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Datasheet for the decision
of 12 October 2005

Case Number: T 0832/02 - 3.2.07
Application Number: 91305091.0
Publication Number: 0488491
IPC: C09K 3/10
Language of the proceedings: EN

Title of invention:
Package including containers and use of compositions for sealing these containers

Patentee:
W.R. GRACE & Co.-CONN

Opponent:
DS-Chemie GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56, 83, 123(2)

Keyword:
"Added subject-matter - yes for some requests"
"Insufficiency - no"
"Inventive step - no"

Decisions cited:
-

Catchword:
-
Case Number: T 0832/02 - 3.2.07

DECISION
of the Technical Board of Appeal 3.2.07
of 12 October 2005

Appellant I/Respondent II: W.R. GRACE & Co.-CONN
(Patent Proprietor)
Grace Plaza
1114 Avenue of the Americas
New York 10036 (US)

Representative: WEBB, Andrew John
J.A. Kemp & Co.
14 South Square
Gray's Inn
London WC 1R SJJ (GB)

Appellant II/Respondent I: DS-Chemie GmbH
(Opponent)
Straubinger Str. 12
D-28219 Bremen (DE)

Representative: Maiwald Walter
Maiwald Patentanwalts GmbH
Elisenhof
Elisenstr.3
D-80335 München (DE)

Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
17 June 2002 concerning maintenance of European
patent No. 0488491 in amended form.

Composition of the Board:

Chairman: H. Meinders
Members: P. O'Reilly
E. Lachacinski
H.-P. Felgenhauer
C. Holtz
Summary of Facts and Submissions

I. Opposition was filed against European Patent No. 0 488 491 as a whole based on Article 100(a) EPC (lack of novelty and lack of inventive step). The opposition was based on D1: GB-A-1 112 025 and an alleged prior use.

II. The Opposition Division decided to maintain the patent in amended form based on the fourth auxiliary request filed at the oral proceedings before it. It considered the alleged prior use proven and its subject-matter as closest prior art.

III. Appellant I/respondent II (hereinafter appellant/proprietor) and appellant II/respondent I (hereinafter appellant/opponent) each filed an appeal against the decision of the Opposition Division.

IV. The appellant/proprietor requested that the decision under appeal be set aside and that the patent be maintained in accordance with the main request or the third auxiliary request filed on 21 February 2001 during the opposition proceedings. The appellant/proprietor further requested that the appeal of the appellant/opponent be dismissed, i.e. maintenance according to the fourth auxiliary request.

The appellant/opponent requested that the decision under appeal be set aside and that the patent be revoked. The appellant/opponent further requested that the appeal of the appellant/proprietor be dismissed.
V. Oral proceedings were held before the Board on 12 October 2005.

VI. Claims 1 and 11 of the main request read as follows:

"1. A package that includes a bottle filled with potable material and that is formed of a body, a cap and a sealing gasket between the body and the cap, in which the package includes a volatile compound that can cause an off-taste and the body and the cap are impermeable to the volatile compound and the gasket is formed from a thermoplastic composition that is a homogeneous blend of 20 to 60% by weight butyl rubber, which is copolymer of isoprene and butylene, with 40 to 80% by weight other thermoplastic polymer."

"11. Use of a thermoplastic composition for forming a bottle cap gasket for a bottle that is to be filled with potable material, and in which the bottle is to be packed in a package that includes a volatile compound that can cause an off-taste wherein the composition is a homogeneous blend of 20 to 60% by weight butyl rubber, which is a copolymer of isoprene and butylene, with 40 to 80% by weight other thermoplastic polymer wherein the thermoplastic composition forms a bottle top gasket for a bottle top which has the following characteristics:

1) where crowns are lined with the thermoplastic compositions and closed on to glass bottles containing carbonated water have a carbonation level of 2.7 volumes and treated with 5% by volume ethanol, the bottles are stored for 14 days at 30°C in an atmosphere containing 200 μg/l 2,4,6-
trichloroanisole, the bottles are then analysed for TCA content, the TCA content is less than 2 ng/l; and/or

2) where crowns are lined with the thermoplastic composition and closed on to 330 ml glass bottles containing carbonated mineral water, the bottles are stored for 10 days at room temperature in a sealed container containing p-dichlorobenzene (DCB), the concentrations of DCB in the water is measured, the DCB content is 120 ppm or less."

