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**Datasheet for the decision  
of 9 March 2021**

**Case Number:** T 0485/18 - 3.3.10

**Application Number:** 07788742.0

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**Language of the proceedings:** EN

**Title of invention:**  
PROCESS FOR THE MANUFACTURE OF OLEFIN OLIGOMERS

**Patent Proprietor:**  
Neste Oyj

**Opponent:**  
Evonik Operations GmbH

**Headword:**

**Relevant legal provisions:**

EPC Art. 99(1), 114(2), 54, 56, 83

EPC R. 116(1), 76(2) (c)

RPBA Art. 12(4)

**Keyword:**

Evidence filed with the notice of opposition inadmissible (no)

Admissibility of late-filed evidence substantively discussed

during opposition oral proceedings (yes)

Sufficiency of disclosure - (yes)

Inventive step - (yes)

**Decisions cited:**

G 0010/91, T 0429/96

**Catchword:**



**Beschwerdekammern**

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**Case Number: T 0485/18 - 3.3.10**

**D E C I S I O N**  
**of Technical Board of Appeal 3.3.10**  
**of 9 March 2021**

**Appellant:** Evonik Operations GmbH  
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**Representative:** Evonik Operations GmbH  
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**Respondent:** Neste Oyj  
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**Representative:** Zacco Denmark A/S  
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**Decision under appeal:** **Interlocutory decision of the Opposition  
Division of the European Patent Office posted on  
22 December 2017 concerning maintenance of the  
European Patent No. 2029701 in amended form.**

**Composition of the Board:**

**Chairwoman** R. Pérez Carlón  
**Members:** M. Kollmannsberger  
T. Bokor

## Summary of Facts and Submissions

I. The opponent lodged an appeal against the interlocutory decision of the Opposition Division finding that European Patent EP 2 029 701 can be maintained in amended form, Articles 101(3)(a) and 106(2) EPC.

II. During the opposition procedure the patent was opposed under Articles 100(a)(b) for lack of novelty (Article 54 EPC), inventive step (Article 56 EPC) and sufficient disclosure (Article 83 EPC).

III. Relevant documents cited in the opposition and appeal proceedings are:

- D1 Jiri Ceijka, Herman van Bekkum, Avelina Corma, Ferdi Schüth, "Introduction to Zeolite Science and Practice" Studies in Surface Science and Catalysis", Volume 168, 3rd edition, Elsevier 2007. Chapter 22: "Acid and Base Catalysis on Zeolites" by Jens Weitkamp and Michael Hunger, Pages 807-809
- D2 EP 1 830 956 A0 (claiming priority from FI 20041675)
- D3 Raymond J. Gorte, Design Parameters for Temperature Programmed Desorption from Porous Catalysts, Journal of Catalysis 75, pages 164-174 (1982)
- D6 G. I. Kapustin et al. Determination of the Number and Acid Strength of Acid Sites in Zeolites by Ammonia Adsorption. Comparison of Calorimetry and Temperature-Programmed Desorption of Ammonia. Applied Catalysis,

- Volume 42, Issue 2, 15 September 1988, Pages 239-246
- D7 WO 01/72670 A1
- D10 US 2002/0128530 A1
- D11 R. L. Espinoza et al. Catalytic oligomerization of ethene over nickel-exchanged amorphous silica-aluminas; effect of the acid strength of the support. *Applied Catalysis*, Volume 29, Issue 2, 1987, Pages 295-303
- D11a Erratum to D11; *Applied Catalysis*, Volume 31, Issue 1, 1987, pages 204-205
- D12 L. Huang et al., Investigation of Synthesizing MCM-41/ZSM-5 Composites. *The Journal of Physical Chemistry B* 2000, Volume 104, Issue 13, Pages 2817-2823
- D13 P. Maitlis , A. de Klerk, "Greener Fischer-Tropsch Processes for Fuels and Feedstocks", Wiley-VCH (2013), Chapter 14.3.2, Pages 302-304
- D14 R. A. Sheldon, et al. "Green Chemistry and Catalysis", Wiley-VCH (2007) Chapters 2.1 and 2.2

IV. In its decision, the Opposition Division came to the conclusion that the claims as amended during the opposition procedure complied with the requirements of the EPC. In particular:

- (i) The novelty objection was considered not substantiated and this ground of opposition was not admitted under Rule 76(2)(c) EPC
- (ii) Documents D1 and D12 were not admitted into the proceedings
- (iii) The claimed invention was sufficiently disclosed (Article 83 EPC)

- (iv) The claimed invention was not obvious starting from D10 as closest prior art (Article 56 EPC).

