

**Internal distribution code:**

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

**Datasheet for the decision  
of 20 February 2020**

**Case Number:** T 0902/17 - 3.3.03

**Application Number:** 09703318.7

**Publication Number:** 2242465

**IPC:** A61F13/15, A61F13/20,  
B32B25/04, B32B25/14,  
B32B27/12, B32B27/32, C08J5/18,  
C08L23/16, B32B25/10

**Language of the proceedings:** EN

**Title of invention:**  
ELASTOMERIC MATERIALS

**Patent Proprietor:**  
Clipay Plastic Products Company, Inc.

**Opponent:**  
Mondi Gronau GmbH

**Relevant legal provisions:**  
EPC Art. 54(2), 100(b), 56, 123(2)

**Keyword:**

Main request - novelty (yes) (ex post facto analysis) -  
sufficiency (yes) - inventive step (no) (obvious alternative)  
Auxiliary requests I to IV - inventive step (no)  
Auxiliary requests V - extension beyond the scope of  
application as filed (yes)

**Decisions cited:**

G 0002/10, T 0939/92



**Beschwerdekammern**  
**Boards of Appeal**  
**Chambres de recours**

Boards of Appeal of the  
European Patent Office  
Richard-Reitzner-Allee 8  
85540 Haar  
GERMANY  
Tel. +49 (0)89 2399-0  
Fax +49 (0)89 2399-4465

Case Number: T 0902/17 - 3.3.03

**D E C I S I O N**  
**of Technical Board of Appeal 3.3.03**  
**of 20 February 2020**

**Appellant:** Mondi Gronau GmbH  
(Opponent) Jöbkesweg 11  
48599 Gronau (DE)

**Representative:** Lorenz, Bernd Ingo Thaddeus  
Andrejewski - Honke  
Patent- und Rechtsanwälte Partnerschaft mbB  
An der Reichsbank 8  
45127 Essen (DE)

**Respondent:** Clopay Plastic Products Company, Inc.  
(Patent Proprietor) 9595 Duke Boulevard  
Mason, OH 45040 (US)

**Representative:** Findlay, Alice Rosemary  
Reddie & Grose LLP  
The White Chapel Building  
10 Whitechapel High Street  
London E1 8QS (GB)

**Decision under appeal:** **Decision of the Opposition Division of the European Patent Office posted on 21 February 2017 rejecting the opposition filed against European patent No. 2242465 pursuant to Article 101(2) EPC.**

**Composition of the Board:**

**Chairman** D. Semino  
**Members:** F. Rousseau  
W. Ungler

## Summary of Facts and Submissions

I. The appeal lies against the decision by the opposition division, posted on 21 February 2017, rejecting the opposition against European patent No. 2 242 465, claim 1 of which read as follows:

"1. An elastomeric film comprising a layer comprising

(i) at least one olefin-based elastomeric polymer, and

(ii) at least one draw down polymer present in a combined amount of from 5 wt% to 25 wt% of said layer to produce the elastomeric film with a basis weight of no more than 25 gsm, said at least one draw down polymer being selected from the group consisting of linear low density polyethylene, high density polyethylene, homopolymer polypropylene, and mixtures thereof,

wherein said elastomeric film has a basis weight of no more than 25 gsm and said elastomeric film has an amount of elastomeric polymer effective to provide a permanent set, as measured per ASTM D882-97, of no more than 14% after recovery from being initially stretched to 100% of its original size."

II. The following documents were *inter alia* cited in support of the opposition:

D1: US 2005/0215964 A1

D2: WO 2007/141745 A2

D3: WO 2007/146148 A2

D4: US 6,982,231 B1.

III. According to the reasons of the decision claim 1 unambiguously stated that the permanent set related to a parameter which was measured after being initially stretched, an initial stretching being interpreted as the very first stretching of said film. Concerning sufficiency of disclosure, Example 4 of the opposed patent showed at least one way to carry out the invention, which example would allow the skilled person to find similar suitable olefin-based elastomers and amounts thereof in order to carry out the claimed invention. Whereas it was likely that not all possible olefin-based elastomeric polymers were suitable to lead to the permanent set value required by claim 1, this did not automatically lead to a lack of sufficiency of disclosure. Novelty was acknowledged, since none of the cited documents unambiguously disclosed an elastomeric film having a basis weight of no more than 25 gsm and a permanent set of no more than 14% after recovery from being initially stretched to 100% of its original size. Regarding inventive step, D1 represented the closest prior art. D1 was mainly interested in achieving a rather high permanent set after an initial stretching which meant a more plastic behaviour after the initial stretching. Accordingly, the skilled person would not get motivation from D1 to obtain an elastic behaviour upon the initial stretching. Hence, D1 did not suggest the subject-matter of the patent in suit. A similar analysis was valid when starting from D2 as the closest prior art. D4 did not represent an appropriate closest prior art and in any event did not teach the skilled person how to arrive at the claimed subject-matter.