Claim 1 of the third auxiliary request reads as follows (amendments when compared to claim 1 of the main request are depicted in bold):

"1. A package that includes a bottle filled with potable material and that is formed of a body, a cap and a sealing gasket between the body and the cap, in which the package includes a volatile compound that can cause an off-taste and the body and the cap are impermeable to the volatile compound and the gasket is formed from a thermoplastic composition that is a homogeneous blend of 20 to 60% by weight butyl rubber, which is copolymer of isoprene and butylene, with 40 to 80% by weight other thermoplastic polymer, which comprises HDPE."

Claim 1 of the fourth auxiliary request (patent as maintained by the Opposition Division) reads as follows (amendments when compared to claim 1 of the third auxiliary request are depicted in bold or struck through):
"1. A package that includes a bottle filled with potable material and that is formed of a body, a cap and a sealing gasket between the body and the cap, in which the package includes a volatile compound that can cause an off-taste and the body and the cap are impermeable to the volatile compound and the gasket is formed from a thermoplastic composition that is a homogeneous blend consisting of 20 to 60% by weight butyl rubber, which is copolymer of isoprene and butylene, with 40 to 80% by weight other thermoplastic polymer, which comprises HDPE."

The third and fourth auxiliary requests do not contain the claim 11 included in the main request.

VII. The arguments of the appellant/proprietor may be summarised as follows:

(i) Claim 11 complies with Article 123(2) EPC. The features 1) and 2) of claim 11 are disclosed in the examples 1 and 2 in the description of the patent in suit, whereby the limits for the contents of 2,4,6-trichloroanisole and p-dichlorobenzene are disclosed in the tables on pages 4 and 5 of the description and the examples are disclosed together in the description of the patent in suit.

(ii) With respect to the third auxiliary request the amendments made to claim 1 compared to the patent as granted comply with Article 123(2) EPC. On page 3, lines 56 to 58 of the patent description it is indicated that high density polyethylene may be preferred so that the skilled person knows that
high density polyethylene may be used as the thermoplastic polymer and in this case throughout the whole claimed range.

(iii) The objection under Article 83 EPC is late filed and was not admitted by the Opposition Division. The ground should not be admitted into the appeal proceedings since it is a new ground in these proceedings.

Moreover, the patent as amended according to the third auxiliary request complies with Article 83 EPC. There are examples in the description of the patent which disclose compositions comprising butyl rubber and high density polyethylene, see for example the tables. There is no proof that the compositions specified in claim 1 are not homogeneous. The appellant/opponent has cited a passage in US-A-5 731 053 (see column 7, line 37 to column 8, line 3) as proof that the compositions are heterogeneous over part of the range. However, there is nothing in that passage which indicates that a homogeneous mixture cannot be obtained. The passage merely mentions the existence of heterogeneous compositions.

(iv) The prior use considered by the Opposition Division in the decision under appeal is not proven "up to the hilt". The subject-matter of claim 1 of third auxiliary request involves an inventive step. Whilst shrink-wrapping was known at the priority date of the patent the problems associated with it, i.e. ingress of volatile compounds into the contents of bottles, were not
known. The skilled person therefore did not know that there was a problem to be solved. The selection of high density polyethylene provides advantages. This is stated in the patent on page 2, lines 56 to 57 where the superiority of high density polyethylene over low density polyethylene is mentioned. In conjunction with their European application No. 91 104 029.3 the appellant/opponent filed, with letter of 3 December 1996, an affidavit of a Mr. J. Skilton dated 12 October 1995. In that affidavit it is stated that high density polyethylene gives surprising results when used in place of low density polyethylene in the examples disclosed in D1. This is evidence of an inventive step in the subject-matter of claim 1.

(v) Claim 1 of the fourth auxiliary request complies with Article 123(2) EPC. Since there are examples given in the description of the patent in suit which mention high density polyethylene in a composition consisting only of butyl rubber and high density polyethylene the arguments brought forward with respect to claim 1 of the main request also apply to claim 1 of the auxiliary request.

(vi) The patent as amended according to the fourth auxiliary request complies with Article 83 EPC. Since there are examples given in the description of the patent in suit which mention high density polyethylene in a composition consisting only of butyl rubber and high density polyethylene the arguments brought forward with respect to the
patent as amended according to the main request also apply to the patent as amended according to this auxiliary request.

(vii) The subject-matter of claim 1 of the fourth auxiliary request involves an inventive step for the same reasons as explained with respect to the main request.

