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Datasheet for the decision of 7 December 2017

Case Number: T 1406/14 - 3.3.09

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Language of the proceedings: EN

Title of invention:

HEAT SHRINK LAMINATE FILM, MOLDING UTILIZING THE FILM, HEAT SHRINK LABEL AND CONTAINER

Patent Proprietor:

Mitsubishi Chemical Corporation

Opponent:

Klöckner Pentaplast GmbH

Headword:

Relevant legal provisions:

EPC Art. 83, 56

Keyword:
Main request (patent as granted) sufficiency (yes); inventive step (yes)

Decisions cited:
T 0435/91, T 1764/06

Catchword:

Europäisches Patentamt
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Beschwerdekammern

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Case Number: T 1406/14 - 3.3.09

D E C I S I O N
of Technical Board of Appeal 3.3.09
of 7 December 2017

Appellant: (Opponent)	Klöckner Pentaplast GmbH Industriestr. 3-5 56412 Heiligenroth (DE)
Representative:	Rasch, Michael Rösler - Rasch - van der Heide & Partner Patent- und Rechtsanwälte PartG mbB Bodenseestrasse 18 81241 München (DE)
Respondent: (Patent Proprietor)	Mitsubishi Chemical Corporation 1-1, Marunouchi 1-chome Chiyoda-ku Tokyo (JP)
Representative:	Ter Meer Steinmeister & Partner Patentanwälte mbB Nymphenburger Straße 4 80335 München (DE)
Decision under appeal:	**Decision of the Opposition Division of the European Patent Office posted on 30 April 2014 rejecting the opposition filed against European patent No. 1752285 pursuant to Article 101(2) EPC**

Composition of the Board:

Chairman	W. Sieber
Members:	N. Perakis
	D. Prietzel-Funk

Summary of Facts and Submissions

I. This decision concerns the appeal filed by the opponent against the decision of the opposition division rejecting the opposition filed against European patent No. 1 752 285.

Independent claims 1 and 11 to 13 as granted read as follows:

"1. A heat-shrinkable laminate film comprising a surface layer (S layer), an intermediate layer (M layer) and an adhesive layer (AD layer) with the adhesive layer (AD) between the surface layer (S layer) and the intermediate layer (M layer), wherein the respective layers are made of resins composed mainly of the following components,
and which has a seal strength of at least 3N/15mm width and at most 20N/15mm width when it is delaminated at a tensile rate of 200 mm/min in an environment of 23°C under 50%RH;
and wherein its tensile modulus of elasticity in a direction perpendicular to the main shrink direction is at least 1,200 MPa;
wherein the intermediate layer (M layer) contains the heat-shrinkable laminate film as recycled, in an amount of at most 40 mass% based on the total amount of the film, and the haze value of the film is at most 10% as measured in accordance with JIS K7105;
and wherein the heat shrinkage is at least 30% in at least one direction, when it is dipped in warm water of 80°C for 10 seconds:
S layer: a polyester resin, wherein the polyester resin is at least one polyester resin comprising polybasic carboxylic acid residues and polyhydric alcohol residues;

M layer: a styrene resin, wherein the styrene resin is a copolymer of a styrene hydrocarbon with a conjugated diene hydrocarbon, a mixture containing at least two types of such copolymers different in the styrene content, a copolymer of such a copolymer with a monomer copolymerizable with a styrene hydrocarbon or a conjugated diene hydrocarbon, a homopolymer of a styrene hydrocarbon, or a mixture of at least two types thereof;
AD layer: an adhesive resin, wherein the adhesive resin is a resin, which is capable of bonding the surface layer and the intermediate layer not to be delaminated."

"11. A molded product employing the heat-shrinkable laminate film as defined in any one of Claims 1 to 10 as the base material."

"12. A heat-shrinkable label employing the heat-shrinkable laminate film as defined in any one of Claims 1 to 10 as the base material."

"13. A container provided with the molded product as defined in Claim 11 or the heat-shrinkable label as defined in Claim 12."

II. With the notice of opposition the opponent requested revocation of the patent in its entirety on the grounds of Article 100(a) (lack of novelty and inventive step) and Article 100(b) EPC.

III. The documents filed during the opposition proceedings included the following:

D1: US 6 214 476 B1;

D2: JP S61 041543 A (the English translation);

D9: Comparison of shrinking properties KP PET types;

D10: Shrinking properties "Genotherm SF-M148/01" and

D17: Sheet "Umrechnung von Druck-Einheiten", www.sengpielaudio.com/Rechner-druckeinheiten.htm

IV. The opposition division rejected the opposition because it considered that the claimed invention was sufficiently disclosed and that the claimed subject-matter was novel and involved an inventive step.

