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Datasheet for the decision of 9 December 2021

Case Number: T 0373/17 - 3.3.03

Application Number: 10728252.7

Publication Number: 2471077

H01B3/44, C08L23/04 IPC:

Language of the proceedings: ΕN

Title of invention:

CABLE AND POLYMER COMPOSITION

Patent Proprietor:

Borealis AG

Opponent:

The Dow Chemical Company

Relevant legal provisions:

EPC Art. 100(b), 123(2) RPBA Art. 12(4)

Keyword:

Late-filed objection - admitted (no)

Grounds for opposition - insufficiency of disclosure (yes; no: auxiliary request 6)

Amendments - extension beyond the content of the application as filed (no: auxiliary request 6)



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Case Number: T 0373/17 - 3.3.03

D E C I S I O N
of Technical Board of Appeal 3.3.03
of 9 December 2021

Appellant: The Dow Chemical Company

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Decision under appeal: Decision of the Opposition Division of the

European Patent Office posted on 19 December 2016 rejecting the opposition filed against European patent No. 2471077 pursuant to Article

101(2) EPC.

Composition of the Board:

C. Brandt

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Summary of Facts and Submissions

- I. The appeal of the opponent is against the decision of the opposition division posted on 19 December 2016 rejecting the opposition filed against European patent No. 2 471 077.
- II. Claims 1, 3, 4, 7, 15 and 16 of the granted patent read as follows:
 - "1. A cable comprising a conductor surrounded by at a least one layer comprising a polymer composition which comprises a polymer component and optionally a carbon black (CB) component, wherein the polymer composition has a flexural modulus of less than 390 MPa, when determined according to ISO 178 using a pressed test specimen (80 x 10 x 4.0 mm, length x width x thickness), a strain at break (%) of 700% or more, when determined according to ISO 527-1:1993 using a pressed test specimen prepared according to ISO527-2:1993 5A and an environmental stress cracking resistance (ESCR) of at least 1500 hours, when determined according to IEC 60811-4-1:2004 (procedure in Chapter 8, "Resistance to environmental stress cracking", Procedure B, 10 % by volume solution in water of Igepal CO-630)."
 - "3. The cable according to any of the preceding claims, wherein the polymer component of the polymer composition has a short chain branching (SCB) profile expressed as a function of molecular weight (abbreviated as SCB(MW) profile) of X \pm 5 CH₃/1000 total carbon atoms (abbreviated as 1000TC), preferably of X \pm 4 CH₃/1000TC, more preferably of

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X \pm 3 CH $_3/1000$ TC, wherein X is the arithmetic mean in centered 90 weight-% of total region of the molecular weight distribution (MWD).

- "4. The cable according to any of the preceding claims, wherein the polymer component of the polymer composition has the arithmetic mean X of SCB(MW) profile of 17 in centered 90 weight-% of total region of the molecular weight distribution (MWD) and the polymer component of the polymer composition has a SCB(MW) profile of 17 \pm 5 CH₃/1000TC, preferably of 17 \pm 4 CH₃/1000TC, more preferably of 17 \pm 3 CH₃/1000TC, in centered 90 weight % of total region of the molecular weight distribution (MWD)."
- "7. The cable according to any of the preceding claims, wherein polymer composition has a shear thinning index, $SHI_{2.7/210}$ of at least 45, preferably of at least 50, preferably of at least 70."
- "15. A polymer composition for use as a cable layer, which comprises a polymer component and a carbon black (CB) component, wherein the polymer composition has a flexural modulus of less than 390 MPa, when determined according to ISO 178 using a pressed test specimen (80 x 10 x 4.0 mm, length x width x thickness), strain at break (%) of 700% or more, when determined according to ISO 527-1:1993 using a pressed test specimen prepared according ISO527-2:1993 5A and an environmental stress cracking resistance (ESCR) of at least 1500 hours, when determined according to IEC 60811-4-1:2004 (procedure in Chapter 8, "Resistance to environmental stress cracking", Procedure B, 10 % by volume solution in water of Igepal CO-630)."
- "16. The polymer composition according to claim 15,

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wherein the polymer component of the polymer composition has a short chain branching (SCB) profile and wherein

- the polymer component of the polymer composition has a short chain branching (SCB) profile expressed as a function of molecular weight (abbreviated as SCB(MW) profile) of X \pm 5 CH $_3$ /1000 total carbon atoms (abbreviated as 1000TC), preferably of X \pm 4 CH $_3$ /1000TC, more preferably of X \pm 3 CH $_3$ /1000TC, wherein X is the arithmetic mean in centered 90 weight-% of total region of the molecular weight distribution (MWD) or
- the polymer component of the polymer composition has the arithmetic mean X of SCB(MW) profile of 17 in centered 90 weight-% of total region of the molecular weight distribution (MWD) and the polymer component of the polymer composition has a SCB(MW) profile of 17 ± 5 CH₃/1000TC, preferably of 17 ± 4 CH₃/1000TC, more preferably of 17 ± 3 CH₃/1000TC, in centered 90 weight-% of total region of the molecular weight distribution (MWD)."
- III. A notice of opposition had been filed against the patent, requesting the revocation of the patent in its entirety.
- IV. The following documents were *inter alia* cited in the decision under appeal:

D3: Jacketing compounds for Wire & Cable, IN0123/GB, WC 2006 03 NI, Borealis A/S 2006

D4: WO 97 /003124

D10: ISO 527-1, 1st ed., 15 June 1993

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- V. In that decision, the opposition division held *inter* alia that:
 - (a) The deletion in claims 3, 4, 7 and 16 of the granted patent of the expression "when determined according to the ... method as described under "Determination methods"" which was present in claims 3, 4, 7 and 16, respectively, of the application as originally filed met the requirements of Article 123(2) EPC;
 - (b) Considering the properties (low) flexural modulus, (high) strain at break and (high) ESCR and the intended use, for jacketing of cables, mentioned in claims 1 and 15 as granted, the person skilled in the art would immediately know that only polyethylenes could be used as polymer component. In addition, from the information provided in the patent specification, the skilled person could derive enough information to achieve the appropriate property levels. Therefore, the patent contained sufficient information as to how to obtain the combination of requirements in terms of flexural modulus, strain at break and ESCR, which was specified in claims 1 and 15 as granted. For that reasons, the requirements of sufficiency of disclosure were met;
 - (c) The subject-matter of the claims as granted was novel over the prior art documents cited by the opponent. In addition, the alleged public prior use was not considered to take away the novelty of the subject-matter of claim 1;
 - (d) The subject-matter of the claims as granted was inventive starting from D4 as the closest prior

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art.