VIII. The arguments of the appellant/opponent may be summarised as follows:

(i) Claim 11 of the main request does not comply with Article 123(2) EPC. Features 1) and 2) of the claim each derive a range for the content of a compound from examples in the tables in the description. There is no basis for broadening these specific examples to form a range. Also, there is no original disclosure of features 1) and 2) in combination with each other, which is one of the alternatives specified in claim 11 ("and/or"). Each of these features is based on an example in the description, but there is no disclosure that these examples may be combined.

(ii) The amendments made to claim 1 of the third auxiliary request do not comply with Article 123(2) EPC. There is no general disclosure over the whole claimed range of a composition including butyl rubber and high density polyethylene. The specific example in the description does not cover the entire claimed range.
(iii) The patent as amended according to the third auxiliary request does not comply with Article 83 EPC. There is experimental evidence as set out in US-A-5 731 053 (see column 7, line 37 to column 8, line 3) which shows that butyl rubber and high density polyethylene do not form a homogeneous mixture over the whole range specified in claim 1. In particular, when the high density polyethylene content is 50% or more a heterogeneous mixture is formed. The patent in suit, however, does not disclose how a homogeneous mixture can be formed in this case.

(iv) Claim 1 of the third auxiliary request does not involve an inventive step starting from D1. D1 explicitly discloses all the features of claim 1 except for the use of high density polyethylene with butyl rubber and the provision of a package including a volatile compound. D1 indicates that any polyethylene may be used with butyl rubber. High density polyethylene is just an alternative to the low density polyethylene specifically disclosed in D1. There is no indication that high density polyethylene is better than low density polyethylene. Therefore, the use of high density polyethylene is obvious to the skilled person. The problem of volatile compounds arises from the use of shrink-wrap film. The claimed composition, which is obvious from D1, would, from its nature, always have had the property of being impermeable to volatile compounds.
In any case, the Opposition Division was correct in its consideration of the prior use as brought forward by the appellant/opponent.

(v) The amendments made to claim 1 of the fourth auxiliary request do not comply with Article 123(2) EPC for the same reasons as explained with respect to the third request.

(vi) The patent as amended according to the fourth auxiliary request does not comply with Article 83 EPC for the same reasons as explained with respect to the third auxiliary request.

(vii) The subject-matter of claim 1 of the fourth auxiliary request does not involve an inventive step for the same reasons as explained with respect to the third auxiliary request.

Reasons for the Decision

Main request

1. Article 123(2) EPC

1.1 Compared to claim 11 as granted claim 11 according to this request has been modified by adding the features numbered as 1) and 2) in the claim. In the following reference will continue to be made to these features using this numbering.

1.2 The content of the description of the patent is essentially identical to that of the application as
filed so that in the following it is convenient to refer to the patent description.

1.3 Feature 1) may have a basis in the patent description on page 4, lines 29 to 31, together with the results given for 2,4,6-trichloroanisole (hereinafter TCA) content in the last line of the table that bridges pages 4 and 5 of the description. This part of the description pertains to an "Example 1". The first part of feature 1) is taken word for word from the description and the last part, which specifies the TCA content, is taken from the table. The table includes compositions which have a TCA content of less than 2 ng/l as specified in the claim.

1.4 Feature 2) may have a basis in the patent description on page 5, lines 28 to 30, together with the results given for p-dichlorobenzene (hereinafter DCB) content in the last line of the table on page 5, lines 31 to 41. This part of the description pertains to an "Example 2". The first part of feature 2) is taken word for word from the description and the last part, which specifies the DCB content, is taken from the table. The table of Example 2 includes a number of compositions which have a DCB content of 120 ppm or less.

The compositions specified in the table in Example 2 are not the same as those given in the table pertaining to Example 1 and indeed contain different components to those of Example 1, i.e. "PE4", "SBS" and "SEBS".

1.5 Claim 11 specifies that features 1) and 2) may be provided either individually or in combination, i.e. "and/or". As explained above each of these features is
derived from differing examples in the description which involve the use of different materials. There is nothing in the patent specification which could indicate that these examples should be combined. On the contrary, the differing materials in the examples mean that it is not possible to combine these examples.

The Board concludes therefore that there is no disclosure in the patent specification and hence in the application as filed of features 1) and 2) in combination.

Since the combination of features 1) and 2) is not disclosed it is not necessary for the Board to reach a conclusion as to whether features 1) and 2) are individually disclosed.

