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

Datasheet for the decision
of 7 June 2018

Case Number: T 1611/15 - 3.3.03
Application Number: 08861098.5
Publication Number: 2222730
IPC: C08F210/06, C08J5/18, C08F10/00
Language of the proceedings: EN

Title of invention:
COPOLYMERS OF PROPYLENE WITH HEXENE-1 AND BLOWN FILMS OBTAINED FROM THEM

Patent Proprietor:
Basell Poliolefini Italia S.r.l.

Opponent:
Borealis AG

Relevant legal provisions:
EPC Art. 56

Keyword:
Inventive step - Main request and first to third auxiliary requests (no) - Fourth auxiliary request (yes)
Case Number: T 1611/15 - 3.3.03

DECISION
of Technical Board of Appeal 3.3.03
of 7 June 2018

Appellant: Borealis AG
IZD Tower
Wagramerstrasse 17-19
1220 Wien (AT)

Representative: Lux, Berthold
Maiwald Patentanwalts GmbH
Elisenhof
Elisenstraße 3
80335 München (DE)

Respondent: Basell Poliolefine Italia S.r.l.
Via Soperga 14/A
20127 Milano (IT)

Representative: Gaverini, Gaetano Luigi Attilio
Basell Poliolefine Italia S.r.l.
Intellectual Property
P.le G. Donegani 12
44100 Ferrara (IT)

Decision under appeal: Decision of the Opposition Division of the European Patent Office posted on 3 July 2015 rejecting the opposition filed against European patent No. 2222730 pursuant to Article 101(2) EPC.
Composition of the Board:

Chairman: D. Semino
Members: D. Marquis
R. Cramer
Summary of Facts and Submissions

I. The appeal lies against the decision of the opposition division posted on 3 July 2015 rejecting the opposition against European patent No. 2 222 730.

II. The European patent was granted on the basis of 11 claims, claim 1 reading as follows:

"1. A copolymer of propylene with hexene-1 containing from 5 to 9% by weight of recurring units derived from hexene-1, said copolymer having a melting temperature from 125°C to 140°C and Melt Flow Rate (ASTM D1238, 230°C/2.16 kg) from 0.1 to 3 g/10 min."

III. A notice of opposition was filed in which revocation of the patent in its entirety was requested.

IV. The following documents formed inter alia part of the decision of the opposition division:

D3: WO 97/19991 A1
D7: WO 02/090399 A1
D12: Experimental report filed on 9 April 2015

V. The decision of the opposition division, as far as relevant to the present decision, can be summarised as follows:

D3 and not D7 was the closest prior art since D3 referred more specifically to the mechanical properties
of the copolymers produced and to their use for the preparation of blown films. The claimed subject matter differed from D3 in the specific range of melt flow rate. Considering the evidence provided in D12, the problem solved was the provision of a further propylene copolymer that had a good balance of mechanical properties, in particular impact resistance and resistance to tear propagation. There was no incentive in D3, D7 or D8 towards the claimed subject matter.

VI. The opponent (appellant) lodged an appeal against that decision. The following additional documents were cited inter alia with the statement of grounds of appeal:

- D8a: Total Petrochemicals "Polypropylene Cast and Blown Film", 2007
- D8b: Total Petrochemicals "Polypropylene Cast and Blown Film", 2010
- D8c: Borclear RB707CF of Borealis A/S, 2004
- D8d: Polypropylene 4170 of Total Petrochemicals, 2007
- D16: Declaration of Andreas Meinecke

VII. The appellant requested with the statement setting out the grounds of appeal that the decision under appeal be set aside and that the patent be revoked. Auxiliary, it requested that the case be remitted to the department of first instance and the appeal fee be refunded. In addition a new novelty objection over example 17 of D7 based on declaration D16 was inter alia raised.

VIII. The respondent (patent proprietor) requested with the reply thereto that the appeal be dismissed (main request) or that the patent be maintained on the basis of one of the first to sixth auxiliary requests submitted with that reply.
IX. Claim 1 of the first auxiliary request differed from claim 1 as granted in that the range defining the melting temperature of the copolymer was 128°C to 140°C.

Claim 1 of the second auxiliary request differed from claim 1 of the first auxiliary request in that the range defining the melting temperature of the copolymer was 128°C to 139°C.

Claim 1 of the third auxiliary request differed from claim 1 as granted in that the range defining the amount of hexene-1 in the propylene copolymer was 5.5 to 9% by weight.