In view of the above, the opposition was rejected.

- VI. The opponent (appellant) appealed against the above decision. With the statement setting out the grounds of appeal the appellant requested that the decision of the opposition division be set aside and that the patent be revoked.
- VII. With its rejoinder to the statement of grounds of appeal, the patent proprietor (respondent) requested that the appeal be dismissed (main request) or, in the alternative, that the patent be maintained in amended form according to any of auxiliary requests 1, 2 to 7 or 2a to 7a filed therewith, whereby these requests were to be dealt with in the following order: 1, 2, 2a, 3, 3a, 4, 4a, 5, 5a, 6, 6a, 7 or 7a.

Claim 1 of auxiliary request 1 was identical to claim 1 as granted.

Claim 1 of auxiliary requests 2 and 2a differed from claim 1 as granted in that the definition of the strain at break was amended as follows (additions in **bold**):

"a strain at break(%) of 700% or more, when determined according to ISO 527-1:1993 using a pressed test specimen prepared according to ISO527-2:1993 5A, when measured as described under "Determination methods,".

Claim 1 of auxiliary request 3 differed from claim 1 as granted in that the following features were added at the end of the claim:

"wherein the at least one layer comprising the polymer

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composition is at least a jacketing layer".

Claim 1 of auxiliary request 4 differed from claim 1 as granted in that it was further specified that the polymer composition "is a polyethylene composition, wherein the polymer comprises at least one polyethylene component".

Claim 1 of auxiliary request 5 differed from claim 1 as granted in that the wording "a polymer composition which comprises a polymer component and optionally a carbon black (CB) component" was replaced by

"a polymer composition which contains

- (1) at least 40 wt% of an LDPE polymer selected from an LDPE homopolymer or an LDPE copolymer of ethylene with one or more comonomer(s);
- (2) less than 60 wt% of LLDPE polymer, and
- (3) from 1 to 20 wt% of a carbon black master batch (CBMB), based on the total amount of the polymer composition".

Claim 1 of auxiliary requests 3a, 4a and 5a differed from claim 1 of auxiliary requests 3, 4 and 5, respectively, in that the strain at break was defined in the same manner as in claim 1 of auxiliary requests 2 and 2a.

Claim 1 of auxiliary request 6 differed from claim 1 as granted in that the wording "a polymer composition which comprises a polymer component and optionally a carbon black (CB) component" was replaced by

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"a polymer composition which contains

- (1) 40 to 70 wt% of an LDPE polymer selected from an LDPE homopolymer or an LDPE copolymer of ethylene with one or more comonomer(s);
- (2) less than 60 wt% to 30 wt% of LLDPE polymer, and
- (3) from 1 to 20 wt% of a carbon black master batch (CBMB)), based on the total amount of the polymer composition.".

Claim 13 of auxiliary request 6 differed from claim 15 as granted in that the definition of the polymer composition was amended in the same manner as done in claim 1 of auxiliary request 6. Also, the wording of claims 3, 4 and 7 was identical to the one of claims 3, 4 and 7 as granted, respectively. The wording of claim 14 of auxiliary request 6 only differed from the one of claim 16 as granted in that the dependency was on claim 13 (instead of claim 15).

Auxiliary requests 6a, 7 and 7a are not relevant for the present decision.

- VIII. The respondent submitted additional auxiliary requests 8 and 8a with letter of 19 March 2019 and auxiliary requests 9 to 11 and 9a to 11a with letter of 17 December 2019 (these requests are however not relevant for the present decision).
- IX. The parties were summoned to oral proceedings and a communication indicating specific issues to be discussed at the oral proceedings was sent to the parties.

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In that communication (section 6.1, last paragraph), it was in particular indicated that the appellant had raised an objection of lack of sufficiency of disclosure related to the fact that the parameter "strain at break" was determined in the patent in suit using an extensometer, which was not in line with the determination method ISO 527-1:1993 as specified therein, in particular in operative claims 1 and 15. Considering said objection seemed to raise completely new concerns regarding e.g. the reproduction of the examples of the patent in suit, it was considered that admitting said objection in the proceedings would require that completely new issues would have to be discussed for the first time in appeal, which was not in line with the main aim of the appeal procedure, as now explicitly indicated in Article 12(2) RPBA 2020 (section 6.3.1 of the communication).

- X. With the explicit agreement of both parties, oral proceedings were held on 9 December 2021 in the form of a videoconference. During these oral proceedings the respondent in particular requested that the appellant's objection of lack of sufficiency of disclosure related to the determination of the parameter "strain at break" (see section IX, second paragraph) not be admitted into the proceedings.
- XI. The appellant's arguments, in so far as relevant to the present decision, may be summarised as follows:
 - Main request Admittance of an objection of lack of sufficiency of disclosure
 - (a) The objection of lack of sufficiency of disclosure raised in respect of the determination method of the parameter "strain at break" (see section IX

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above) was already addressed in the first instance proceedings, in particular in the opponent's letter of 22 November 2016. It was further to be taken into account that the patent proprietor acknowledged for the first time during the oral proceedings before the opposition division that the "strain at break" was determined in the patent in suit using an extensometer, which was in contradiction with the instructions given in D10. Under these circumstances, the objection of lack of sufficiency of disclosure related to the parameter "strain at break" had been raised at the first opportunity, namely with the statement of grounds of appeal. Under these circumstances, it would not be justified that said objection not be admitted into the proceedings.

Main request - Sufficiency of disclosure

(b) The patent in suit lacked sufficient information regarding the type of polymer or structural or compositional features for a particular type of polymer in order to obtain, with a good chance of success, the combination of requirements in terms of flexural modulus, strain at break and ESCR specified in claim 1. There was in particular no reasonable teaching given how to control these parameters. In addition, the examples of the patent in suit were not reproducible. Also, they were limited to very specific components and at most illustrated variations in amounts of specific combination of LDPE and LLDPE. The comparison of these examples did not show any continuous change in the properties specified in the claims as granted and did not allow to recognise how to control the parameters specified therein. In

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particular, polymer composition 4 in table 2 of the patent in suit was carried out according to the preferred teaching of the patent in suit but did not lead to a suitable value of ESCR. Under these circumstances, the patent in suit lacked of a sufficient teaching what had to be done to obtain a composition as claimed and/or to adapt the examples so that they worked. In addition, the terms of claim 1 were not commensurate to the patent's technical contribution to the art.

