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**Datasheet for the decision
of 14 November 2013**

Case Number: T 0964/09 - 3.3.03

Application Number: 02759487.8

Publication Number: 1425344

IPC: C08L23/04

Language of the proceedings: EN

Title of invention:

MULTIMODAL POLYETHYLENE MATERIAL

Patent Proprietor:

Dow Global Technologies LLC

Opponents:

Borealis Technology OY
Basell Polyolefine GmbH
Ineos Commercial Services UK Limited
Total Research & Technology Feluy

Headword:

Relevant legal provisions:

EPC Art. 123(2)
RPBA Art. 13(1)

Keyword:

Amendments - added subject-matter
(yes) (Main Request and Auxiliary Request 1)
Late-filed auxiliary requests - request clearly allowable (no)
(Auxiliary Requests 2 to 6)

Decisions cited:

G 0009/91, G 0001/93, G 0002/10

Catchword:



**Beschwerdekammern
Boards of Appeal
Chambres de recours**

European Patent Office
D-80298 MUNICH
GERMANY
Tel. +49 (0) 89 2399-0
Fax +49 (0) 89 2399-4465

Case Number: T 0964/09 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 14 November 2013

Appellant: Dow Global Technologies LLC
(Patent Proprietor) 2040 Dow Center
Midland, MI 48674 (US)

Representative: Boulton Wade Tennant
Verulam Gardens
70 Gray's Inn Road
London WC1X 8BT (GB)

Respondent: Borealis Technology OY
(Opponent 1) P.O.Box 330
06101 Porvoo (FI)

Representative: Campbell, Neil Boyd
Dehns
St Bride's House
10 Salisbury Square
London
EC4Y 8JD (GB)

Respondent: Basell Polyolefine GmbH
(Opponent 2) Intellectual Property
Bldg. C657, 2nd floor
Industriepark Höchst
65926 Frankfurt (DE)

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

Respondent: Ineos Commercial Services UK Limited
(Opponent 3) Hawkslease
Chapel Lane
Lyndhurst
Hampshire SO43 7FG (GB)

Representative: Smith, Julian Philip Howard
Mathisen & Macara LLP

Communications House
South Street
Staines-upon-Thames
Middlesex, TW18 4PR (GB)

Respondent: Total Research & Technology Feluy
(Opponent 4) Zone Industrielle C
7181 Seneffe (BE)

Representative: Leyder, Francis
Total Research & Technology Feluy
Zone Industrielle C
7181 Seneffe (BE)

Decision under appeal: **Decision of the Opposition Division of the
European Patent Office posted on 20 February
2009 revoking European patent No. 1425344
pursuant to Article 101(3) (b) EPC.**

Composition of the Board:

Chairman: M. C. Gordon
Members: F. Rousseau
C. Brandt

Summary of Facts and Submissions

I. The appeal by the Patent Proprietor (Appellant) lies from the decision of the opposition division posted on 20 February 2009 revoking European patent No. EP-B-1 425 344 in respect of European patent application No. 02 759 487.8, based on International application PCT/US2002/027503 filed on 28 August 2002 and published as WO 2003/020821.

II. The patent as granted contained 10 claims, claims 1, 2 and 4 reading as follows (for ease of understanding the Board has indicated by comparison to the text as filed additions in bold and underlined, and deletions in strikethrough):

- "1. A polyethylene resin having a multimodal molecular weight distribution, said resin being further characterized in that it ~~has~~
- (a) **has** a density in the range of from ~~about~~ 0.925 g/ccm [sic] to ~~about~~ 0.950 g/ccm, and
 - (b) **has** a melt index (I₂) in the range of from ~~about~~ ~~0.05~~ **0.1** g/10 min to ~~about~~ 5 g/10 min, and
 - (c) comprises at least one high molecular weight (HMW) ethylene interpolymer and at least a low molecular weight (LMW) ethylene polymer, wherein
 - ~~(d)~~ the HMW component comprises ~~at least~~ one or more ethylene interpolymers having a density in the range of from ~~about~~ 0.910 g/ccm to ~~about~~ 0.935 g/ccm, and a melt index of ~~about~~ 1.0 g/10 min or lower, and
 - ~~(de)~~ the LMW component comprises ~~at least~~ one or more ethylene polymers having a density in the range of from ~~about~~ 0.945 g/ccm to ~~about~~ 0.965 g/ccm and a melt index ~~of at least about~~ **in the range of from 2.0 g/10 min or higher to less than 200 g/10 min.**

2. The polyethylene resin according to claim 1 which has a bimodal (sic) molecular weight distribution and consists of one unimodal HMW ethylene interpolymer and one unimodal LMW ethylene polymer.

