DECISION of 10 April 2002

Case Number: T 0306/97 - 3.3.7
Application Number: 88108142.6
Publication Number: 0292894
IPC: B32B 27/32

Language of the proceedings: EN

Title of invention: Multilayer film containing very low density polyethylene

Patentee: CURWOOD, INC.

Opponent: W.R. Grace & Co.-Conn.

Headword:

Relevant legal provisions: EPC Art. 84, 123(2)(3), 56

Keyword:
"Amendments - added subject-matter (yes) - main request"
"Claims - clarity (no) - main request, first auxiliary request"
"Inventive step - obvious combination of known features (second, third and fourth auxiliary requests)"

Decisions cited:

Catchword:

EPA Form 3030 10.93
Case Number: T 0306/97 - 3.3.7

DECISION  
of the Technical Board of Appeal 3.3.7  
of 10 April 2002

Appellant: CURWOOD, INC.  
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Decision under appeal: Decision of the Opposition Division of the European Patent Office posted 16 January 1997 revoking European patent No. 0 292 894 pursuant to Article 102(1) EPC.

Composition of the Board:
Chairman: R. E. Teschenmacher
Members: B. L. ter Laan  
B. J. M. Struif
Summary of Facts and Submissions

I. Mention of the grant of European patent No. 0 292 894 in respect of European patent application No. 88 108 142.6, filed on 20 May 1988 and claiming priority from earlier application US 54918 of 28 May 1987, was published on 5 October 1994 (Bulletin 94/40) on the basis of a set of 58 claims, Claim 1 reading:

"A thermoplastic, heat shrinkable, multilayer film wherein:

Said multilayer film comprises a first layer comprising very low density polyethylene, a core layer comprising vinylidene chloride copolymer, and a second layer comprising very low density polyethylene, wherein said very low density polyethylene of said first layer and said very low density polyethylene of said second layer have a density of up to 0.915 grams per cubic centimeter characterized in that said multilayer film is obtained by coextruding said layers, said vinylidene chloride copolymer is a vinylidenechloride-methyl acrylate copolymer having a vinylidene chloride content of from 85 to 95 weight percent and a methyl acrylate content of from 5 to 15 weight percent, based on the weight of said copolymer;

Said first layer is adhered directly to one side of said core layer and said second layer is adhered directly to the other side of said core layer."

Claims 2 to 28 referred to preferred embodiments of the film according to Claim 1.
Claim 29 read:

"A thermoplastic, heat shrinkable, multilayer film wherein:

Said multilayer film comprises a first layer comprising very low density polyethylene, a core layer comprising vinylidene chloride copolymer, and a second layer comprising very low density polyethylene, wherein said very low density polyethylene of said first layer and said very low density polyethylene of said second layer have a density of up to 0.915 grams per cubic centimeter, characterized in that said multilayer film is obtained by coextruding said layers, said vinylidene chloride copolymer is a vinylidene chloride-methyl acrylate copolymer having a vinylidene chloride content of from 85 to 95 weight percent and a methyl acrylate content of from 5 to 15 weight percent, based on the weight of said copolymer.

Said first layer is adhered directly to one side of said core layer and said second layer is adhered directly to the other side of said core layer; and, Said first layer and said second layer have substantial freedom from cross-linking bonds."

Claims 30 to 41 concerned preferred embodiments of the film according to claim 29.

Claim 42 read:

"A process of producing a thermoplastic, heat shrinkable, multilayer film, suitable for use in packaging fresh red meats and processed meats, which comprises coextruding a core layer comprising a
vinylidene chloride-methyl acrylate copolymer, a first layer adhered directly to one side of said core layer and comprising very low density polyethylene, and a second layer adhered directly to the other side of said core layer and comprising very low density polyethylene, wherein said very low density polyethylene of said first layer and said very low density polyethylene of said second layer have a density up to 0.915 grams per cubic centimeter and wherein said vinylidene chloride-methyl acrylate copolymer has a vinylidene chloride content of from 85 to 95 weight percent and a methyl acrylate content of from 5 to 15 weight percent, based on the weight of said copolymer."