For these reasons, the patent in suit did not meet the requirements of sufficiency of disclosure.

Auxiliary requests 1, 2 to 5 and 2a to 5a - Sufficiency of disclosure

- (c) The amendments made in claim 1 of each of auxiliary requests 1, 2, 2a, 3 and 3a were not suitable to overcome the objection of lack of sufficiency of disclosure raised against the main request.
- (d) Regarding claim 1 of auxiliary requests 4 and 4a, the same arguments as outlined above in respect of sufficiency of disclosure for the main request were valid. In particular, the patent in suit still failed to provide sufficient guidance which polyethylene compositions could be suitably used and the terms of the claims were still not commensurate to the technical contribution of the patent.
- (e) Considering that the wording of claim 1 of auxiliary requests 5 and 5a did not impose the presence of LLDPE, these auxiliary requests did not meet the requirements of sufficiency of

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disclosure for the same reasons as the higher ranked requests.

Auxiliary request 6 - Sufficiency of disclosure

(f) Although the amendments made in claim 1 of auxiliary request 6 now imposed the presence of LDPE, LLDPE and of a carbon black masterbatch in the polymer composition defined therein, inventive polymer compositions 1 to 3 of the patent in suit still only constituted isolated disclosures illustrating the subject-matter being claimed. In addition, polymer composition 4 was still carried out according to the teaching of the patent in suit, even according to its preferred embodiments, but failed to exhibit an ESCR as defined in claim 1 of auxiliary request 6. The same considerations were valid for claim 13 of auxiliary request 6. Under such circumstances, auxiliary request 6 did not meet the requirements of sufficiency of disclosure.

Auxiliary request 6 - Article 123(2) EPC

(g) The deletion in claims 3, 4, 7 and 14 of auxiliary request 6 of the indication that the SCB feature or the $SHI_{2,7/210}$ feature mentioned therein were measured "as described under "Determination methods"", which was specified in claims 3, 4, 7 and 16 of the application as filed, infringed Article 123(2) EPC.

Auxiliary request 6 - Novelty and inventive step

(h) At the oral proceedings before the Board, the appellant explicitly confirmed in reply to a - 12 - T 0373/17

question of the Board that they had no objection of lack of novelty and lack of inventive step against auxiliary request 6.

XII. The respondent's arguments, in so far as relevant to the present decision, may be summarised as follows:

Main request - Admittance of an objection of lack of sufficiency

(a) The objection of lack of sufficiency of disclosure raised in respect of the determination method of the parameter "strain at break" (see section IX above) should not be admitted into the proceedings because it was put forward for the first time in the statement of grounds of appeal but had not been presented in the first instance proceedings. Also, it raised new issues which would have to be addressed for the first time in appeal proceedings, which was not appropriate.

Main request - Sufficiency of disclosure

(b) Claim 1 as granted was directed to a cable comprising a conductor surrounded by a layer comprising a polymer composition, whereby the latter was defined in terms of its composition (comprising a polymer component and optionally a carbon black component) and further characterised in that it met specific requirements in terms of flexural modulus, strain at break and ESCR. As indicated in the Background art section of the patent in suit and as acknowledged by the opposition division, it was known in the art (see e.g. D3) that the polymer compositions which were conventionally used for this application (LDPE,

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LLDPE, HDPE multimodal polyethylenes and singlesite catalyst polyethylenes) felt short to meet that combination of parameters. It was further derivable from the general description and from the examples of the patent in suit that the polymer composition being defined in the operative claims was preferably a polyethylene component, more preferably a blend of at least two polyethylene components together with carbon black preferably as master batch, whereby in particular LDPE and LLDPE could be suitably used. The patent in suit did not disclose any other polymer composition that could be suitably used and clearly taught, in particular in the examples, towards a blend of an LDPE component, an LLDPE component and a carbon black component. Therefore, the skilled person would read claim 1 as granted as being limited to a polymer component being polyethylene or a mixture of LDPE and LLDPE.

Regarding the examples of the patent in suit, no evidence was on file to show that they could not be reproduced. In addition, also these examples taught toward using a blend of LDPE, LLDPE and carbon black masterbatch.

In view of the above, the subject-matter claimed was commensurate with the patent's technical contribution to the art and the objections of the appellant regarding sufficiency of disclosure should be rejected.

Auxiliary requests 1, 2 to 5 and 2a to 5a - Sufficiency of disclosure

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- (c) At the oral proceedings before the Board, it was acknowledged that the amendments made in claim 1 of each of auxiliary requests 1, 2, 2a, 3 and 3a were not suitable to overcome the objection of lack of sufficiency of disclosure addressed in above section (a), should it be retained by the Board. In any case, the same arguments applied.
- (d) Regarding claim 1 of auxiliary requests 4 and 4a, the same arguments as outlined above for the main request were valid, whereby as already indicated in respect of the main request, the patent in suit provided undoubtedly guidance which polyethylene compositions could be suitably used.
- (e) Regarding claim 1 of auxiliary requests 5 and 5a, the presence of an LLDPE polymer, although not mandatory in view of the wording "less than 60 wt% of LLDPE polymer", was (implicitly) imposed by the combination of requirements in terms of flexural modulus, strain at break and ESCR specified in claim 1. The skilled person would understand that said requirements could not be achieved without a LLDPE polymer being present. This was also confirmed by the data of the LDPE component indicated in table 2 of the patent in suit. Under these circumstances, the requirements of sufficiency of disclosure were met.

Auxiliary request 6 - Sufficiency of disclosure

(f) The amendments made in claim 1 of auxiliary request 6 limited the subject-matter being claimed so as to be much closer to the teaching of the preferred embodiments taught in the patent in suit and to inventive polymer compositions 1 to 3 of

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table 2 of the patent in suit. The comparison of these compositions with polymer composition 4 further taught that the low ESCR value obtained for polymer composition 4 could be increased so as to be within the range defined in operative claim 1 by increasing the amount of LLDPE while simultaneously decreasing the amount of LDPE. In addition, the appellant's objection that the teaching derivable from the patent in suit and table 2 of the patent in suit could not be generalised to any compositions falling under the scope of claim 1 was not supported by any evidence. For these reasons, the objection of lack of sufficiency of disclosure retained against the higher ranked requests was overcome by the amendments made in claim 1 of auxiliary request 6. The same considerations applied to claim 13, in which the same amendments were made as in claim 1.

