluminoxane Catalyst for Olefin Copolymerization", J. Polym., Sci., Part A Pol. Chem. vol. 29, p 1603-1607 (1991).

D11: WO-A-94/00500

D12: WO-A-94/07928.

D10 and D11 were cited by the opponent in a letter of 24 March 2005. D12 was cited by the patentee in a letter of 6 April 2005.

III. In a decision announced orally on 13 April 2005 and issued in writing on 3 May 2005, the opposition division held that the patent could be maintained in

amended form on the basis of the first auxiliary request, consisting of 9 claims and submitted with a letter dated 6 April 2005.

The first auxiliary request differed from the set of claims of the patent as granted in that in claim 1 the final phrase [...the] "mole ratio of aluminium in any alumoxane activator to the transition metal being above 100" was replaced by the wording [...the] "activator not being alumoxane".

According to the decision:

- (a) The main request (the claims as granted) did not meet the requirements of Art. 123(2) EPC. It was noted that during the examination procedure process claim 1 had been amended by introduction of the disclaimer "the mole ratio of aluminium in any alumoxane activator to the transition metal being above 100" in order to distinguish the claimed subject matter over the disclosure of D8, prior art pursuant to Art. 54(3) EPC. The disclaimer however removed more than was necessary to establish novelty over the anticipatory teaching of D8. Accordingly, the second criteria for admissibility of disclaimers set out in decisions G 1/03 and G 2/03 of the Enlarged Board of Appeal (OJ EPO, 2004, 413 and 448) was not fulfilled.
- (b) With regard to the first auxiliary request, it was held that the basis for the amendment "the activator not being alumoxane" was to be found in paragraphs [0021]-[0027] where alumoxanes, ionizing activators or Lewis acids etc were specified as cocatalysts and activators. Alumoxanes had been deleted from this list. It was held that deletion of an activator from a list,

even if it was the preferred one did not contravene Art. 123(2) EPC.

The amendment was also held not to contravene the requirements of Art. 123(3) EPC since in the claims as granted alumoxane could be used in a specific molar ratio with respect to the transition metal of the metallocene component. In the amended claim, alumoxane was excluded.

Claim 1 of the first auxiliary request also met the requirements of Art. 84 EPC. The introduced feature made it clear that no alumoxane could be used.

The claims of the first auxiliary request were also held to meet the requirements of Art. 54 and 56 EPC.

(c) Accordingly it was held that the patent could be maintained in amended form on the basis of the first auxiliary request.

IV. Notices of appeal against this decision were filed by the patentee on 27 June 2005 and by the opponent on 12 July 2005, the appeal fees were paid on the respective indicated dates.

V. In its statement of grounds of appeal, dated 5 September 2005 the patentee requested that the patent be maintained unamended. As a first auxiliary request it was requested that, should the board find the main request to meet the requirements of Art. 123(2) EPC but was not minded to grant the main request that the case be remitted to the opposition division for consideration of Art. 54 and 56 EPC. As a second auxiliary request it was requested that the patent be

maintained in the form upheld by the opposition division.

With respect to Art. 123(2) EPC it was submitted that the disclaimer in claim 1 of the patent as granted was in accordance with the criteria set out in the decisions G 1/03 and G 2/03.

In particular it was argued that although parts of D8, and in particular the claims were directed to a process in which the ratio solution volume:pore volume was below one, other parts of D8 were directed to processes wherein that ratio was greater than one. The restriction derivable from the claims of D8 did not mean that the disclosure of D8 as a whole was also restricted in this manner.

Examples 1, 6, 8, and 9 of D8 involved solution volumes which were greater than the pore volume of the silica. Accordingly the process of D8 involved a solution:pore volume ratio within the scope specified in claim 1 of the patent.

No selections were necessary from D8 in order to arrive at a novelty destroying disclosure. It was simply required that D8 be read as a whole. The presence of more than one process in D8 could not be used to argue that none of these processes were novelty destroying. It was also submitted that the novelty destroying content of D8 did not rely on a combination of features of an example with generic features.

Submissions were also made with respect to novelty and inventive step which are however not of importance for the present decision.



VI. The opponent submitted its statement of grounds of appeal with a letter dated 13 September 2005, and made a further submission with a letter dated 26 January 2006, in response to the statement of grounds of appeal of the patentee.

In these submissions the opponent made explicit reference to D1-D8, D10 and D11.

It was argued that the opposition division had been correct in its conclusion that the main request did not meet the requirements of Art. 123(2) EPC, since the disclaimer did not meet the requirements set out by the Enlarged Board of Appeal in the decisions G 1/03 and G 2/03.

With regard to the set of claims as maintained by the opposition division, it was submitted that the feature "the activator not being alumoxane" did not have support in the application as originally filed and hence contravened Art. 123(2) EPC.

Paragraphs [0021]-[0027] of the patent, referred to by the opposition division (see section III.(b) above) made clear that the activator could be alumoxane, which was emphasized by the fact that all but one of the working examples employed alumoxane. The finding of the decision under appeal (see section III.(b) above) that "alumoxanes" had been deleted from a list, which deletion did not violate Art 123(2) EPC was disputed. Claim 1 of the first auxiliary request did not contain a list but referred to a genus and explicitly stated that the activator was not alumoxane. It was submitted that had deletion from a list been effected then the remaining members of that list should have been recited in the claim.

Since the feature "the activator not being alumoxane" was not based on the disclosure of the application as

originally filed, it had to be regarded as a disclaimer. Hence the conditions set out in G 1/03 and G 2/03 had to be observed. Reference was also made to T 1102/00 (1 June 2004, not published in the OJ EPO), which related to a case in which subject matter which had been disclosed as being according to the invention had been excluded. According to T 1102/00 the exclusion was held to be inadmissible pursuant to Art. 123(2) EPC since it could not be inferred from the original disclosure that it had been intended to exclude this subject matter. It was hence submitted that the amendment excluding alumoxane - which had been the preferred embodiment - neither had support in the application as filed, nor did it constitute a valid disclaimer pursuant to G 1/03 and G 2/03.

In this connection it was requested that, should the board come to the conclusion that the feature "the activator not being alumoxane" as being based on the application as filed that a question be referred to the enlarged board of appeal, a formulation of this question being proposed.