Claims 43 to 57 referred to preferred embodiments of the process according to claim 42.

Claim 58 concerned the use of a film according to claims 1 to 41 or produced by the method of claims 42 to 57 for packaging fresh red meat and processed meat.

II. On 5 July 1995 a notice of opposition against the granted patent was filed, in which the revocation of the patent in its entirety was requested on the grounds set out in Article 100(a) EPC (lack of inventive step).

The opposition was supported inter alia by the following documents:

D1 EP-A-0 202 814
D2 EP-A-0 204 918
D3 Modern Plastics International, February
III. By a decision issued in writing on 16 January 1997, the Opposition Division revoked the patent. That decision was based on a main and two auxiliary requests, all filed on 15 November 1996. The Opposition Division held that

(a) The added requirement in the main request as compared to the granted version, that the second layer could consist of "[any] blend of VLDPE with one or more other polymers provided that such blends must not cause degradation of adhesion, curl, haze or gloss to such an extent that the multilayer film is rendered unacceptable", was not clear since the patent specification did not provide any information as to which levels of adhesion and curl would be acceptable and which would not be acceptable. Therefore, the main request did not comply with Article 84 EPC.

(b) The first auxiliary request contravened Article 123(2) EPC since there was no disclosure in the original application for the possibility to blend the very low density polyethylene (VLDPE) with any other polymer without restriction as to its properties.

(c) The second auxiliary request was considered to be formally allowable but it did not involve an inventive step. The closest prior art document was D2, which differed from the claimed film in the composition of the outer layers: ethylene vinyl
acetate copolymer (EVA) instead of very low density polyethylene (VLDPE). However, in view of the disclosure of D3, which described the advantageous properties of VLDPE and proposed it as a replacement for EVA in food contact film, it was obvious to replace EVA by VLDPE. Also, no prejudice against the use of VLDPE instead of EVA existed.

IV. On 14 March 1997 the Proprietor (Appellant) lodged an appeal against the above decision and paid the prescribed fee on the same day. The statement of grounds of the appeal was filed on 26 May 1997. During the oral proceedings held on 10 April 2002, a main request (22 claims) and four auxiliary requests (21, 22, 21 and 15 claims respectively) were submitted, replacing all previous requests filed during the appeal proceedings.

Claim 1 of the main request reads:

"A thermoplastic, heat shrinkable, multilayer film obtained by coextruding a core layer comprising a vinylidene chloride-methyl acrylate copolymer having a vinylidene chloride content of from 85 to 95 weight percent and a methyl acrylate content of from 5 to 15 weight percent, based on the weight of said copolymer, blended with a vinylidene chloride-vinyl chloride copolymer having a vinylidene chloride content of at least 65 weight percent and not more than 95 weight percent, and a first and a second layer of 100 weight percent very low density polyethylene (VLDPE) having a density of from 0.86 to 0.915 grams per cubic centimeter and a melt index in the range of from 0.5 to 2.5 decigrams per minute or of a blend of such VLDPE
with one or more other polymers provided that such blends must not cause degradation of adhesion, curl, haze or gloss to such an extent that the multilayer film is rendered unacceptable for use in the packaging of primal and subprimal meat cuts and processed meats; said first layer is adhered directly to one side of said core layer and said second layer is adhered directly to the other side of said core layer."

Claim 1 of the first auxiliary request reads:

"A thermoplastic, heat shrinkable, multilayer film suitable for use in the manufacture of bags for packaging fresh red meats and processed meats, said film obtained by coextruding a core layer comprising a vinylidene chloride-methyl acrylate copolymer having a vinylidene chloride content of from 85 to 95 weight percent and a methyl acrylate content of from 5 to 15 weight percent, based on the weight of said copolymer, blended with a vinylidene chloride-vinyl chloride copolymer having a vinylidene chloride content of at least 65 weight percent and not more than 95 weight percent,

and a first and second layer of 100 weight percent very low density polyethylene (VLDPE) having a density of from 0.86 to 0.915 grams per cubic centimeter and a melt index in the range of from 0.5 to 2.5 decigrams per minute or of a blend of such VLDPE with one or more other polymers;

said first layer is adhered directly to one side of said core layer and said second layer is adhered directly to the other side of the core layer."
Claim 1 of the second auxiliary request differs from Claim 1 of the first auxiliary request in that the alternative feature "or of a blend of such VLDPE with one or more other polymers" has been cancelled.