With respect to sufficiency, the opposition division held that the patent as a whole, in particular the examples and comparative examples, provided the skilled person with the necessary guidance to find the appropriate material for each individual layer which had the required properties. The opponent, which bore the burden of proof, had not submitted any evidence to support its assertions of lack of enabling disclosure. The reference to T 435/91 was irrelevant because it concerned a compound defined only by its function.

With respect to novelty, the opposition division held that the claimed laminate film was novel over D1 and D2. In particular, it differed from the film disclosed in example 17 of D2 in terms of the chemical structure of the surface layer and the combination of film properties, namely seal strength (property 1), tensile modulus of elasticity (property 2), haze value (property 3) and heat shrinkage (property 4).

Regarding inventive step, the opposition division held that the skilled person, starting from D2, example 17,

considered to be the closest prior art, and aiming to provide a heat-shrinkable laminate film with excellent elasticity, low-temperature shrinkability, shrink finishing quality, rupture resistance, transparency when incorporated as recycled, little natural shrinkage and suppressed delamination, would not find any motivation in D2 or D1 to modify the film of D2 in such a manner as to arrive at the claimed film.

V. The opponent (in the following: the appellant) filed notice of appeal against this decision and requested that the opposition division's decision be set aside and that the patent be revoked in its entirety for insufficiency of disclosure and lack of inventive step.

VI. The patent proprietor (in the following: the respondent) requested that the appeal be dismissed. With letter of 7 January 2015 it filed auxiliary requests 1 to 3.

VII. With letter of 29 May 2015 the appellant objected to the patentability of the auxiliary requests and filed the following documents:

D18: Lexikon Folientechnik, Joachim Nentwig, VCH Verlagsgesellschaft mbH, 1991, pp. 88-91, 210-211, 236-237, 248-249, 420-425; and

D19: Screen Protection Film, SMP, www.smpcorps.com, data sheet of products LHC-2, LHA-2, HIF-2 and LBC-2.

VIII. With letter of 21 September 2015 the respondent requested that D18 and D19 not be admitted into the proceedings and that, if they were admitted, the following documents also be admitted:

D20: Cheng See Yuan *et al.*, "Heat sealability of laminated films with LLDPE and LDPE as the sealant materials in bar sealing application", *Journal of Applied Polymer Science*, 2007, vol. 104, pp 3736-3745;

D21: EP 1 449 787 A1; and

D22: JIS K6854-3, Adhesives - Determination of peel strength of bonded assemblies - Part 3: Adhesives - 180° peel test for flexible-to-flexible bonded assemblies (T-peel test).

IX. With letter dated 25 February 2016 the appellant provided further arguments and agreed that D20 to D22 be admitted into the proceedings.

X. With letters dated 23 May 2016 and 31 October 2016 the respondent and the appellant, respectively, submitted further arguments on the outstanding issues.

XI. On 29 September 2017 the board issued a communication in preparation for oral proceedings.

XII. With letter dated 7 November 2017 the respondent filed new auxiliary requests 1 to 3 and requested that the previously filed auxiliary requests 1 to 3 be renumbered as auxiliary requests 4 to 6.

XIII. Oral proceedings were held on 7 December 2017 as scheduled. During the oral proceedings the respondent withdrew its request concerning the admission of D18 and D19 into the appeal proceedings.

XIV. The relevant arguments put forward by the appellant in its written submissions and during the oral proceedings may be summarised as follows:

Sufficiency

- The claimed invention was not sufficiently disclosed because the functional features of claim 1 merely defined *desiderata* (parameters) of the film and placed undue burden on the skilled person trying to reproduce the claim over its entire scope (see T 435/91). The skilled person had to carry out a first research programme in order to identify the components of the laminate film which fulfilled the functional parameters and a second research programme in order to determine which method should be used to measure the "seal strength" (see T 1764/06).

- With respect to "seal strength", the patent did not disclose (i) its definition, (ii) a method for measuring it and (iii) the preparation of the sample to be used for the measurement.

- The respondent's argument that in the context of the patent "seal strength" and "delamination" were interchangeable was not supported by the general technical knowledge of the skilled person and the prior art (see D18, D20 and D21).

- D22 disclosed a T-peel test for measuring peel strength, namely K 6854-3, but no reference to this test was made in the patent for measuring the seal strength.