IV. The opponent (appellant) lodged an appeal against the above decision. The following document was submitted by the appellant with its statement setting out the grounds of appeal dated 29 June 2017:

D7: Test report (submitted as Annex 2 with the statement of grounds for appeal)

- V. The patent proprietor (respondent) submitted with the reply to the statement of grounds of appeal dated 26 October 2017 auxiliary requests I to V whose claims 1 were as follows:

*Auxiliary request I*

The elastomeric film of claim 1 differed from that of claim 1 of the main request (patent as granted) in that the amount of elastomeric polymer effective to provide the permanent set was defined to be the amount of "said at least one olefin-based" elastomeric polymer.

*Auxiliary request II*

The elastomeric film of claim 1 differed from that of claim 1 of auxiliary request I in that the at least one olefin-based elastomeric polymer was defined to be "present in a combined amount of from 70 wt% to 90 wt% of said layer".

*Auxiliary request III*

The elastomeric film of claim 1 differed from that of claim 1 of auxiliary request II in that the at least one olefin-based elastomeric polymer was further defined to be "selected from the group consisting of ethylene-propylene random copolymer, ethylene-butene random copolymer, ethylene-hexene random copolymer, ethylene-octene olefin block copolymer, propylene-ethylene olefin block copolymer, ethylene  $\alpha$ -olefin

copolymer, ethylene  $\alpha$ -olefin random copolymer, ethylene  $\alpha$ -olefin block copolymer, and mixtures thereof".

*Auxiliary request IV*

The elastomeric film of claim 1 differed from that of claim 1 of auxiliary request III in that the elastomeric film was further defined to have "sufficient processability to be extruded at line speeds of at least about 200 fpm".

*Auxiliary request V*

Claim of that request read as follows (for ease of understanding the Board has indicated by comparison to the text as filed additions in **bold** and deletions in ~~strikethrough~~):

"1. An elastomeric film comprising a layer comprising

(i) at least one olefin-based elastomeric polymer **comprising ethylene-octene olefin block copolymer, present in a combined amount of from 77 wt% to 82 wt% of said layer, and**

(ii) at least one draw down polymer **present in a combined amount of from 10 wt% to 15 wt% of said layer,**  
(iii) **white master batch in an amount of 7 wt% of said layer, and**

(iv) **processing aid in an amount of 1 wt% of said layer,**

~~in an amount effective to produce the elastomeric film with a basis weight of no more than about 25 gsm, said~~ **at least one draw down polymer comprising linear low density polyethylene,**

wherein said elastomeric film has a basis weight of no more than ~~about~~ 25 gsm and said elastomeric film has **an amount of said at least one olefin-based elastomeric polymer effective to provide a permanent set, as measured per ASTM D882-97, of no more than ~~about~~ 1514%** after recovery from being **initially** stretched to 100% of its original size **and wherein the elastomeric film has sufficient processability to be extruded at line speeds of at least 200 fpm."**

- VI. A communication of the Board dated 11 December 2019 sent in preparation for oral proceedings was issued in which inter alia the meaning of granted claim 1 and the disclosure of D3 were addressed.
- VII. Oral proceedings before the Board took place on 20 February 2020.
- VIII. The appellant's submissions, in so far as they are pertinent to the present decision, may be derived from the reasons for the decision below. They are essentially as follows:
- (a) The subject-matter of granted claim 1 lacked novelty over the disclosure of each of D1, D2 and D3.
  - (b) The subject-matter of granted claim 1 lacked sufficiency of disclosure.
  - (c) The subject-matter of granted claim 1 lacked an inventive step in view of the disclosure of D3. The modifications inserted in auxiliary requests I to IV had no effect on the assessment of inventive



step provided in respect of claim 1 of the main request.

(d) Claim 1 of auxiliary request V extended beyond the content of the application as filed.

IX. The respondent's submissions, in so far as they are pertinent to the present decision, may be derived from the reasons for the decision below. They are essentially as follows:

(a) Novelty over each of D1, D2 and D3 should be acknowledged.

(b) The subject-matter of claim 1 was sufficiency disclosed to be carried out by a skilled person.

(c) The subject-matter of claim 1 was inventive in the light of D3. The modifications inserted in auxiliary requests I to IV had no effect on the assessment of inventive step provided in respect of claim 1 of the main request.

