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Datasheet for the decision of 25 July 2006

Case Number: T 0327/03 - 3.3.09

Application Number: 92304360.8

Publication Number: 0515096

IPC: B32B 3/26

Language of the proceedings: EN

Title of invention:
Polymeric film

Patentee:
Dupont Teijin Films U.S. Limited Partnership

Opponent:
Mitsubishi Polyester Film GmbH

Headword:
-

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

Keyword:
"Main request, auxiliary requests I, II: novelty (no) - anticipation by examples of the prior art"
"Auxiliary request III: novelty, inventive step (yes)"
"Compliance with Articles 83, 123(2) (yes)"

Decisions cited:
T 0002/81

Catchword:
-

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Case Number: T 0327/03 - 3.3.09

D E C I S I O N
of the Technical Board of Appeal 3.3.09
of 25 July 2006

Appellant: (Opponent)
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office orally announced 12 December 2002 and posted 23 January 2003 rejecting the opposition filed against European patent No. 0515096 pursuant to Article 102(2) EPC.

Composition of the Board:

Chairman: P. Kitzmantel
Members: W. Ehrenreich
M.-B. Tardo-Dino

Summary of Facts and Submissions

I. Mention of the grant of European patent No. 0 515 096 in the name of *E.I. Du Pont de Nemours and Company*, now *Dupont Teijin Films US Limited Partnership,* in respect of European patent application No. 92 304 360.8, filed on 14 May 1992, was announced on 6 October 1999.

The patent, entitled *"Polymeric film"*, was granted with ten claims, Claim 1 reading as follows:

"1. A composite film comprising a substrate layer of oriented polymeric material having on at least one surface thereof a heat-sealable layer having a thickness of at least 0.5 μm and being capable of forming a heat-seal bond without softening or melting the substrate layer, the heat-sealable layer comprising a particulate additive, the exposed surface of the heat-sealable layer comprising greater than 100 surface protrusions per mm^2 produced by the particulate additive, the surface protrusions having an average peak height in the range from 5 to 400 nm measured from the average level of the surface of the heat-sealable layer."

Claims 2 to 8 were dependent on Claim 1; Claim 9 was directed to a method of producing the film according to Claim 1 and Claim 10 pertained to the use of the film according to Claims 1 to 8 as a heat-sealable film.

II. Notice of opposition requesting revocation of the patent in its entirety on the grounds of Articles 100(a), (b) and (c) was filed by *Mitsubishi Polyester Film GmbH* on 6 July 2000.

The Opponent introduced, inter alia, the following documents:

D1 EP-A 0 379 190
D2 US-A 4 670 319
D3 EP-B 0 035 835
D4 Experimental Report in the form of a statutory declaration ("Eidesstattliche Erklärung") of Prof. Dr Peiffer dated 21 December 2001
D5 Experimental Report filed with the submission dated 12 November 2002, including Annexes 1 and 2

The citations D3 to D5 were submitted after the expiry of the opposition period.

Under the opposition grounds according to Article 100(a) EPC, the Opponent argued that the claimed subject-matter was not novel over a film described in example 21 of D1 and over films according to certain examples described in D3. In particular, as demonstrated in the experimental report D4, the film of example 21 in D1 possessed a surface protrusion concentration and an average peak height of the protrusions lying within the definitions of Claim 1 of the patent.
Moreover, the claimed film was considered not to be inventive over a combination of D1 with D2.

With regard to Article 100(b), the Opponent took the position that it was established by D5 that the claimed protrusion parameters could not be reliably determined by the method of measurement given in the patent specification.

Under Article 100(c) the Opponent argued that the range of "at least 0.5 μm" for the heat sealable layer had no basis in the application as filed.

III. By its decision orally announced on 12 December 2002 and issued in writing on 23 January 2003 the Opposition Division rejected the opposition.

The Opposition Division regarded the late filed documents D4 and D5 as contradictory and did not, therefore, admit them into the opposition proceedings.

Concerning the issue of novelty, it was held that the film according to example 21 of D1 did not explicitly disclose the surface topography as claimed and that the Opponent had failed to show that D3 disclosed a film meeting all requirements of the claimed invention.