Auxiliary request 6 - Article 123(2) EPC

- (g) The methods, the reference to which was deleted in claims 3, 4, 7 and 14 of auxiliary request 6, were described in detail in the description. It was neither shown that other methods for measuring these parameters existed, nor that they led to different results. Therefore, the appellant's objection pursuant to Article 123(2) EPC raised against these claims should be rejected.
- XIII. The appellant requested that the decision under appeal be set aside and that the patent be revoked.

The respondent requested that the appeal be dismissed (main request) or, in the alternative, that the patent be maintained in amended form according to any of

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auxiliary requests 1, 2 to 7 or 2a to 7a filed with the rejoinder to the statement of grounds of appeal or any of auxiliary requests 8 or 8a filed with letter of 19 March 2019 or any of auxiliary requests 9 to 11 or 9a to 11a filed with letter of 17 December 2019.

Reasons for the Decision

Main request (patent as granted)

- 1. Admittance of an objection regarding sufficiency of disclosure
- The respondent requested that the objection of lack of sufficiency of disclosure raised by the appellant in respect of the determination method of the parameter "strain at break" not be admitted into the proceedings (see section IX, second paragraph and section X above).
- 1.2 Considering that said objection was raised in the statement of grounds of appeal (page 7, first paragraph, continuing on page 8), its (non)admittance into the proceedings is subject to the stipulations of Article 12(4) RPBA 2007 (see Article 25(2) RPBA 2020), according to which the Board has the power to hold inadmissible facts and evidence which could have been presented in the first instance proceedings. In that respect, the aim of an opposition-appeal proceedings is to obtain judicial review of the opposition decision and not to bring a "fresh case", so that parties have only limited scope to amend the subject of the dispute in appeal (Case Law of the Boards of Appeal of the EPO, 9th edition, 2019, V.A.4.11.1 and 4.11.3.a), as now

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explicitly indicated in Article 12(2) RPBA 2020.

- 1.3 During the oral proceedings before the Board, the appellant argued that the issue underlying the objection being raised, namely whether or not an extensometer was used to determine the strain at break in the patent in suit, was already addressed in their letter of 22 November 2016 during the opposition proceedings.
- However, although the issue related to the use of an 1.3.1 extensometer to determine the strain at break was effectively mentioned in the opponent's letter of 22 November 2016 (page 1: second paragraph from the bottom and paragraph bridging pages 1 and 2), the sole argument made was a possible impact of that issue on the opponent's objection regarding lack of novelty in respect of an alleged public prior use (page 2, end of first paragraph). At this moment, although the opponent was aware of a possible inconsistency/lack of clarity related to the determination method of the strain at break carried out in the patent in suit in view of the information provided in D10 (which was filed simultaneously with that letter of the opponent), no argument of lack of sufficiency was raised. Also, no concerns regarding a possible impact of that issue on sufficiency of disclosure were indicated in that submission.
- 1.3.2 In view of the minutes of the oral proceedings before the opposition division, it is further derivable that also at the oral proceedings no objection of lack of sufficiency of disclosure, but only arguments related to lack of novelty, was raised in respect of that issue (see minutes of the oral proceedings: section "Art. 83 EPC" on pages 1-2 and novelty section "b) Public prior

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use" on pages 3-4).

- 1.3.3 Even if it were correct that the patent proprietor acknowledged for the first time at the oral proceedings before the opposition division how the strain at break was effectively determined in the patent in suit (as brought forward by the appellant during the oral proceedings before the Board, which was not contested by the respondent), it is derivable from the file history that the appellant has at no point requested that the oral proceedings be postponed in order to allow him to elucidate the possible implications on sufficiency of disclosure of that statement of the patent proprietor.
- 1.3.4 In the Board's view, the fact that said issue was also not dealt with in the decision under appeal and that the appellant at no stage complained that the decision was deficient in that respect further confirms that no objection of lack of sufficiency of disclosure related to the determination method of the parameter "strain at break" was effectively raised during the opposition proceedings.
- 1.3.5 The Board is further convinced that admitting said objection into the proceedings would have required that completely new issues would have had to be discussed for the first time in appeal (in particular regarding the reproducibility of the examples of the patent in suit), which is not in line with the main aim of the appeal procedure, as now explicitly indicated in Article 12(2) RPBA 2020.
- 1.3.6 In view of the above, the Board considers that the appellant could and should have raised that objection during the opposition proceedings and that the

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circumstances of the case do not justify its submission for the first time in the statement of grounds of appeal. Therefore, the Board finds it appropriate to make use of its power pursuant to Article 12(4) RPBA 2007 to hold that objection inadmissible.

- 2. Sufficiency of disclosure
- In order to meet the requirements of sufficiency of disclosure, an invention has to be disclosed in a manner sufficiently clear and complete for it to be carried out by the skilled person without undue burden on the basis of the information provided in the patent specification and, possibly, common general knowledge. This means in particular in the present case that the skilled person should be able to make a cable according to claim 1 as granted or to prepare a composition according to claim 15 as granted, which is objected to by the appellant (statement of grounds of appeal: bottom of page 2 to end of page 6).
- 2.2 The cable according to claim 1 as granted is characterised among others by the definition of the composition of a polymeric layer in terms of both
 - its constituents, i.e. it has to comprise a polymer component and optionally a carbon black component, which will be referred to hereinafter as the "structural definition" and
 - a combination of parameters defining requirements to be met by that composition in terms of flexural modulus, strain at break and environmental stress crack resistance (ESCR), which will be referred to

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hereinafter as the "parametrical definition".

- 2.3 In that respect, it makes no doubt and it was undisputed between the parties that said parametrical definition is very specific and cannot be implicitly satisfied by all the polymer compositions falling under the structural definition of claim 1. Therefore, in order to meet the requirements of sufficiency of disclosure, the patent in suit, optionally in combination with common general knowledge, should not only provide a sufficient teaching as to how to appropriately select "a polymer component" according to the above structural definition, but also what has to be done so that said parametrical definition is satisfied.
- Regarding the selection of the "polymer component" specified in claim 1, the respondent argued, as was done by the opposition division, that in view of the intended use as cable layer and of the combination of properties required, the skilled person would understand that only polyethylenes could be used as polymer component. At the oral proceedings before the Board, the respondent further argued that the skilled person would understand that claim 1 as granted would be read as limiting the "polymer component" to a combination of a LDPE and a LLDPE.
- 2.4.1 However, the wording of claim 1 per se puts no limitation as to the nature of the polymer component. No restriction in terms of the nature of the polymer was further shown to be derivable from the patent in suit. It is further indicated in paragraph 55 of the patent in suit that other polyolefins than polyethylene may be contemplated and paragraphs 37 and 55 only mention polyethylene(s) as preferred embodiments. Also,

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the appellant's view that other polymers than polyolefins were known in the art to be usable as a cable layer according to claim 1 as granted, in particular as jacketing layer, is confirmed by D3 (see in particular the various references to Casico technology: Figure 3 and paragraph above it, Table 2, Figure 15 and paragraph above it, Table 5; see also the references to PVC: page 2, penultimate paragraph; figures 4 to 6, 8, 12-13; page 17 "Building wire solutions").