1.6 Claim 11 according to the main request therefore does not comply with Article 123(2) EPC.

First and Second Auxiliary Requests

2. These requests were withdrawn by the appellant/proprietor during the oral proceedings before the Board.

Third Auxiliary Request

3. Article 123(2) EPC

3.1 This request does not contain the claim 11 which was the reason for the rejection of the main request.
3.2 The appellant/opponent, however, raised this ground with respect to claim 1 of this request. The matter at issue is whether the amendment to claim 1 as granted which adds the words "which comprises HDPE" (high density polyethylene, hereinafter HDPE) has resulted in a claim which does not comply with Article 123(2) EPC.

3.3 Since the relevant parts of the patent specification have their counterparts in the application as originally filed, the patent specification is referred to below for convenience.

3.4 On page 3, lines 50 to 55, of the patent specification it is explained that the thermoplastic material can be chosen from a number of preferred possibilities. In lines 56 to 58 of page 3 it is explained that polyethylene is particularly preferred. It is stated there that in some instances low density polyethylene (hereinafter LDPE) is preferred but in general HDPE is more suitable. In the table bridging pages 4 and 5 of the patent specification some examples of compositions are given as well as an indication of their impermeability to oxygen. In the table the results of testing for TCA on eleven compositions are given. One of these compositions (C) contains 50% HDPE and 50% butyl rubber; others include 50% LDPE and 50% butyl rubber. In the table on page 5 the results of DCB testing on several compositions are given. These compositions include a composition (L) including 50% HDPE and 50% butyl rubber.

Claim 1 as granted (and as originally filed) specifies 20 to 60% butyl rubber and 40 to 80% thermoplastic polymer, and claim 6 as granted (which is the same as
claim 5 as originally filed) specifies that the thermoplastic polymer may be polyethylene.

There is thus, by the claims as originally filed, a direct specification of 20 to 60% butyl rubber and 40 to 80% polyethylene. The description mentions on page 3, lines 56 to 58 LDPE and HDPE in generally equal terms though with a preference for HDPE. Also, the examples disclose both LDPE and HDPE. From these disclosures the Board considers that the skilled person would understand that the range of 20 to 60% butyl rubber and 40 to 80% polyethylene also includes to the polyethylene being HDPE.

3.5 The Board therefore concludes that claim 1 of this request complies with Article 123(2) EPC.

4. Article 83 EPC

4.1 The Opposition Division considered that the objection pursuant to Article 83 EPC constituted a late filed ground of opposition and hence disregarded it. The minutes of the oral proceedings before the Opposition Division refer to it on page 8 as under Article 100(b) EPC. The objection was directed to a claim that had been amended in opposition proceedings and in particular to the amendment that had been made.

4.1.1 Irrespective of the actions of the Opposition Division in the opinion of the Board the objection cannot be considered a late filed ground of opposition. Since the patent has been amended it is indeed the duty of the Opposition Division to examine the patent, in so far as it has been amended, for compliance with Article 83 EPC.
in view of Article 102(3) EPC which states that a patent as amended must meet the requirements of the Convention. Under the established Case Law of the Boards of Appeal, amendments must be examined against the whole of the EPC, see Case Law of the Boards of Appeal of the EPO, 4th edition, 2001, VII.C.10.2. The amendments made must therefore be examined for compliance with Article 83 EPC.

4.2 As explained above with respect to Article 123(2) EPC, the description contains general statements together with specific examples. Claim 1 of the present request includes as a feature a blend of two well known polymers, i.e. butyl rubber and HDPE. There is no reason to believe that the teaching of the patent cannot be carried out by the skilled person throughout the whole breadth of claim 1.

4.2.1 The appellant/opponent argued that there was experimental evidence that a homogenous mixture of HDPE and butyl rubber could not be formed throughout the claimed range. The experimental evidence is disclosed in US-A-5 731 053 in column 7, line 37 to column 8, line 3. US-A-5 731 053 is a US continuation-in-part application, filed by the appellant/opponent and published after the publication date of the application underlying the patent in suit. The fact that the publication date is after both the priority and the publication dates of the patent in suit is not relevant since a potential opponent can self-evidently only carry out tests based on the teaching of a patent application after the application has been published. This means that tests carried out to check the sufficiency of disclosure of a patent or patent
application are by necessity carried out after the respective publication. The Board therefore considers the quoted passage in US-A-5 731 053 may be considered as evidence with respect to Article 83 EPC.