VII. In a letter dated 24 January 2006 the patentee submitted sets of claims forming third to fifth auxiliary requests.

Common to all requests was the specification in the respective claims 1 that an "ionizing activator" was employed, and deletion of the requirement that "the mole ratio of aluminum in any alumoxane activator to the transition metal being above 100". According to the fourth auxiliary request the "ionizing activator" was further specified as "(not being alumoxane)". The fifth auxiliary request differed from the third auxiliary request in that claim 1 was restricted to the process

in which the metallocene and ionizing activator were combined before being contacted with the porous support. With regard to the admissibility of the feature "the activator not being alumoxane" it was submitted that the situation was not that of deletion from a list, but instead the application referred to "activators" in a generic sense, i.e. a "genus" in the terminology of the opponent. Certain types of activator were disclosed, in particular "alumoxane". Alumoxanes were thus defined as a subset of "activators". The definition of this subset thus also implicitly defined the group of activators which were not alumoxanes, i.e. the complementary - larger - subset of the overall set. It was submitted that the amendment was in line with principles set out in T 2/81 (OJ EPO 1982, 394), although it was conceded that this case law, which related to numerical ranges, was not directly applicable to the present situation. Regarding the question of removing the most preferred embodiment by the disclaimer it was disputed that it was disclosed in the application as filed that alumoxane was preferred over other types of initiators. In this connection it was submitted that the description of non-alumoxane activators was in fact broader than the disclosure of alumoxane activators. It was further submitted that the position of the opponent lacked any basis in the case law of the boards of appeal, reference being made to G 2/98 (OJ EPO 2001, 413), which again was conceded not to be directly applicable to the present case. It was submitted that T 1102/00, cited by the opponent (see section VI above) related to the situation of a chance disclosure whereas in the present case the situation was one of genus and sub-genus. Contrary to the position taken by the opponent, it was submitted that the case law did permit

limiting amendments based upon features mentioned in the description of the application without considering whether or not it could be inferred from the application as filed that it had been intended to exclude said subject matter, reference again being made to T 2/81.

With regard to G 1/03 and G 2/03 it was submitted that the feature "the activator not being alumoxane" was not a disclaimer with respect to "accidental" prior art but was instead based on the disclosure of the application as filed.

With regard to the third auxiliary request, it was submitted that alumoxane was not an ionizing activator and consequently the reference to alumoxane in claim 1 had been deleted. This amendment had a basis at page 6 line 20 of the application as published: "It is also within the scope of this invention to use ionizing activators". This amendment was considered to meet the requirements of Art. 123(3) EPC.

With regard to the fourth auxiliary request, including the words "not being alumoxane", it was submitted that this feature had a basis at page 4 lines 31-33 and page 6 lines 25-27 of the application as published. The restriction in the fifth auxiliary request to the order of addition was to be found at page 10, lines 23 and 24 of the application as filed.

Further submissions were made with respect to novelty and inventive step which however are not relevant for the present decision.

VIII. In a letter dated 30 June 2006 the opponent submitted that the amended third auxiliary request contravened Art. 123(3) EPC. Reference was made to a letter, dated 14 February 2005, filed by the patentee during the

opposition proceedings in which it had been submitted that "alumoxane is not an ionizing activator and hence the disclaimer has been deleted from claim 1". This contention of the patentee had been disputed with reference to D11, which taught that alumoxane was an ionizing cocatalyst, this being confirmed by D10. Since the patentee did not define what an ionizing cocatalyst was, and adopted varying views on this, an objection pursuant to Art 84 EPC was raised in respect of this term.

Claim 1 of the third auxiliary request permitted alumoxane to be present, which became clear with respect to claim 3 which allowed the presence of two or more activators. The restriction on the ratio of aluminium to transition metal present in granted claim 1 had been deleted, meaning that the stated ratio could be below 100. Hence the claim contravened Art. 123(3) EPC.

With respect to the fourth auxiliary request, the objections pursuant to Art. 123(3) EPC were maintained. Further since there was no basis in the application as filed for the disclaimer of alumoxane, an objection pursuant to Art. 123(2) EPC was raised. The fifth auxiliary request was submitted to contravene the requirements of Art. 123(3) EPC for the same reason as the third and fourth auxiliary requests. It was further submitted that the fifth auxiliary request contravened Art. 123(2) EPC. There was no basis in the application as filed for the combination of the feature "ionizing activator" with a specific manner of addition of different solutions, which manner was selected from among three possible routes mentioned in claim 1 as granted.

It was further referred to T 1050/99 (25 January 2005, not published in the OJ EPO) which, with reference to G 1/03 was submitted to provide further support for the position of the opponent in respect of "undisclosed disclaimers".

IX. In a letter dated 10 November 2006 the patentee submitted revised fourth and fifth auxiliary requests. These had been amended to specify that the ionizing activator was not in combination with alumoxane. As a basis for this amendment reference was made to page 6 lines 25 to 27 of the application as filed, which disclosed a combination of alumoxane and ionizing activators, which, it was submitted implicitly disclosed the case where these two activators were not employed in combination.

Reference was also made to:

- T 4/80 (OJ EPO 1982, 149);
- Annex 1 of Paper B of the 2005 European Qualifying Examination and the associated Examiners' Report and
- T 1139/00 (10 February 2005, not published in the OJ EPO).

With regard to the clarity objections raised by the opponent in respect of the term "ionizing activator", and the reference to D10 and D11 it was submitted that from paragraphs [0017] and [0022] of the patent it was clear that the term "ionizing activator" did not include alumoxane, since in the cited paragraphs alumoxane was presented as an alternative to and not a subset of ionizing activators. The fact that the disclosures of D10 and D11 diverged from this was

ascribed to the fact that at the time these documents were written the mechanism of activation by alumoxane was unknown. Reference was made to D12, which was submitted to treat alumoxanes as an alternative to, and different from ionizing activators. D12 was referred to in the patent and used similar terminology. It was further submitted that it was clear from the patent as a whole that the term "ionizing activator" as employed did not include alumoxane, and hence that the objection pursuant to Art. 84 EPC was without substance.

Regarding the objection pursuant to Art. 123(3) EPC, it was submitted that this did not apply to the second auxiliary request since claim 1 thereof was limited to an activator which was not alumoxane, and hence all ratios of aluminium to metal were excluded. The third auxiliary request, directed to solutions comprising two or more activators, would be understood as relating to two ionizing activators rather than to alumoxane and ionizing activator, which would not be consistent with claim 1. The intention behind the fourth and fifth auxiliary requests was to make clear that claim 1 excluded alumoxane.

With respect to Art. 123(2) EPC and the wording "(not being alumoxane)", it was submitted this was supported by the aforementioned paragraphs [0017] and [0022] of the description. The wording "(not being alumoxane)" merely reflected and confirmed the meaning of the term "ionizing activator".

The combination of features in claim 1 of the fifth auxiliary request was also supported by the disclosure of the application as filed, the objection of the opponent being based on an inadmissible, selective reading of the original disclosure.