4. The polyethylene resin according to any of claims 1 to 3, wherein the HMW and/or the LMW ethylene interpolymer is a homogeneous, substantially linear interpolymer."

III. Four oppositions were filed requesting revocation of the patent in its entirety on the grounds inter alia of lack of novelty and lack of inventive step.

IV. The impugned decision was based on a Main Request and an Auxiliary Request 1, both submitted with letter of 9 August 2006, as well as Auxiliary Requests 2 to 5, submitted with letter of 11 December 2008, Auxiliary Requests 6 to 10 submitted with letter of 29 January 2009 and Auxiliary Requests 11 and 12 submitted during the oral proceedings held on 11 February 2009.

V. The Opposition Division concluded in the contested decision that claim 1 according to any of the those requests contravened the requirement for clarity set out in Article 84 EPC due to the presence of mutually incompatible features. Claim 1 of the main and first to eleventh auxiliary requests additionally did not meet the requirements of Article 84 EPC due to the absence of an indication of the method of determination of the amounts of the HMW and LMW components present in the composition. Furthermore, claim 1 of Auxiliary Requests 11 and 12 was held to be in violation of

Article 123(2) EPC. The patent in suit was therefore revoked.

VI. With the statement setting out the grounds for appeal filed on 29 June 2009 (dated 26 June 2009), the Appellant submitted four sets of claims forming a Main Request and Auxiliary Requests 1 to 3. Independent claim 1 of the Main Request read as follows (deletions compared to claim 1 as originally filed being indicated in strikethrough and additions in bold and underlined):

- "1. A polyethylene resin having a multimodal molecular weight distribution, said resin being further characterized in that it ~~has~~
- (a) **has** a density in the range of from ~~about 0.925~~ **0.935** g/ccm to ~~about 0.950~~ **0.945** g/ccm, and
 - (b) **has** a melt index (I₂) in the range of from ~~about 0.05~~ **0.1** g/10 min to ~~about 5~~ **1** g/10 min, and
 - (c) comprises ~~at least~~ one high molecular weight (HMW) ethylene interpolymer and ~~at least a~~ **one** low molecular weight (LMW) ethylene **interpolymer**, wherein
 - (d) the HMW component ~~comprises at least one or more~~ **is an** ethylene interpolymer having a density in the range of from ~~about 0.910~~ **0.915** g/ccm to ~~about 0.935~~ g/ccm, and a melt index of ~~about 1.0~~ g/10 min or lower, ~~and~~
 - (e) the LMW component ~~comprises at least one or more~~ **is an** ethylene **interpolymer** having a density in the range of from ~~about 0.945~~ g/ccm to ~~about 0.965~~ **0.960** g/ccm and a melt index ~~of at least about~~ **in the range of from** 2.0 g/10 min ~~or higher~~ **to less than 200 g/10 min, and**
 - (f) the HMW component is present in an amount of 30 to 50 weight percent and the LMW component is present in an amount of 50 to 70 weight percent based on**

the total amount of polymer in the multimodal polymer resin.

Claim 1 of Auxiliary Request 1 differed from claim 1 of the Main Request in that component (e) was defined as follows (the deletions made compared to claim 1 as filed are indicated in strikethrough and the additions made, in bold and underlined):

"(e) the LMW component ~~comprises at least one or more~~ **is an** ethylene ~~inter~~polymers having a density in the range of from about ~~0.945~~ **0,950** g/ccm to about ~~0.965~~ **0.960** g/ccm and a melt index ~~of at least~~ about **in the range of from** 2.0 g/10 min ~~or higher~~ **to 150 g/10 min**"

- VII. Rejoinders of Respondents-Opponents 1, 4 and 2 were submitted with letters of 13 November 2009, 16 November 2009 and 6 January 2010, respectively.
- VIII. The parties were summoned to attend oral proceedings with a registered letter dated 2 April 2013.
- IX. In a communication by the Board dated 10 October 2013, the Board indicated in a provisional opinion that the passages of the original application cited by the Appellant did not appear to provide a direct and unambiguous disclosure of the combination of features defining the LMW component in the context of the HMW component and their respective amounts as defined in amended claim 1. It was also indicated that the clarity objections underlying the contested decision were not considered to be convincing.
- X. With a letter of 14 October 2013 the Appellant submitted new Auxiliary Requests 2 and 3 in replacement

of previous Auxiliary Requests 2 and 3, as well as additional Auxiliary Request 4 and 5. The respective independent claims 1 of those requests read as follows:

Auxiliary Request 2

- "1. A polyethylene resin having a bimodal molecular weight distribution, said resin being further characterized in that it
- (a) has a density in the range of from 0.935 g/ccm to 0.945 g/ccm, and
 - (b) has a melt index (I_2) in the range of from 0.1 g/10 min to 1 g/10 min, and
 - (c) consists of one unimodal high molecular weight (HMW) ethylene interpolymer and one unimodal low molecular weight (LMW) ethylene interpolymer, wherein
 - (d) the HMW component is an ethylene interpolymer having a density in the range of from 0.915 g/ccm to 0.935 g/ccm, and a melt index of 1.0 g/ 10 min or lower,
 - (e) the LMW component is an ethylene interpolymer having a density in the range of from 0.945 g/ccm to 0.960 g/ccm and a melt index in the range of from 2.0 g/10 min to less than 200 g/10 min, and
 - (f) the HMW component is present in an amount of 30 to 50 weight percent and the LMW component is present in an amount of 50 to 70 weight percent based on the total amount of polymer in the bimodal polymer resin."

Auxiliary Request 3

- "1. A polyethylene resin having a bimodal molecular weight distribution, said resin being further characterized in that it
- (a) has a density in the range of from 0.935 g/ccm to 0.945 g/ccm, and
 - (b) has a melt index (I_2) in the range of from 0.1 g/10 min to 1 g/10 min, and
 - (c) consists (sic) of one unimodal high molecular weight (HMW) ethylene interpolymer and one unimodal low molecular weight (LMW) ethylene interpolymer, wherein
 - (d) the HMW component is an ethylene interpolymer having a density in the range of from 0.915 g/ccm to 0.935 g/ccm, and a melt index of 1.0 g/10 min or lower,
 - (e) the LMW component is an ethylene interpolymer having a density in the range of from 0.950 g/ccm to 0.960 g/ccm and a melt index in the range of from 2.0 g/10 min to 150 g/10 min, and
 - (f) the HMW component is present in an amount of 30 to 50 weight percent and the LMW component is present in an amount of 50 to 70 weight percent based on the total amount of polymer in the bimodal polymer resin."

Auxiliary Request 4

- "1. A polyethylene resin having a multimodal molecular weight distribution, said resin being further characterized in that it
- (a) has a density in the range of from 0.935 g/ccm to 0.945 g/ccm, and
 - (b) has a melt index (I_2) in the range of from 0.1 g/10 min to 1 g/10 min, and

- (c) comprises one high molecular weight (HMW) ethylene interpolymer and one low molecular weight (LMW) ethylene interpolymer, wherein
- (d) the HMW component is an ethylene interpolymer having a density in the range of from 0.915 g/ccm to 0.925 g/ccm, and a melt index of 1.0 g/10 min or lower,
- (e) the LMW component is an ethylene interpolymer having a density in the range of from 0.950 g/ccm to 0.960 g/ccm and a melt index in the range of from 2.0 g/ 10 min to 150 g/10 min, and
- (f) the HMW component is present in an amount of 40 to 55 weight percent and the LMW component is present in an amount of 45 to 60 weight percent based on the total amount of polymer in the multimodal polymer resin."

Auxiliary Request 5

- "1. A polyethylene resin having a bimodal molecular weight distribution, said resin being further characterized in that it
 - (a) has a density in the range of from 0.935 g/ccm to 0.945 g/ccm, and
 - (b) has a melt index (I_2) in the range of from 0.1 g/10 min to 1 g/10 min, and
 - (c) consists of one unimodal high molecular weight (HMW) ethylene interpolymer and one unimodal low molecular weight (LMW) ethylene interpolymer, wherein
 - (d) the HMW component is an ethylene interpolymer having a density in the range of from 0.915 g/ccm to 0.925 g/ccm, and a melt index of 1.0 g/10 min or lower,
 - (e) the LMW component is an ethylene interpolymer having a density in the range of from 0.950 g/ccm

to 0.960 g/ccm and a melt index in the range of from 2.0 g/10 min to 150 g/10 min, and

- (f) the HMW component is present in an amount of 40 to 55 weight percent and the LMW component is present in an amount of 45 to 60 weight percent based on the total amount of polymer in the bimodal polymer resin."

XI. Respondents Opponents 3 and 4 made further submissions with letters of 14 October 2013 and 15 October 2013, respectively, where they indicated their intention not to attend the oral proceedings.