- The technical evidence in the patent did not provide the skilled person with clear guidance towards the claimed invention. Reference was made to example B1 and comparative example B1, which had the same surface layers but inexplicably different seal strengths although these should have been the same. The seal strength related to the bonding strength of a surface layer.

Inventive step

- The subject-matter of claim 1 lacked inventive step in the light of example 17 of D2 as closest prior art.

- With respect to the structural features of claim 1, example 17 did not disclose the type of polyester resin used for the surface layer of the laminate film. However, the selection of the type of polyester required in claim 1 as granted was obvious in view of either D1 or the general technical knowledge of the skilled person.

- With respect to the functional features of claim 1, example 17 disclosed three out of four. Thus, the values for tensile modulus of elasticity and haze lay within the claimed range in the light of D17 and D19 respectively. The heat shrinkage also lay within the claimed range, since its measuring method differed only slightly from that of the patent, as was apparent from D9 and D10. The fourth feature, the seal strength, was inherent in the film of example 17.

- But even if the film of claim 1 were distinguished from that of example 17 by the seal strength, the

technical problem would only concern how to determine a concrete range for the seal strength. Since, however, the claimed range did not provide an unexpected advantage, its selection was merely the result of ordinary technical considerations in order to prevent any failure of the seal seam and thus was obvious.

XV. The relevant arguments put forward by the respondent in its written submissions and during the oral proceedings may be summarised as follows:

Sufficiency

- The claimed invention was sufficiently disclosed, since the skilled person on the basis of the patent considered as a whole was able to put it into practice without undue burden. The skilled person would have no difficulty adjusting the functional features and arriving at the ranges of claim 1. Decision T 435/91 did not apply since it related to a component which was defined exclusively by functional features.

- Furthermore, the definition of "seal strength" and the method for its measurement were disclosed in the patent in suit (paragraphs [0099] and [0118]). According to paragraph [0099] "seal strength" and "delamination strength" were interchangeable, and according to paragraph [0118] the seal strength related to the integrity of the whole film, i.e. the seal strength between all layers (front, rear and intermediate).

- Moreover, paragraph [0099] disclosed that "seal strength" was measured by applying the "T type

peeling method", a method known in the art (see D20, D21 and D22). Preparation of the sample for measurement was disclosed in D18 and D20. The appellant had not submitted any evidence to show that at the priority date of the patent there were other methods available which provided different results.

- The difference in seal strength observed between "example A1" and "comparative example A1" as well as "example B1" and "comparative example B1" was due to the fact that the comparative example did not contain any intermediate layer. The absence of the intermediate layer had an impact on the seal strength, which related to the integrity of the entire film.

Inventive step

- D2, example 17, was the closest prior art. The laminate film of claim 1 differed from the laminate film of the prior art as regards the polyester of the surface (S) layer, which comprised polybasic carboxylic acid residues and polyhydric alcohol residues, and as regards the values for the functional features of tensile modulus of elasticity, haze and heat shrinkage. D2 did not concern seal strength.

- The appellant did not show that the film of example 17 inherently fulfilled the parameters of the claimed film. T 1746/06 did not apply, and thus the burden of proof did not shift to the respondent, since this decision related to unusual parameters, whereas the parameters of claim 1 were parameters conventionally used in the art.

- D19 did not show that the the film of example 17 had a haze value which fell within the range of claim 1. D17 did not show that the film of example 17 had a tensile modulus of elasticity which fell within the range of claim 1. D9/D10 did not show that the film of example 17 had a heat shrinkage which fell within the range of claim 1. The methods which had been used in these documents to measure the respective parameters were different from the methods used in the patent in suit.

- The technical problem underlying the claimed film in view of D2 was the provision of a heat-shrinkable laminate film having improved properties. The technical evidence of the patent in suit - considering comparative example B2 to represent D2 - showed that the technical problem was solved.

- The skilled person starting from the heat-shrinkable laminate film of example 17 of D2 and seeking to improve its seal strength, heat shrinkage, haze and tensile modulus in combination would not have considered D1, which was mainly directed to adhesive resin compositions, and would not have replaced the polyester outer layer of the film of example 17 of D2 with the polyester disclosed in D1. Furthermore, he would not have found any motivation in the prior art to adjust the seal strength, heat shrinkage, haze and tensile modulus in accordance with claim 1 of the patent in suit. Thus the claimed film involved was not obvious.

XVI. The appellant requested that the decision under appeal be set aside and that European patent No. 1 752 285 be revoked in its entirety.