With regard to the issue of inventive step it was argued that a skilled person starting from D1 as closest prior art would not arrive at the claimed invention by combining D1 with D3 because these two documents addressed two different problems, i.e. the film handling properties (D1) and the blocking properties (D3), the latter to be dealt with by the provision of surface protrusions with average peak heights outside the claimed range.

The Opposition Division also considered the claimed invention sufficiently disclosed within the meaning of Article 83 EPC, in particular having regard to the experimental report D4 showing that the surface topography of the film could be measured with the method indicated in the patent specification.

Since the film thickness was not limited by the original application, the formulation of the open-ended range "heat sealable layer having a thickness of at least 0.5 μm", the lower limit thereof being derived from a specifically disclosed thickness range, was in accordance with the principles laid down in T 2/81 (OJ EPO 1982, 394) and did not, therefore, contravene the requirements of Article 123(2) EPC.

IV. On 20 March 2003 the Opponent (hereinafter the Appellant) lodged an appeal against that decision and paid the prescribed fee on the same day. The Statement of the Grounds of Appeal was submitted on 30 May 2003.

The Appellant maintained its objections of lack of novelty, lack of inventive step, insufficiency of disclosure and added subject-matter raised in the first instance opposition proceedings and submitted an experimental report D6 concerning the reworking of films described in the examples C and 1 to 5 of D3 and the measurement of their surface topography.

V. With a letter dated 16 February 2004 the Patent Proprietor (Respondent) defended the patent as granted and filed sets of claims as a basis for auxiliary requests I to III. Further auxiliary requests IV to XII were filed with the letter dated 26 June 2006 (auxiliary requests IV to XI) and in the oral proceedings (auxiliary request XII), which took place on 25 July 2006. Additional documents were presented, inter alia an experimental report D11 and a declaration of Dr Mills with a letter dated 13 July 2006.

Claim 1 according to the auxiliary request I corresponds to Claim 1 as granted with the amendment that the range "greater than 100 surface protrusions per mm^2" was limited to "greater than 100 and up to 2000 surface protrusions per mm^2" (emphasis added).

Claim 1 of the auxiliary request II corresponds to Claim 1 as granted with the amendment that the thickness of the heat-sealable layer "of at least 0.5 μm" was limited to "from 0.5 to 50 μm".

In Claim 1 of the auxiliary request III, the heat-sealable layer was further specified by indicating that the particulate additive was "applied to the exposed surface of the heat sealable layer". This Claim reads as follows:

"1. A composite film comprising a substrate layer of oriented polymeric material having on at least one surface thereof a heat-sealable layer having a thickness of at least 0.5 μm and being capable of forming a heat-seal bond without softening or melting the substrate layer, the heat-sealable layer comprising a particulate additive applied to the exposed surface of the heat-sealable layer, the exposed surface of the heat-sealable layer comprising greater than 100 surface protrusions per mm^2 produced by the particulate additive, the surface protrusions having an average peak height in the range from 5 to 400 nm measured from the average level of the surface of the heat-sealable layer."

VI. The arguments of the Appellant provided orally and in written form may be summarised as follows:

(a) *Article 123 (2) EPC*

According to the decision T 2/81, the combination of the limiting values of a broader range and a subrange in order to define a new range was permissible under Article 123(2) EPC only if a clear and unequivocal disclosure existed for them in the application as filed.

This was not the case for the thickness range "at least 0.5 μm" to the extent indicated in Claim 1 of the main request. In the original claims the thickness of the heat sealable layer was not defined and in the description of the A2 publication only the value of 0.5 μm was quantified in column 4, line 26 as the lower limit of a particularly preferred range. The description, however, lacked any explicit information that the upper thickness value was unlimited. It was therefore not justified, in the interest of legal certainty, to construct a thickness range whose upper limiting value is unlimited.