With respect to T 1050/99 and its relation to G 1/03 it was submitted that G 1/03 related to the practice of amending a claim by introducing a feature which was not disclosed in the application as filed, which amendments were permissible in certain situations. The inclusion of the feature that the activator was not alumoxane was submitted not to be an amendment of this type because "alumoxane" was implicitly and inevitably disclosed in the application as filed in the form of a generic disclosure of activators as a genus and alumoxanes as a subset thereof. Accordingly it was submitted that T 1050/99 had no relevance to the present appeal. It was further submitted that the comments made in T 1050/99 were inconsistent with the substance of G 1/03 and G 2/98, T 2/81 or T 4/80. T 1050/99 broadly defined the term "disclaimer" in accordance with the definition set out in G 1/03. However G 1/03 was concerned with a disclaimer the subject matter of which was not disclosed in the application as filed, and it was incorrect to extend this reasoning to other types of "disclaimers". Further the emphasis in T 1050/99 on whether a feature was disclosed in positive or negative terms had no basis in the EPC, since both Art. 123 EPC and R. 86 EPC 1973/R. 137 EPC 2000 referred simply to amendments, not making any distinction between amendments expressed in positive or negative terms. In support of this position reference was made to the consideration of combinations of numerical ranges in T 2/81. It was further submitted that according to T 4/80 originally disclosed subject matter clearly definable by technical features could, at the request of the applicant, be excluded from the wider claim by disclaimer, it being immaterial whether



that subject matter was disclosed as a preferred or potentially advantageous feature or not.

It was further submitted that G 1/03 in point 2.5 of the reasons referred to the exclusion of non-working embodiments which were comprised in the scope of a claim and nowhere in G 1/03 was it suggested that the reasoning also applied to embodiments specifically disclosed in the application as filed. It was considered that T 1050/99 confused the situation of non-working embodiments falling within the scope of the claim (to which G 1/03 relates) to non-working embodiments specifically disclosed in the application (on which G 1/03 was silent). It was also submitted that the practice of "waiving part of the invention" as referred to in T 1050/99 related simply to limiting the scope of protection which, subject to the provisions of Art. 123(2) and (3) EPC was not contrary to the practice of the EPO.

According to the Guidelines for Examination the principle established in T 4/80 was still to be applied and G 1/03 did not affect the established practice of allowing amendments to exclude subject matter disclosed in the application. Reference in this respect was made to section C-III 4.12 of the Guidelines. The allowability of disclaimers not disclosed in the application as filed, to which G 1/03 applied was a separate issue discussed in section C-VI 5.3.11 of the Guidelines.

Support for the position of the patentee was also to be found in the Examiner's Report on the EQE 2005/B(Ch)/e, which stated that the basis for an exclusion was to be found in the application where the subject matter was expressly disclosed. It was further stated in this

report that G 1/03 and G 2/03 were not applicable since these related to undisclosed disclaimers.

Support for this position was also to be found in T 1139/00, in which an embodiment which had been disclosed in the application as filed was disclaimed. According to T 1139/00 since the disclaimed subject matter had been disclosed in the application as filed the situation was the opposite of that considered in G 1/03 which thus did not apply. Accordingly it was submitted that disclaimers to exclude part of the originally filed subject matter were not contrary to Art. 123(2) EPC.

- X. On 23 July 2007 the board issued a summons to attend oral proceedings.
  
- XI. With a letter dated 5 December 2007 the patentee withdrew the existing second to fifth auxiliary requests and filed new second to ninth auxiliary requests as follows:
  - (a) Second auxiliary request: Corresponded to the main request except that claim 1 was limited to a process in which the metallocene and activator solutions were combined first.
  - (b) Third auxiliary request: Corresponded to the main request except that claim 1 was limited to a solution volume of less than three but not less than two pore volumes.
  - (c) Fourth auxiliary request: Corresponded to the claims as allowed by the opposition division (see section III above).
  - (d) Fifth auxiliary request: The disclaimer in the fourth auxiliary request was deleted and line 1 of

claim 1 specified "in which alumoxane is not used as activator".

- (e) Sixth auxiliary request: Corresponded to the fifth auxiliary request additionally specifying that the activator was an "ionizing" activator.
- (f) Seventh auxiliary request: Corresponded to the former fourth auxiliary request as filed with the letter of 10 November 2006 (see section IX above). Accordingly this request differed from the above mentioned sixth auxiliary request by specifying additionally in line 2 "a solution of an ionizing activator (not being alumoxane)" and in the final line of the claim specifying "the ionizing activator not being in combination with alumoxane".
- (g) Eighth auxiliary request: Corresponded to the former fifth auxiliary request filed with the letter of 10 November 2006 (see section IX above). Thus claim 1 of this request was limited to processes in which the metallocene solution and ionizing activator solution were combined first and specified that the activator was an ionizing activator.
- (h) The ninth auxiliary request was a combination of the third and sixth auxiliary requests.

XII. Oral proceedings was held on 13 December 2007.

At the beginning of the oral proceedings the parties confirmed their requests as follows:

Patentee:

That the decision under appeal be set aside and that the patent be maintained in the form as granted (main request). As a first auxiliary request, in the event that the board finds the main request to be allowable under Art. 123(2) EPC, but was not minded to grant the

main request, that the case be remitted to the opposition division for consideration of the main request under Art. 54 and 56 EPC.

As second to ninth auxiliary request that the patent be maintained in amended form on the basis of the respective correspondingly named sets of claims filed with the letter dated 5 December 2007. During the course of the oral proceedings the eighth auxiliary request was amended (see section XII.(e) below).

Opponent:

That the decision under appeal be set aside and the patent be revoked.

(a) With regard to the main request, corresponding to the claims as granted, which request had been held not to meet the requirements of Art. 123(2) by the opposition division (see section III.(a) above) the patentee submitted that the disclaimer "and the mole ratio of aluminum in any alumoxane activator to the transition metal being above 100" was based on the ranges disclosed at page 9 lines 1-4 of D8. While the claims of D8 disclosed a ratio of solution volume to pore volume of less than 1, other parts of the disclosure of D8, specifically examples 1, 6, 8 and 9 disclosed volume ratios above 1. The fact that these examples were outside the scope of the claims of D8 was immaterial for answering the question of what was disclosed by D8.

Thus the combination of these examples with the disclosure at page 9 provided a basis for the disclaimer. The disclaimer was of an appropriate scope and it was not necessary to include any

details of the process, for example as set out at page 8 lines 9-14 of D8.