(d) Claim 1 of auxiliary request V was based on the application as filed.

X. The appellant requested that the decision under appeal be set aside and the European patent be revoked.

XI. The respondent requested that the appeal be dismissed (main request), or in the alternative that the decision under appeal be set aside and the patent be maintained in amended form according to one of auxiliary requests I to V filed with letter dated 26 October 2017.

## **Reasons for the Decision**

### *Main request (patent as granted)*

1. Before addressing the objections raised by the appellant, it is first necessary to address the meaning of certain terms used in claim 1 of the patent in suit, as far as those are relevant for the present decision.
  - 1.1 The elastomeric film is defined to have an amount of elastomeric polymer effective to provide a permanent set, as measured per ASTM D882-97, of no more than 14% after recovery from being initially stretched to 100% of its original size.
  - 1.2 It is undisputed that the term "permanent set" refers for the skilled person to the residual deformation of a material after said material has been stretched for some period and then released. Accordingly, the maximum permanent set value of 14% defined in claim 1 quantifies the property already defined in the introductory part of said claim, namely that the film exhibits elastomeric property (i.e. rubber-like elasticity). This already implies that the film comprises an elastomeric material, which is reflected in the characterizing part of claim 1 defining that the film has an amount of elastomeric polymer effective to provide a permanent set as defined in said part of the claim, whereas the draw down polymer selected from linear low density polyethylene, high density polyethylene, homopolymer polypropylene represents for the skilled person a non elastomeric compound.
  - 1.3 The permanent set is in accordance with the definition of claim 1 to be measured per ASTM D882-97 after

recovery of the film being initially stretched to 100% of its original size. This standard test method per se is a method for determining tensile properties of plastic films, but not the permanent residual deformation of films held under tension. Considering the indication in paragraph [0015] of the specification (page 3, lines 47-48) that the test method used to determine the permanent set is based upon ASTM D882-97 with some modifications defined in said paragraph, the skilled person understands as acknowledged by the parties during the oral proceedings that the test method used to determine the permanent set is a method using some aspects of the methodology of ASTM D882-97.

1.4 Contrary to the respondent's opinion that the expression "initially stretched to 100% of its original size" refers to the activation of the elastomeric film, i.e. to the very first stretch of the film, this expression is understood by the Board to refer to the strain endpoint used for determining the permanent set, as confirmed on page 3, line 52 of the specification. This is also confirmed in paragraph [0030] of the specification (page 7, lines 4-11) where it is described that the permanent set of the elastomeric film after recovery from being stretched to 100% of its original length with values of no more than 14%, no more than 10%, or no more than 7% can be obtained in some instances before and in other instances after activation. This is also supported by the fact that paragraph [0050] of the specification which defines the means to perform activation does not refer to an initially stretching of the elastomeric film to 100% of the original size.

1.5 The Board agrees with the respondent that the requirement that the basis weight of the elastomeric

film should be at most 25 gsm refers to the basis weight before elongation, i.e. before measuring the permanent set.

### *Novelty*

2. Objections that the subject-matter of claim 1 of the granted patent lacks novelty have been raised over the disclosure of each of documents D3, D1 and D2. Apart from the objection based on the specific film used for the hysteresis test described in Sample 5E of Example 5 in Table 5C of D3, all other novelty objections have in common that they have been made having regard to multiple separate passages of each of the documents concerned. The appellant's novelty objections however fail to convince for reasons which in essence are the following:

2.1 As explained in point 4.4.2 below the disclosure relating to the film designated Sample 5E in Table 5C of D3 is ambiguous as to whether the basis weight indicated in Table 5C is that of the film before performing the hysteresis test. It follows that the basis weight of the film prior to testing, which is the exemplified film in view of which the novelty objection was raised by the appellant, has not been shown to be directly and unambiguously derivable from D3. It follows therefore that this objection must fail irrespective of the question whether such film should be considered to meet the permanent set requirement defined in operative claim 1. On that basis, the experimental report D7 submitted by the appellant in support of this specific novelty objection is not relevant and does not need to be addressed.

2.2 Concerning the additional objections made having regard to multiple separate passages of each of D3, D1 and D2, those do not go beyond the mere observation that the features of granted claim 1, to the exception of the permanent set value of the elastomeric film, are at least separately and explicitly described in each of those documents. In the absence of any indication for a disclosure, even implicit, in each of those documents that the features selected therein by the appellant, corresponding to those recited in operative claim 1, should be used all together, the Board concludes that the reading of each of those documents by the appellant can only be seen as the result of an *ex post facto* interpretation thereof, i.e. made with the knowledge of the invention in mind and with the aim of reconstructing on purpose the elastomeric film of granted claim 1.