(b) *Article 83 EPC*

The surface topography of the film according to the invention, defined in Claim 1 by the number of surface protrusions per mm^2 and the average peak height measured from the average level of the surface of the heat sealable layer, could not be reliably determined with the aid of the method of

measurement indicated in the patent specification. In particular, the experimental report D5 showed considerable deviations for the measured median summit height and summit densities of the surface protrusions depending, on the one hand, on the sample magnification and, on the other, on the kind of the sample carrier used during the measurement. The measurement indications in the patent specification, lacking information about these conditions, did therefore not enable a skilled person to carry out the invention in the sense of Article 83 EPC.

The experimental report D4, identifying concrete values for the protrusion concentration and the average peak height, was not in contradiction thereto because it represented a fair reworking of example 21 of D1 respecting at the same time the general conditions of measurement of the surface topography set out in the patent in suit (column 10, paragraph [0048] of the patent specification). It was not relevant in this respect that the information in the patent in suit was not sufficiently precise to clearly define all parameters necessary for a precise measurement.

(c) *Novelty*

The repetition of example 21 of D1 according to the afore-mentioned experimental report D4 resulted in a film having 2411 protrusions per mm^2 and a median peak height of 237.57 nm. These values were embraced by the respective ranges given in Claim 1 of the main request and the auxiliary request II.

Seven additional parameters corresponding to those listed in table 4 of D1 were measured on the reworked film and compared with the respective values indicated in this table for the film of example 21. Thereby, identity was found for six of the seven parameters.
It was evident from this experimental report that the film according to example 21 of D1 inherently possessed the surface topography of the films claimed according to the main request and the auxiliary request II. This film was thus novelty destroying for their subject-matter.

Reworking of the examples 1 to 5 and the comparative example C of D3 and measurement of the resulting films with respect to the surface protrusion concentration and the median peak height of the protrusions were performed in line with the measurement conditions of the patent in suit and the results were summarised in D6.
Because the silica particles of the type Gasil HP 21, Gasil 35 and Syloid 74 used in D3 were no longer available on the market, they were replaced by particle of the type Sylysia 300, 340 and 440 with a very similar particle specification (Table 1 of D6).
Under the assumption that the surface topography of the reworked films could reliably be measured with the measurement instructions given in the patent specification, D6 clearly demonstrated, by way of the results in Table 2 for the median summit height and the summit density, that the surface topography of the films according to the examples 3, 4 and 5 of D3 was inherently identical

with that of the films claimed in the main request and the auxiliary requests I and II.

The feature in Claim 1 of the auxiliary request III that the particulate additive was *"applied to the exposed surface of the heat-sealable layer"* was a process feature which could not be detected on the product itself. This feature, therefore, could not serve for distinguishing the claimed film from those described in D1 and D3 in which the particulate material had been incorporated into the polymeric material before coextruding it to form a multi-layer film and was evenly distributed within the surface layer.
Therefore, the novelty objections against the subject-matter of the main request and the auxiliary requests I and II also applied to the film according to the auxiliary request III.

(d) *Inventive step*

The problem to be solved by the claimed invention was the provision of films with good handling properties.
D1, which was representative of the closest prior art, also taught the provision of composite films with enhanced slipperiness and, hence, good handling properties. According to this prior art, the problem was solved by incorporating into the heat-sealing layer fine particles. Differently from the claimed invention, however, the particles in D1 were defined by reference to their mean diameter, which should be substantially smaller than the thickness of the heat-sealing layer.

It was, however, obvious for a skilled person being aware of D2 to influence the surface properties of a composite film - and in particular its slipperiness - via the protrusion density and the height of the protrusions in a slippable layer. Although D2 pertained to magnetic recording tapes and not to films with particulate materials in a heat-sealable layer, the problems of enhancement of the slipping properties were comparable.

VII. The arguments of the Respondent were as follows:

(a) *Article 123 (2) EPC*

The fact that no specific thickness values for the heat-sealable layer were defined in the original claims, and that the ranges for the thickness values disclosed in column 4, lines 24 to 26 of the A2 publication were indicated as preferred, implied that the layer thickness, in its broadest aspect, was open-ended. Therefore, it was admissible under Article 123(2) EPC and would not contravene the principles developed in T 2/81 to construct an open-ended thickness range whose lower limit was the value of 0.5 μm taken from the preferred thickness range disclosed in column 4, line 26.
Despite this, the skilled person would not consider the thickness of the heat-sealable layer to be unlimited in practical terms, which of course involved economic and technical constraints.