- 2.4.2 In addition, the normal rule of claim construction is that the terms used in a claim should be given their broadest technically sensible meaning in the context of the claim in which they appear. However, if a term present in a claim has a clear technical meaning, the description cannot be used to interpret such a term in a different way (Case Law, supra, section II.A.6.3.1, fourth paragraph and section 6.3.4, third paragraph). Considering that the term "polymer component" has a clear, albeit broad, meaning, there is no reason to interpret it in a different manner on the basis of the patent specification. In particular, although it is indicated in paragraphs 4 to 7 of the description of the patent in suit that some polyethylene compositions would be expected not to meet the parametrical definition specified in claim 1 as granted, it cannot be concluded that the skilled person would read claim 1 as granted only as being limited to a combination of a LDPE and an LLDPE as "polymer component" because it would be considered that any other meaning would not make sense from a technical point of view and would be excluded for that reason.
- 2.4.3 In view of the evidence on file, it can also not be concluded that the skilled person would have limited

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the polymer component according to claim 1 as granted to a combination of a LDPE and an LLDPE in view of the parametrical definition specified in that claim. In particular, the Board is satisfied that D3 (see in particular figures 11 and 12), which was referred to by the respondent at the oral proceedings before the Board, was not shown to contain any information which would make a combination of a LDPE and an LLDPE the sole sensible reading from a technical point of view of the term "polymer component" in claim 1 as granted. In other words, the parametrical definition present in claim 1 as granted (namely the combination of three parameters) cannot be held to confer a more limiting meaning to the structural definition of the polymer component (namely the term "polymer component") which would be derived from the wording of the claim.

- 2.4.4 For these reasons, the respondent's argument that claim 1 as granted could only be read as being limited to the polymer component being polyethylene or a mixture of LDPE and LLDPE is rejected. Therefore, the term "polymer component" according to claim 1 as granted has to be read in its broadest, technically meaningful sense.
- As a consequence, it has to be assessed if the patent in suit, optionally in combination with common general knowledge, provides sufficient teaching how to prepare a cable as defined in claim 1 as granted for any such polymer component defined therein. In order to do so, the skilled person should be provided with enough information to select an appropriate "polymer component", whereby the teaching should be such that said polymer component satisfies the above parametrical definition.

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- 2.6 In that respect, although the structural definition of the polymer composition defined in claim 1 does not put any limitation regarding the (polymeric) components to be used and/or their amounts, it was not shown by the respondent that the patent in suit provides any information regarding polymers different from polyethylenes, which corresponds to the broadest, although indicated as preferred embodiment, disclosure according to paragraph 37. In addition, the more detailed teaching of the patent in suit regarding said polymer component is limited to compositions comprising a blend of two polyethylenes with a carbon black masterbatch, where particular emphasis is made on blends of LDPE, LLDPE and carbon black masterbatch (paragraphs 34-36, 38, 39, 44, 46, 56, 69, 73, 75, 110, 111). The same is valid regarding the experimental part of the patent in suit, wherein the sole polymer compositions illustrative of the subject-matter being claimed are blends of LDPE, LLDPE and a carbon black masterbatch (table 2: inventive polymer compositions 1 to 3).
- 2.7 In addition, although the description of the patent in suit provides some information regarding the nature of the polymer component that may be suitably used (paragraphs 37 to 113), it fails to provide a general discussion regarding the nature and amounts of polymer component(s) to be used in order to control each of the parameters specified in claim 1 as granted and the combination thereof. The patent in suit further fails to elucidate the interplay between these individual parameters and provides no guidance to assist the skilled person, when confronted with a composition that meets some but not all the requirements of claim 1, in identifying which aspects should be modified and in what manner in order to obtain, in a structured and

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guided manner, a composition meeting the requirements of claim 1. It was also not shown that such information made part of common general knowledge. Under these circumstances, the description of the patent in suit does not provide sufficient information on how the three parameters mentioned in claim 1 as granted and the combination thereof can be controlled, in particular not for any "polymer component" encompassed by claim 1 as granted.

- 2.8 Therefore, the question arose if that lack of information in the description of the patent in suit could be compensated by the teaching derived from the examples of the patent in suit.
- 2.9 In that respect, the appellant argued that the examples of the patent in suit exhibited such inconsistencies that they were not reproducible and could not be trusted.
- 2.9.1 The appellant argued in particular that inventive polymer compositions 1 and 2 (table 2 of the patent in suit) appeared to have been prepared using very similar components and using the same process but exhibited different values in terms of density, MFR2, strain at break, flexural modulus and $SHI_{2.7/210}$.

However, the respondent put forward in writing that these different properties reported in table 2 of the patent in suit for inventive polymer compositions 1 and 2 could result from the respective properties of the LDPE and LLDPE components used in these examples, which differed significantly in terms of MFR2 and $SHI_{2.7/210}$: in view of this, small differences in terms of amounts of these polymeric components could have a significant impact on the final properties of the composition

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(letter of 18 October 2017: page 6, section 3.8). The respondent further argued that also the blending conditions could influence the final properties of the compositions (letter of 18 October 2017: page 6, section 3.8, whereby the argument was pursued at the oral proceedings before the Board). At the oral proceedings before the Board, the respondent further explained that carbon black, even for a specific batch of a commercial product, could also exhibit different properties, in particular in terms of density, which could also have an impact on the properties of the compositions prepared in the examples.

The Board considers that the arguments put forward by the respondent render credible that the different properties reported in table 2 for inventive polymer compositions 1 and 2 may be related to differences in the various components used to prepare these compositions and/or on the blending compositions used. In any case, although both compositions prepared in these examples exhibit differences in terms of properties, it remains that both compositions fulfill the parametric definition specified in claim 1 (i.e. they both have a flexural modulus, a strain at break and an ESCR within the ranges according to claim 1). In that respect, in the absence of any evidence from the appellant that these examples could not be reworked using usual working conditions and/or on the basis of common general knowledge, it cannot be concluded that inventive polymer compositions 1 and 2 are not reproducible.