In claim 1 of the third auxiliary request, the contents of claims 1 and 2 of the second auxiliary request are combined, so that the amounts of vinylidene chloride-methyl acrylate copolymer and vinylidene chloride-vinyl chloride copolymer in the core layer should now be 75 and 25 weight percent, respectively.

Claim 1 of the fourth auxiliary request is directed to the use for packaging fresh red meat and processed meat, of a thermoplastic, heat shrinkable, multilayer film as defined in claim 1 of the third auxiliary request.

V. The arguments of the Appellant, submitted in writing and during the oral proceedings, can be summarized as follows:

(a) The amendments were supported by the original disclosure and restricted as regards the granted claims, so that the requirements of Articles 123(2) and (3) EPC were fulfilled.

(b) The claims were clear in view of the definitions given in the description, so that the requirements of Article 84 EPC were also satisfied.

(c) As regards inventive step, the patent in suit concerned films for packaging fresh meat, requiring certain properties. The closest prior art was represented by D2, which disclosed a core
layer of vinylidene chloride-methyl acrylate copolymer (VDC-MA) and outside layers of EVA. The problem to be solved was to provide an alternative film suitable for fresh meat packaging. D3 described applications of stretch cling films containing VLDPE, which was said to be able to replace EVA. However, the films described in D3 were not oriented in the same way as the present heat shrink films and concerned a different technical field, so that the skilled person would not have combined the teaching of D3 with D2 and would not have replaced the EVA layers of D2 by the VLDPE layers of D3. Moreover, that combination did not result in the claimed film in view of the differences in the core layer. The same arguments were valid when starting from either D1 or D5 as the closest prior art documents, neither of which disclosed the blend of vinylidene chloride-vinylchloride copolymer (VDC-VC) and VDC-MA in the core layer as now claimed, nor VLDPE on both sides of it, and which taught away from the claimed subject-matter. The superior properties of the claimed films, in particular the strong adhesion of the VLDPE layers, were illustrated by the examples in the patent in suit.

VI. The arguments of the Respondent can be summarized as follows:

(a) The amendments, which should only be allowed if necessitated by the grounds of opposition, contravened the requirements of Article 123(2) and (3) EPC.

(b) The amended claims lacked clarity since there was
no definition for the acceptability or suitability of packaging film for the meat industry (Article 84 EPC).

(c) As regards inventive step, the claimed films differed from D2 only in the material of the outer layer. The films described in D3 were suitable for meat packaging so that that document could be and would have been combined with D2. Since D3 taught to replace EVA by VLDPE, such a replacement was obvious. The difference to D2 in the claimed core material was not relevant.

Starting from D1, which had a core of VDC-MA with outer layers of linear low density polyethylene (LLDPE), the latter had to be replaced by VLDPE. Since there was no real difference between LLDPE and VLDPE but rather a continuous transition from the one to the other, as also apparent from D5, and since the rheological properties of VLDPE were similar to those of LLDPE, such a replacement was obvious. The same was valid for D5 as the starting point.

VII. The Appellant requested that the decision under appeal be set aside and the patent be maintained on the basis of the main request or, alternatively, on the basis of one of the four auxiliary requests, all submitted during the oral proceedings.

The Respondent requested that the appeal be dismissed.

Reasons for the Decision
1. The appeal is admissible.