XII. The Appellant with letter of 29 October 2013 submitted in response to the Board's communication an additional Auxiliary Request 6, independent Claim 1 of which read as follows:

- "1. A polyethylene resin having a bimodal molecular weight distribution, said resin being further characterized in that it
 - (a) has a density in the range of from 0.925 g/ccm to 0.950 g/ccm, and
 - (b) has a melt index (I_2) in the range of from 0.1 g/10 min to 5 g/10 min, and
 - (c) consists of one unimodal high molecular weight (HMW) ethylene interpolymer and one unimodal low molecular weight (LMW) ethylene polymer, wherein the HMW interpolymer has a density in the range of from 0.910 g/ccm to 0.935 g/ccm, and a melt index of 1.0 g/10 min or lower, and
 - (d) the LMW ethylene polymer has a density in the range of from 0.945 g/ccm to 0.965 g/ccm and a melt index in the range of from 2.0 g/10 min to less than 200 g/10 min,

wherein the HMW interpolymers are a homogenous, substantially linear interpolymers."

XIII. The Appellant's arguments insofar as they are relevant for the present decision can be summarized as follows:

- a) The Board should only consider the requirements of Article 123(2) EPC insofar as they related to the specific situation covered by the opposition division's decision. If there were outstanding issues under Article 123(2) EPC, the case should be remitted to the opposition division.
- b) The Case Law according to which it was not allowable under Article 123(2) EPC to combine features disclosed in different embodiments was not applicable in the present situation. The amendments to claim 1 did not comprise the insertion of additional feature, but amounted merely to a limitation of the scope of claim 1 as originally filed, all amendments relating to the same embodiment.
- c) The only feature which was not present in original claim 1 was the relative proportion of the LMW and HMW components, which feature, however, was implicit in view of the density values for the LMW and HMW components and their mixture.
- d) Moreover, the limitations introduced were disclosed to be preferred restrictions of the amended features, which restrictions taken as a whole did not represent added subject-matter. Those restrictions did not result in the definition of a new single resin, but rather of a group of resins (no "singling out").

- e) Feature (e) in claim 1 of the Main Request was based on a combination of claims 1 and 3 as filed, wherein the upper limit of the melt index of the LMW component had been defined to be less than 200 g/10 min in accordance with claim 1 as granted. Apart from the fact that no ground of opposition had been raised under Article 100 (c) EPC, the upper limit of less than 200 g/10 min was disclosed on page 4, lines 30-31 of the application as filed. Thus, in the absence of any suggestion that the upper limit of less than 200 g/10 min for the melt index could be read only in conjunction with another specific lower limit disclosed in the application, in particular with that defined in original claim 1, the definition of feature (e) in claim 1 of the Main Request did not contravene the requirements of Article 123(2) EPC.

- f) The application as filed did not indicate that the preferred values defined therein for each of the parameters had to be read in conjunction with each other.

- g) Thus, the Main Request satisfied the requirements of Article 123(2) EPC.

- h) Auxiliary Request 1 differed from the Main Request only in that in feature (e) the density of the LMW component was defined to lie in the range from 0,950 g/ccm to 0.960 g/ccm and the melt index was in the range of from 2.0 g/10 min to 150 g/10 min, in accordance with the original disclosure in the paragraph bridging pages 4 and 5. For the same reasons as for the main request the first

auxiliary request met the requirements of Article 123(2) EPC.

- i) The filing of Auxiliary Requests 2 to 5 was an attempt to address the objections raised by the Respondents in their rejoinders to the grounds of appeal. The filing of these auxiliary requests was appropriate not only because the appealed decision did not deal with the requirements of Article 123(2) EPC in respect of claim 1, but also because it was clear that that issue would be discussed at the oral proceedings. Furthermore, the new requests were only based on features disclosed to be preferred in the application as filed, which amounted to an appropriate response in order to overcome the objections raised pursuant to Article 123(2) EPC. The additional reasons for allowing those requests were the same as for the Main and Auxiliary Request 1. Furthermore, the amendments introduced according to the respective claim 1 of the second to fifth auxiliary requests in the present claim did not necessitate any additional search of prior art to be carried out by the Respondents, the only issues to be discussed being whether the claims met the requirements of Articles 84 and 123(2) EPC.

