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D E C I S I O N
of 26 May 2004

Case Number: T 0080/02 - 3.3.3

Application Number: 88111360.9

Publication Number: 0300372

IPC: C08J 5/18

Language of the proceedings: EN

Title of invention:

Minute-cellular polyester film provided with coating

Patentee:

Mitsubishi Polyester Film Corporation

Opponent:

Toyo Boseki Kabushiki Kaisha
Imperial Chemical Industries PLC

Headword:

-

Relevant legal provisions:

EPC Art. 56, 84, 123(2), 123(3)

Keyword:

"Inventive step (main request) - no"
"Inventive step (auxiliary request) - no"

Decisions cited:

T 0095/83, T 0939/92

Catchword:

-



Case Number: T 0080/02 - 3.3.3

D E C I S I O N
of the Technical Board of Appeal 3.3.3
of 26 May 2004

Appellant: Toyo Boseki Kabushiki Kaisha
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Respondent: Mitsubishi Polyester Film Corporation
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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted
23 November 2001 concerning maintenance of
European patent No. 0300372 in amended form.

Composition of the Board:

Chairman: P. Kitzmantel
Members: C. Idez
E. Dufrasne

Summary of Facts and Submissions

- I. The mention of the grant of European Patent 0 300 372 in respect of European patent application No. 88 111 360.9 filed on 14 July 1988 and claiming the priority of 15 July 1987 of an earlier application in Japan (JP 176237/87), was announced on 21 September 1994 (Bulletin 94/38) on the basis of 3 claims.

Claim 1 read as follows:

"A film comprising a uniaxially or biaxially stretched minute-cellular polyester film having an apparent specific gravity in the range of 0.4 to 1.3 and an opacifying power of not less than 0.2, and a coating applied to either or both of the surfaces of said polyester film, said coating comprising at least one compound selected from the group consisting of thermoplastic polyesters soluble in organic solvents: water-dispersible thermoplastic polyesters containing sulfonates: alkyd type polyesters: acryl modified polyesters; polyurethane resins soluble in organic solvents or dispersible in water; polyisocyanate compounds; terminal-blocked polyurethane resins; vinyl type resins soluble in organic solvents or dispersible in water; epoxy type resins; silicon type resins; urea type resins; and melamine type resins; and 0.01 to 10% by weight, based on the solid component of said coating, of at least one surfactant selected from the group consisting of anionic surfactants, cationic surfactants, amphoteric surfactants; and nonionic surfactants."

Dependent Claim 2 related to preferred amounts of surfactants in the coating composition and dependent

Claim 3 was directed to specific embodiments of the polyester film.

- II. Notices of Opposition were filed on 10 June 1995 by Toyo Boseki Kabushiki Kaisha (Opponent 1) and on 19 June 1995 by ICI Materials (Opponent 2), respectively, both parties requesting the revocation of the patent in its entirety on the grounds of lack of novelty, including an objection of public prior use, and lack of inventive step.

The objections were based *inter alia* on the following documents:

D1: GB-A-1 415 686, and

D12: Shell Chemicals Technical Bulletin ICS/69/28 "Teepol 610".

- III. By an interlocutory decision issued in writing on 24 February 1998, the Opposition Division held that the grounds for opposition did not prejudice the maintenance of the patent in amended form on the basis of Claims 1 to 2 filed by the Patentee with its letter dated 16 June 1997, the amendments consisting in (a) the limitation to 0.1 to 3% by weight of the amount of surfactant and the indication that the thickness of the coating was 0.01 to 0.5 μm in Claim 1, (b) the deletion of granted Claim 2 and (c) the indication that the intrinsic viscosity of the polyester was not less than 0.4 in granted Claim 3.

- IV. On 25 April 1998 an appeal was lodged by the Appellant (Opponent 1) against this decision.

In the Statements of Grounds of Appeal filed on 25 June 1998, the objection of lack of novelty over D1 was maintained. Inventive step was also denied on the basis of the combination of D1 with document D21 (JP-A-59 174 323), a new citation considered in the form of an English translation.

V. In its decision T 438/98 of 12 October 2000 the Board of Appeal considered that the subject-matter of Claims 1 and 2 submitted by the Patentee with its letter dated 16 June 1997 was novel and that document D21 was sufficiently relevant to be admitted into the proceedings. It thus decided to set aside the decision under appeal and to remit the case to the first instance for further prosecution.