The opponent submitted that according to G 1/03 a disclaimer should not remove more than was required to establish novelty. The disclaimer was however not restricted to those examples identified by the patentee. Further both D8 and the patent in suit disclosed a number of process alternatives. Only that disclosed at page 8, lines 16-18 of D8 corresponded to one of the methods specified in claim 1 of the main request. The disclaimer was however of broader scope since it encompassed any combination of method steps.

Following deliberation the board announced its decision that the claims of the main request did not meet the requirements of Art. 123(2) EPC.

The patentee maintained the 1st-3rd auxiliary requests, while acknowledging that the reasoning in respect of the main request applied also to these.

- (b) With regard to the 4th auxiliary request, which corresponded to the set of claims maintained by the opposition division (see section III above) the opponent submitted that the feature "the activator not being alumoxane" did not exclude the presence of alumoxane for other reasons. It could still be present e.g. as a scavenger. The restriction on the amount of alumoxane contained in the claims as granted was no longer present in the claims of the fourth auxiliary request,

meaning that the requirements of Art. 123(3) EPC were not met.

More significant, according to the opponent, was however that the application as filed did not disclose that the activator could not be alumoxane. Most examples of the patent employed alumoxane. Regarding the submissions of the patentee in the written procedure in respect of G 1/03 (see sections VII and IX above) it was disputed that this was a "disclosed disclaimer". On the contrary alumoxane activator was disclosed as being part of the invention, and to exclude this contravened the requirements of Art. 123(2) EPC. This position was consistent with the decisions G 1/03, T 1050/99 and T 1102/00 already cited in the written submissions (see sections VI and VIII above). Reference was also made to T 868/04 (10 May 2006, not published in the OJ EPO) and T 236/01 (15 September 2005, not published in the OJ EPO) for the first time at the oral proceedings. The opponent submitted that according to the application as filed alumoxane was disclosed as an activator. The application did not contain a list of activators. The approach of the opposition division whereby the disclosure starting at page 6 and continuing onto page 7 of the application was treated as a list was submitted to be incorrect. There was no basis in the application as filed for the exclusion of alumoxanes. G 1/03 fully applied to the present case for the reasons set out in T 1050/99. The disclaimer in the 4th auxiliary request was of broader scope than that in the patent as granted, and hence excluded more.

After a break to give the patentee the opportunity to study the two decisions newly cited by the opponent, the patentee submitted that a basis for the amendment in claim 1 of the 4th auxiliary request was to be found at page 6, lines 10 and 11 and on page 7 of the application as filed. The arguments in respect of subsets (see section VII above) and whether a disclaimer was positively or negatively formulated (see section IX above) were reiterated. The approach with the "subsets" was stated to be compatible with the established case law as set out in the publication "Case Law of the Boards of Appeal of the European Patent Office", 5th edition section page 262, third paragraph (page reference of the English language version, corresponds to the 13th paragraph of section III.A.2.1) which, with reference to T 2/81 permitted combinations of general and preferred embodiments, i.e., broad and narrow ranges. It was emphasised that what was important was what was disclosed, not what was "preferred".

The argument that T 1050/99 misapplied the principles of G 1/03 was reiterated (see section IX above). The same error was submitted to have been made in the other decisions cited by the opponent.

The patentee then referred to T 1139/00 to support the admissibility of the disclaimer of alumoxane (see section IX above). It was submitted that T 1139/00 confirmed that it was permissible to formulate a disclaimer to subject matter disclosed in the application as filed, it being emphasized that this was the opposite situation to that considered in G 1/03 which related to subject

matter not disclosed in the application as filed. The effect of the disclaimer was merely to exclude or waive part of the subject matter originally covered by the application as filed. In this respect it should be seen merely as an "amendment" and not as a "disclaimer". This approach was consistent with that derivable from T 4/80, which was also set out in the Guidelines for Examination. The approach adopted, with a negative feature, was also consistent with G 2/98. The "essence" of the invention was not changed merely by excluding one part thereof, regardless of the degree of preference thereof.

With regard to the question of the role of the alumoxane, it was submitted that if this was present it acted inevitably and exclusively as an activator. Thus the position of the opponent according to which alumoxane could be present, but not acting as an activator was unrealistic.

Following announcement by the board that the fourth auxiliary request was refused the patentee submitted that the situation in respect to the fifth auxiliary request was the same. This request was maintained.

- (c) Regarding the sixth auxiliary request, the patentee submitted that, since it was specified that the activator was an ionizing activator, alumoxane was excluded.

There was a basis for this amendment in the wording of the application as filed.

In response to the submissions of the opponent concerning the function of the alumoxane and whether this could fulfil some other function (see



also section XII.(b) above), the patentee emphasised that in the context of the method of claim 1 alumoxane could, if present only function as an activator. Thus the claim excluded alumoxane completely. From the patent, paragraph [0017] it was further clear that "ionizing activators" formed a class distinct from alumoxane, which was consistent with the prevailing views of the skilled person. This was also implicit from the wording of the description - there had to be a distinction otherwise the disclosure of a combination of an alumoxane and an ionizing activator would make no sense. The species encompassed by the term "Lewis acids" were broader than those encompassed by "ionizing activators", It was reiterated, with reference to D10-D12 that at the priority date of the patent in suit the precise mode of action of alumoxane was not known. The opponent submitted that the term "ionizing activator" was unclear since it attempted to define the component by the effect it was intended to have. Whether it acted as an "ionizing activator" however depended on other conditions prevailing. Accordingly the restriction imposed by this feature was unclear. It was also submitted that a further source of unclarity arose since the distinction between alumoxane, Lewis acids and "ionizing activators" was uncertain, which objection had already been raised in the written submissions with reference to D10 and D11 (see section VIII above). The raising of an objection pursuant to Art. 84 EPC in respect of this feature was submitted to be admissible since the term "ionizing activator" had not been present in the

claims of the patent as granted.

Following this debate, the patentee requested that were the board to come to the conclusion that the term "ionizing activator" did not meet the requirements of Art. 84 EPC that the case be remitted to the opposition division for consideration of this matter.

Following deliberation the board announced that the request for remittal was rejected and that the 5th and 6th auxiliary requests were refused.

- (d) With respect to the 7th auxiliary request the opponent submitted that this should be refused pursuant to Art. 123(2) EPC since there was no disclosure in the application as filed of the feature "an ionizing activator (not being alumoxane)". Further this request did not address the defect arising due to the unclarity of the term "ionizing activator" (see the discussion of the 5th and 6th auxiliary requests in the previous section). The patentee submitted that the application as filed disclosed at page 6 lines 25-27 the ionizing activator in combination with alumoxane. Analogously to the reasons advanced in respect to the 4th auxiliary request (see section XII.(b) above) it was submitted that this also disclosed ionizing activators not being in combination with alumoxane. Specifically, two possibilities were disclosed, one of which had now been deleted. The aim of this amendment was to address the objection of the opponent that by not excluding alumoxane a deficiency pursuant to Art. 123(3) arose. This amendment was thus to be considered as a "clarifying amendment".