- j) Auxiliary Request 6 had been filed separately in direct response to the Board's communication which in a preliminary opinion found that the combination of restrictions according to claim 1 was in violation of the requirements of Article 123(2) EPC. Hence, the filing of Auxiliary Request 6, which represented the first attempt to address that objection, should be allowed into the proceedings. Furthermore, no objection had been

raised by the Opponents under Article 100(c) EPC. Claim 1 of Auxiliary Request 6 was a combination of the features of granted claim 1, granted dependent claim 2 and one of the alternatives disclosed in granted dependent claim 4. Claim 1 of Auxiliary Request 6 was therefore prima facie allowable, as also no clarity objection could be raised with respect to the subject-matter of the patent as granted. Should one take the view that claim 1 of Auxiliary Request 6 constituted an amendment of the patent as granted, claim 1 was based on the application as originally filed, in particular on original claim 4 and page 11, lines 19-22. Hence, Auxiliary Request 6 clearly overcame the objections raised under Article 123(2) EPC and should be admitted into the proceedings.

XIV. The arguments of the Respondents as far as they are relevant for the present decision can be summarised as follows :

- a) It was conceded that each of the upper and lower values selected for individual parameters defined in claim 1 of the Main Request was disclosed in the application as filed. However, the subject-matter resulting from the combination of numerous selections made for the ranges defining the melt index, the amount of HMW component and its density, the amount of LMW component and its density, as well as the selection of interpolymers for the LMW component was not directly and unambiguously disclosed in the application as filed. This was in particular the case, as feature (e) in claim 1 of the Main Request was not solely based on a combination of claims 1 and 3 as originally filed, as that combination did not

disclose an upper limit for the melt index of less than 200 g/10 min. The disclosure on page 4, line 31, from which the upper value of 200 g/10 min had been extracted was not in conjunction with interpolymers having a density from 0.945 to 0.960 g/ccm. It had furthermore to be kept in mind that the overall density and melt index of the polyethylene resin depended on the density and melt index of its LMW and HMW components. Hence, the application as filed did not contemplate all combinations of the upper and lower limits disclosed for the density and melt index of the polyethylene resin and its LMW and HMW components. Thus, claim 1 of the Main Request contravened the requirements of Article 123(2) EPC.

- b) Component (e) as defined in claim 1 of Auxiliary Request 1 was disclosed in the paragraph bridging pages 4 and 5 of the application as filed. However, this component was not disclosed in the application as filed in combination with the various restrictions according to claim 1 as originally filed. Thus, claim 1 of Auxiliary Request 1 also contravened Article 123(2) EPC.

- c) As to the admissibility of Auxiliary Request 2 to 5, there was no proper justification for their belated submission. These requests addressed arguments advanced in the rejoinders to the statement of grounds of appeal and therefore could have been submitted much earlier. Moreover, the additional amendments contained in those requests did not overcome the objections raised against the Main Request and Auxiliary Request 1.

d) Regarding Auxiliary Request 6, the Appellant had completely changed its case, sweeping away the entire discussion which had taken place on appeal about the allowability of amending the various upper or lower numerical limits defined in claim 1. As that request could have been filed years ago, even before the opposition division, its submission shortly before the oral proceedings before the Board constituted an abuse of the proceedings. Furthermore, the combination of features claimed was still problematic having regard to the requirements of Article 123(2) EPC. Hence, Auxiliary Request 6 should not be admitted into the proceedings.

XV. The Appellant (patent proprietor) requested that the decision under appeal be set aside and the case be remitted to the opposition division for further prosecution on the basis of the Main Request or, alternatively, on the basis of Auxiliary Request 1, both requests as submitted with the statement setting out the grounds of appeal of 26 June 2009, or alternatively on the basis of one of the Auxiliary Requests 2 to 5, submitted with letter of 14 October 2013, or, alternatively on the basis of Auxiliary Request 6, submitted with letter of 29 October 2013.

XVI. The Respondents requested that the appeal be dismissed.

XVII. At the end of the oral proceedings, which took place on 14 November 2013 the decision of the Board was announced.

Reasons for the Decision

1. The appeal is admissible.

Main Request

2. In the case of amendments of the claims in the course of opposition or appeal proceedings, such amendments are to be fully examined as to their compatibility with the requirements of the EPC, in particular with regard to the provisions of Article 123(2) EPC (G 9/91, OJ EPO, 1993, 408, point 19 of the reasons for the decision).
3. The Board cannot accede to the Appellant's request to restrict scrutiny of the amendments only in respect of specific situations covered by the Opposition Division and exercising its discretion under Article 111(1) EPC to remit the case to the Opposition Division for dealing with issues under 123(2) EPC which were not dealt with by the Opposition Division. Such course of action would be improper, not only in view of the absence of any procedural justification, as the parties had, in particular in the written phase of the proceedings, sufficient opportunity to present their arguments concerning the allowability of the amended claims with respect to the requirements of Article 123(2) EPC, but also because examination of whether or not the requirements of Article 123(2) EPC are met requires consideration of the combination of features claimed, and not only each feature taken in isolation.