Furthermore, the admissibility of the amendment under Article 123(2) EPC was made clear by

applying the so-called novelty test, because a fictitious prior art disclosing the open-ended thickness range as claimed in the main request would certainly be novelty-destroying for the subject-matter of the application as filed.

(b) *Article 83 EPC*

The Appellant's objections in this respect were unjustified.

Firstly, D4 clearly showed that Prof. Peiffer took measurements on films described in D1 on the basis of the information indicated in the patent specification and arrived at unambiguous results.

Secondly, if the Appellant's objections of insufficiency of disclosure with respect to the serious deviations of the peak heights measured in D5 at different sample magnifications were well-founded, a trend for the measured peak heights depending on these magnifications should be apparent. Since the results in D5 showed random results rather than such a trend, the Appellant's experimental report D5 was not apt to prove the alleged insufficiency of disclosure.

Thirdly, a skilled person clearly knew that the method for measuring the surface roughness should be performed in such a way that any influence on the surface topography induced by the sample carrier was eliminated, and he would therefore select the appropriate support for the film on the basis of his common knowledge. Use of inadequate

supports according to D5 was therefore not within the bounds of common practice.

(c) *Novelty*

The experimental report D4 did not represent a faithful repetition of example 21 of D1. This was evident from the fact that the friction coefficient between the heat-sealable layer and the base layer measured at the reworked film (0.54) was different from the corresponding friction coefficient of the film of example 21, which, according to the table 4 of D1, amounted to 0.45. Because, as shown by the experimental report D11, the surface topography of the heat-sealable layer was strongly influenced by the surface texture of the base layer, the different friction coefficients indicated different surface textures for the reworked films and the film of example 1 of D1, which were probably caused by differences in the base layers. It was therefore not established by D4 that example 21 of D1 disclosed a film which was novelty-destroying for the subject-matter of the main request and the auxiliary request II.

In a similar manner, D6 did not constitute a faithful reworking of the examples of D3 because D6 deviated from the disclosure in D3 in that for the reworking experiment the silica particles Gasil and Syloid had been replaced by particles of the Sylysia type.
In particular, the allegedly novelty-destroying examples 3 to 5 of D3 used a mixture of two particle types (Gasil HP21 + Syloid 74 (examples 3,

4) and Gasil HP21 + Gasil 35 (example 5) which were replaced according to D6 by the mixtures Sylysia 300 + Sylysia 440 in examples 3, 4 and Sylysia 300 + Sylysia 340 in example 5.
The declaration of Dr Mills, however, clearly indicated that Sylysia particles had a different surface geometry, particle size distribution and porosity which considerably influenced the surface properties of the film. The reworked films according to D6 could therefore not prove the novelty-anticipating properties of the films according to D3 for the subject-matter of the main request and the auxiliary requests I and II.

The process feature in Claim 1 of the auxiliary request III, namely that the particulate additive was applied to the exposed surface of the heat-sealable layer, made the claimed film novel over D1 and D3.
The application of the particles onto the film surface via the preferred method of dispersion in an organic or aqueous solution or in the dry state by electrostatic deposition as disclosed in column 6, paragraph [0026] of the patent specification, caused different physical properties of the film surface than by incorporation of the particulate material into the polymeric material before extrusion to form the film as taught in D1 and D3. This product-by-process feature would lead to a concentration gradient with a higher particle concentration on the layer surface and a decrease of the concentration towards the interior of the layer.

This made the claimed film distinguishable from the films of D1 and D3 with an even distribution of the particulate material throughout the heat-sealable layer.

(d) *Inventive step*

The claimed invention was also inventive vis à vis D1 in combination with D2 because this document related to magnetic recording media which did not contain a heat sealable layer and, therefore, could not contribute to the solution of the problem posed, i.e. the provision of heat-sealable films with good handling and optical properties.