2.9.2 The appellant also argued that the comparison of inventive polymer compositions 1 to 3 together with polymer composition 4 showed that the properties of the compositions prepared with a similar amount of carbon black masterbatch but with decreasing amount of LDPE and increasing amount of LLDPE behaved in an unexplainable manner. Therefore, also for that reason, the examples of the patent in suit were not reproducible and could not be trusted (statement of grounds of appeal: page 6, table and two paragraphs below the table).

However, also that objection is not supported by any evidence. The mere fact that the compositions prepared in the patent in suit do not behave as may have been expected is, in the Board's view, not a sufficient reason to put their credibility into doubt (in fact, this could in some cases even support the presence of an inventive step). In the absence of any facts to demonstrate that the examples of the patent in suit cannot be reproduced, the appellant's objection fails to convince.

2.9.3 At the oral proceedings before the Board, the appellant pointed to paragraph 158 of the patent in suit, in which it is indicated that the carbon black masterbatch used in the examples contained 35 wt% carbon black and 75 wt% of a carrier polymer. Considering that both components added up to more than 100 wt%, which was not possible, the examples could not be reproduced, so the appellant.

However, since it does not make sense that both components add up to more than 100 wt%, the skilled person would have understood that there was an obvious error in the indications given in said paragraph 158. Further considering that suitable ranges for these components are indicated in paragraph 113 of the patent in suit and that no evidence is on file showing that there would be any difficulty to carry out the

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invention on the basis of that information, the appellant's objection does not convince.

2.9.4 At the oral proceedings before the Board, the appellant further argued that the patent in suit provided no information regarding the exact nature of the polymeric components of polymer component (1) and present in the carbon master batch (3) used in the examples.

However, it is indicated in paragraph 152 and 158 of the patent in suit that said polymeric components are "conventional" in the art. This is further in line with the more general teaching in that respect provided in paragraphs 56 to 68 and 112 of the patent in suit. In the absence of any evidence showing that the invention cannot be carried out on the basis of that information, also that objection is not persuasive.

- 2.9.5 In view of the above, the appellant's objection that the examples of the patent in suit were not reproducible and could not be trusted is rejected.
- 2.10 The appellant further argued that even if the examples of the patent in suit were relied upon, they merely constituted isolated disclosures of the subject-matter being claimed but did not show how to control the parameters specified in claim 1 as granted and the combination thereof, in particular not on the whole breadth of claim 1, i.e. for any polymeric component encompassed by that claim.
- 2.10.1 In that respect, it is agreed with the appellant that the patent in suit contains only three examples illustrative of the subject-matter of claim 1 as granted (table 2: inventive polymer compositions 1 to 3), which were all carried out using the same

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combination of polymeric resins LDPE(1), znLLDPE(2) with a carbon black masterbatch CBMB(3) (as defined in paragraphs 152-158) in varying amounts. In view of that, these examples can at most provide information how to carry out the invention in the specific case of components used in these examples but cannot illustrate the whole scope of the claims, which is as outlined above not limited to polymeric compositions comprising LDPE, LLDPE and carbon black. Therefore, the examples of the patent in suit can only be seen as isolated disclosures of individual compositions illustrating the subject-matter being claimed, in particular specific compositions comprising a blend of a LDPE, LLDPE and a carbon black master batch. However, these examples provide no teaching how to prepare a cable as claimed using any other polymeric component encompassed by the structural definition of claim 1 and which mandatorily satisfies the parametrical definition specified in that claim. Should the skilled person contemplate preparing such cables, he is left with no other choice than to rely on try and error and/or to elaborate a research program to find out which polymer components may satisfy such a combination of properties. This amounts to an undue burden, the consequence being that the requirements of sufficiency are not met.

2.11 In view of the above, the Board shares the appellant's view that the scope of claim 1 as granted is not commensurate to the technical contribution of the patent in suit and that the opposed patent fails to provide sufficient guidance how to obtain in a reliable manner and with a good chance of success the combination of parameters (flexural modulus, strain at break, ESCR) specified in claim 1 as granted for any other polymer composition which is not based on a combination of LDPE, LLDPE and carbon black masterbatch

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as illustrated in the examples of the patent in suit.

2.12 For these reasons, the ground of opposition under Article 100(b) EPC prejudices maintenance of the patent as granted.

Auxiliary request 1

3. Claim 1 of auxiliary request 1 is identical to claim 1 of the main request. Therefore, auxiliary request 1 can only share the same fate as the main request regarding sufficiency of disclosure.

Auxiliary requests 2, 2a, 3 and 3a

- 4. At the oral proceedings before the Board, it was acknowledged by the respondent that the amendments made in claim 1 of each of auxiliary requests 2 and 2a, 3 and 3a were not suitable to overcome the objection of lack of sufficiency of disclosure addressed in above section 1, should it be retained by the Board.
- 4.1 The amendment made in claim 1 of auxiliary request 2 and 2a is directed to the definition of the method of determination of the strain at break mentioned in claim 1.
- 4.2 The amendment made in claim 1 of auxiliary request 3 and 3a is directed to the definition of the layer comprising the polymer composition as a jacketing layer.
- 4.3 These amendments have no impact on the conclusions drawn in section 2.4 above regarding the meaning of the term "polymer component" and/or the issue that the terms of claim 1 were not commensurate to the teaching

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provided by the patent in suit (including the lack of guidance as to how to obtain reliably the combination of parameters defined in claim 1 over the whole breadth of the claim). Therefore, the amendments made in claim 1 of auxiliary requests 2, 2a, 3 and 3a cannot overcome the objection of lack of sufficiency of disclosure retained against the main request.

Auxiliary requests 4 and 4a

- The amendments made in claim 1 of auxiliary request 4 and 4a limit the definition of the polymer composition so that it has to be "a polyethylene composition, wherein the polymer comprises at least one polyethylene component".
- 5.1 Although these amendments effectively limit the structural definition of the term "polymer component" present in claim 1 of the main request and therefore at least address some of the concerns underlying the objection of lack of sufficiency of disclosure retained against the main request, it fails to address the issues identified above regarding both
 - the fact that the terms of claim 1 is still not commensurate to the technical contribution of the patent in suit;
 - the lack of guidance regarding how to control the parameters mentioned in claim 1 and the combination thereof for any other composition different from a composition comprising LDPE, LLDPE and a carbon black masterbatch, which is the sole embodiment illustrated in the examples of the patent in suit.