Following deliberation the board announced that the 7th auxiliary request did not meet the requirements of Art. 84, 123(2) and 123(3) EPC.

- (e) Following the discussion of the 7th auxiliary request, and a preliminary discussion of the 8th auxiliary request submitted with the letter of 5 December 2007 (see section XI.(g) above), the patentee submitted an amended version of the 7th auxiliary request, designated 8th auxiliary request, and replacing that filed with the letter of 5 December 2007. Claim 1 of this request was amended compared to claim 1 of the 7th auxiliary request by deletion of the wording "not being alumoxane" in claim 1 (twice).

The patentee submitted that due to the amendment the objection pursuant to Art. 123(2) had been overcome. Regarding Art. 123(3) EPC it was submitted that claim 1 of the 8th auxiliary request should be read as relating to ionizing activators.

The opponent maintained the objections to the clarity of the term "ionizing activators". It was further argued that the effect of claim 3 according to which 2 or more activators could be present, also with reference to the use of the term "comprising" in operative claim 1 and in view of paragraph [0022] of the patent, was to reintroduce the possibility that alumoxane be present. Accordingly this request was open to an objection pursuant to Art. 123(3) EPC since the limitation in claim 1 as granted had been deleted. The patentee submitted that claim 3 should be understood as being limited to ionizing activators and excluding alumoxane, which would be understood

by reading claim 1 in conjunction with paragraph [0022] of the patent.

(f) With respect to the ninth auxiliary request the patentee submitted that the basis for the range of "less than three times" and "not less than two" was to be found at page 9 line 14 of the application as published. With regard to the other issues, reference was made to the arguments already advanced.

The opponent disputed that there was a basis for the feature "less than two", and otherwise relied on the arguments already advanced.

### **Reasons for the Decision**

1. The appeals are admissible.
  
2. During the course of the opposition proceedings, a number of documents were cited by the parties, in particular D10 and D11 cited by the opponent and D12 cited by the patentee (see section II above). All these documents were relied upon by the parties both during the opposition proceedings (cf. letter of 24 March 2005 of the opponent and letter of 7 April 2005 of the patentee) and in the proceedings before the board (see sections VIII, IX and XII above. Thus the board sees no reason not to consider these documents as being part of the appeal procedure.

3. *Main request*

The main request is the set of claims of the patent as granted.

Claim 1 on file at the entry in the regional phase before the EPO read as follows:

"1. A method of forming a supported catalyst system, the method comprising contacting a porous support with a metallocene solution and an activator solution, wherein the total volume of the metallocene solution and the activator solution together is in the range of from less than that at which a slurry is formed to above one times the total pore volume of the porous support".

3.1 Claim 1 as granted (see section I above) contains the following disclaimer:

"and the mole ratio of aluminum in any alumoxane activator to the transition metal being above 100".

As can be deduced from the letter of 15 January 1998 of the patentee during the examination proceedings, this disclaimer was incorporated into claim 1 in order to distinguish the claimed subject matter from the disclosure of Example 1 of D8.

3.2 D8 has a priority date of 5 November 1993 and an international publication date of 11 May 1995. The patent in suit claims priority dates of 24 June 1994 and 29 March 1995. The same contracting states are designated in both D8 and the patent in suit. D8 is therefore prior art pursuant to Art. 54(3) EPC (1973 and 2000).

- 3.3 According to the general disclosure of D8, as defined in claim 1 thereof, this document relates to a process for the preparation of a supported olefin polymerization catalyst involving providing a solution of a metallocene and an alumoxane reaction product and impregnating the porous support with this solution. Claim 1 of D8 specifies that the volume of solution does not exceed the total pore volume of the porous support. The same teaching is to be found at page 6 lines 19-20 of D8.
- Claim 1 of the patent in suit as granted requires that the volume of solution be less than three times and more than one times the total pore volume of the support. From the foregoing analysis of D8, it is thus apparent that the general disclosure thereof does not, in fact, anticipate this feature of the granted claim. Accordingly the subject matter of granted claim 1 is novel with respect to the general disclosure of D8 without recourse to the disclaimer.
- 3.4 Example 1 of D8 however discloses a process in which 11.07ml of 10 wt% solution of methyl alumoxane (hereinafter "MAO") to which 0.138g of a metallocene ( $\text{Cp}_2\text{ZrCl}_2$ ) had been added was added to 3g of Grace 955W silica. According to the information in D8, the silica had a pore volume of 1.5-1.7ml/g. It may thus be calculated that the total pore volume of the silica was 4.5-5.1, and hence that the proportion of solvent employed amounted to 2.17-2.46 based on the pore volume of the silica.
- The molar ratio of aluminium to transition metal was 49.4.
- Thus example 1 of D8 would have been novelty destroying for the subject matter of claim 1 as granted had it not

contained the disclaimer.

The patentee also referred to examples 6, 8 and 9 of D8 (see section V above).

The board observes that in the catalyst employed in examples 6 and 8 of D8 the volume ratio is in the range of 3.05-3.46 and hence is outside the range specified in claim 1 as granted. The information provided in example 9 of D8 is insufficient to allow the volume ratio to be calculated.

Accordingly even if claim 1 as granted did not contain the disclaimer, the subject matter of such a claim would not be anticipated by the disclosures of examples 6, 8 and 9 of D8.

Thus the board comes to the conclusion that only example 1 of D8 would have been novelty destroying for the subject matter of claim 1 without the disclaimer.

3.5 According to G 1/03 a disclaimer may be allowable under Art. 123(2) EPC to restore novelty by delimiting a claim against state of the art under Art. 54(3) and (4) EPC. (G 1/03 Order 2.1 first indent). A disclaimer must however not remove more than is necessary to establish novelty (G 1/03, order 2.2).

3.6 Accordingly although the disclaimer of a molar ratio of aluminium to transition metal of above 100 does exclude the subject matter of example 1 of D8, the disclaimer is broader than is necessary and hence disclaims more than the novelty destroying disclosure of D8. For this reason the disclaimer does not comply with the requirement set out in G 1/03, order point 2.2.

3.7 The submission of the patentee (see section XII.(a) above) that in D8 at page 9 lines 1-4 there was a disclosure of a ratio of aluminium to transition metal of 100:1-1:1 is correct. However this disclosure is part of the general exposé of the invention of D8 and hence is not associated with a pore volume ratio in the range specified in claim 1 as granted. Accordingly this disclosure of D8 could not provide a basis for the disclaimer in operative claim 1.