Main request

2. Claim 1 of the main request now contains the requirement that the material of the first and second layer should be 100 weight percent very low density polyethylene (VLDPE) having a density of from 0.86 to 0.915 grams per cubic centimeter and a melt index in the range of from 0.5 to 2.5 decigrams per minute or a blend of such VLDPE with one or more other polymers "provided that such blends must not cause degradation of adhesion, curl, haze or gloss to such an extent that the multilayer film is rendered unacceptable for use in the packaging of primal and subprimal meat cuts and processed meats".

2.1 The claim itself contains no definition of or requirements for the acceptability of the film for use in the packaging of meat. Nor are there any limits indicated for the values of adhesion, curl, haze and gloss that might still be acceptable. Since a claim should be clear by itself, without having to take resort to the description, the requirement of acceptability for meat packaging is unclear, so that the requirements of Article 84 EPC are not satisfied.

2.2 Even if the information contained in the patent specification were taken into account, several other objections would arise.

On page 11, line 47 to page 13, line 40 the various properties and their measuring methods are described. On page 11, lines 55 to 58, the measuring methods for haze and gloss are indicated without, however, any...
desired values being given. From Table 2 on page 16, it can be inferred that a value of 6.2% is still acceptable for haze, whereas a value of 7.2% is considered to be unacceptable. For gloss, the values are 72% and 69% respectively. However, there is no guidance in the patent specification whether haze values between 6.2% and 7.2% and gloss values between 72% and 69% are acceptable or not.

On page 13, lines 8 to 40, in particular lines 26 to 40, the requirements for adhesion and curl are indicated. However, although it is stated that poor and fair adhesion are unacceptable for meat packaging (line 26 to 28), curl properties are only mentioned in relation to the fabrication of bags, in which connection tubing samples showing a "tightly inward" curl are deemed to be unacceptable (lines 33 to 40). However, claim 1 is not restricted to the fabrication of bags. Therefore, apart from the fact that terms such as "poor", "fair" and "tightly inward" are unclear by themselves and provide no useful limitation of the desired range, which is objectionable under Article 84 EPC, the relationship of the curl property with respect to a heat-shrinkable film for the packaging of meat other than in the form of fabricated bags is lacking.

Moreover, claim 1 requires only one of the above-mentioned properties of adhesion, curl, haze or gloss not to cause degradation, whereas from Table 2 (page 16) it appears that the film as a whole should satisfy all four requirements to be acceptable.

For these reasons, the main request does not comply with the requirements of Article 123(2) EPC.
First auxiliary request

3. Claim 1 of the first auxiliary request now contains the requirement that the multilayer film should be "suitable for use in the manufacture of bags for packaging fresh red meats and processed meats". According to the Appellant, that requirement served as a limitation of the scope of the claim, further defining the claimed films.

However, the concept of suitability for the purpose of producing bags for meat packaging is not clear by itself, nor is it defined in the claim, so that the same clarity objections arise as for the main request. Therefore, the first auxiliary request does not fulfil the requirements of Article 84 EPC. Furthermore, the omission of the obligatory properties for the blend of the VLDPE with one or more other polymers is not supported by the application as originally filed either (Article 123(2) EPC).

Second auxiliary request

4. As regards the second auxiliary request, no formal objections have been raised. Novelty was not contested by the Respondent and the Board sees no reason to take a different position.

5. The patent in suit concerns a multilayer film for the packaging of meat products. Such films have been described in D2 which was considered to be the closest prior art document by the Appellant and the Opposition Division. The Respondent agreed with the analysis of D2 but also argued that D1 and D5 were suitable starting points as well.
5.1 D2 describes a heat-shrinkable, biaxially stretched multilayer film suitable for packaging primal and sub-primal meat cuts and processed meats, said film containing a barrier layer comprising VDC-MA (Claim 1). The barrier film is preferably the core layer (Claim 2), whereas the outer layers may comprise EVA (Claim 5). In the examples, four biaxially stretched three-layer films are prepared by coextrusion. The first two films have core layers of VDC-VC and outer layers of EVA. The third and fourth films have similar compositions, the core layers however comprising VDC-MA. The physical properties of the films are shown to be similar (Table 1), as are the impulse sealing properties (Table 2), but the films with a core layer of VDC-MA have better colour properties than those having VDC-VC as the core layer (Figure 1).