Claim 1 of the fourth auxiliary request differed from claim 1 as granted in that the range defining the amount of hexene-1 in the propylene copolymer was raised to 6.5% to 9% by weight.

X. In a communication sent in preparation of oral proceedings, the Board summarised the points to be dealt with and provided a preliminary view on the disputed issues.

XI. With letter of 17 May 2018 the appellant submitted documents D10b, D21, D21a and D22 as additional evidence.

XII. Oral proceedings were held on 7 June 2018. During the oral proceedings the appellant withdrew its auxiliary request of remittal and refund of the appeal fee.
XIII. The arguments provided by the appellant, as far as relevant to the present decision, can be summarised as follows:

Inventive step

Main request

(a) D7 pertained to the production of films and specifically addressed the processability of the produced copolymers, which was an aspect of the patent in suit. D7 also had the most features in common with the claimed subject matter. D7 was therefore the closest prior art. D3 was not more relevant than D7 as it had less features in common with the claimed subject matter. Also, the high thickness of the films produced in the examples of D3, as well as the general reference to mechanical properties and creep performance, showed that that document did not relate to blown films.

(b) The copolymer of example 17 of D7 differed from the one of claim 1 of the main request only in the value of its melt flow rate, which if outside of the range of claim 1 of the main request, was probably below the lower limit. The copolymer disclosed in comparative example 2 of D12 was not representative of the closest prior art, since the presence of two melting temperatures suggested that it had a different structure than the copolymer of example 17 of D7 and its melt flow rate was above the claimed range. The evidence on file did not show therefore an effect related to the distinguishing feature. Starting from the copolymer of example 17 of D7 as the closest prior art, the
technical problem was to provide further propylene hexene-1 copolymers suitable for the production of blown film.

(c) The range of melt flow rate according to claim 1 of the main request was already generally known to be suitable for the production of blown films, as established by the documents D8 and D8a-d. The claimed subject matter therefore lacked an inventive step.

First and second auxiliary request

(d) Claim 1 of the first auxiliary request additionally differed from example 17 of D7 as the closest prior art in that the melting temperature was in a range of 128°C to 140°C, while it was 126°C in that example. It was already acknowledged for the main request that the choice of the melt flow rate within the specific range was obvious. Since the melting temperature was not related to the melt flow rate, it had to be dealt with separately from that other feature. No effect was shown for the choice of a melting temperature within the narrower range, so that the problem posed was to provide alternative copolymers. Examples 18 to 20 of D7 already showed that a steep increase in melting temperature of copolymers resulted from a small decrease of content in hexene-1 in the copolymers of Table 2. Raising the melting temperature of the copolymers from 126°C to a value within the range of 128°C to 140°C was possible with a value of the hexene-1 content within the range of 5-9% by weight. Claim 1 of the first auxiliary request therefore lacked an inventive step. The same arguments applied to claim 1 of the second
auxiliary request.

Third auxiliary request

(e) Since the content in hexene-1 of the copolymer of example 17 of D7 was still within the narrower range, claim 1 of the third auxiliary request also lacked an inventive step for the same reasons as the main request.

Fourth auxiliary request

(f) There were no objections against the set of claims of the fourth auxiliary request.

XIV. The arguments of the respondent, as far as relevant to the present decision, can be summarised as follows:

Inventive step

Main request

(a) D7 did not concern the mechanical properties of blown films as addressed in the patent in suit. The processability of the produced copolymers was only an aspect of the patent in suit that was less relevant than the mechanical properties of the blown films produced therefrom. D3 extensively addressed the mechanical properties of films and was as such closer to the patent in suit. D3 was therefore the closest prior art, while D7 was not.

(b) Even if D7 was taken as the closest prior art, an inventive step should be acknowledged. The content of hexene-1 and the melting temperature of the copolymer of example 17 of D7 were not measured
according to the methods disclosed in the patent in suit. It was common general knowledge that the values obtained in D7 were not comparable to the ranges according to the patent in suit. Also, the value of content in hexene-1 in the copolymer disclosed for example 17 was not in line with the values reported for the copolymers of examples 18-20 in Table 2, therefore casting doubt on that value. Thus, neither the content in hexene-1 nor the melting temperature, both derived from D7, were according to claim 1 of the main request. In the absence of any information concerning the melt flow rate in D7, it could also not be concluded whether the value of melt flow rate in example 17 was below or above the claimed range. The claimed subject matter differed therefore in many aspects from that disclosed in example 17 of D7.