3.8 The board can come to no other conclusion than that claim 1 of the main request is not allowable in view of Art. 123(2) EPC.

3.9 The main request is therefore refused.

4. *First auxiliary request*

Since the first auxiliary request is contingent upon a finding that the claims of the patent as granted meet the requirements of Art. 123(2) EPC, this request is also refused.

5. *Second auxiliary request*

The claims of the second auxiliary request differ from the claims of the main request in that the method is restricted to one in which the alumoxane and metallocene components are combined first before being added to the support.

As this request however retains the same disclaimer as the main request, for the reasons explained in section 3 above this request is refused.



6. *Third auxiliary request*

Claim 1 of the third auxiliary request differs from claim 1 of the main request in that it specifies that the ratio of solution to pore volume of the support is less than three and **not less than two** times the pore volume of the porous support.

6.1 Claim 1 of this request retains the inadmissible disclaimer of claim 1 of the main request, and hence this request is not allowable pursuant to Art. 123(2) EPC for the reasons explained in section 3 above.

6.2 The third auxiliary request is therefore refused.

7. *Fourth auxiliary request*

The claims of the fourth auxiliary request are those on the basis of which the opposition division held that the patent could be maintained (see section III above). Claim 1 thereof no longer has the disclaimer "the mole ratio of aluminum in any alumoxane activator to the transition metal being above 100" but instead the feature "the activator not being alumoxane" has been incorporated into the claim.

7.1 *Wording of the claims - Art 123(2) EPC*

7.1.1 Claim 1 of the fourth auxiliary request differs from Claim 1 of the main request, i.e. claim 1 as granted in that the disclaimer "and the mole ratio of aluminium in any alumoxane activator to the transition metal being above 100" has been deleted and in that the following

feature "the activator not being alumoxane" has been incorporated in the claim.

In contrast to claim 1 as granted, which permitted alumoxane to be present, but restricted the content thereof, the newly introduced feature in claim 1 of the fourth auxiliary request excludes the presence of alumoxane altogether.

7.1.2 It must hence be examined whether this amendment is allowable under Art. 123(2) EPC.

7.1.3 In this respect, the Board firstly observes that there is agreement between the parties that there is no explicit literal basis for this amendment in the application as originally filed.

7.1.4 In the Board's view, it is further evident that the aim of the amendment made to claim 1 was to avoid an objection of lack of novelty with respect to D8, specifically example 1 thereof.

7.1.5 In this connection the Board notes that the appellant/opponent has argued that this amendment must be considered as a disclaimer and hence that its allowability under Art. 123(2) has to be examined according to the principles set out in G 1/03. The appellant/opponent has further relied on decisions T 1102/00, T 1050/99, T 236/01 and T 868/04 to support its line of argumentation.

7.1.6 The Board notes however that the appellant/patentee has, on the contrary, submitted that this amendment could not be considered to be a disclaimer in the sense of G 1/03 and has relied on the decisions T 1139/00 and

T 4/80 to support its position. It has further been submitted that this amendment merely defined the group of activators which were not alumoxanes and hence had to be considered as being supported by the application as originally filed (see sections VII and XII.(b) above). In this respect, the appellant/patentee also referred to the decisions T 2/81 and G 2/98.

7.1.7 At page 6, lines 10-11 of the published application it is stated "It is within the scope of this invention to use alumoxane as an activator". Thus it is a matter of fact that alumoxanes were presented in the application as filed as being part of the claimed invention. This is further confirmed by the fact that all the examples of the application, with the exception of catalyst 5-2 of example 5 employ alumoxane as activator.

7.1.8 It thus follows, in the Board's view that it could not have been inferred from the application as originally filed that it was intended to exclude such subject matter from the scope of protection.

7.1.9 Consequently, the Board, in agreement with the considerations made in T 1102/00 (Reasons point 4), T 1050/99 (Reasons points 7.(b) and (c)) T 236/01, (Reasons point 6), T 868/04, (Reasons point 3.4), considers the feature "the activator not being an alumoxane" as a disclaimer which has no basis either explicitly (point 7.1.3 above) or implicitly (point 7.1.8 above) in the application as originally filed.

7.1.10 According to the principles set out in G 1/03 a disclaimer which has no basis in the application as

field (cf Order point 1) may not be refused under Art. 123(2) EPC provided it fulfils the criteria set out under points 2.1 to 2.4 set out in the order of G 1/03.

7.1.11 Since as indicated above in paragraph 7.1.4 this disclaimer was incorporated into claim 1 in order to overcome a lack of novelty over a document belonging to the state of the art according to Art. 54(3) EPC, i.e. D8, the Board comes to the conclusion that it has to be checked whether this disclaimer fulfils the further criteria set out in points 2.2 to 2.4 of the Order of G 1/03.

7.1.12 This conclusion cannot, in the board's view, be altered by the arguments presented by the patentee in view of the decision T 1139/00.

7.1.13 While in T 1139/00 it was considered that an amendment (disclaimer) excluding part of the subject matter that was originally disclosed could be allowed under Art. 123(2) EPC the board observes that the case under consideration in T 1139/00 concerned the problem of conflicting applications having the same applicant and the same application date (i.e. the case of a parent and divisional application). In this respect, the board concurs with the statement made under point 2.6 of the reasons of T 1139/00 according to which the constellation dealt with in that decision was not one of the cases considered in G 1/03 for allowing a disclaimer which was not disclosed in the application as filed (cf. G 1/03 Order point 2.1).

7.1.14 While under the specific circumstances of the case underlying the decision T 1139/00, the further view had been expressed by the Board in charge of that case (Reasons point 2.5 thereof) according to which, since the subject-matter excluded by the disclaimer was supported by the application as filed, such disclaimer was not one covered by the decision G 1/03, the present Board cannot share this view in the present case. This is because, although the **subject-matter excluded by the disclaimer** is also supported by the application as filed, it still remains in the present case that, for the reasons indicated in paragraph 7.1.9 **the disclaimer itself** has no basis in the application as filed.

Thus the findings of T 1139/00, reached in the context of the special circumstances applying thereto, i.e. the constellation of a parent and divisional application, provide no reason for the board to depart from its view (see points 7.1.9 and 7.1.10 above) that, although the subject matter excluded by the disclaimer is supported by the application as originally filed, the disclaimer itself has no basis in the application as filed and that the disclaimer accordingly does fall under the scope of the decision G 1/03, in particular point 1 of the Order thereof.