VI. By an interlocutory decision issued in writing on 23 November 2001, the Opposition Division held that the ground of lack of inventive step did not prejudice the maintenance of the patent in amended form on the basis of Claims 1 to 2 filed by the Patentee with its letter dated 16 June 1997.

According to the decision document D1 was considered as the closest state of the art. The decision further stated that, although D1 and the patent in suit related to the field of opaque voided polyester films, their objectives were different. While D1 was concerned with the selection of additives in the polyethylene terephthalate, with the forming conditions in order to obtain an opaque and voided film, and with the provision of intermediate layers in order to improve the adhesion of the photosensitive layer, the patent in

suit related to the problem of providing coated films having in combination:
an excellent whiteness,
excellent opacifying properties,
excellent coating properties (i.e. uniformity, absence of cissing) and,
excellent adhesion properties in particular to printing inks.

This problem was solved by incorporation of a low amount of surfactant in the coating composition and by applying the coating in a specific thickness.

According to the decision the similarities of the composition of D1 comprising 3% of a surfactant represented an accidental coincidence rather than a disclosure detrimental to the inventive step of the subject-matter of the patent in suit, since D1 did not teach that the presence of a low amount of surfactant would improve the coating and adhesion properties of the coating. In that respect, the importance of the amount of surfactant had been demonstrated in Table 1 of the patent in suit and in the additional experimental results submitted with the letter of 18 January 1996.

The decision further held that document D21 was concerned with transparent, coated polyester films. According to the decision, although D21 dealt with materials having good adhesion to laminating materials such as gelatine or printing inks, the knowledge obtained with transparent coated polyester films could not be transferred to opaque voided polyester films. Furthermore the criticality of the amount of surfactant and the thickness of the coating could not be derived from D21. In particular, the examples of D21 showed

that the materials being free of surfactant had similar properties in comparison to surfactant containing materials.

Thus, the Opposition Division came to the conclusion that D1 or the combination of D21 with D1 did not render obvious the subject-matter of the contested patent.

VII. A Notice of Appeal was filed on 19 January 2002 by the Appellant (Opponent I). With the Statement of Grounds of Appeal filed on 22 March 2002, the Appellant submitted the following documents:

A declaration of Mr Christopher Deverell dated 21 March 2002;

An annex which was a summary of published patent applications naming the inventor of the opposed patent in a time period around the priority date of the opposed patent in suit.

The Appellant argued essentially as follows:

(i) A person skilled in the art of opaque voided polyester films would also be an expert in the field of polyester films in general.

(ii) In that respect the Annex showed that the inventors of the opposed patent were also active in the field of transparent polyesters.

(iii) From the declaration of Mr Deverell it was further evident that the practitioner did not distinguish between transparent and voided polyester films.

(iv) The skilled person in the present case would be a practitioner in the field of polyester films which was aware of what was the common knowledge in that field at the priority date.

(v) Thus D1 and D21 belonged to the same field of technology.

(vi) The whiteness and the opacifying properties were inherent properties of the films of D1.

(vii) The technical results allegedly achieved by the opposed patent in view of D1 were the provision of coated films having excellent adhesive properties in particular to printing inks, and good coating properties (uniformity absence of cissing).

(viii) Thus, starting from D1 the technical problem was seen as imparting adhesion to the opaque film and obtaining good coating properties.

(ix) When faced with this problem, the person skilled in the art would have been prompted towards the teaching of D21 because it related to polyester films rendering them adhesive to printing inks and focussed on obtaining a good coatability.

(x) The coating of Example 4 of D21 had a thickness of 0.45 μm and comprised a surfactant in an amount of 0.5% by weight.

(xi) This coating exhibited the best rating in terms of adhesion to printing inks and a superior uniformity and appearance.

(xii) While it was correct as stated in the decision under appeal that no hint to opaque voided films could be found in D21, the colour of the polyester surface would not have any effect on its coatability. The surface of polyester film consisted of polyester molecules, irrespective of its internal modification which might bring any colour.

(xiii) The surface roughness of the polyester film should not be taken into account, since such feature was lacking in Claim 1 of the opposed patent.

(xiv) The Examples of the patent in suit did not demonstrate that the addition of a surfactant improved the adhesion of printing inks.

(xv) Thus, the addition or absence of a surfactant had no effect on the adhesion of the printing ink. It further belonged to the general knowledge that a surfactant improved the wettability of a surface and thus its coatability.

(xvi) There was no link between the opacity or whiteness of an opaque film and the presence or not of a surfactant in a coating.