V. In the appeal proceedings the appellant essentially argued as follows:

Novelty should have been admitted as ground of opposition; admission of an opposition for some of the raised grounds only is not foreseen in the EPC. D1 should have been admitted into the proceedings because it was timely filed and sufficiently identifiable. D12 should have been admitted into the proceedings since it was substantively discussed during oral proceeding. The claimed process was not sufficiently disclosed because the number of acid sites present in the catalyst defined in the claims could not be determined by a person skilled in the art. Moreover, the claims covered situations were, due to the nature of the feedstock, no reaction occurred. The claimed process lacked an inventive step starting from D10 as closest prior art; both distinguishing features, namely the type of catalyst as well as the lower single conversion rate in the dimerisation reaction, would have been considered as obvious alternatives by a skilled person.

The respondent (patent proprietor) argued essentially as follows:

D1 had been correctly excluded from the proceedings because it was not sufficiently identified. D12 was correctly excluded from the proceedings due to its late filing and lack of relevance; the same should have been done with D11. D13 and D14 were filed only in appeal and should be excluded from the proceedings under Article 12(4) RPBA 2007 since they could have been

filed already before the Opposition Division. The claimed process was sufficiently disclosed; a skilled person knew how to determine the number of acid sites in the catalyst and how to select a suitable feedstock for the process. The claimed process was not obvious starting from D10 as closest prior art; a skilled person would have neither considered the catalyst nor the single conversion rate defined in the claims as obvious alternatives. Moreover, the claimed process showed unexpected advantages over that of D10.

Details of the respective argumentations are reproduced below in the reasons for the decision.

VI. Claim 1 of the patent as maintained by the Opposition Division, which is the respondent's main request in these appeal proceedings, reads:

*"A process for producing polyolefins, characterized in that said process comprises*

*dimerising a feedstock comprising at least one n-olefin selected from the group consisting of C<sub>8</sub>-C<sub>30</sub> n-olefins or a mixture of the n-olefins at a temperature ranging between 25 and 200°C and at a pressure ranging between 0.001 mbar and 50 bar in the presence of a solid acidic catalyst by passing the feedstock to a catalytic distillation apparatus comprising either a) a combination of a distillation column and a reactor comprising at least one catalyst layer, or b) a distillation column connected to one or more side reactors comprising at least one catalyst layer, recovering the unreacted n-olefin at the upper part of the distillation column or at the upper part of the combination of the distillation column and the reactor as a side stream to be combined with the feedstock*

*wherein the single conversion of n-olefin monomers is from 5 to 50 %, and*

*hydrogenating the reaction product from the dimerization,*

*wherein the catalyst layer comprises solid acidic catalyst material with a mesoporous surface area of more than 100 m<sup>2</sup>/g, an aluminium content between 0.2 and 30 % by weight, the amount of the acid sites of the material ranging between 50 and 500 µmol/g, and the material being selected from the group consisting of amorphous aluminium silicates and mesoporous molecular sieves with inserted zeolite."*

VII. The final requests of the parties were:

The appellant (opponent) requested that the decision under appeal be set aside, and that the European patent No. 2029701 be revoked. They also requested the admission of novelty as a ground of opposition and the admission of documents D1 and D12.

The respondent (patent proprietor) requested that the appeal be dismissed. Additionally, they requested the non-admission of documents D1, D11-D14.

### **Reasons for the Decision**

1. The appeal is admissible.
2. Admission of documents
  - 2.1 D1



2.1.1 D1 was not admitted into the proceedings by the Opposition Division (point 12.1 of the decision).

D1 was filed with the notice of opposition. The EPC does not contain any provision that would permit to hold evidence (documents) submitted with the notice of opposition inadmissible. Thus, D1 does not need to be admitted, it is in the proceedings by definition.

2.1.2 Whether objections based on D1 can prejudice the maintenance of the patent is not a matter of admissibility, but a question of the substantive merits of the objection, and depends on the evaluation of D1 as evidence.

2.1.3 The respondent argued that D1 had no probative value since the copy originally submitted with the notice of opposition neither includes bibliographic information nor a publication date.