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5.2 Therefore, these amendments are not sufficient to overcome the objection of lack of sufficiency of disclosure retained against the main request.

Auxiliary requests 5 and 5a

- 6. The amendments made in claim 1 of auxiliary requests 5 and 5a further limit the definition of the polymer composition (as compared to auxiliary requests 4 and 4a), which is now defined as to contain
 - at least 40 wt% of an LDPE polymer selected from an LDPE homopolymer or an LDPE copolymer of ethylene with one or more comonomer(s);
 - less than 60 wt% of LLDPE polymer, and
 - from 1 to 20 wt% of a carbon black master batch (CBMB), based on the total amount of the polymer composition.
- In that respect, it was not disputed by the respondent, in particular at the oral proceedings before the Board, that the amendment "less than 60 wt% of LLDPE polymer" does not impose per se a minimum amount of LLDPE polymer, as was put forward by the appellant (letter of 13 September 2019: page 7, beginning of the third full paragraph). The Board sees no reason to deviate from that view.
- 6.2 However, the respondent argued at the oral proceedings before the Board, that the presence of a LLDPE polymer was (implicitly) rendered mandatory because only compositions comprising some LLDPE could satisfy the parametric definition present in claim 1 (namely the combination of the three parameters in the ranges

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specified in claim 1). In that respect, the sole argument put forward by the respondent was that the LDPE used in the examples of the patent in suit exhibited a far too low ESCR and a too low strain at break (see column "Polymer component 1" on the left hand side of table 2 of the patent in suit).

In the Board's view, although the LDPE polymer according to operative claim 1 is defined in a broad manner (it may be a homopolymer or a copolymer with any kind of comonomer in any amount), the LDPE used in the patent in suit is a single, very specific component (as defined in paragraph 158). Therefore, it cannot be held that any teaching derived from the properties of the (sole) LDPE used in the examples of the patent in suit may be generalised to any LDPE polymer falling under the definition of the LDPE according to operative claim 1.

In addition, the composition according to operative claim 1 is defined as "containing" at least 40 wt% of an LDPE polymer, an optional LLDPE polymer and 1-20 wt% of a carbon black masterbatch. Therefore, said composition may comprise up to 59 wt% of another component which is not explicitly defined in operative claim 1. In that respect, it was not shown, nor even argued, that the combination of properties constituting the parametric definition of the polymer composition according to claim 1 cannot be achieved by using another component, different from a LLDPE polymer, in combination with the otherwise mandatory components LDPE and carbon black masterbatch.

For these reasons, the respondent's argument that the parametric definition of operative claim 1 imposed the presence of a LLDPE polymer component as a mandatory

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component of the structural definition of the polymeric composition defined in that claim does not convince.

- 6.3 In view of the above, the amendments made in claim 1 of auxiliary requests 5 and 5a only limit the polymer composition defined in operative claim 1 in that it imposes the presence of a LDPE polymer and carbon black, both in certain amounts.
- 6.4 However, although these amendments further limit - as compared to auxiliary requests 4 and 4a - the structural definition of the term "polymer component" present in claim 1 of the main request and therefore also address some of the concerns underlying the objection of lack of sufficiency of disclosure retained against the main request, the Board is of the opinion that they still fail to overcome the concerns identified above regarding both i) the fact that the terms of claim 1 is still not commensurate to the technical contribution of the patent in suit and ii) the lack of guidance regarding how to control the parameters mentioned in claim 1 and the combination thereof for any other component different from a composition comprising LDPE, LLDPE and a carbon black masterbatch, which is the sole embodiment illustrated in the examples of the patent in suit.
- 6.5 Therefore, auxiliary requests 5 and 5a also do not meet the requirements of sufficiency of disclosure.

Auxiliary request 6

- 7. Sufficiency of disclosure
- 7.1 The amendments made in claim 1 of auxiliary request 6 further limit the definition of the polymer

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composition, which is now defined as to contain

- (1) 40 to 70 wt% of an LDPE polymer selected from an LDPE homopolymer or an LDPE copolymer of ethylene with one or more comonomer(s);
- (2) less than 60 wt% to 30 wt% of LLDPE polymer, and
- (3) from 1 to 20 wt% of a carbon black master batch (CBMB)), based on the total amount of the polymer composition.
- 7.2 The amendments made in operative claim 1 limit the structural definition of the polymer composition defined therein so that a LDPE polymer, a LLDPE polymer and a carbon black masterbatch must be present in specific amounts. In view of that, the terms of claim 1 are now more closely related to the teaching of the patent in suit, in particular in view of the preferred embodiments taught in the patent specification regarding the nature and the amounts of the components making up the polymer composition (see e.g. paragraphs 34-36, 38, 39, 44, 46, 56, 69, 73, 75, 110, 111) and in its experimental part (table 2 of the patent in suit). In particular, inventive polymer compositions 1, 2 and 3 illustrate compositions as defined in claim 1, for which, in view of the properties indicated in table 2 of the patent in suit, the Board is satisfied that they could suitably be used as a polymeric layer in a cable according to operative claim 1.
- 7.3 The appellant put forward that polymer composition 4 in table 2 of the patent in suit was also carried out according to the preferred teaching of the patent in suit but did not lead to a value of ESCR according to operative claim 1. Under these circumstances, the

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patent in suit lacked a sufficient teaching concerning what had to be done to obtain a composition as claimed and/or to adapt that example so that it worked, so the appellant.

In that respect, it is first noted that the respondent indicated that the composition of polymer composition 4 of the patent in suit is a LDPE (1)/znLLDPE (2)/CBMB (3) in wt.% 60.0/33.0/7.0 (letter of 19 March 2019: section 3.1; the wt.% indicated in table 2 of the patent in suit are otherwise unclear because of a typo).

With that in mind, it is correct that polymer composition 4 in table 2 of the patent in suit is a composition made up of the same components as the ones used in inventive polymer compositions 1 to 3, illustrative of the subject-matter of operative claim 1. These components were further used in amounts according to said claim 1. Therefore, it is agreed with the appellant that said composition is effectively prepared according to the teaching of the patent in suit but nevertheless exhibits an ESCR of 1300 hours, which is not in the range of "at least 1500 hours" specified in operative claim 1.