XVII. The respondent requested that the appeal be dismissed, or alternatively that the patent be maintained on the basis of any of auxiliary requests 1 to 6, auxiliary requests 1 to 3 as filed with the letter dated 7 November 2017 and auxiliary requests 4 to 6 as filed as auxiliary requests 1 to 3 with the letter dated 7 January 2015 and renumbered as auxiliary requests 4 to 6 with the letter dated 7 November 2017.

Reasons for the Decision

1. Sufficiency

1.1 The film of claim 1 as granted (see point I above) is defined by structural and functional features. The structural features relate to a surface layer (S layer) composed mainly of a specified polyester resin, an intermediate layer (M layer) composed mainly of a specified styrene resin, and an adhesive layer (AD layer), whereas the functional features (parameters) relate to the following properties of the film: seal strength, tensile modulus of elasticity, haze and heat shrinkage.

1.2 The appellant reiterated in the appeal proceedings that the claimed invention was insufficiently disclosed, because the skilled person would not find in the patent in suit the information required to reproduce the invention. In fact, it had to set up two research programmes, which placed him under an undue burden of experimentation (T 435/91, OJ 1995, 188).

The first research programme concerned the selection of the structural features of the claimed heat-shrinkable laminate film which simultaneously satisfied the functional features. The second research programme concerned the method for determining the seal strength.

1.3 The board does not agree. With respect to the first alleged research programme, the skilled person finds guidance both in the general disclosure of the patent and in its experimental part on how to select appropriate materials for the individual layers of the film. On the one hand, the films of examples A-1 to A-3 and B-1 to B-3 are in accordance with the claimed invention, i.e. they satisfy both the structural and functional requirements of the claimed film and disclose specific ways to carry out the claimed invention. On the other hand, the general disclosure of the patent specification provides guidance on how to carry out the invention across the entire scope of claim 1. Reference is made to:

- paragraphs [0022] to [0041], which provide information concerning the surface layer, which is capable of suppressing natural shrinkage while imparting rigidity, rupture resistance and low-temperature shrinkability to the film;

- paragraphs [0042] to [0062], which provide information concerning the intermediate layer, which is capable of imparting impact rupture resistance and elasticity to the film;

- paragraphs [0063] to [0082], which provide information concerning the adhesive layer, which is capable of bonding the surface layer and the

intermediate layer, preventing delamination and suppressing turbidity; and

- paragraphs [0083] to [0087], which provide information concerning the film's layer structure, which imparts excellent elasticity, shrink finishing quality, rupture resistance, transparency, little natural shrinkage and suppression of delamination.

The appellant's objection was based on T 435/91, the headnote of which reads as follows:

"The disclosure of an invention relating to a composition of matter, a component of which is defined by its function ..., is not sufficient if the patent discloses only isolated examples, but fails to disclose, taking into account, if necessary, the relevant common general knowledge, any technical concept fit for generalisation, which would enable the skilled person to achieve the envisaged result without undue difficulty within the whole ambit of the claim containing the 'functional definition' (point 2.2.1 of the reasons)" [underlining added by the board].

The appellant criticised the fact that the patent in suit did not contain the above-mentioned "technical concept fit for generalisation".

However, decision T 435/91 relates to a claim whose composition comprises a component which is defined only by its function. Apart from that, the decision makes it quite clear that each case has to be decided on the basis of the facts at hand. According to T 435/91 (Reasons 2.2.1):

"There cannot, of course, be a clear-cut answer to the question of how many details in a specification are required in order to allow its reduction to practice within the comprehensive whole ambit of the claim, since this question can only be decided on the basis of the facts of each individual case."

Unlike this decision, the present case relates to a film which is defined by a combination of structural and functional features, for all of which there is, as discussed above, further guidance in both the general disclosure and the experimental part of the patent in suit.

1.4 The board also does not agree that the skilled person had to set up a second research programme to determine the seal strength. In this context, the appellant invoked the absence of any definition of the "seal strength" parameter in the patent and the absence of any indication of the method used to determine it, including the conditions for preparing the sample and the conditions for performing the measurement.

1.4.1 With respect to the definition of the "seal strength" parameter, the following is disclosed in the patent in suit:

"[0099] The delamination strength (seal strength) of the film of the present invention is at least 2N/15 mm width ... Further, the upper limit of the interlaminar peel strength is not particularly limited ..."