However, the appellant argued, and the Board agrees, that the bibliographic information is detailed in the notice of opposition, page 3. The mere fact that the copy submitted does not display the bibliographic information is not a reason as such to disregard it. D1 was published in 2007 and may not be state of the art for examining novelty and inventive step, but it may be relevant for other issues such as Article 83 EPC.

2.2 D11 and D12

2.2.1 The Opposition Division decided to admit D11/D11a into the proceedings, but not D12 (see point 12.2 of the decision).

- 2.2.2 The respondent referred to Articles 99(1) and 114(2) EPC and argued that these documents were filed late and not *prima facie* relevant.
- 2.2.3 D12 was filed, together with D11/D11a, before the final date for submissions defined in the summons for oral proceedings in accordance with Rule 116(1) EPC. These documents were filed to strengthen the appellant's arguments on inventive step starting from D10, which was chosen as closest prior art in the Opposition Division's preliminary opinion annexed to the summons to oral proceedings. Previously, the parties had discussed inventive step starting from D4. Thus, in the Board's view, the filing of these documents was a legitimate reaction to the Opposition Division's preliminary assessment, and it was filed within the time limit set under Rule 116(1) EPC. These documents should have been admitted into the procedure for this reason alone.

Moreover, D11 and D12 were discussed at length during the oral proceedings, see page 3 of the minutes, and the parties were explicitly invited to present their arguments on inventive step taking them into account. The decision not to admit D12 was pronounced only at the end of the oral proceedings. Furthermore, the substance of these documents is discussed in the appealed decision in the context of inventive step starting from D10 (see page 6).

Thus, the parties discussed and the Opposition Division assessed the technical disclosure of these documents in detail in the course of the inventive step discussion. In the end, the Opposition Division came to the conclusion that these documents did not lead to a finding of lack of inventive step. However, these

documents were factually part of the proceedings, even if the decision states the contrary.

Since D11/D11a and D12 were part of the opposition proceedings, were discussed in the opposition decision and were referred to in the statement of grounds of appeal, they are part of the appeal proceedings, Article 12(1) RPBA 2020.

### 2.3 D13 and D14

D13 and D14 were filed together with the appellant's statement setting out the grounds of appeal. In view of Article 25(2) RPBA 2020 this situation is covered by Article 12(4) RPBA 2007 and their admission is thus at the discretion of the Board.

The respondent argued that these documents were not *prima facie* relevant and did not change the assessment of inventive step. *Prima facie* relevance is not a criterion under Article 12(4) RPBA 2007. The Board decides to refrain from non-admitting these documents into the proceedings. Their relevance is assessed together with the objections which they intend to support.

## 3. Novelty (Article 54 EPC)

3.1 The Opposition Division was of the opinion that this ground of opposition was not properly substantiated as required by Rule 76(2)(c) EPC, and decided not to admit it into the procedure.

3.2 The appellant argued that Rule 76(2)(c) EPC applied to the admissibility of the opposition as a whole and did

not provide a legal basis for declaring individual grounds of opposition inadmissible.

- 3.3 The Board agrees that, on the one hand, the EPC does not provide for an opposition being held partly admissible, i.e. only with respect to certain grounds of opposition. On the other hand, the Board notes that according to G 10/91 (OJ EPO 1993, 420) an Opposition Division shall examine only such grounds of opposition which have been properly submitted *and substantiated* according to Article 99(1) EPC in conjunction with Rule 55(c) EPC 1973, now corresponding to Rule 76(2)(c) EPC, see point 2 of the Headnote.

In the notice of opposition, novelty of granted claim 14 was questioned based on D10. A reasoning was provided, namely that the claim should be read as a use claim for the final product of the process and, for this reason, lacked novelty. Thus, the objection was substantiated.

- 3.4 However, the appellant has not provided any arguments on the substance of that objection in appeal. Thus, whether formally admitted or not, this ground of opposition cannot prejudice the maintenance of the patent.

#### 4. Sufficiency of disclosure (Article 83 EPC)

- 4.1 The claimed invention relates to a preparation process for producing polyolefins from olefins via catalytic dimerisation, followed by hydrogenation.

The appellant argued that the claimed process was not sufficiently disclosed for two reasons. They will be addressed in the following.

4.2 Amount of acid sites in the catalyst.

4.2.1 The appellant's first objection relates to the characterisation of the catalyst used in the dimerisation step, in particular to the determination of the amount of its acid sites being in the range of 50 to 500  $\mu\text{mol/g}$ . It was submitted that this parameter could not be determined by a skilled person, or could not be determined with sufficient accuracy. Reference was made to D1, D3 and D6.