2.3 Having regard to the conclusion in respect of the separate objection that claim 1 as granted lacks an inventive step which is addressed below, there is not need to provide a more detailed reasoning concerning the novelty objections.

#### *Sufficiency of disclosure*

3. According to the established jurisprudence of the Boards of Appeal of the EPO a European patent complies with the requirements of sufficiency of disclosure, if a skilled person, on the basis of the information provided in the patent specification and, if necessary, using common general knowledge, is able to carry out the invention as claimed in its whole extent with undue burden, i.e. with reasonable effort.

- 3.1 Whereas the reproducibility of the films described in the examples of the specification was not questioned, the appellant argued that the teaching of the patent in suit did not make available to a person skilled in the art the films of claim 1 over the whole extent of what is claimed, however, without submitting any evidence for this allegation.
- 3.2 The Board agrees with the respondent's view according to which there is no reason to believe that the skilled person on the basis of the teaching provided in paragraphs [0019] to [0021] of the specification concerning the type of olefin-based elastomeric polymers and draw down polymers to be used, as well as their amounts, would not be able to produce films having a permanent set of no more than 14% after recovery from being initially stretched to their original size.
- 3.3 Claim 1 itself teaches that the amount of the elastomeric polymer must be effective to provide the permanent set defined in claim 1, which taking into account the meaning of the permanent set and the nature of the compounds defined in claim 1 implies that the amount of elastomeric compound must be high enough to obtain a film having sufficient elastomeric character expressed in claim 1 by its permanent set value. Hence, the Board has no doubt that a film as defined in claim 1 is one which can be achieved by the skilled person using the elastomeric compounds taught in the patent in suit, as well as the plastic components defined in claim 1 and by carrying no more than routine experimentation such as to adjust the amount of plastic component necessary to obtain the permanent set required by claim 1 depending on the degree of elasticity of the particular elastomeric compound used.

- 3.4 Accordingly, no case has been made that the invention defined by the terms of claim 1 lacks sufficiency of disclosure.

*Inventive step*

*Closest state of the art*

4. According to paragraph [0004] of the specification of the contested patent there "remains a need for an inexpensive elastomeric film, or an inexpensive laminate of an elastomeric film that is bonded to one or more layers of substrate, such as fabric. There also remains a need for an elastomeric film or laminate that has good elastomeric properties, such as permanent set. Such a film or laminate can be suitable for improving the fit and comfort of garments and personal care items, including limited-use and disposable items".
- 4.1 D3 relates to a stretchable outer cover (SOC) for an absorbent article, which includes a multilayered elastomeric film (paragraph bridging pages 2 and 3). D3 recommends on page 7, lines 15-20 the use of elastomeric polypropylenes under the trademark VISTAMAXX as they are relatively inexpensive for an outer cover and indicates on page 20, lines 13-16 that the physical properties of the SOC in accordance with the teaching of that document allow an absorbent article incorporating said SOC to conform a wearer's body in a way that improves fit and comfort. The Board therefore agrees with the parties that D3 which is also concerned with the same objective as the claimed invention would be considered by the skilled person as a suitable starting point for the present invention.

- 4.2 The appellant proposed three argumentations on the basis of the teaching of D3, starting either (i) from the general teaching of D3, (ii) from the film designated Sample 5E in Table 5C on page 32 or (iii) from the film having the same designation, i.e. also Sample 5E, but in Table 5B on the same page 32, whereas the respondent was of the opinion that only the film designated Sample 5E in Table 5B on page 32 represented a suitable starting point for assessing inventive step. As there is no doubt that all films disclosed in D3 are concerned with the same objective, the determination of the closest prior art and starting point for assessing inventive step rather depends on which of the films addressed by the parties has the most relevant technical features in common, i.e. requires the minimum of structural modifications.
- 4.3 Concerning the general teaching of D3, the appellant referred to page 11, line 5 disclosing the use of elastomeric random copolymers under the name VISTAMAXX and to page 11, lines 10-12 mentioning the influence of the amount of plastic component in the plastoelastic material on the permanent set of the material. These passages do not refer to the type of draw down polymers defined in operative claim 1, let alone to their amount, the basis weight of the films to be prepared or their permanent set value under the conditions defined in operative claim 1.
- 4.4 As to the experimental part of D3, its Example 5 illustrates the tensile properties of plastoelastic film materials formed with an elastomeric component (i.e. a V1100 film-grade VISTAMAXX elastomeric polypropylene), various polyolefin-based plastic components and an optional opacifier (paragraph bridging pages 31 and 32). One of these plastoelastic



materials, whose compositions are shown in Table 5A, on page 32, is referred to as "Sample 5E". It is a mixture of 85 wt.% of said elastomeric polypropylene (V1100 VISTAMAXX) and 15 wt.% of a linear low density polyethylene (LL6201). The unactivated samples, i.e. the inactivated films made out of the compositions shown in Table 5A, were tested to determine their tensile properties and subjected to a hysteresis test (page 32, lines 2-5).