(c) Example 1 of D12 showed, by comparison with example 2, that decreasing the melt flow rate of a propylene copolymer to a value that was within the claimed range led to a blown film with an improved Elmendorf tear strength. The fact that the copolymer of example 2 had two melting temperatures was not relevant to the question of inventive step since it still had one melting temperatures within the range of claim 1. The technical problem was thus, as established in the patent in suit, to provide blown films made from copolymers of propylene with hexene-1 with a good balance of mechanical properties, in particular of impact resistance (e.g. dart drop impact strength) and resistance to tear propagation as well as good optical properties, in particular haze and gloss, and that were easily obtainable by processing in
existing blown film lines.

(d) Considering the argument of the appellant that the melt flow rate of the copolymer of example 17 of D7 would be below the claimed range, the examples in Table 2 of D7 did not provide a teaching regarding the specific combination of melt flow rate, melting temperature and hexene-1 content as claimed.

First auxiliary request

(e) The content of hexene-1, the melt flow rate and the melting temperature characterizing the claimed copolymers were all interdependent. Given a melt flow rate according to claim 1, it was not possible to modify the copolymer of example 17 of D7 so as to obtain a copolymer having both a content of hexene-1 and a melting temperature according to claim 1. The prior art available relating to the preparation of propylene copolymers by metallocene catalysis in particular did not teach how to obtain a copolymer having both an hexene-1 content and a melting temperature within the specified ranges. Claim 1 of the first auxiliary request was therefore inventive over D7.

Second auxiliary request

(f) The arguments regarding inventive step put forward for the first auxiliary request also applied to the second auxiliary request.

Third auxiliary request

(g) The value of 6.0 wt% that was calculated for the hexene-1 content of the copolymer of example 17 in
D7 was not obtained by the same method as that used in the patent in suit. The use of the same method would have led to a content in hexene-1 below the lower limit of the range. Consequently, the claimed subject matter differed from D7 by two features, the combination of which was not taught in the prior art. Claim 1 of the third auxiliary request was therefore inventive.

Fourth auxiliary request

(h) The amendments performed in the fourth auxiliary request made a clear distinction of the claimed subject matter over D7 that was also inventive with respect to the disclosure therein.

XV. The appellant requested that the decision under appeal be set aside and that the European patent No. 2 222 730 be revoked.

XVI. The respondent requested that the appeal be dismissed, or alternatively that the decision under appeal be set aside and the patent be maintained in amended form on the basis of the claims of one on the first to sixth auxiliary requests filed with the reply to the statement of grounds of appeal. The respondent furthermore requested not to admit the appellant's novelty objection based on document D7 and documents D10b, D21, D21a and D22 filed with the appellant's letter of 7 May 2018.
Reasons for the Decision

Main request

1. In view of the conclusion reached by the Board on inventive step of the main request and of the first to third auxiliary requests and the lack of objections against the fourth auxiliary request, there is no need to consider the admittance of the objection of lack of novelty over D7 based on evidence newly filed in appeal, nor any other novelty objection.

2. Inventive step

2.1 The object of the patent in suit was to provide copolymers of propylene with hexene-1 that can be easily processable to blown films having a good balance of mechanical properties (paragraphs 11 and 12).

2.2 In the decision under appeal and according to the respondent, D3 represented the closest prior art. The appellant submitted that D7 was the correct starting point for inventive step. The closest prior art for the purpose of assessing inventive step is normally a prior art document disclosing subject matter conceived for the same purpose or aiming at the same objective as the claimed invention and having the most relevant technical features in common, i.e. requiring the minimum of structural and functional modifications (Case Law of the Boards of Appeal, 8th Edition, 2016, I.D.3.1).

2.3 Both D3 and D7 relate to the preparation of propylene α-olefin copolymers produced with metallocene catalyst
systems where the α-olefin is selected from higher molecular weight α-olefins (having 5 or more carbon atoms in claim 1 of D3 and having 4 to 30 carbon atoms in claim 9 of D7). In particular, both D3 and D7 disclose propylene hexene-1 copolymers (D3, example 3; D7, examples 17-21). The fields of application of these copolymers are similar in both documents since D3 mentions flexible films, tubing, sheets, extruded profiles, molded articles (page 7, lines 16-19) and D7 relates to pipes, films, sheets, fibres, molded articles and foamed articles (page 11, lines 32-35). D7 does not mention blown films specifically. While the manufacture of blown films is briefly mentioned in D3 (page 10, line 28), that alone does not make of D3 the closest prior art since blown films are otherwise not addressed any further in that document and the properties of the copolymers sought for in D3 (cold flow and creep resistance, page 6, lines 24-28) do not specifically relate to blown films. In view of the fields of application and the properties of the propylene α-olefin copolymers produced with metallocene catalyst systems, D3 and D7 are both equally relevant to the patent in suit.