4.2.2 In column 7, line 37 to column 8, line 3 of US-A-5 731 053 it is explained that a heterogeneous mixture of butyl rubber and thermoplastic polymer is unexpectedly advantageous compared to the previously known homogeneous mixtures. The passage explains that a pseudolaminate structure is formed. It is suggested that the basis for this heterogeneous structure appears to be a mixing incompatibility of butyl rubber and thermoplastic polymer. It is considered that the desired, i.e. heterogeneous, structure can be obtained by selecting suitable types of polymer and weight ratios. From this passage the Board understands that homogenous mixtures were known and considered desirable but the inventor of US-A-5 731 053 had found that if the conditions are changed such as to produce a heterogeneous structure then an unexpected advantage occurs. There is thus nothing in this passage to suggest that it was not possible to obtain homogeneous compositions throughout the entire claimed range. The passage indeed gives the contrary information that homogeneous compositions are normal and a special effort is required to obtain a heterogeneous structure.

4.3 The Board is therefore satisfied that the patent according to this request satisfies the requirements of Article 83 EPC.
5. **Novelty and inventive step**

5.1 The appellant/opponent has argued lack of inventive step based either on the prior use considered in the decision under appeal or on D1. The prior use is contested by the appellant/proprietor. The Board therefore considers it expedient to first consider D1 since there is no dispute between the parties that this document belongs to the state of the art in the sense of Article 54(1) EPC.

5.2 The closest undisputed prior art is represented by D1 which discloses (in example 7) a bottle cap lined with a gasket formed of a thermoplastic polymer composition characterised by comprising a homogeneous blend of 50 parts by weight butyl rubber and 50 parts by weight LDPE. The bottle cap is stated in this example to be suitable for use with a bottle containing carbonated water, which is a potable material.

5.3 The subject-matter of claim 1 may be considered to be distinguished over the disclosure of D1 by the thermoplastic polymer of the gasket being HDPE and providing the known bottle in a package including a volatile compound.

5.4 With regard to the thermoplastic polymer being HDPE, D1 discloses on page 2, lines 86 to 112 a number of preferred mixtures of which some include poly α - monoolefine. The description then states on page 3, lines 1 to 2 that a mixture of polyethylene and butyl rubber is a specific example. Further, on page 3, lines 16 to 21 it is explained that the α - monolefine is preferably polyethylene, especially LDPE. In claim 1 of D1 there
are set out three alternative mixtures of thermoplastic material defined by the general chemical designations of the components. The dependent claims then contain narrowing definitions of these components. In claim 3 it is specified that the poly $\alpha$-mono-olefine is polyethylene and in claim 4, which depends from claim 3, the polyethylene is specified to be LDPE. In claim 12 it is specified that the thermoplastic material is a mixture of poly $\alpha$-mono-olefine and a copolymer of butylene with isoprene. This mixture is further specified in claim 17, which is dependent on claim 12, to be a mixture of polyethylene and butyl rubber.

5.5 It may be summarised that both the description and claims specify polyethylene in general and then give LDPE either as a preference or as a dependent claim respectively. From this the Board concludes that the skilled person would understand the teaching of D1 to be that polyethylene in general may be used with, amongst other materials, butyl rubber and that there is a non-exclusive preference for LDPE.

Since the use of polyethylene is clearly not limited to LDPE the Board considers that the skilled person would inevitably consider using HDPE, as an alternative to LDPE, in example 7 of D1. There is no disclosure in D1 which would speak against this for the skilled person. In particular, there is no indication of the need to use any particular properties of LDPE which would not be present in HDPE. The fact that D1 makes it abundantly clear that the use of polyethylene is not limited to LDPE would incite the skilled person to consider HDPE.
Furthermore, there is no evidence for a surprising effect resulting from the use of HDPE. In the table bridging pages 4 and 5 of the patent in suit there are compositions listed which each have either 50% HDPE or 50% LDPE. The results for TCA permeation do not show any difference between the compositions. In the table on page 5, which gives the results of DCB permeation tests on compositions, the compositions comprise either HDPE in combination with butyl rubber or LDPE in combination with a styrene butadiene copolymer in percentages lying outside the claimed range for HDPE. This table therefore provides no comparison for HDPE and LDPE.

There is, therefore, no indication of a surprising effect and no indication of an effect which is present over the whole of the claimed range.