- 4.4.1 The results of the tests are provided in Tables 5B and 5C, each of the tables showing the results obtained with a "Sample 5E". Table 5B and Table 5C show the results of the tensile test and those of the hysteresis test, respectively, on the basis of which it is concluded that these plastoelastic films have favorable mechanical properties that make them suitable for inclusion into a SOC (page 33, lines 1-3).
  
- 4.4.2 Table 5C indicates for each of the samples tested the results of the hysteresis test (i.e. % set and the forces measured under prestrain or during the strain cycle) alongside the basis weight of the plastoelastic film. Having regard to the passage on page 32, lines 7-10 describing the tests, namely "*The sample is then subjected to a particular test. As a result, the physical parameters of the samples, such as basis weight, may vary even though the sample designation is the same. For example, Sample 5E shown in Table 5B lists a different basis weight than Sample 5E in Table 5C.*" there is an ambiguity as to whether the basis weight of the plastoelastic film indicated in Table 5C alongside % set and the forces measured under prestrain or during the strain cycle refers to that measured before or after testing of the films. Having regard to the purpose of that test which is to assess the ability

of the SOC to survive the high-strain rate activation process and to elastically conform to a wearer's body during use (page 20, lines 13-16 and page 21, lines 7-9) it cannot be excluded that the basis weight indicated in Table 5C relates to that resulting from the hysteresis test. This means that the disclosure relative to one of the features to be taken into account for determining the film of D3 having the most relevant technical features in common with the film defined in granted claim 1 is ambiguous as far as the film designated Sample 5E in Table 5C is concerned. In addition its permanent set as measured by the method of operative claim 1 is unknown.

4.4.3 As to the results indicated in Table 5B those concern only a tensile test by which the film is elongated until it breaks, assessing thereby the ability of the SOC to withstand the activation process and to react to stresses during normal use (page 20, last paragraph, second sentence). Since a measure of the basis weight made on a deformed and broken film obtained after such a tensile test is technically not sensible, the basis weight of the film designated Sample 5E in Table 5B which is  $29 \text{ g/m}^2$  (i.e. gsm) can only relate to the film before testing. Its permanent set as measured by the method of operative claim 1 is also unknown.

4.4.4 It is therefore concluded that the film designated Sample 5E in Table 5B is structurally closer to the elastomeric film of operative claim 1 than the film disclosed by the general teaching of D3 also considered by the appellant as alternative starting point for assessing inventive step. In addition, based on the ambiguous disclosure of the film designated Sample 5E in Table 5C concerning its basis weight, it cannot be concluded that the latter constitutes a starting point

which is structurally closer to the subject-matter of present claim 1 than the film designated Sample 5E in Table 5B. On that basis and in agreement with the respondent the Board is satisfied that the elastomeric film designated Sample 5E in Table 5B represents the closest prior art and starting point for assessing inventive step.

*Problem successfully solved*

5. Having regard to the closest prior art represented by the elastomeric film designated Sample 5E in Table 5B on page 32 of D3, the appellant and the respondent took differing positions as to which problem could be considered to be successfully solved by the elastomeric film of operative claim 1. According to the appellant the technical problem would be the provision of a film having improved elastomeric properties, reduced permanent set and reduced basis weight, whereas the respondent referring to paragraph [0004] of the patent in suit argued that the technical problem solved by the elastomeric film of operative claim 1 was the provision of an inexpensive elastomeric film or an inexpensive laminate of an elastomeric film that is suitable to improve fit and comfort of garments and personal care items comprising said film.

5.1 Considering in turn the various aspects addressed by the parties in the formulation of the problem, it is first noted as indicated in above point 4.4.3 that the permanent set measured under the conditions defined in operative claim 1 of the elastomeric film constitutive of the closest prior art is unknown. Furthermore, a formulation of the problem which would include the definition that the film has improved elastomeric properties, reduced permanent set or a reduced basis

weight would as argued by the respondent at least partially anticipate the solution leading to an inadmissible ex post facto analysis of the question whether the presently claimed film involves an inventive step (Case Law of the Boards of Appeal of the EPO, 9th Edition, 2019, I.D.4.3.1).