2.4 With regard to the respective starting points relating to propylene hexene-1 copolymers in D3 and D7, the copolymers according to example 3 of D3 (passage bridging pages 15 and 16) and according to example 17 of D7 (Table 2, page 16) are both relevant to the patent in suit since these two copolymers have a melting temperature (126°C) which is within the claimed range of 125 to 140°C. As to the content in hexene-1, while the value disclosed in example 3 of D3 (2.9 wt%) is outside the claimed range of 5 to 9 wt%, the value for the copolymer of example 17 of D7 (3.1 mol%) established to correspond to 6.0 wt% in the first
instance proceedings) is within the claimed range of the main request. Under these circumstances, the copolymer of example 17 of D7 is structurally closer to the claimed subject matter than that of example 3 of D3. For this reason, the copolymer of example 17 of D7 and not that of example 3 of D3 is found to represent the closest prior art.

2.5 The fact that the content in hexene-1 reported in Table 2 for the copolymer of example 17 of D7 may seem to be higher than what could be expected from the statement on the passage on lines 24 to 29 does not change the conclusion that D7 can be seen as the closest prior art. The passage cited by the respondent comparing the compositions of the produced copolymers to the corresponding monomer compositions in the polymerization medium is a general observation drawn from the 17 examples contained in Table 2 that as such does not invalidate the clear information regarding the content in hexene-1 in example 17. In the absence of any evidence that the content in hexene-1 reported in Table 2 for example 17 was indeed false or is not representative of the copolymers of D7, there is no reason to disregard the copolymer of example 17.

2.6 With regard to the determination of the content in hexene-1 of the copolymer of example 17 of D7, the method used in that document appears to be based on a $^{13}$C NMR technique (page 12, lines 8-18) analogous to that used in the patent in suit (paragraphs 103 to 108). Even if the specifics of the determination of the content in hexene-1 in D7 and in the patent in suit may differ, it was not shown that these differences, if they existed, were so significant that they were relevant to the comparison of example 17 of D7 with the claimed subject matter. The content in hexene-1 of the
copolymers of example 17 of D7 as given in Table 2 may therefore be directly compared to that of the claimed subject matter. The same applies to the method used to determine the melting temperature of the produced copolymer, which is based on ISO 11357 in both D7 (page 12, lines 30-37) and the patent in suit (paragraph 99). While different heating rates were used in these two documents (10°C in D7 and 20°C in the patent in suit), it has not been shown that that difference was significant when comparing the melting temperatures of D7 with those of the patent in suit.

2.7 The copolymer of example 17 of D7 is reported to have a melting temperature of 126°C and a content of hexene-1 of 3.1 mol% corresponding to 6.0 wt%. D7 does not disclose the value of the melt flow rate of the copolymers produced. The appellant made the argument, based on a correlation made between the hexene-1 contents and the molecular weights disclosed for the copolymers of examples 18 to 20 in Table 2, that the melt flow rate of the copolymer of example 17 should be below the range of melt flow rate as defined in claim 1 of the main request. The data provided in D7 does however not support the argument of the appellant since the molecular weight of the copolymer produced is not reported in example 17 and no further evidence was provided in that respect. The Board therefore concludes from the above that claim 1 of the main request differs from example 17 of D7 in that the melt flow rate is in the range of 0.1 to 3 g/10 min.

2.8 The patent in suit contains examples and comparative examples intended to establish an effect relating to the use of hexene-1 (examples 1 and 2) over butene-1 and ethylene (comparative examples 1 to 4). These examples are as such not addressing the question of
whether an effect can be attributed to the choice of a melt flow rate of between 0.1 and 3 g/10 min as claimed and are therefore irrelevant to the question of inventive step.