Article 123(2) EPC

4. Compared to claim 1 as originally filed, claim 1 of the Main Request contained the following amendments:

- (1) The density of the polyethylene resin, originally "from about 0.925 g/ccm to about 0.950 g/ccm" has been restricted to the range of "from 0.935 g/ccm to 0.945 g/ccm",
- (2) The melt index of the polyethylene resin, originally "from about 0.05 to about 5 g/10 min" has been restricted to "from 0.1 to 1 g/10 min",
- (3) The density of the HMW ethylene interpolymer, originally "from about 0.910 g/ccm to about 0.935 g/ccm" has been restricted to the range "from 0.915 g/ccm to 0.935 g/ccm (the wording interpolymer, as defined on page 3 lines 4-5 of the application as filed, denotes polymers prepared by the polymerisation of at least two monomers),
- (4) The LMW ethylene polymer has been restricted to ethylene interpolymers,
- (5) The density of the LMW component originally "from about 0.945 g/ccm to about 0.965 g/ccm has been restricted to the range "from 0.945 g/ccm to 0.960 g/ccm",
- (6) The melt index of the LMW component has been restricted from "at least about 2.0 g/10 min or higher" to "from 2.0 g/10 min to less than 200 g/10 min", and
- (7) The proportions of the HMW and LMW components have been defined to be from 30 to 50 wt.-% and from 50 to 70 wt.-% respectively.

5. In accordance with the established Case Law of the Boards of Appeal of the EPO, the relevant question to be decided in assessing whether the subject-matter of

an amended claim extends beyond the content of the application as filed is whether after the amendment the skilled person is presented with new technical information (see G 2/10 (OJ 2012, 376), point 4.5.1 of the Reasons and Case Law of the Boards of Appeal of the EPO, 7th edition 2013, II.E.1). In other words, the above mentioned amendments are only allowable if the skilled person would derive the resulting subject-matter directly and unambiguously, using common general knowledge from the application as filed.

6. The Appellant did not indicate any explicit single disclosure for the claimed combination of features, but rather relied on various separate passages of the application as filed. It was not contested that each of the amended numerical values defining lower and/or upper limits of concentration or parametric ranges is as such, i.e. when read in isolation, disclosed in the application as filed. It was not disputed either that the application as filed disclosed that the LMW ethylene polymer can be an interpolymer within the meaning of the patent in suit, i.e. a copolymer (page 3, lines 4-5). This, however, does not allow it to be concluded that the skilled person would implicitly derive the presently claimed subject-matter directly and unambiguously, using common general knowledge, from the application as filed. In this context "implicitly" means that the skilled person would have found this disclosure as necessarily implied by the content of the application as originally filed as a whole.

- 6.1 According to the application as filed, the multimodal polyethylene resin composition comprising a LMW ethylene polymer and a HMW ethylene interpolymer has a density in the range of from about 0.925 g/cm³, preferably of from about 0.935 g/ccm, to about 0.950 g/

ccm, preferably to about 0.945 g/ccm, and a melt index in the range of from about 0.05 g/10 min, preferably of from about 0.1 g/10 min, to about 5 g/10 min, preferably to about 1 g/10 min (page 3, lines 24-32 and claim 1).

6.2 The only passage of the application as filed disclosing an upper limit of 200 g/10 min for the melt index of the LMW ethylene polymer, albeit not in the context of copolymers (interpolymers within the meaning of the patent in suit) is to be found on page 4, line 26-31. According to said passage the LMW ethylene polymer is furthermore characterized by a density in the range of from about 0.945 g/ccm to about 0.965 g/ccm and a melt index of at least about 2.0 g/10 min or higher, preferably of at least about 5 g/10 min, more preferably of at least about 15 g/10 min or higher.

6.3 As to the ethylene HMW interpolymer, it is defined on page 4, lines 6-12 of the application as filed to have a density in the range of from about 0.910 g/ccm, preferably of from about 0.915 g/ccm, to about 0.935 g/ccm, preferably to about 0.925 g/ccm and to be characterized by a melt index of about 1.0 g/10 min or lower, preferably of about 0.05 g/10 min or lower. The same passages also specifies that the HMW ethylene interpolymer advantageously has a melt index of about 0.02 g/10 min or higher.