5.2 Concerning the formulation of the problem submitted by the respondent, it can only be concluded that the fit and comfort of garments and personal care items is improved when incorporating a film in accordance with operative claim 1, i.e. in comparison with such items which do not contain a film having elastomeric properties. This is also the same type of improvement brought about by the film of the closest prior art (D3, page 20, lines 13-16; see above point 4.1). However, neither evidence, e.g. in the form of an experimental report, nor explanation was submitted by the respondent allowing the Board to conclude that the elastomeric film of operative claim 1 when compared to the elastomeric film of the closest prior art would provide a better fit and/or higher comfort of the garments and personal care items.

5.3 Based on the above considerations, the technical problem solved over the closest prior art by the elastomeric film of operative claim 1 has to be reformulated as residing in the mere provision of further elastomeric films for a SOC.

*Obviousness of the solution*

6. It remains to be decided whether the skilled person desiring to solve the problem identified above would, in view of the disclosure of D3, possibly in combination with other prior art documents or with

common general knowledge, have modified the elastomeric film designated Sample 5E in Table 5B of D3 in such a way as to arrive at the elastomeric film defined in operative claim 1.

- 6.1 Considering the problem of merely providing an alternative to the specific elastomeric film of D3 constituting the starting point for the present invention, the skilled person would have turned to the general teaching of D3 and consider modifications of the specific film described therein.
- 6.2 Based on the recommendation on page 7, lines 18-23 and page 11, lines 2-6 of D3 the skilled person would in particular consider to use not only the elastomeric polypropylene VISTAMAXX V1100, but also any other elastomeric polypropylene, including random copolymers of propylene with a low level of comonomer such as sold under the trademark VISTAMAXX (see above points 4.1 and 4.3). It is pointed out at this juncture that these elastomeric compounds are taught in paragraph [0021] of the patent in suit to be suitable to obtain an elastomeric film in accordance with the patent in suit.

Concerning the amounts of plastic and elastomeric components, D3 recommends on page 9, lines 21-25 for the elastomeric compound any amount in a range of 5 wt.% to 95 wt.% based on the total weight of the plastoelastic material, whereas the film constitutive of the prior art contains 15 wt% of the plastic component. The amount of plastic component used in the layer of the elastomeric film of operative claim 1 is therefore within the range recommended in D3 and even centered around the amount used in the film constitutive of the closest prior art.

6.3 D3 while recommending to use elastomeric polypropylenes under the trademark VISTAMAXX for preparing SOC (page 7, lines 15-20; see above point 4.1) as used in Sample 5E also describes in the next sentence that these elastomeric polypropylenes can be extruded at low basis weights such as in the range of from 10 to 40 gsm. Having regard to the relatively low proportion of the plastic component in the monolayer film constitutive of the closest prior art, this passage already suggests to the skilled person seeking to provide further elastomeric films for a SOC to use a monolayer film of a plastoelastic material having a basis weight significantly lower than the value of 29 gsm used in the closest prior art, in line with the passage on page 16, lines 16-19 referred to by the appellant which describes a basis weight for a laminated polymeric film in a range of 10 gsm to 40 gsm or in a range of 15 gsm to 25 gsm. On that basis the selection of a maximum basis weight of no more than 25 gsm for the elastomeric film of claim 1 which is not associated with any technical effect and therefore represents an arbitrary choice within the broader range available on the basis of D3 constitutes an obvious measure for the skilled person. It is also not disputed that the skilled person would be able using conventional techniques to prepare monolayer films similar to that of the closest prior art but having a basis weight of at most 25 gsm.

6.4 Turning to the question of the obviousness for the skilled person to use an elastomeric film meeting the permanent set defined in claim 1, it is first to be noted that the permanent set is a key feature of the elastomeric behaviour of a material and for the skilled person an obvious parameter to control when wishing to provide further elastomeric film for a SOC, as is

illustrated in many passages of D3, including those mentioned in above points 4.3 and 4.4.2.

6.4.1 Moreover, in the absence of any technical effect due to the selection of a permanent set of no more than 14% after recovery from being initially stretched to 100% of its original size, the threshold value defined in claim 1 must be considered as an arbitrary choice which does not require any inventive skill. The question, however, remains whether this obvious selection of a maximum value of the permanent set after recovery from being initially stretched to 100% of its original size corresponds to films which the skilled person would be able to realize based on the teaching of the prior art and the common general knowledge.