The appellant/proprietor has referred in this respect to an affidavit of Mr. J. Skilton dated 12 October 1995 which was filed by the appellant/opponent in the grant proceedings for a European application of the appellant/opponent. In that affidavit he reports the results of tests carried out on mixtures disclosed in D1. For these mixtures the tests involved both LDPE and HDPE. The tests were carried out on examples 2, 4, 7 and 9 of D1, whereby it may be noted that example 2 is a mixture of ethylene/vinyl acetate copolymer with LDPE and hence is not a relevant example. The other examples all contain 50% of LDPE. The results show improvements by the use of HDPE for some tests, i.e. oxygen and TCA transmission resistance. The Board notes, however, that the tests only involved HDPE at the value of 50%. If it is desired to prove that a surprising effect has been
achieved then this should be proven as occurring throughout the complete claimed range. Therefore, the Board does not consider that the affidavit of Mr. Skilton provides adequate proof of a surprising effect.

5.8 With regard to the feature of providing the known bottle in a package including a volatile compound, it is well known to transport bottles containing potable liquids both on pallets and covered with shrink-wrapped film. These packages are mentioned in the patent in suit on page 3, lines 34 to 40 and include wooden pallets, which may have been impregnated with a volatile compound as a wood preservative, and shrink-wrapping. It is indeed the fact that the transport is effected with such packages that gives rise to the problem that volatile compounds contained in such packages can permeate the closures on bottles. Thus, the packages do not solve any problem but rather are the origin of the problem. For the skilled person it is clear that bottles made in accordance with example 7 of D1 may be shrink-wrapped and/or transported on wooden pallets. This distinguishing feature of claim 1 is thus obvious for the skilled person.

5.9 Therefore, the subject-matter of claim 1 of the third auxiliary request does not involve an inventive step in the sense of Article 56 EPC.

In view of the above, the prior use as considered by the opposition division in the decision under appeal need not further be considered by the Board.
Fourth Auxiliary Request

6. Article 123(2) EPC

6.1 Compared to claim 1 of the third auxiliary request, claim 1 of this request is limited to the thermoplastic composition consisting of butyl rubber and HDPE. In the parts of the description of the patent in suit already quoted above in this respect for the third auxiliary request the HDPE compositions were in each case compositions consisting of butyl rubber and HDPE, i.e. containing only butyl rubber and HDPE. Also on page 4, lines 6 to 7 of the patent specification it is indicated that the preferred composition is formed "only of polyethylene and butyl rubber". The combination of this disclosure and that fact that each HDPE example only comprises HDPE and butyl rubber would lead the skilled person to conclude that the preference is for the composition containing HDPE to contain only HDPE and butyl rubber, i.e. to consist of butyl rubber and HDPE. Hence, since the relevant parts of the patent specification have their counterparts in the application as filed, this feature is considered disclosed in the latter.

6.2 The Board therefore concludes that claim 1 of this request complies with Article 123(2) EPC.

7. Article 83 EPC

7.1 The conclusion reached by the Board with respect to the third auxiliary request in this respect also applies to this request since there is a specific example to which reference was made with respect to the third auxiliary.
request and this example discloses compositions consisting of butyl rubber and HDPE.

Also, the reasons for the Board not following the arguments of the appellant/opponent with respect to the experimental results disclosed in US-A-5 731 053 still apply to this request.

7.2 The Board therefore concludes that the patent as amended according to this request complies with Article 83 EPC.

8. Inventive step

8.1 As already indicated above, compared to the third auxiliary request claim 1 of this request is limited to the composition consisting of butyl rubber and HDPE. For the third auxiliary request the starting point for the discussion of inventive step is example 7 of D1. The composition given in example 7 consists of 50% butyl rubber and 50% LDPE so that the feature added to claim 1 of this request does not distinguish the subject-matter of this claim further from the disclosure of D1. As a result, the same conclusions regarding inventive step apply to claim 1 of the present request.

8.2 Therefore, the subject-matter of claim 1 of this request does not involve an inventive step in the sense of Article 56 EPC.
Order

For these reasons it is decided that:

I. Regarding the appeal of the appellant (patentee):
   The appeal is dismissed.

II. Regarding the appeal of the appellant (opponent):
   1. The decision under appeal is set aside.
   2. European patent No 0 488 491 is revoked.

The Registrar: The Chairman:

G. Nachtigall H. Meinders