6.4 It is not contested by the respondents that the application as filed discloses that the respective values of any of the above parameters, considered in isolation, may vary within the various corresponding lower and upper numerical limits disclosed in the above cited passages thus forming each of the separate ranges defined in present claim 1. The application as filed,

however, does not provide any indication that the various ranges defined in present claim 1 by these lower and upper limits were to be read in combination, i.e. in the context of each other. The Appellant has not identified any pointer in the application as filed towards such combination. Nor is there any evidence that, based on predictions of the parameter melt index of the blend as a function of the melt indices of its constituents, the presently claimed multimodal polyethylene resin is disclosed in the application as originally filed to be obtained using the LMW and HMW components and their amounts as defined in present claim 1. Consequently the Board must conclude that the combination of features present in claim 1 of the Main Request does not emerge from the disclosure of the application as filed either explicitly or implicitly and constitutes new technical information.

- 6.5 The Appellant's central argument that the amendments to claim 1 did not comprise the insertion of additional features, but amounted merely to a limitation of the scope of claim 1 as originally filed, to a group of resins pertaining to the same embodiment, and also not to the singling out of an undisclosed resin is not decisive.
- 6.6 The underlying idea of Article 123(2) EPC is that an applicant or patent proprietor shall not be allowed to improve his position by defining subject-matter not disclosed in the application as filed, since so doing would give him an unwarranted advantage and could be damaging to the legal security of third parties relying on the content of the original application (G 1/93 OJ EPO, 1994, 541, point 9 of the reasons for the decision).

- 6.7 Defining ranges for various parameters in a claim in a broad manner, with some preferred values for the upper and lower limits of those various ranges in the description and subsequently introducing some limits for each of those features, for the purpose of overcoming grounds of opposition based on prior art revealed in proceedings before the EPO, is allowable in view of the requirements of Article 123(2) EPC subject to the condition that the application as filed reveals, at least implicitly in a direct and unambiguous manner the resulting specific combination of amended ranges.
- 6.8 Allowing restrictions to various ranges defining parametric values, which restrictions result from amendments to various upper and lower limits of those ranges, without there being any - even implicit - indication in the application as filed that the specific combination of restricted ranges was envisaged would be unfair to third parties. It would give an applicant or a patentee who filed a broad speculative claim an unwarranted advantage over other applicants who were the first to attribute any significance to a specific combination of parametric ranges encompassed by said broad claim. The underlying principle is that any invention for which protection is sought, i.e. in the specific form claimed, and which therefore is meant to provide a contribution to the art justifying a patent monopoly must have been made at the date of filing the application and be properly disclosed therein. In the present case, the application as originally filed did not contain any fall-back position on the basis of which the combinations of parametric ranges as presently claimed might be considered to be disclosed.

- 6.9 Accordingly, the subject-matter of present claim 1 contravenes the requirements of Article 123(2) EPC.

Auxiliary Request 1

7. The argument of the Appellant in favour of Auxiliary Request 1 were indicated to be the same as those brought forward for the Main Request. The additional restrictions carried out for Auxiliary Request 1, i.e. a lower limit for the density of 0.950 ccm and an upper limit of 150 g/10 min for the melt index of the LMW interpolymer, are in the absence of any pointer in the application as filed towards this combination of parametric ranges, unable to overcome the objections raised in respect of the main request. Hence, claim 1 of Auxiliary Request 1 also does not comply with the requirements of Article 123(2) EPC.

Admissibility of Auxiliary Requests 2 to 6

8. Auxiliary Requests 2 to 5 and Auxiliary Request 6 were submitted with letters of 14 October 2013 and 29 October 2013, respectively, within one month before the oral proceedings. The Board had to exercise its discretion under Article 13(1) RPBA as to whether these requests should be admitted into the proceedings.
9. Concerning the justification for the late filing of Auxiliary Requests 2 to 5, submitted more than three years after the rejoinders of the Respondents and before the Board's communication had reached the Appellant, the mere argument that they were submitted to pre-empt any objection under Article 123(2) EPC, fails to convince, as that issue and the essential supporting arguments had been raised in the Respondents' rejoinders. The justification for the late