2.9 Further examples were also provided by the respondent in the form of an experimental report (D12). In particular, examples 1 and 2 of D12 were seen by the respondent to establish that copolymers having a melt flow rate within the claimed range (0.33 for the copolymer of example 1) led to blown films having improved mechanical properties (Elmendorf tear strength and Dart test) as compared to copolymers having a melt flow rate outside the claimed range (4.3 for the copolymer of example 2). However, the copolymer of example 2 of D12 cannot be seen as representative of the copolymer of example 17 of D7. As reported in D12, the propylene copolymer of example 2 has two melting temperatures, one that falls within the claimed range (134°C) and the other that is outside the claimed range (143.1°C), indicating that the copolymer of example 2 is bimodal, unlike that of example 17 of D7 for which only one melting temperature is reported. On that basis, the copolymer of example 2 of D12 and that of example 17 of D7 exhibit structural differences relating to their compositions which were not shown to be of no relevance for the comparison of the mechanical properties measured in D12. Also, it has not been shown that the value of the melt flow rate of the copolymer of example 2 of D12 (4.3 g/10 min) represented that of the copolymer of example 17 of D7 since the respondent himself argued that the melt flow rate of that copolymer could equally be above or below the claimed range of 0.1 to 3 g/10 min. For all these reasons, it cannot be concluded that the copolymer of example 2 of D12 can be seen as representative of the copolymer of
example 17 of D7.

2.10 In the absence of evidence showing the presence of an effect related to the feature distinguishing the claimed copolymers over that of example 17 of D7, the problem can only be seen as the provision of copolymers of propylene with hexene-1 that are suitable for the production of blown films.

2.11 The question remaining is whether the skilled person, starting from the propylene hexene-1 copolymer disclosed in the closest prior art D7, would have arrived at the subject-matter of claim 1 of the main request in order to solve the problem posed.

2.12 In order to answer this question, it is relevant to note that, when the technical problem is simply that of providing a further composition of matter, any feature or combination of features already conventional for that sort of composition of matter represents an equally suggested or obvious solution to the posed problem. The Boards of Appeal have repeatedly established that the simple act of arbitrarily selecting one among equally obvious alternative variations is devoid of any inventive character (Case Law of the Boards of Appeal, supra, I.D.9.18.7).

2.13 D8 is an excerpt of the polypropylene handbook relating to air-quenched blown films (section 7.2.3.3) and concerns the production of blown films. D8 specifically addresses the production of films from propylene copolymers (paragraphs 2, 4 and 5). That document can be seen as representing the common general knowledge in the field of blown film from polypropylene copolymers. D8 further teaches that in order to provide blown films with good film operation, the melt flow rate of
propylene copolymers should be in the range of 0.8 to 4 g/10 min (second line of the last paragraph on page 413). The range taught in D8 largely corresponds to the range of claim 1 of the main request (0.1 to 3 g/10 min). Since it was not shown, nor argued, that the claimed range of melt flow rate was in any way more advantageous than that disclosed in D8, the choice of a propylene hexene-1 copolymer with a melt flow rate in the range of 0.8 to 3 g/10 min in order to solve the problem of providing copolymers of propylene with hexene-1 that are suitable for the production of blown films cannot be seen as inventive. Claim 1 of the main request does therefore not satisfy the requirements of Article 56 EPC.

First auxiliary request

3. Inventive step

3.1 Claim 1 of the first auxiliary request differs from claim 1 of the main request in that the range defining the melting temperature was amended to 128 to 140°C.

3.2 Since the melting temperature of the copolymer of example 17 of D7 (126°C) is outside the amended range, claim 1 of the first auxiliary request differs from the copolymer of example 17 of D7 not only in the value of the melt flow rate but also in the value of the melting point of the copolymer.

3.3 The documents on file do not show the presence of a technical effect resulting from the difference in melting temperature of the claimed copolymers or resulting from its combination with the range of melt flow rate. Indeed, that was not argued by the respondent. Rather, the argument of the respondent with
respect to inventive step of the first auxiliary request was that the skilled person starting from the closest prior art could not have obtained a propylene hexene-1 copolymer having both a melting temperature and a melt flow rate within the claimed ranges. Therefore, the problem solved by the copolymer of claim 1 of the first auxiliary request is, as for the main request, the provision of copolymers of propylene with hexene-1 that are suitable for the production of blown films.

3.4 With regard to obviousness, the main question under dispute between the parties was whether a propylene copolymer similar to that of example 17 of D7 but with a melting temperature in the range of 128 to 140°C and a melt flow rate in the range of 0.1 to 3 g/10 min could have been obtained with a content of hexene-1 within the range of 5-9% by weight. More specifically, an aspect of that discussion was whether the content of hexene-1 could be reduced while still being within the range to such an extent that the melting temperature could be raised above 128°C. In that regard, the examples 17 to 21 of Table 2 of D7 show that lowering the hexene-1 content of propylene copolymers is associated with an increase of the melting temperature of the copolymer that is particularly significant for the copolymers having the lowest content of hexene-1. Thus, lowering the content of hexene-1 by 1.6 wt% from 7.6 wt% (example 18) to 6.0 wt% (example 17) results in an increase of melting temperature of 16°C from 110°C to 126°C. On that basis, the examples of D7 show that it is both credible and plausible that a propylene copolymer according to D7 having a content in hexene-1 below 6 wt% but still within the claimed range of 5 to 9 wt% will have a melting temperature in the range of 128°C to 140°C as claimed in the first auxiliary
request.