"[0118] The seal strength of a film was measured, and the interlaminar peel strength was evaluated ... The seal strengths of the front and rear layers and the

intermediate layer were evaluated by the following numerical values".

These passages support the respondent's argument that the terms "seal strength" and "delamination strength" are interchangeably used and have the same meaning in the context of the present patent, the more so since paragraph [0118] discloses that the seal strength relates to the integrity of the entire film (front, rear and intermediate layers), i.e. its interlaminar strength.

It might be true that from a strictly scientific point of view, as argued by the appellant on the basis of D18 and D20, seal strength is a measure of the stability of a sealed seam in a foil pack, and delamination strength is a different parameter taking into account the delamination of all layers of the film. However, taking into account the above-cited passages in the patent in suit, the skilled person would not take such a strict approach, but would interpret the term "seal strength" more broadly, namely as being directed to the integrity of the whole film.

1.4.2 With respect to the method for determining the seal strength, paragraph [0099] refers to a "T type peeling method". Despite the fact that the patent provides no information on how to carry out this measuring method, the skilled person knew at the priority date of the patent in suit how to measure the seal strength of a film, since at that time such methods were known in the art (see D18: page 421, right column, entry "Siegelfestigkeit"; D20: page 3738, left column, under "Making of heat-seals", last line of first paragraph; D21: paragraph [0051]; D22: title). Particular reference is made to D20 and D22, which refer to a T-

peel test. Hence, at the priority date of the patent the skilled person would have had no difficulty measuring the seal strength and reproducing the claimed invention without undue burden.

The board acknowledges that the specific test of D22 is not cited in the patent in suit. However, the appellant did not submit any evidence that there were other methods, in particular T-type peeling methods, for determining the seal strength which provided results which differed substantially.

The same applies to the conditions for preparing the sample and the performance of the measurement. D18 (page 421, right column, entry "Siegelfestigkeit") discloses a standard method of preparing the sample for measuring the seal strength, namely ASTM F 88-68. Another standard method is disclosed in D20 (page 3738, paragraph bridging left and right columns). In this case too, the appellant did not submit any evidence to show the existence of other preparation methods which substantially influence the measurement. Therefore, in the absence of any evidence, the appellant's assertions concerning this issue must also fail.

The appellant argued that it did not need to submit any evidence because the patent disclosure was contradictory in itself, and it referred to example B-1 and comparative example B-1, which, although having the same outer layer, showed a different seal strength. The board notes that this argument is based on the appellant's understanding that the "seal strength" parameter relates to the bonding of outer surface(s) only. However, given the board's broader interpretation (see point 1.4.1 above) that seal strength in the context of the patent in suit relates to the integrity

of the entire film, namely outer layer, adhesive layer and intermediate layer, the results of example B-1 and comparative example B-1 are consistent. They show that the absence of an adhesive layer from the film structure leads to delamination, i.e. to a worse "seal strength" value. The impact of the adhesive layer on delamination is thoroughly discussed in the description of the patent (see paragraphs [0063], [0065], [0067] and [0070]).

1.5 In summary, the patent in suit discloses the invention underlying the subject-matter of claim 1 as granted in a manner sufficiently clear and complete for it to be carried out by a person skilled in the art.

2. Inventive step

2.1 Closest prior art

2.1.1 The parties considered D2 to be the closest prior art, and the board agrees. D2 is directed to multilayer stretched films exhibiting excellent shrink characteristics, in particular shrinkability and shrink stress, film strength, optical characteristics, sealing characteristics, anti-cracking characteristics, strength after shrinkage, surface characteristics and dimensional stability (page 4, lines 10-17), properties which are also mentioned in the context of the patent in suit (paragraph [0013]).

2.1.2 The multilayer film of example 17 is the most relevant disclosure of D2. This film has a five-layer structure (table 4), with two outer layers T-1 made of a polyester copolymer (page 43, line 15), two adhesive layers M-1 adjacent to the outer layers made of an ethylene-vinyl acetate copolymer grafted with acrylic

acid (page 43, lines 19-20), and an intermediate layer between the adhesive layers, which is a 90:10 mixture of two styrene-butadiene block copolymers (page 30, lines 9-15, and page 31, table 1).

2.1.3 The film of example 17 has a haze value of 1.2% (page 44, table 5, (e)) measured according to ASTM D 1003-52 (page 37, line 3). Although the method used to measure the haze in the patent in suit is JIS K7105 (paragraph [0120]), the appellant has shown that, on the basis of D19, this method gives the same results as the method used in D2. Since the value of D2 falls within the range of claim 1, the film of example 17 fulfils the haze requirement of claim 1.