6.4.2 In this respect and having regard to above points 3.2 and 3.3 concerning the issue of sufficiency of disclosure, it has to be kept in mind that the films in accordance with operative claim 1 can be prepared using the elastomeric compounds mentioned in paragraph [0021] of the patent in suit, including the random copolymers of propylene with a low level of comonomer such as those sold under the trademark VISTAMAXX, as well as the plastic components defined in operative claim 1, which include the plastic component of the closest prior art, while carrying out no more than routine experimentation. This routine experimentation consists as indicated by the appellant in the context of sufficiency of disclosure to adjust within the limits allowed by operative claim 1 the amount of elastomeric component necessary to obtain said permanent set value, which amount depends on the degree of elasticity of the particular elastomeric compound used.

6.4.3 Although having no knowledge of the patent in suit the skilled person wishing to obtain a permanent set within the limit arbitrarily fixed in operative claim 1 would find in D3 (page 7, lines 18-23; page 9, lines 21-25; page 11, lines 2-6 ; see above point 6.2) the same information concerning the use of certain types of elastomeric and plastic materials suitable for forming an elastomeric film for a SOC, as well as the essential information that the permanent set can be adjusted by varying the respective amounts of plastic and elastomeric materials (see passages on page 10, lines 6-8 and page 11, lines 8-12 referred to by the appellant). On that basis, starting from the composition of the film constitutive of the prior art which is made of 85 wt.% of the elastomeric polypropylene (V1100 VISTAMAXX) and 15 wt.% of a linear low density polyethylene (LL6201) the skilled person having fixed an arbitrary maximum value for the permanent set would obviously assess whether such composition allow to meet said requirement and if needed, guided by the teaching of D3, would increase the level of elastomeric material or lower the level of plastic material and/or use elastomeric compounds having a higher elasticity within those taught of D3. Doing so the skilled person would not only be able to provide film having a maximum basis weight of no more than 25 gsm as indicated in above point 6.3, but would also be in the position - guided by the teaching of D3 while carrying out no more than routine experimentation - to provide said film exhibiting a permanent set of no more than 14% after recovery from being initially stretched to 100% of its original size.

6.5 Accordingly, starting from the elastomeric film designated Sample 5E in Table 5B of D3 and merely wishing to provide further elastomeric films for a SOC



the skilled person would in view of the general teaching of D3 arrive in an obvious way at films falling within the ambit of operative claim 1.

6.6 The respondent argued not only that the skilled person would have no motivation starting from the closest prior art to select both the basis weight and the permanent set defined in claim 1, but also that the permanent set parameter defined in claim 1 is not a property that one skilled in the art would pick up from the shelves and that it would rather require hindsight knowledge of the present invention to come to a different conclusion. According to the case law of the boards of appeal, the answer to the question what a skilled person would have done in the light of the state of the art depends in large measure on the technical result he has set out to achieve (see T 0939/92, OJ EPO, 1996, 309, Reasons points 2.4.2 and 2.5.3). Faced with the problem to provide further elastomeric films for a SOC, it is the Board's view that the skilled person would consider any measure which in the light of the prior art is believed to be adequate to provide elastomeric films for a SOC, which measures include as shown above in the light of D3 a certain level of permanent set and a basis weight for said film. Even if the permanent set as formulated by the respondent is not a property that one skilled in the art would pick up from the shelves, it remains having regard to the reasons provided in above point 6.4 an obvious measure suggested by D3 requiring, if necessary, no more than routine experimentation.

6.7 Consequently, the subject-matter of claim 1 of the main request does not involve an inventive step within the meaning of Article 56 EPC. The main request is therefore not allowable.

*Auxiliary requests I to IV*

7. Having regard to the absence of any additional argument submitted by the respondent for auxiliary requests I to IV on the issue of inventive step starting from the elastomeric film designated Sample 5E in Table 5B of D3 and the respondent's opinion at the oral proceedings that the conclusion of the Board regarding inventive step of the subject-matter of the main request would equally apply to that of auxiliary requests I to IV, the Board can only conclude that the amendments introduced into those auxiliary requests do not overcome the finding that the subject-matter of claim 1 of the main request lacks an inventive step. Accordingly, the subject-matter of claim 1 of any of auxiliary request I to IV does not involve an inventive step either and these auxiliary requests are therefore also not allowable.

*Auxiliary requests V*

*Allowability of the amendments*

8. In accordance with the established Case Law of the Boards of Appeal of the EPO, the relevant question to be decided in assessing whether the subject-matter of an amended claim extends beyond the content of the application as filed is whether after the amendment the skilled person is presented with new technical information (see G 2/10 (OJ 2012, 376), point 4.5.1 of the Reasons and Case Law, supra, II.E.1). In other words, the above mentioned amendments are only allowable if the skilled person would derive the resulting subject-matter directly and unambiguously,

using common general knowledge from the application as filed.