3.5 As discussed for the main request (point 2.13), the common general knowledge attested in document D8 is that polypropylene copolymers having a melt flow rate of between 0.8 and 4 g/10 min are generally suitable for the production of blown film. That common general knowledge, in the absence of any evidence to the contrary, equally applies to all propylene copolymers encompassed by D7. That applies therefore also to the copolymers of D7 having a content in hexene-1 of between 5 and 6 wt% selected such that the melting temperature of these copolymers is in the claimed range of 128 to 140°C according to claim 1 of the first auxiliary request. In that regard, the argument of the respondent that a propylene copolymer with a content in hexene-1 of between 5 and 6 wt% produced with a metallocene catalyst according to D7 could not display a melt flow rate as claimed was speculative since it was not supported by facts. The reference to D12 is not relevant in that respect either, since the propylene hexene-1 copolymers of D12 were produced with a highly stereospecific Ziegler Natta catalyst according to the patent in suit and not with a metallocene catalyst according to the method of D7.

3.6 Starting from the propylene copolymer of example 17 of D7, with a content of hexene-1 of 6.0 wt% and a melting point of 126°C, the skilled person would have considered propylene copolymers according to claim 1 of the first auxiliary request as a result of routine variations of the copolymers disclosed in D7 and therefore as an obvious solution to the problem of providing further copolymers of propylene with hexene-1 that are suitable for the production of blown films.
3.7 Claim 1 of the first auxiliary request therefore lacks an inventive step.

Second auxiliary request

4. Inventive step

4.1 Claim 1 of that request differs from claim 1 of the previous request only in that the upper limit of the range defining the melting temperature was lowered from 140°C to 139°C. Both the appellant and the respondent maintained their arguments put forward for the first auxiliary request and had no further argument for the second auxiliary request.

4.2 The amendment of the upper limit of the range defining the melting temperatures of the claimed copolymers does not result in any further difference as compared to the closest prior art and the limited range is also not associated with any particular effect in the patent in suit. The reasoning of inventive step detailed for claim 1 of the first auxiliary request equally applies to claim 1 of the second auxiliary request. Under these circumstances, the Board concludes that claim 1 of the second auxiliary request does not meet the requirements of Article 56 EPC.

Third auxiliary request

5. Inventive step

5.1 Claim 1 of the third auxiliary request differs from claim 1 of the main request in that the range defining the content in hexene-1 in the claimed propylene copolymer is amended to 5.5 to 9 wt%.
5.2 With respect to the content of hexene-1 of the copolymer of example 17 of D7, it was established that its value was 6.0 wt% (see points 2.4 and 2.6 above). Under these circumstances, the copolymer representing the closest prior art actually already fulfils the requirement set out with respect to the content of hexene-1 in claim 1 of the third auxiliary request. The Board finds also no evidence supporting the argument of the respondent that the content in of hexene-1 in the copolymer of example 17 of D7 was below the amended range. No plausible explanation for the alleged discrepancy between the methods of D7 and the patent in suit was presented to the Board and no further evidence was provided showing that the method of D7 led to different results as compared to the method of the patent in suit. There is therefore no reason for the Board to conclude that the content of hexene-1 in the copolymer of example 17 of D7 constitutes a further difference with respect to the copolymer of claim 1 of the third auxiliary request.

5.3 Under these circumstances, claim 1 of the third auxiliary request differs from the closest prior art in the same feature as claim 1 of the main request. The same reasoning and the same conclusion with respect to inventive step apply to the third auxiliary request. Claim 1 of the third auxiliary request does not meet therefore the requirements of Article 56 EPC.

Fourth auxiliary request

6. The appellant had no objections against the claims of the fourth auxiliary request. Since the Board sees no reason to raise any objections of its own motion in view of the claims of the fourth auxiliary request, the
patent is to be maintained on the basis of these claims.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of first instance with the order to maintain the patent on the basis of the claims of the fourth auxiliary request filed with the reply to the statement of grounds of appeal and after any consequential amendment of the description.

The Registrar: The Chairman:

I. Aperribay D. Semino

Decision electronically authenticated