The films according to D2 possess the physical properties required for use in packaging primal and sub-primal meat cuts and processed meats, while additionally having improved resistance to the colour degradation caused by irradiation of the film (column 13, lines 43 to 47), which reflects the general teaching of D2: to replace the core layer of VDC-VC by VDC-MA in order to improve the effects of irradiation of the film on its colour, while maintaining its physical properties required for meat packaging purposes.

5.2 D5 describes a multilayer thermoplastic barrier film having at least three layers comprising (a) a layer consisting essentially of VLDPE having a density of less than 0.910 gms/cc; (b) a barrier layer comprising a material selected from the groups consisting of: (1) copolymers of vinylidene chloride (PVDC) and (2)
hydrolyzed ethylene-vinyl acetate copolymers (EVOH); (c) a thermoplastic polymeric layer, said layer being on the side of the barrier layer opposite to that of layer (a); and, (d) the shrinkage of layer (a) controlling the shrinkage of the entire multi-layer barrier film, said multi-layer film having been oriented and rendered heat shrinkable at a temperature below 100°C, said orientation temperature being about 40°F or more below the melt temperature of said VLDPE (Claim 1). VLDPE is defined as a linear polyethylene copolymer having a density of less than 0.910 gm/cc and as low as 0.860 or even lower (column 5, lines 63 to 65). A particularly advantageous thermoplastic is said to be one which comprises EVA or VLDPE, the latter being shrinkable below the boiling point of water (column 4, lines 61 to 68). Coextrusion is mentioned as a possible method for the production of the films (column 7, lines 3 to 16).

In the examples, films are described having PVDC as the gas barrier layer with outer layers of EVA and VLDPE. According to Example 1 (column 7, lines 58 to 64), where a VLDPE/EVA/PVDC/EVA structure is disclosed, the EVA layer between the PVDC and the VLDPE layers serves to improve the adhesion between the layers so as to lessen any tendency of delamination. In Examples 2 and 5 four-layer structures of VLDPE/EVA/PVDC/VLDPE are mentioned. In example 7, the use of an adhesive layer between the barrier layer and the outer layers of VLDPE is shown.

The films according to D5 are useful for making bags for the packaging of meat, having improved shrink characteristics, heat seal strength and puncture resistance (column 3, line 34 to column 4, line 43).
5.3 D1 describes a multilayer polymeric film including first and second layers, the compositions of which comprise major fractions of EVA; and a third layer of VDC-MA disposed between the first and second layers (Claim 1). According to claims 2 and 3, blends of EVA and LLDPE are used in the outer layers. D1 aims at improved films for use in packaging of e.g. meat (page 1, lines 8 to 11; page 7, line 23 to page 8, line 6).

5.4 In agreement with established jurisprudence, the closest prior art for the purpose of assessing inventive step is that which corresponds to a purpose or technical effect similar to the invention requiring the minimum of structural and functional modifications, (Case Law of the Boards of Appeal of the European Patent Office, 4th edition 2001, I.D.3.1). It follows from the above analysis that both D2 and D1 as well as D5 are closely related to the subject matter now being claimed. All concern the technical field of meat packaging and all have a number of structural features in common with the claimed films. The core layers of D2 and D1 contain VDC-MA, whereas the core layer of D5 contains an unspecified VDC copolymer or EVOH. However, none of the documents mentions the blend of the VDC copolymers now being claimed. Regarding the outer layers, D2 only mentions EVA, D1 describes blends of EVA and LLDPE whereas D5 also mentions two outer layers of VLDPE, one of which, but not both, is directly adhered to the core layer. Therefore, D2, D1 as well as D5 qualify as the closest prior art document.