7.1.15 Nor could the arguments presented by the appellant/patentee in respect of the decision T 4/80 challenge the conclusion drawn by the board in paragraph 7.1.11 above. While it is true that the disclaimer in claim 1 of the application in suit under consideration in T 4/80, which was intended to exclude originally disclosed subject-matter had been allowed by the board in charge of that case, the present Board

observes that the disclaimer had been introduced at the request of the applicant in order to exclude potential or existing prior national rights (T 4/80 Reasons point 4).

7.1.16 Independently of the fact that the decision T 4/80 was issued well before decision G 1/03, so that it is at least questionable whether the practice concerning disclaimers set out in T 4/80 could still be concilable with the considerations made in G 1/03, it still remains that the disclaimer in the present case is, in contrast to the case under consideration in T 4/80, intended to restore novelty over a document belonging to the state of the art according to Art. 54(3) EPC, and is as such not disclosed in the application as filed. Consequently, it has to fulfil the criteria set out in the decision G 1/03 in order to be admissible under Art. 123(2) EPC.

The fact that the approach of T 1139/00 was followed in a question of the EQE or would, in the opinion of the patentee have support in the Guidelines for Examination (see sections IX and XII.(b) above) is immaterial since the Boards of Appeal are not bound by the Guidelines, and certainly not by the position taken by the Examination Board of the EQE.

By the same reasoning, the reference in the Guidelines to T 4/80 (see section IX above) is of no consequence.

7.1.17 The further argument of the appellant/patentee that the mention in the application as originally filed that alumoxanes could be used as activators inherently defined also the complementary groups of activators which were not alumoxanes, so that the amendment made to claim 1, following T 2/81 was an amendment supported

by the application as originally filed is, in the Board's view, not convincing.

7.1.18 Independently of the fact that the decision T 2/81 relates to numerical ranges and states that a range (e.g. a temperature range of 180°C to 300°C was directly derivable from the combination of a general range (e.g. a temperature range 150 to 300°C ) with a preferred range (e.g. a temperature range 180 to 240°C), the Board observes that the new range claimed (180 to 300°C) was defined in positive terms, and not by exclusion of a numerical range from the general range (e.g. "the range 150 to 300°C with the exclusion of the range 150 to 180°C").

7.1.19 In the present case while it might have been conceivable to delimit the subject-matter of claim 1 over D8 by listing compounds other than alumoxane belonging to the genus of activator, it is evident that the use of the expression "not being alumoxane" tries to define the remaining subject-matter by a negative feature, i.e. by a disclaimer, which, as explained above has no basis in the application as originally filed.

7.1.20 The considerations made in respect of the Opinion G 2/98 are even less pertinent, since this decision is not even concerned with the allowability of amendments in general, let alone the allowability of disclaimers in particular.

7.1.21 It thus follows that, for the reasons indicated above, the amendment carried out in claim 1 of the fourth auxiliary request has to be considered as a disclaimer

having no basis in the application as originally filed and has therefore to fulfil the criteria set out in G 1/03 for allowability under Art. 123(2) EPC.

7.1.22 Since, as explained in section 7.1.1 above this disclaimer (i.e. "the activator not being alumoxane") excludes more than the previous - inadmissible - disclaimer introduced in claim 1 as granted, it follows that this disclaimer also does not fulfil the requirements set out in point 2.2 of Order G 1/03.

7.1.23 Therefore claim 1 is not allowable under Art. 123(2) EPC.

7.2 *Art. 123(3) EPC*

The question was raised at the oral proceedings by the opponent whether the feature "the activator not being alumoxane" excluded the presence of alumoxane for other purposes (section XII.(b) above). The position of the patentee that alumoxane if present would necessarily and inevitably act as an initiator is beside the point. The claim is directed to a process, which is defined as "comprising" certain steps. This wording does not exclude other, non-specified steps. On the contrary, it is within the scope of the process to employ any additional steps, including for example adding alumoxane for some other reason, for example as a scavenger as set out by the opponent at the oral proceedings before the board (see section XII.(b) above).

Once in the reaction mixture, it would - according to the submission of the patentee - also act as an activator regardless and independently of the original



purpose for which it was added.

Claim 1 of the fourth auxiliary request thus does allow alumoxane to be present, and once present this would act - at least in part - as an activator.

However while claim 1 as granted placed a restriction on the amount of alumoxane permitted to be present by means of the mole ratio of aluminium to transition metal, claim 1 of the fourth auxiliary request does not contain any limitation in this respect.

Accordingly the scope of claim 1 of the fourth auxiliary request is in this respect broader than that of claim 1 as granted, which is forbidden by Art. 123(3) EPC.

Accordingly claim 1 of the fourth auxiliary request also does not meet the requirements of Art. 123(3) EPC.

7.3 Claim 1 of the fourth auxiliary request does not meet the requirements of Art. 123(2) or (3) EPC.

7.4 The fourth auxiliary request is therefore refused.

8. *Fifth auxiliary request*

The fifth auxiliary request differs from the fourth auxiliary request in specifying in line 1 of the claim "in which alumoxane is not used as activator".

The effect of this is the same as the disclaimer present in the final line of claim 1 of the fourth auxiliary request.

Accordingly the same considerations and conclusions as for the fourth auxiliary request (section 7 above) apply to the fifth auxiliary request, with the consequence that claim 1 of the fifth auxiliary request

does not meet the requirements of Art. 123(2) or (3) EPC.

8.1 The fifth auxiliary request is therefore refused.

9. *Sixth auxiliary request*

Claim 1 of the sixth auxiliary request differs from claim 1 of the fifth auxiliary request by specifying that an "ionizing activator" is employed.

This term was not present in the claims as granted, but was introduced in the form of an amendment during the opposition proceedings. Accordingly it must be examined for compliance with all requirements of the EPC, including clarity (G 9/91, OJ EPO 1993, 408, Reasons 19).

9.1 The term "ionizing" relates to the behaviour of the activator, i.e. whether it itself is capable of undergoing ionization or whether it causes other species present to undergo ionization.

Whether a substance is "ionizing" however depends on a number of factors extrinsic to the substance itself such as the solvent, temperature or the presence of other reagents.

Accordingly the presence in the claim of the term "ionizing activator", without specifying other factors such as the reaction conditions does not permit a clear, unambiguous understanding of the nature of the compound to be employed. Accordingly it is not possible to understand the scope of a claim containing this term. Consequently claim 1 of the sixth auxiliary request does not meet the requirements of Art. 84 EPC.

9.2 It is further apparent that this term in any case does not exclude alumoxane. According to D10 and D11 both of which relate to polymerization of olefins employing metallocene/alumoxane catalyst systems, alumoxane has the effect of ionizing transition metal compounds (D10, page 1603, rh column 1st complete paragraph). In D11 it is disclosed at page 18 lines 10-29 that reaction of a transition metal compound with alumoxane leads to formation of an anion.