VIII. The Appellant requested that the decision under appeal be set aside and the patent be revoked.

IX. The Respondent requested that the appeal be dismissed and the patent be maintained as granted or alternatively on the basis of the claims of any of the auxiliary requests I to III submitted with the letter dated 16 February 2004, or IV to XI/XII submitted with the letter of 26 June 2006/during the oral proceedings.

The Respondent abandoned its request for a referral to the Enlarged Board which had been filed in its written submissions of 26 June 2006.

Reasons for the Decision

1. The appeal is admissible.

2. Admission of the documents D4 and D5 into the appeal proceedings.

The admissibility of the documents D4 and D5, which had been disregarded in the opposition proceedings, was no longer questioned by the Respondent during the appeal proceedings. Thus, given their apparent relevance, the Board admits them.

Main Request and Auxiliary Request II

3. Novelty

In Claims 1 of the main request and the auxiliary request II the surface topography of the heat sealable layer is characterised by a particle concentration of greater than 100 surface protrusions per mm^2 and by the average peak height of the surface protrusions in the range from 5 to 400 nm, measured from the average level of the surface of the heat-sealable layer.

When comparing the preparation instructions given in example 21 of D1 with the measures of manufacture applied according to the sections of the experimental report D4: "Herstellung eines Copolyesters VII" and "Herstellung der coextrudierten Folie", the Board has no doubt that the reworking conditions in D4 correspond to the instructions in example 21 of D1.

In the Board's judgment, the Respondent's argument is not convincing (point VII (c) above) that the report D4 did not represent a faithful repetition of the example 21 of D1 because the coefficient of friction between the heat-sealable layer and the base layer measured in D4 differed from the corresponding value indicated in table 4 of D1.

As put forward by the Appellant in the oral proceedings and as confirmed by the experimental report D4, six of the seven parameters measured on the film prepared according to D4 are identical with those depicted in table 4 of D1 for the film of example 21 and only the above-mentioned friction coefficient value deviates somewhat. This high degree of identity of the film parameters implies an extremely similar film structure. The Board is satisfied by the explanation of the Appellant that the minor deviation of the friction coefficient - which is anyway only slightly outside the standard deviation as confirmed by the Appellant in the oral proceedings - very likely has its origin in a slightly differing surface texture (e.g. the presence of "pinning bubbles" caused by penetration of air into the extrusion equipment and/or strips on the extruded film layer caused by small irregularities of the extrusion die). In spite of such minor processing defects, the processing conditions used according to D4 are still fully within the teaching of D1. In view of theses circumstances, the Board concurs with the Appellant's position that the reworking of example 21 of D1 as reported in D4 can be considered as a faithful repetition of this example.

According to D4, the surface topography of the reworked film was measured under the conditions given in column 10, paragraph [0048] of the description of the patent in suit and the values 2411 per mm^2 for the number of surface protrusions and 237.57 nm for the average peak height were found. These values fall within the ranges defined in Claims 1 of the main request and the auxiliary request II. It was furthermore admitted by the Respondent in the oral proceedings that a film with these values anticipated the novelty of the claimed film provided there was a fair reworking of example 21 of D1.

For the above reasons and because, as was not contested by the Respondent, the other compositional requirements defined in Claims 1 of the main request and auxiliary request II are met, the film of example 21 of D1 is novelty destroying for the claimed subject-matter.

The main request and the auxiliary request II are therefore not allowable.

Auxiliary Request I

4. Novelty

According to Claim 1 of the auxiliary request I and in contrast to the above requests, the number of the surface protrusions in the heat-sealable layer is limited to 2000. This upper limit is below the corresponding value measured according to D4 for the reworked film of example 21 of D1.