filing of Auxiliary Request 6, that it was filed in reaction to the Board's communication is not convincing either. The argumentation in support of the Board's preliminary opinion that the requirements of Article 123(2) EPC had not been shown to be satisfied in respect of claim 1 of the Main Request and that the same issues arose for the First and Second Auxiliary Requests then on file was essentially based on the arguments brought forward by the Respondents. A communication of the Board pursuant to Article 15(1) RPBA is intended as guidance for the oral proceedings. It helps the parties to focus their argumentation on issues that the Board considers of relevance for reaching its decision. Where the Board's communication contains a preliminary opinion based on the essential arguments raised by the parties, that communication cannot be taken as a justification or invitation to submit new requests that the parties could have filed earlier. In decision G 4/95 of the Enlarged Board of Appeal (OJ EPO, 1996, 412), it is recalled that both opposition and opposition appeal procedures are primarily written procedures. In principle, oral proceedings are scheduled at a point in time within an opposition or opposition appeal procedure when the written submissions of all parties, including the written presentation of facts and evidence by all parties, are complete. In the present case, the Appellant, should have submitted the present Auxiliary Request 6 in response to the rejoinder of the Respondents, and hence in good time if they intended to seek protection for such combination of features.

10. Moreover, Article 13(1) RPBA specifies that a board in exercising its discretion to admit and consider amendments to a party's case should take into account the current state of the proceedings and the need for

procedural economy. One factor to be considered in the exercise of its discretion is therefore whether the newly filed request can be considered *prima facie* allowable at least in the sense that all previous objections, in the present case objections under Article 123(2) EPC, have been overcome.

Auxiliary Requests 2 to 5

11. The arguments by the Appellant that the values for lower and upper limits of the parametric ranges or the amounts of the HMW and LMW components now defined in amended claim 1 were indicated to be preferred in the application as filed does not permit, in the absence of any pointer to this combination of preferred upper or lower limits for the various numerical ranges of claim 1, it to be concluded that this specific combination of various modified ranges would be at least implicitly disclosed in the application as filed. To demonstrate such implicit disclosure would at the least require some additional indication, based on technical considerations, that values indicated to be preferred, even if they had been disclosed in the application as filed to have the same degree of preference, which has not been shown to be the case here, should be implicitly read in combination. Thus, in the case under consideration the mere fact that the amended values inserted are - individually - preferred in the application as filed does not constitute *prima facie* an argument supporting the conclusion that the additional amendments inserted in Auxiliary Requests 2 to 5 would overcome the objection under Article 123(2) EPC.

Auxiliary Request 6

12. The subject-matter of claim 1 of Auxiliary Request 6 corresponds to that of claim 1 as granted, wherein the definition of the resin has been restricted to bimodal resins consisting of one unimodal HMW ethylene interpolymer and one unimodal LMW ethylene polymer as defined in claim 2 as granted, the definition of the HMW interpolymer moreover being restricted to homogeneous, substantially linear interpolymers which is one of the two possibilities permitted by claim 4 as granted. Hence, the combination of features according to claim 1 of Auxiliary Request 6 does not correspond to the subject of any claim in the patent as granted. Claim 1 of Auxiliary Request 6 constitutes therefore an amendment of the patent as granted which in view of G 9/91 (loc. cit.) has to be fully examined for conformity with the requirements of the EPC, in particular those of Article 123(2) EPC.

13. The use of a LMW ethylene polymer being unimodal, having a density in the range of from 0.945 g/ccm to 0.965 g/ccm and a melt index in the range of from 2.0 g/10 min to less than 200 g/10 min can be considered to be disclosed in the application as filed, considering that unimodal LMW components are most preferred and that the upper limit of less than 200 g/10 min is also disclosed in the application as filed. The Applicants, however, did not provide any indication of passages of the application as filed on the basis of which the skilled person would recognize that said group of unimodal LMW components is meant to be used in combination with HMW ethylene polymers being homogeneous, substantially linear interpolymers, let alone for providing polyethylene resins having a minimum melt index of at least 0.1 g/10 min. Under

these conditions the subject-matter of claim 1 of Auxiliary Request 6 cannot be considered *prima facie* allowable at least in the sense that the objections raised under Article 123(2) EPC against the Main Request and Auxiliary Request 1 have not been shown to have been overcome by the amendments made.

14. Hence, Auxiliary Requests 2 to 6 which have been late filed in the absence of a proper justification and which do not *prima facie* overcome the reasons for rejecting the Main Request and Auxiliary Request 1 are not admitted into the proceedings pursuant to Article 13(1) RPBA.

Order

For these reasons it is decided that:

1. The appeal is dismissed.

The Registrar:

The Chairman:



E. Goergmaier

M. C. Gordon

Decision electronically authenticated