The respondent pointed to the reference to D2 in paragraph [0054] of the patent and to D3 and D6. These documents described a way to determine the amount of acid sites.

4.2.2 The catalysts defined in claim 1 of the patent are either mesoporous molecular sieves with embedded zeolite, or amorphous aluminium silicates. The claim further defines an aluminium content between 0.2 and 30 % by weight, a mesoporous surface area of  $>100\text{m}^2/\text{g}$  and the disputed feature of an amount of acid sites of 50 to 500  $\mu\text{mol/g}$ .

Suitable catalysts are described in paragraphs [0053] to [0055] of the specification, and are used e. g. in examples 2 and 4.

4.2.3 Paragraph [0054] of the specification contains a reference to the priority application of D2. The Board concurs with the Opposition Division that a skilled person would have retrieved the corresponding publication (e. g. D2) without undue burden. The Board also concurs with the Opposition Division that, since D2 was available at the publication date of the patent,

such a reference can be taken into account, in line with T 429/96, cited in the appealed decision.

D2 discloses the preparation of mesoporous molecular sieves with embedded zeolites, i. e. one of the two catalyst types required by claim 1. D2 also discloses the measurement of acid sites by ammonia desorption (page 10) as mentioned in paragraph [0055] of the patent. The results of these measurements are depicted in Fig. 1b of D2 and confirm that the prepared materials have the required amount of acid sites. In the Board's view this is sufficient information for a skilled person on the mesoporous molecular sieve catalysts used in the claimed process.

The appellant has argued that the reference to D2 in paragraph [0054] only relates to the preparation of the materials, not to the method for the determination of acid sites. The part of D2 referring to the method is thus not, in the appellant's view, part of the teaching of the patent.

However, in the Board's view the reference in paragraph [0054] of the specification relates to D2 as a whole, and not only to the preparation of the catalysts. A skilled person takes thus into account the whole document, including the passage on page 10 dealing with the determination of the amount of acid sites by ammonia desorption, in particular since it is clear from the patent that this parameter is important. In any case, D2 shows that the materials prepared therein do have the required amount of acid sites.

4.2.4 The second type of catalysts used in the process are amorphous aluminium silicates having the parameters as

required by the claims. Such materials are commercially available (see e. g. example 2 of the patent).

The appellant's argument is that, although amorphous aluminium silicates are known and commercially available, not all of them will have the amount of acid sites required by the claims. In its view, this parameter cannot be determined by a skilled person, or at least not with the required reliability, so that they would be at loss as to which material to choose.

However, the Board is of the opinion that the claimed parameter can be determined by a skilled person using the information in the patent. The patent refers to ammonia desorption in paragraph [0055], a method which is described not only in D2, as discussed above, but also in D1, D3 or in D6. D6 uses the method for the determination of acid sites in zeolites and compares it with results obtained via calorimetric methods. D3 shows a theoretic discussion of the method highlighting the parameters influencing the measurement results. Thus, at least the disclosure of the methods in D2 and D6 allows the skilled person to determine the parameter defined in the claims. The appellant has argued that according to D3 (last sentence of the abstract) the method has to be used with care, and that D1 describes (page 808) that the method may not work well for all materials. However, the appellant has not substantiated that the method could not be applied to the present materials.

The appellant has furthermore stressed that D3 and D6 are scientific articles and are not representing general knowledge which a skilled person would consult if the teaching of a patent is not detailed enough. They are not referred to in the patent.

The Board does not see this as a hindrance for a skilled person. The method has been known for a long time. D3 and D6 are from the 1980s. D1 is a textbook excerpt published a year after the priority date and discusses the method, thus supporting the argument that it was not only known but still used around the patent's filing date. Furthermore, as discussed above, the method is described in D2, referred to in the patent.

4.2.5 Thus, the Board holds that the catalysts used in the claimed process are sufficiently disclosed.

#### 4.3 Process feedstock

The appellant's second objection relates to the composition of the feedstock. It submitted that the claims did not exclude a feedstock of mainly unreactive compounds, containing the C<sub>8</sub>-C<sub>30</sub> olefins starting materials only as impurities. If the feedstock e. g. comprised mainly ethylene no dimerisation would be obtained, as shown in D11 (page 298).