The Appellant has reworked the composite films of the examples C and 1 to 5 of D3 and summarized the results in the experimental report D6. According to this report, the median summit heights of the surface protrusions and summit densities per mm^2 were determined under the conditions given in the patent specification and at various sample magnifications (5x, 10x, 25x), the samples being mounted on a tension ring, a sample arrangement considered by the Respondent to be adequate for these measurements. Table 2 of this report shows that all values determined for the films of the reworked examples 3, 4 and 5 lie within the claimed range. As uncontested by the Respondent, the other claimed compositional requirements are also fulfilled.

As far as D6 shows that the mixtures of the particulate additive Gasil HP21/Syloid 74 used in examples 3 and 4 and Gasil HP 21/Gasil 35 used in example 5 of D3 were respectively replaced by Sylysia 300/Sylysia 440 and Sylysia 300/Sylysia 340, the Respondent argued (point VII (c)) that this replacement by the Sylysia-type particles were tantamount to an unfair reworking of the examples of D3 because differences in surface geometry, particle size distribution and porosity of these particles - as compared to those used according to D3 - influenced the surface texture of the reworked film.

This argument is not convincing since although, on the basis of the available information, such deviations cannot be totally ruled out, they are not decisive in the present case. This is because, first, they do not exceed the disclosure of D3, where the only important particle criterion mentioned is the average particle

size, which according to Claim 1 has to be greater than the thickness of the secondary layer. Second, their possible influence on the measured results is not such that deviations are to be expected going beyond the protrusion specifications of present Claim 1, which moreover is not restricted to any surface geometry, particle size distribution or porosity of the particulate additive.

The Appellant's argument that some of the particles used in D3 were not available on the market anymore and therefore that is was appropriate to use other particles instead with a particle size as close as possible to that of the particles in the examples of D3 is therefore accepted by the Board.
This all the more so as the test report D6 shows in columns 2 to 4 of the table 1 at page 2, that the mixtures of the replacement particles Sylysia 300/440 used for the repetition of examples 3 and 4 and Sylysia 300/340 for example 5 fulfil the particle size/thickness requirement in Claim 1 of D3 with only a minor particle size deviation from the particle sizes of Gasil and Syloid.
Therefore, the Board is satisfied that D6 represents a sufficiently faithful repetition of the examples 3 to 5 within the framework of the teaching in D3.

For the above reasons, D6 demonstrates that the examples 3 to 5 of D3 anticipate the novelty of the films claimed in the auxiliary request I.

The auxiliary request I is therefore not allowable.

Auxiliary Request III

5. Article 123(2) EPC

Claim 1 of the auxiliary request III defines the thickness of the heat-sealable layer as *"at least 0.5 μm"*. This range was not expressly mentioned in the application as filed.

In the original Claim 1 the thickness of the heat-sealable layer is not defined. Preferred thickness ranges, however, are found in the description of the application (cf. A2-publication, column 4, lines 24 to 26), wherein an especially preferred range formed by the claimed value of 0.5 μm and 5 μm as upper value is disclosed.
The fact that all ranges are indicated as preferred means that a skilled person is not limited to work within these ranges but implies that there is also room for exceeding the preferred ranges dependent on technical and practical aspects. Therefore, formation of a new range limiting the lower end of the layer thickness to 0.5 μm but leaving the upper end open does not contravene the principles developed in T 2/81 and does not exceed the original disclosure.

The requirements of Article 123(2) EPC are therefore met.

6. *Sufficiency of disclosure - Article 83 EPC*

In the Board's judgment, the skilled person can also carry out the invention on the basis of his general technical knowledge.

It is without any doubt possible to produce a composite polymeric film with a substrate layer and a heat-sealable layer comprising a particulate additive in a thickness as claimed in Claim 1. The Board has also no doubt that a protrusion concentration per mm^2 and an average peak height in the heat-sealable layer can be determined on the basis of the measurement method indicated in paragraph [0048] of the patent specification. The Appellant has done this itself as demonstrated by the test reports D4 and D6 on films of the prior art D1 and D3.
The Appellant's argument with respect to D5 that certain essential criteria, such as the sample magnification and the kind of the sample carrier, were not defined in the patent, is not decisive in this context. Absence of these criteria in the patent specification merely implies that a skilled person is free to choose these conditions when measuring the surface properties with the consequence that, depending on the selected magnification and carrier, a broader spectrum of films falls within the scope of the claims.