The patentee has submitted that D10 and D11 are old documents, stemming from a time where the mode of action of alumoxane was poorly understood and hence that their disclosure should be disregarded (see sections IX and XII.(c) above). As support for this position reference was made to D12.

It is true that D12 does not disclose that alumoxane is an ionizing compound. D12 is in fact entirely silent about the mode of action of alumoxane. Accordingly the disclosure of D12 does not establish one way or the other whether alumoxane is an "ionizing activator". Accordingly in view of the evidence provided, in particular the explicit statements in D10 and D11 it is concluded that alumoxane falls within the scope of the term "ionizing activator" insofar as this term is clear.

9.3 With reference to the issues discussed in sections 9.1 and 9.2, the appellant/proprietor has requested that the case be remitted to the first instance for consideration of the issue of clarity of the term "ionizing initiator" (see section XII.(c) above). While it is true that this issue has not been dealt with in the decision under appeal, it is however evident that the question of clarity of this term, in particular in the light of D10, D11 and D12, has been discussed in

depth by both parties both during the course of the opposition proceedings before the opposition division (cf. letter of 24 March 2005 of the opponent and the letter of 7 April 2005 of the patentee), as well as in the course of the written appeal proceedings (letter of 30 June 2006 of the opponent; letter of 15 November 2006 of the patentee) and during the oral proceedings before the board.

9.4 Thus taking into consideration that this objection of lack of compliance with Art. 84 EPC had already been raised by the appellant/opponent during the opposition proceedings before the opposition division and had been maintained in the appeal procedure (cf. letter of 30 June 2006) when claims containing such a feature were submitted by the appellant/patentee (letter of 24 January 2006), and that the appellant/patentee has hence had not only ample time and opportunity to consider the substance of the objection but furthermore has submitted additional amendments in order to address such objections (cf. letter of 7 April 2005, paragraph 2.6; letter of 24 January 2006, paragraph 6.7), the Board sees no reason to remit the case to the first instance for consideration of this issue as requested by the appellant/patentee.

9.5 A consequence of the conclusion in section 9.2 is that the objections pursuant to Art. 123(3) in respect of the fourth and fifth auxiliary request apply also to the sixth auxiliary request (see section 7.2 above).

9.6 Further as explained in the case of the fourth auxiliary request (see section 7.1 above) the exclusion

of the use of alumoxane as an activator by means of a disclaimer contravenes Art. 123(2) EPC.

9.7 Claim 1 of the sixth auxiliary request does not meet the requirements of Art. 84, 123(2) or 123(3) EPC.

9.8 The sixth auxiliary request is therefore refused.

10. *Seventh auxiliary request*

The seventh auxiliary request specifies in line 2 "an ionizing activator (not being alumoxane)". Further in the remainder of the claim the activator is specified as being an ionizing activator. The final line of the claim specifies "ionizing activator not being in combination with alumoxane".

10.1 Due to the presence in the claim of the reference to "ionizing activator" the objections pursuant to Art. 84 EPC indicated for the sixth auxiliary request apply also to claim 1 of the seventh auxiliary request (see section 9.1 above).

Accordingly claim 1 of the seventh auxiliary request does not meet the requirements of Art. 84 EPC.

10.2 The exclusion of alumoxane by a disclaimer is also not allowable pursuant to Art. 123(2) EPC as explained above in relation to the fourth auxiliary request (see section 7.1 above). Accordingly claim 1 of the seventh auxiliary request does not meet the requirements of Art. 123(2) EPC.

10.3 Claim 1 of the seventh auxiliary request thus does not meet the requirements of Art. 84 or 123(2) EPC.

10.4 The seventh auxiliary request is therefore refused.

11. *Eighth auxiliary request*

Claim 1 of the eighth auxiliary request specifies an ionizing activator. There is no statement of exclusion of alumoxane.

11.1 As explained in relation to the sixth auxiliary request the term "ionizing activator" does not permit an unambiguous definition of the subject matter claimed and hence does not meet the requirements of Art. 84 EPC (see section 9.1 above).

11.2 Further although alumoxane is not mentioned in the claim, the wording "the method comprising" indicates that the method steps specified in the claim are not exhaustive or exclusive and that other steps may be employed, including using other reagents. Accordingly claim 1 of the eighth auxiliary request permits the presence of alumoxane either explicitly as an activator or in some other role, which would however inevitably involve activity as an activator (see section 7.2 above). Since however there is no restriction on the amount of alumoxane in terms of the ratio of aluminium to transition metal, it is concluded, as in the case of the fourth auxiliary request that the scope of this claim extends beyond that of claim 1 as granted (see section 7.2 above). Accordingly claim 1 of the eighth auxiliary request does not meet the requirements of Art. 123(3) EPC.

11.3 Claim 1 of the eighth auxiliary request therefore does not meet the requirements of Art. 84 or 123(3) EPC.

11.4 The eighth auxiliary request is therefore refused.

12. *Ninth auxiliary request*

The ninth auxiliary request is, as submitted by the patentee (see section XI.(h) above) a combination of the third and sixth auxiliary requests).

12.1 The definition of the lower limit of the amount of solvent of "not less than two" has no basis in the application as filed, as discussed at the oral proceedings (see XII.(f) above).

The wording employed in claim 1 of the ninth auxiliary request includes in its scope explicitly two as the lower limit of the solvent volume based on the pore volume of the support.

At page 9 lines 14-18 of the application as filed it is disclosed that the content of solvent is "less than four times...more preferably less than three times, even more preferably less than two times, and most preferably less than one time the total pore volume of the porous support".

The wording of the application as filed "less than two times" relates to an upper limit which, being "less than two", **excludes** two. In contrast, as noted above, the wording employed in claim 1 of the ninth auxiliary request "not less than two" presents two as a lower limit which **includes** two.

Accordingly there is no basis in the application as filed for a lower limit of the solvent volume ratio of two.

Thus this feature of claim 1 of the ninth auxiliary request extends beyond the content of the application as originally filed contrary to Art. 123(2) EPC.

12.2 Further the considerations in respect of the sixth auxiliary request pursuant to Art. 84, 123(2) and 123(3) EPC (see section 9 above) also apply to the ninth auxiliary request.

12.3 Accordingly the ninth auxiliary request does not meet the requirements of Art. 84, 123(2) and (3) EPC.

12.4 The ninth auxiliary request is therefore refused.

13. Since none of the requests of the appellant/patentee are allowable, the patent in suit must be revoked.

## **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:

E. Görgmaier

C. Idez