This objection is not convincing. A skilled person knows what the starting material of the claimed process should be, namely a (mixture of) C<sub>8</sub>-C<sub>30</sub> n-olefin(s). These starting materials are defined in claim 1. If the concentration of the starting material in the feedstock is too low, a skilled person would know what to do to make the process work, i. e. increase its concentration. This is not a systematic failure which cannot be overcome by a skilled person. In order for a claim to comply with the requirements of Article 83 EPC, it is not required that any conceivable embodiment



theoretically covered by the claim must yield useful results.

4.4 Thus, the patent discloses the claimed process sufficiently to allow a skilled person to carry it out.

5. Inventive step (Article 56 EPC)

5.1 Closest prior art

The claims are directed to a preparation process for polyolefins from a feedstock comprising at least one C<sub>8</sub>-C<sub>30</sub>-olefin via catalytic dimerisation and hydrogenation.

The parties agreed on D10 as the closest state of the art. The Opposition Division was of the same view, and the Board sees no reason to disagree. D10 discloses a process for the preparation of polyolefinic lube base oils starting from a feedstock containing C<sub>5</sub>-C<sub>11</sub> olefins which are dimerized twice consecutively, followed by hydrogenation of the product.

5.2 Differences

5.2.1 The differences of the claimed process with respect to D10 are at least:

- (i) the catalyst
- (ii) the single conversion of n-olefin monomers in the dimerization step of 5 to 50%

This was undisputed.

5.2.2 The respondent argued that D10 was also silent about the recovery of unreacted n-olefins after the dimerization step followed by their recycling back to

the feedstock of the dimerization. He referred to Figure 1 of D10 which did not show such a recycling step since the respective dimerization step was carried out in reactor (40).

The appellant pointed to paragraphs [0079] and [0087] of D1 which mention recycling of a light fraction obtained in the second dimerization reaction to one or both of the dimerization zones as an alternative possibility.

However, as outlined below, in the Board's view the claimed process is inventive already based on the difference (i) alone. This question can thus be left unanswered.

### 5.3 Technical problem and its solution

D10 discloses a process to prepare polyolefinic lube base compositions.

A technical problem to be solved starting from D10 can be formulated as to provide an alternative process for the production of such materials.

This problem has been solved by the process defined in claim 1 which is characterized (i) by the use of the dimerization catalysts defined in the claim and (ii) by a single conversion of n-olefin monomers in the dimerization step of 5 to 50%.

It was undisputed that the claimed process provided a solution to this technical problem.

### 5.4 Obviousness of the claimed solution

The question to be decided is whether starting from D10 it was obvious for a skilled person to use the claimed catalyst in such a process and dimerize only 5-50% of n-olefin monomers in a single step.

- 5.4.1 D10 discloses catalysts useful for the dimerisation step in paragraph [0077]. It is stated that the catalyst can be "*virtually any acidic material*". As preferred catalysts group VIII metals on a zeolite support are mentioned. Table 1 on page 8 summarizes the results of example 1 where various materials were screened for catalytic activity in the dimerization of 1-decene. D10 also discloses catalysts useful for other process steps described in D10, e. g. for the hydrocracking step used for the preparation of the starting feed. The cracking part of these catalysts is described in [0112] and includes silicoaminophosphates (SAPO), mesoporous molecular sieves and amorphous silica-alumina, i. e. aluminium silicate.

The catalysts defined in claim 1 of the patent are either mesoporous molecular sieves with embedded zeolite, or amorphous aluminium silicates. The claim further defines an aluminium content between 0.2 and 30 % by weight, a mesoporous surface area of more than 100m<sup>2</sup>/g and an amount of acid sites of 50-500 µmol/g.

The respondent argued that the materials required by claim 1 were not disclosed in any of the cited documents as being useful in a dimerisation reaction of n-olefins and thus a skilled person would not have seen them as an alternative to the catalysts disclosed in [0077] or in example 1 of D10.

The Board agrees. The arguments brought forward by the appellant are not convincing.

- (a) One general argument brought forward related to the statement in [0077] of D10 that "*virtually any acidic material*" could be used to catalyse the dimerisation. The claimed materials being acidic, a skilled person would have seen them as alternative suitable catalysts.