2.1.4 However, example 17 does not disclose that the surface layers T-1 comprise polybasic carboxylic acid residues and polyhydric alcohol residues as required by claim 1.

2.1.5 The film of example 17 has a tensile modulus value of 140 kg/mm (page 44, table 5, (d)) measured according to ASTM D 882-67 (page 37, line 1), which translates to 1372 MPa (D17), i.e. a value falling within the range of claim 1. However, the patent in suit measures the tensile modulus according to JIS K7127 (paragraph [0110]), and the appellant has not demonstrated that these methods provide results which do not differ substantially. Thus, this parameter of claim 1 is not directly and unambiguously derivable from D2.

2.1.6 The film of example 17 has a shrink response at 100°C of 62% (table 5 (g)) measured after the film was subjected to hot-air treatment for 10 seconds (page 37, lines 7-9), and a degree of shrinkage at 80°C of 70% (table 5 (f)) measured after the film was subjected to hot-air treatment for 5 minutes (page 37, lines 3-7).

The measuring methods are different from the method indicated in the claim (different medium and different time). The board notes that D2 states that the value of this parameter varies depending on the method of measurement, for example hot-air treatment or immersion in hot water. Thus the values disclosed in D2 cannot be compared with the range of claim 1. Therefore this parameter of claim 1 is also not directly and unambiguously derivable from D2.

The appellant asserted on the basis of D9 and D10 that the film of example 17 did have a heat-shrinkage value falling within the claimed range of at least 30% in at least one direction. The board does not agree. D9 and D10 do not provide any means for converting the values obtained in example 17 to those required by claim 1. D9 is a diagram which shows the heat shrinkage behaviour of heat-shrinkable films, some of which were already available in 2003, when dipped in a water bath for 10 and 30 seconds. D10 is a diagram which shows the heat shrinkage behaviour of a heat-shrinkable film obtained in 2000 when dipped in a water bath at a temperature from 50 to 100°C for 30 seconds.

2.1.7 Example 17 is silent about the seal strength of the multilayer film, which is, however, a parameter characterising the film of claim 1.

2.1.8 In summary, the appellant, which bears the burden of proof, did not file any evidence in support of its assertion that the multilayer film of example 17 intrinsically has some or all the properties of the claimed film, including the seal strength. Decision T 1764/06, relied on by the appellant, does not apply in the present case, because the parameters defining the claimed film are not unusual but conventional.

2.2 Technical problem and its solution

As already set out above (point 2.1.1), the heat-shrinkable laminate film of D2 and the claimed film solve similar problems. Thus the technical problem underlying the claimed film in view of D2 is the provision of a heat-shrinkable laminate film which has an improved combination of properties. This technical problem has been solved by a film according to claim 1 which combines specific materials for the layers and satisfies specific film parameters. The technical evidence in the patent shows that the technical problem has been solved. Reference is made to examples A1-A3 and B1-B3 according to the claimed invention and comparative example B2, which comes close to the film of example 17 of D2. Thus, this technical evidence shows that the claimed films provide an improved combination of properties.

2.3 Obviousness

The skilled person starting from the heat-shrinkable multilayer film of example 17 of D2 and seeking to improve its balance of properties would not find any motivation in D2 or any other prior-art document to adjust the resins of the layers of the multilayer structure or certain parameters of the known film, such as seal strength, tensile modulus of elasticity, haze and heat shrinkage, in such a way as to arrive at a film which is in accordance with claim 1.

During the written procedure the appellant referred to D1. This document, which relates to an adhesive composition for producing a laminate film (column 1, lines 8-16), may disclose alternatives for the surface

layer of the laminate which include the polyester resin of claim 1 (column 11, lines 54-67). However, it does not disclose the film parameters in accordance with claim 1. Therefore, even if the skilled person combined D2 with D1, he would not obtain the film of claim 1.

2.4 To conclude, the subject-matter of claim 1 involves an inventive step.

3. The other independent claims

Independent claims 11, 12 and 13 all refer to the heat-shrinkable laminate film as defined in claim 1. Thus, the inventions underlying these claims and their subject-matter are *mutatis mutandis* sufficiently disclosed and involve an inventive step.

4. The dependent claims

The above considerations apply *a fortiori* to dependent claims 2 to 10, which directly or indirectly relate to claim 1 and correspond to specific embodiments of it.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar: The Chairman:

U. Bultmann W. Sieber

Decision electronically authenticated