(xvii) Thus, it would not have required inventive skill for the skilled person to identify the best example in D21 and apply it for the same purpose for which it had been disclosed, to coat the polyester film surface of

an opaque film of reference D1 to render it adhesive, in particular to printing inks.

VIII. With its letter dated 28 August 2002, the Respondent submitted a set of 2 claims as first auxiliary request which corresponded to the auxiliary request filed with its letter of 23 August 2001. Claim 1 thereof differs from Claim 1 of set of claims submitted with letter of 16 June 1997 by the fact that the vinyl type resins soluble in organic solvents or dispersible in water have been restricted to vinyl chloride-vinyl acetate type, vinylidene chloride type and vinyl acetate type. Claim 2 corresponds to Claim 2 of the set of claims submitted with letter of 16 June 1997.

The Respondent argued essentially as follows:

(i) The technical problem underlying the patent in suit was to provide polyester films having:
an excellent whiteness,
excellent opacifying properties,
excellent coating properties (i.e. uniformity, absence of cissing) and,
excellent adhesion properties in particular to printing inks.

(ii) This problem had been solved by using a coating comprising between 0.1 and 3% by weight of a surfactant, and by applying the coating in a thickness between 0.01 and 0.5 μm .

(iii) The coating composition of D1 comprising 3% of a surfactant represented an accidental coincidence.

(iv) There was no teaching in D1 relating to a technical effect linked with the incorporation of a surfactant.

(v) D1 taught the improvement of the adhesion of photosensitive layers. In Examples 6 to 14 of D1, the photosensitive layer was directly applied to the opaque films.

(vi) D21 related to transparent films. Example 4 thereof represented an accidental coincidence since D21 gave no information as to the effect of the fluorine surfactant.

(vii) The base materials of D1 and D21 had different morphology. An opaque voided film would exhibit a much higher surface roughness.

(viii) Even if one combined the teaching of D1 and D21, one would not come to the claimed subject-matter because Example 4 did not show any improvement of adhesion and of coatability. In that respect the submission of the Appellant that the coatability of Example 4 was superior was based on an inaccurate translation of the Japanese document.

(ix) Thus, neither D1 nor the combination of D1 and D21 would render the claimed subject-matter obvious.

IX. In its letter dated 5 February 2003, the Appellant contradicted the findings of the Respondent and relied essentially on its arguments presented in the Statement of Grounds of Appeal.

X. In its letter dated 26 April 2004, Opponent II argued essentially as follows:

(i) It was not credible that the advantages relied on by the Patentee were obtained over the full scope of the claims. The experimental data submitted by the Patentee concerned an extremely narrow range of materials, although the claims covered a vast range of coating polymers and did not limit the nature of the surfactant.

(ii) The surface roughness of the films might be of the order of 0.5 μm , i.e. 50 times more than the thickness of the thinnest coating. It was therefore not credible that such a coating would be uniform and free of cissing.

(iii) Claim 1 contemplated the use of aqueous dispersions. These dispersions had a particle size of 50 to 150 nm. It was therefore not clear how a uniform coating having a thickness of 10 nm could be obtained on a film having a roughness of 500 nm.

XI. Oral Proceedings were held on 26 May 2004.

(i) While essentially relying on the arguments presented in their written submissions, the Parties presented further arguments concerning the assessment of inventive step of the main request which may be summarized as follows:

(i.1) By the Appellant:

(i.1.1) There was no doubt that D1 represented the closest state of the art.

(i.1.2) Starting from D1 the technical problem was to provide polyesters films having good adhesive properties.

(i.1.3) According to a specific embodiment of the patent in suit the problem was solved by coating the opaque voided polyester film with a coating having a thickness of 0.01 to 0.5 μm made of coating composition comprising a polyester containing sulfonate groups and a surfactant.

(i.1.4) D21 was concerned with the problem of improving the adhesive properties of transparent polyester films but belonged to the same field of technology as D1 which related to opaque films.

(i.1.5) Example 4 of D21 was the example giving the best results in terms of coatability and adhesion properties.

(i.1.6) Thus, the skilled person would have combined D1 with the teaching of Example 4 of D21.

(i.1.7) It was clear from the comparison between Example 2 and Comparative Example 1 of the patent in suit that the presence of a surfactant was not linked with the improvement of the adhesion properties.

(i.1.8) As stated in the patent in suit (cf. page 6, lines 25 to 27), the surfactant improved the wettability of the polyester surface and the adhesion of the coating to the polyester surface. This was the usual application of a surfactant.