However, according to accepted case law, some trial and error is permissible when it comes to sufficiency of disclosure, as long as the skilled person has at its disposal, either in the patent in suit or on the basis of common general knowledge, adequate information leading necessarily and directly towards success through evaluation of initial failure. In the present case, the comparison of inventive polymer compositions 1 to 3 and polymer composition 4 shows that, while maintaining a very similar amount of carbon

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black masterbatch, the low ESCR of polymer composition 4 can be increased so as to meet the requirement of operative claim 1 by increasing the amount of LLDPE while simultaneously decreasing the amount of LDPE. Therefore, that comparison teaches that it is possible to turn a failure in respect of ESCR (as illustrated by polymer composition 4) into success by appropriately varying the respective amounts of LDPE and LLDPE (as illustrated by inventive polymer compositions 1 to 3). That finding is further in line with paragraph 44 of the patent in suit. In that respect, it is noted that in doing so, the other parameters specified in operative claim 1 (strain at break, flexural modulus) remain in the ranges specified in said claim 1. Under these circumstances, the Board is satisfied that the requirements of sufficiency of disclosure are met and the appellant's objection based on polymer composition 4 is rejected.

- 7.4 The appellant put forward that inventive polymer compositions 1 to 3 of the patent in suit still only illustrated a single and very specific kind of polymer compositions, in which in particular the same LDPE, LLDPE and carbon black masterbatch were used in various amounts. Therefore, the terms of operative claim 1 were still not commensurate to the technical contribution of the patent in suit.
- 7.4.1 However, the appellant's objection is not based on any evidence. In particular, apart from the objection based on polymer composition 4 of the patent in suit which was dealt with in above section 7.3, it was not shown that the conclusions drawn from the teaching of the patent specification and from the comparison of inventive polymer compositions 1 to 3 and polymer composition 4 would not be valid for any other polymer

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composition satisfying the structural definition of operative claim 1.

- 7.4.2 In that respect, according to EPO case law, an objection of insufficient disclosure presupposes that there are serious doubts, substantiated by verifiable facts and the burden of proof is primarily on the opponent, here the appellant. Although such evidence was not held necessary by the Board to reach its decision that the higher ranked requests did not meet the requirements of sufficiency of disclosure in view of the broadest scope of the structural definition of the polymer composition defined in claim 1 of these requests, the Board reached a different conclusion for auxiliary request 6 in view of the more limited structural definition of the polymer composition, which only in this case comes close to the examples and the teaching in the patent, and after weighing up the evidence contained in the patent in suit supporting sufficiency of disclosure with the evidence relied upon by the appellant to argue the contrary. In doing so, the Board arrived at the conclusion that the appellant's objection that the terms of claim 1 of auxiliary request 6 were not commensurate to the technical contribution of the patent in suit is, contrary to the higher ranked request, not persuasive.
- 7.5 In view of the above, the appellant's objection that the patent in suit lacked sufficient information regarding the type of polymer or structural or compositional features for a particular type of polymer in order to obtain, with a good chance of success, the combination of requirements in terms of flexural modulus, strain at break and ESCR specified in claim 1 of auxiliary request 6, which is limited to compositions comprising specific amounts of LDPE, LLDPE

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and CBMB, is rejected.

- 7.6 The Board is further satisfied that the same conclusion is valid for operative claim 13, in which the definition of the polymer composition was amended in the same manner as in operative claim 1.
- 7.7 In view of the conclusions reached in sections 1 and 7.2 to 7.6 above, auxiliary request 6 meets the requirements of sufficiency of disclosure.
- 8. Auxiliary request 6 Article 123(2) EPC
- 8.1 The appellant's objection pursuant to
 Article 123(2) EPC was raised against the deletion in
 claims 3, 4 and 14 of auxiliary request 6 of the
 expression "when determined according to the SCB
 determination method as described under "Determination
 methods"", which was present in claims 3, 4 and 16 of
 the application as filed.
- 8.1.1 In that respect, the Board agrees with the appellant that the reference in the original claims to the "Determination methods" indicated in the description effectively tied the definition of the subject-matter being claimed to these specific methods, which is not the case any more in the granted claims. However, regarding the reading of the operative claims, the normal rule of claim construction is that the terms used in a claim should be given their broadest technically sensible meaning in the context of the claim in which they appear. In that respect, the "SCB(MW)" feature indicated in claims 3, 4 and 14 of auxiliary request 6 is neither a usual feature, nor was it shown to have a clear, accepted, generic meaning. That view, which was indicated in the Board's

communication (section 5.3, second paragraph), was not contested by the appellant. Under these circumstances, the skilled person would have to turn to the description to understand the meaning of that term, whereby the sole information in that regard is given in the "Determination methods" section of the patent in suit (paragraphs 141-144), which was not shown to differ from the corresponding part of the application as filed. Under these circumstances, it cannot be concluded that the subject-matter defined in claims 3, 4 and 14 of auxiliary request 6 extends beyond the content of the application as filed as a consequence of the deletion of the expression "when determined according to the SCB determination method as described under "Determination methods"".

8.2 The appellant's objection pursuant to Article 123(2) EPC was also directed against the deletion in claim 7 of auxiliary request 6 of the expression "when measured as described under "Determination methods" in relation to the shear thinning index $SHI_{2,7/210}$ mentioned therein, although that expression was present in claim 7 of the application as filed.

However, considering that also feature $\mathrm{SHI}_{2,7/210}$ was not shown to have an accepted definition in the art, the same considerations as outlined above for claims 3, 4 and 14 of auxiliary request 6 are valid, i.e. the skilled person would read claim 7 of auxiliary request 6 in the light of paragraphs 147-151 of the patent in suit, which is part of the "Determination methods" section of the patent in suit and which was not shown to differ from the corresponding part of the application as filed.

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- 8.3 In view of the above, the appellant's arguments pursuant to Article 123(2) EPC are rejected.
- 9. In answer to a question by the Chairman of the Board, the appellant explicitly acknowledged at the end of the oral proceedings before the Board that they had no additional objection, in particular in respect of novelty and inventive step, against auxiliary request 6.
- 10. Since none of the objections put forward by the appellant against auxiliary request 6 is successful, the patent is to be maintained in amended form on that basis.

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Order

For these reasons it is decided that:

- 1. The decision under appeal is set aside.
- 2. The case is remitted to the opposition division with the order to maintain the patent in amended form on the basis of claims 1 to 15 according to auxiliary request 6 filed with the rejoinder to the statement of grounds of appeal and after any necessary consequential amendment of the description.

The Registrar:

The Chairman:



B. ter Heijden

D. Semino

Decision electronically authenticated