- 8.1 Claim 1 of auxiliary request V corresponds to claim 1 as filed in which among others various restrictions concerning the composition of the film, its permanent set maximum value and its processability have been introduced, as shown in section V of the Summary of Facts and Submission where the features inserted in claim 1 as filed are shown in bold characters. In the respondent's view claim 1 was amended to essentially direct the claimed invention to the films of Example 4 of the patent obtained with compositions of Sample 4-B and Sample 4-C which samples and films are described on pages 25 and 26 of the application as filed. The Board notes that the subject-matter of claim 1 has not been limited to the specific films disclosed in Example 4 which are obtained at different line speeds, leading to different basis weight and permanent set but is directed to films whose definition lies between that of those specific films and that of claim 1 as filed.
- 8.2 Sample 4-B is described in Table 1 to be a composition consisting of 82 wt% of a specific ethylene-octene olefin block copolymer (INFUSE™ 9107), 10 wt% of a specific linear low density polyethylene (ELITE™ 5800), 1 wt% of a specific processing aid (LUVOFILM 9679) and 7 wt% of a specific white masterbatch concentrate (Schulman 8500), whereas composition of Sample 4-C differs from that of Sample 4-B solely in that the compounds INFUSE™ 9107 and ELITE™ 5800 are contained in amounts of 77 wt% and 15 wt%, respectively.
- 8.3 Amended claim 1 does not specify the type of processing aid or white master batch contained in amounts of 1 wt% and 7 wt% respectively. These amounts are however

disclosed in Example 4 of the application as filed only in relation to two specific additives. There is no reason for the skilled person to consider that the amounts of 1 wt% and 7 wt% used in Example 4 are meant to apply to any additive aid or any white master batch, as the amounts for these additives would obviously depend on the nature of the said additive aid and white master batch.

8.4 Moreover, the generalisation made by the respondent of the composition of Samples 4-B and 4-C which consists of the four components enumerated above allows as stressed by the appellant for the use of additional components due to the use of the term "comprising" in the first line of amended claim 1 and the fact that the minimum amounts defined for each the above enumerated components add up only to 95 wt%. The consequential implicit definition in amended claim 1 of the use of up to 5 wt% of additional components in addition to 7 wt% of white master batch and 1 wt% of processing aid is in the absence of any indication by the respondent of a corresponding disclosure in the application as filed a new technical information generated by the amendment of claim 1.

8.5 In addition, Samples 4-B and 4-C do not disclose the use of any other olefin-based elastomeric polymer or any other drawn down polymer apart from that of an ethylene-octene olefin block copolymer (INFUSE™ 9107) and a linear low density polyethylene (ELITE™ 5800). In contrast thereto, amended claim 1 due to the use of the term "comprising" in the definition of both the at least one olefin-based elastomeric polymer (defined by feature (i)) and the at least one draw down polymer (defined by feature (ii) and the wording "said at least one draw down polymer comprising linear low density

polyethylene") allows for the use of any other olefin-based elastomeric polymers and/or any other draw down polymers. In the absence of any restriction in amended claim 1 concerning the amounts of ethylene-octene olefin block copolymer and linear low density polyethylene, the amounts of these other olefin-based elastomeric polymers or drawn down polymers can vary almost through the whole ranges of from 77 wt% to 82 wt% and from 10 wt% to 15 wt%, respectively. This means in essence that these specific ranges which might for the sake of argument be considered to be allowable in the context of the specific compounds used in Example 4 would now be extrapolated to any type of olefin-based elastomeric polymers and/or drawn down polymers. No passage of the application a filed, however, has been indicated to show that these ranges defined in amended claim 1 would be disclosed in a broader context than that of Example 4, let alone in combination as shown above with 7 wt% of any white master batch, 1 wt% of any processing aid and up to 5 wt% other components.

9. Accordingly and in view of the fact that no other basis has been indicated in the application as originally filed, the subject-matter of present claim 1 has not been shown to be derivable directly and unambiguously, using common general knowledge from the application as filed. The subject-matter of claim 1 is thus not in keeping with the requirements of Article 123(2) EPC. Auxiliary request V is therefore not allowable either.

**Order**

**For these reasons it is decided that:**

1. The decision under appeal is set aside.
2. The patent is revoked.

The Registrar:

The Chairman:



B. ter Heijden

D. Semino

Decision electronically authenticated