It is correct that olefin oligomerisation is known to be catalyzed by acids; this is not only disclosed in D10 but also e. g. in the textbook D14 (page 49), published about a year after the priority date. However, a skilled person knows that the mere acidity is not sufficient for catalytic activity in a specific reaction; other properties of the material will also play a role. Otherwise, there would be no point in carrying out a screening of catalysts as e. g. in example 1 of D10. D10 discloses that ATS-10 shows almost no catalytic activity, despite being considered an acidic oxide material [0121].

- (b) The appellant argued that both the amorphous aluminium silicates as well as the mesoporous molecular sieves with inserted zeolites required by claim 1 were acid catalysts in cracking reactions. This was disclosed in paragraph [0112] of D10 and in D12, respectively. According to the appellant, cracking and oligomerisation were opposite reactions that were catalyzed by the same materials. The appellant referred to page 49 of D14 and page 303 of D13. Furthermore they referred to D10 itself, where some of the materials disclosed as cracking catalysts in [0112] were screened for oligomerisation catalysis in table 1, e. g. the SAPOs and, in particular, amorphous aluminium

silicate. Also the introductory discussion in [0009] and [0011] of the patent showed this equivalence.

It is correct that D12 discloses MCM-41/ZSM-5-composites, a material that is included in the definition of suitable catalysts in the presently claimed process (see paragraph [0053] of the patent specification). D12 is however silent on olefin dimerisation. The outlook for potential use of these materials in the last paragraph of D12 exclusively relates to cracking reactions. Also the disclosure of amorphous silica-alumina in [0112] of D10 is limited to cracking. Furthermore, it is not known whether this material fulfils the parameters required in the claim (see also point (c) below).

The Board does not consider it established that a skilled person would have considered materials disclosed to be cracking catalysts to be useful also in olefin dimerisation. D13 was published in 2013, i. e. seven years after the priority date. D13 cannot thus prove the common general knowledge at the priority date. The textbook D14, although published one year after the priority date, may be more suitable for this purpose. However, D14 only describes that many processes, including cracking, isomerization and oligomerisation, among others, are catalyzed by acids. It does not state that all these processes are carried out using the same catalysts. Although some of the catalysts mentioned in [0112] of D10 as cracking catalysts are found to be active also in olefin oligomerisation (table 1 of D10), there is no general teaching in D10 stating that every catalyst having a good cracking activity would be also generally useful for the

dimerisation of olefins. Paragraphs [0009] and [0011] of the patent, within the section "state of the art", do not lead to arrive at this conclusion either. Firstly, these passages are not prior art, but the result of the prior art analysis made by the inventors. Secondly, the analysis made in these paragraphs does not conclude that every catalyst is equally suitable for both reactions, but rather that most of the catalysts used for dimerization lead to unwanted cracking or oligomerization, as side reactions.

- (c) D10 contains a table (table 1) which summarizes tests carried out on different materials concerning their suitability as catalysts for the dimerisation of 1-decene. The last entry of this table relates to silica-alumina made from spray-drying a corresponding co-gel. This catalyst is thus an aluminium silicate, presumably in amorphous form.

The appellant argued that this disclosure would have lead a skilled person to consider amorphous aluminium silicates as alternative catalysts for the dimerisation step.

However, D10 is silent about the further characteristics of the amorphous aluminium silicates as required by the claim, i. e. mesoporous surface area, aluminium content and amount of acid sites. The appellant has pointed to D11/D11a (table 1 on page 205 of D11a) in order to show that the required parameters are fulfilled by commercially available aluminium silicates. However, the amount of acidic sites has not been determined there. Moreover, as submitted by the appellant itself during the discussion on Article

83 EPC, the aluminium silicates of D11 are disclosed as not active in the oligomerisation of ethylene (see page 298). It is thus evident that not all aluminium silicates have the same properties and would have been seen as equally suitable alternatives to the dimerisation catalysts used in D10.

D10 in combination with D11 does not suggest to use an aluminium silicate as defined in the claims in a process for the dimerisation of olefins.

5.4.2 Since the claim thus differs from D10 in one non-obvious feature it is not necessary to assess the second one, i. e. the single conversion defined in the claim.

5.5 To sum up, starting from D10 a skilled person would not have arrived at the presently claimed process if confronted with the technical problem of finding an alternative way for the production of polyolefins.

The claimed process involves thus an inventive step.

**Order**

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

The appeal is dismissed.

The Registrar:

The Chairwoman:



C. Rodríguez Rodríguez

R. Pérez Carlón

Decision electronically authenticated