6. Following the Appellant's approach and starting from D2, the problem to be solved would be to provide a further multilayer film suitable for packaging meat, by
way of an alternative to the existing films. According to the patent in suit, this problem is to be solved by a three-layer film having a blend of VDC-MA and VDC-VC as the core layer and VLDPE as both outer layers attached directly to the core layer, as defined in Claim 1. From Table 2 (page 16) it appears that a film according to that definition (example B-2; Table 1, page 14) is suitable for meat packaging (Table 2, page 16). Therefore, the above-defined problem is considered to be effectively solved.

7. It remains to be decided whether the claimed subject-matter is obvious having regard to the documents on file.

8. The claimed subject matter differs from D2 in the composition of the core layer as well as in the use of VLDPE instead of EVA for the outer layers. Therefore, the question to be answered is whether it was obvious to employ those materials as alternatives to the ones known from D2.

8.1 As can be seen from D3, VLDPE, that is, a linear polyethylene having a density that may be as low as 0.860 g/m³, was, at the priority date of the patent in suit, a new material which had not long been on the market. D3 describes the products of a number of manufacturers and the properties of those products, such as being flexible at low temperatures, colourless, transparent, free from gel content, highly adhesive, that it has an excellent stretch and puncture resistance and is capable of improving impact strength, flexibility, tear strength, and low-temperature heat-sealing and hot-tack characteristics (page 34, column 2, second and third full paragraphs; column 3,
first full paragraph from the bottom; paragraph bridging page 34, column 3 and page 35, column 1; page 35, column 3, first full paragraph). A number of applications are mentioned: use as a modifier for polypropylene and polyethylene film and sheet, use as a heat sealing material for multi-layer film, transparent tubes and flame-retardant wire sheathing, and in packaging applications, e.g. food packaging (page 34, column 2, second full paragraph, to column 3, second full paragraph), as well as blending with LLDPE in stretch cling film (paragraph bridging page 34, column 3 and page 35, column 1) and the use as a sealing layer in coextruded cast film (page 35, column 3, first full paragraph). A separate chapter describes VLDPE as a replacement of EVA (page 35, column 2), where, according to a manufacturer of VLDPE, the material is seen as a replacement for EVA copolymers in a broad range of food and drink film packaging applications (first paragraph).

In view of the general teaching of D3 that VLDPE would be a very suitable material to replace EVA in several film applications, in particular food film packaging, it would have been obvious for the skilled person to actually do so, with a reasonable expectation of producing a film suitable for meat packaging. The Appellant's argument that D3 mentioned stretch films but did not refer to heat shrink films, as required by the meat packaging industry, cannot be followed since the teaching of D3 is not restricted to stretch films. Also the argument that, according to the examples, the film with VLDPE outer layers had a better haze and adhesion than a film with EVA outer layers (Tables 1 and 2, B-2 and B-3) is not convincing: the differences in the properties are so small that it is doubtful
whether any valid conclusion regarding a technical effect could be drawn; moreover, even if a surprising effect could be attributed to the replacement of EVA by VLDPE, that replacement by itself would, in the light of D3, have been obvious so that any advantage could not render such a replacement inventive (Case Law, supra, I.D.7.7.1).

8.2 Regarding the composition of the core layer, according to the general teaching of D2, the VDC-VC should be replaced by VDC-MA in order to improve the colour of the film after irradiation, while maintaining its physical properties required for meat packaging purposes (page 8, lines 43 to 47). Hence, the use of either VDC-VC or VDC-MA as a core layer is known from D2 — resulting in comparable physical properties apart from the resistance to colour degradation —, but the use of a mixture of the two components is not mentioned. However, the presence of a feature not disclosed as such in a prior art document does not automatically render a claim inventive. It is within the realm of the skilled person to vary randomly within the possibilities of a known field and, in the present case, to use either the one or the other or mixtures of the two compounds in the expectation to arrive at a film suitable for meat packaging. Even though blending is not specifically mentioned in D2, there is no indication in the patent in suit, nor has the appellant brought forward any other evidence, that the use of a mixture of VDC-VC and VDC-MA would contribute to any technical effect. Although the examples in the patent in suit allow one to compare the properties of films having either VDC-VC (example A-1) or the blend now being claimed (example B-3) in the core layer and the latter's properties would appear to be slightly better
over the whole range of tested properties, there is no comparison with a film having a core layer of only VDC-MA. Hence, it is not possible to draw any conclusions as to whether the improvement is due to the use of VDC-MA, which, when used alone, might provide even better values than the blend. Therefore, the use of a blend of VDC-VC and VDC-MA instead of either of the two known compounds cannot be regarded as an inventive measure.