For these reasons, the invention claimed according to the auxiliary request III meets the requirements of Article 83 EPC.

7. Novelty

According to Claim 1 of the auxiliary request III, the particulate additive is *"applied to the exposed surface of the heat-sealable layer"*. In this context, the patent specification states in column 6, paragraph [0026] that the particulate material can be applied as

an aqueous dispersion, a dispersion in organic liquids, by electrostatic deposition or from a fluidised bed.

The pertinent documents for the assessment of novelty are again D1 and D3. According to these documents, the particulate additive is either added during the polymerization of the monomers to form the polyester or added to the polymerized polyester material. In both cases, the particles are added before the polymeric material is coextruded (D1, page 8, line 54 to page 9, line 1 and page 3, lines 49/50; D3, column 5, lines 48 to 65 and column 8, lines 16 to 24), which leads to an even distribution of the particles throughout the coextruded heat-sealable layer (D1, page 8, lines 54 to page 9, line 1: methods (1) and (2) and example 21; D3, column 6, lines 34 to 40 and Claim 13.

In assessing novelty of the film claimed according to the auxiliary request III, it has therefore to be considered whether the process feature in Claim 1, namely that the particulate additive is applied to the exposed surface of the heat-sealable layer, makes the resulting film distinguishable from the films obtained according to the teaching in D1 and D3.
The Board accepts that this is the case. A subsequent application of particles onto a coextruded polymeric surface of a film by way of particle dispersions, electrostatic deposition or from a fluidised bed as taught in the patent normally leads to a concentration gradient with a higher particle concentration directly on the surface and a decreasing concentration towards the interior of the layer. This view is corroborated by the passage in column 7, lines 13 to 17 of the patent specification, which says that *"the particulate*

additive preferably sinks just below the polymer surface ...".

It is unrealistic to think that under these process conditions an even particle distribution throughout the layer as in D1 or D3 will be obtained, unless additional specific process measures are applied, for example softening or melting of the polymer allowing equalizing the particle distribution throughout the cross section, these not being measures which are taught anywhere in the patent.

The Respondent's argument put forward in the oral proceedings with reference to column 7, lines 44 to 50 of the patent specification that this process feature according to the auxiliary request III causes verifiable physical characteristics of the film which made it distinguishable over the films of D1 and D3 is therefore accepted.

Because - as was not contested by the Parties - the other documents do not bring novelty into question, the film is novel over the cited prior art.

8. Inventive step

The Board accepts the Respondent's argument that the film claimed in the auxiliary request III is inventive. Because the question of inventive step was no longer in dispute by the Parties in the oral proceedings, this issue is only briefly discussed.

D1, pertaining to heat-sealable films with good slipping properties, may be regarded as the closest prior art.
The claimed film differs from this prior art in an uneven distribution of the particulate material in the heat-sealable layer.
The problem to be solved by the invention is seen in providing an alternative heat-sealable film with good handling properties.

The solution to this problem is not obvious when combining D1 with D2.
D2 discloses polyester films for magnetic recording media which have no heat-sealable layers. According to column 5, lines 28 to 33 of D2, an easily slippable layer containing fine particles is applied onto the substrate layer in the form of a coating composition composed of fine particles dispersed in an organic polymeric binder material. This measure, however, leads to a layer in the form of a polymeric matrix in which the particles are evenly distributed and cannot render obvious the deliberate, uneven particle distribution resulting from the process feature introduced into Claim 1 of auxiliary request III.

9. For the reasons set out in points 5 to 8 it is concluded that the opposition grounds according to Articles 100(a) to (c) do not prejudice maintenance of the patent on the basis of auxiliary request III.

The necessity to discuss the subsequent auxiliary requests does therefore not arise.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the Opposition Division with the order to maintain the patent on the basis of Claims 1 to 10 of the auxiliary request III filed with the letter of 16 February 2004 after any necessary consequential amendment of the description.

The Registrar The Chairman

G. Röhn P. Kitzmantel