8.3 Likewise, the presence of both the specific blend in the core layer and VLDPE as the outer layers has not been shown to result in any special film properties, in line with the Appellant's view that the problem to be solved was to provide an alternative film. The use of each of the components of VDC-VC and VDC-MA in the core layer (D2) as well as the use of VLDPE in the outer layers (D3, D5) had been known from the prior art. To assemble a number of features in a claim each of which was known by itself but which had not been described or suggested in combination, which combination however does not lead to any technical effect, amounts to a simple aggregation of known features, without any inventive contribution. Therefore, the appellant's argument that the combination of D2 with D3 would not result in the present combination of features, cannot be accepted.

In view of the above, the subject-matter of Claim 1 is not inventive.

9. In view of the contents of D1, the same considerations would be valid if D1 was regarded as the closest prior art document instead of D2, so that no inventive step could be acknowledged in that case either.
10. Starting from D5 as the closest prior art document would not change the foregoing conclusions. The core layer of D5 is an unspecified PVDC. In the light of the teaching of D2 and for the reasons mentioned above (point 8.2), it was within the possibilities of the skilled person looking for an alternative film, to use either any of VDC-VC and VDC-MA or a mixture of the two. The Appellant's argument that a layer of EVA was necessary to provide sufficient adherence of the VLDPE outer layer to the core layer, based upon D5, column 7, lines 59 to 65, is not supported by the use of an VLDPE outer layer directly adhered to the PVDC core layer in example 2 of D5. Therefore, starting from D5 does not change anything compared with the situation when D2 is regarded as the closest prior art document. The claimed subject-matter is a simple aggregation of known features, without any inventive contribution. In the light of this, the appellant's argument that the combination of D5 with D3 would not result in the present combination of features, cannot be accepted either.

Third auxiliary request

11. The third auxiliary request differs from the second one in the additional specification of the composition of the core layer blend. However, the mere addition of features to a claim, even if these have not been disclosed in prior art documents, does not automatically render it inventive. If the added features do not contribute to the solution of the problem described in the patent specification, they are normally not relevant for assessing the inventive step (Case Law of the Boards of Appeal, supra, I.D.6.5).
In the present case, there is no indication in the patent in suit, nor has the appellant brought forward any evidence that the specified amounts of the blended copolymers added in the third auxiliary request would have any technical effect in addition to those of the film according to the second auxiliary request, or, in fact, any technical effect at all, which might be interpreted as an inventive contribution. Therefore, they cannot confer inventiveness on the claimed subject-matter. Hence, the above considerations regarding the second auxiliary request are also valid for the third auxiliary request, which, as a consequence, is not inventive.

*Fourth auxiliary request*

12. The fourth auxiliary request concerns the use of the film as defined in the third auxiliary request for packaging fresh red meat and processed meat. That very use is specifically mentioned in D1 (page 1, lines 6 to 15), D2 (column 1, lines 3 to 37) and D5 (column 1, lines 14 to 16). D3 mentions a broad range of food film packaging applications (page 35, column 2, under "VLDPE as replacement for EVA"). Therefore, this particular use offers no inventive contribution and all the above mentioned considerations (points 8 to 11) also apply to the fourth auxiliary request, which, therefore, is not inventive.

13. It follows from the above that none of the requests meets the requirements of the EPC.

*Order*
For these reasons it is decided that:

The appeal is dismissed.

The Registrar:  The Chairman:

D. Spigarelli  R. Teschemacher