(i.1.9) It would also be possible to start from the specific example of D1 which related to a coating composition comprising a surfactant. This coating composition improved the adhesion of the photosensitive layer to the polyester film.

(i.1.10) The only feature not disclosed by this example was the thickness of the coating. It was however evident that the thickness of the coating in this example was within a workable range for the skilled person.

(i.1.11) Thus, selecting the thickness of the coating adapted to a specific need represented a mere optimisation of this parameter.

(i.1.12) Thus, both D1 alone or the combination of D1 with D21 would render the claimed subject-matter obvious.

(i.2) By Opponent 2

(i.2.1) The specific example of D1 in which a surfactant was used in the coating composition did not represent an accidental coincidence.

(i.2.2) The patent in suit was not limited to the provision of polyester films having adhesion to printing inks.

(i.2.3) The only difference between this specific example and the patent in suit was the selection of the thickness range of the coating.

(i.2.4) No specific effect had been shown in the patent in suit in relation to the selection of this range. This was not derivable from the patent in suit (cf. page 7, lines 14 to 17).

(i.2.5) The experimental data submitted by the Patentee with its letter of 5 December 1997, which showed that the adhesion and the coating properties depended on the thickness of the coating, were very specific.

(i.2.6) Furthermore, the experimental data submitted by the Appellant with its letter of 10 December 1997 showed that the thickness of the coating, which was based on a different coating composition than that used in the experiments of the Patentee submitted with letter of 5 December 1997, did not affect the adhesive properties and the coating properties.

(i.2.7) It was evident in view of the very broad definition of the coating materials which encompassed highly hydrophilic materials and highly hydrophobic materials such as silicone resins that the claimed effect of adhesion to printing inks would not be obtained within the whole scope of Claim 1 of the patent in suit. Furthermore, it had not been shown that this effect would be obtained for opaque polyester

films having a very high surface roughness of up to 300 μm (cf. page 4, lines 12 to 14). In that respect the onus of the proof was on the Patentee. Reference was made to the decision T 939/92 (OJ EPO, 1996, 309).

(i.3) By the Respondent:

(i.3.1) D1 did not refer to the adhesion to printing inks.

(i.3.2) The coating layer in D1 was generally used as heat sealing layer; i.e. it would not be further coated.

(i.3.3) The specific example of D1 relied on by the Appellant and the Opponent 2 disclosed the presence of an emulsifying agent. Furthermore this example only dealt with the application of a photosensitive layer on the polyester film.

(i.3.4) D1 was totally silent on the effect of this component. Thus, this example could not represent a starting point for the claimed invention.

(i.3.5) Example 4 of D21 was not the best example in terms of adhesive properties to printing inks. The same results were achieved with the coating composition of Example 1 which contained no surfactant.

(i.3.6) The experimental data submitted with the letter of 18 January 1996 showed the influence of the surfactant on the adhesive properties of the coating.

(i.3.7) The selection of the thickness of the coating was purposive as shown by the experimental data submitted with letter of 5 December 1997.

(i.3.8) The decision T 939/92 concerned an *ex-parte* case and was not relevant in the present opposition proceedings. Thus, the burden of the proof was on the Opponents.

(i.3.9) The experimental results submitted by the Opponent 1 with its letter dated 10 December 1997 appeared to be in contradiction to the experimental result submitted by the Patentee. In accordance with the case law of the Board's of Appeal, the Patent proprietor should be given the benefit of the doubt.

(ii) Following preliminary considerations of the Board in view of the submissions of the Opponents concerning the question as to whether the effects relied on by the Patentee, i.e. improved adhesion to printing inks and improved coatability, would be obtained within the whole scope of Claim 1, the Respondent argued essentially that this objection had been made at a very late stage, i.e. in the letter of Opponent 2 of 26 April 2004, and that it should therefore be allowed to submit a further auxiliary request in response to this objection, this auxiliary request being limited to the use of polyester resins as compound of the coating composition.

(iii) Concerning the auxiliary request filed with letter of 23 August 2001, all the Parties relied only on the arguments presented in respect of the main request.

XII. The Appellant (Opponent 1) and Opponent 2 requested that the decision of the Opposition Division be set aside and the European patent No. 0 300 372 be revoked.

The Respondent requested that the appeal be dismissed and the patent be maintained or alternatively, that the decision be set aside and that a patent be granted based on the auxiliary request submitted with letter of 23 August 2001.

Reasons for the Decision

1. The appeal is admissible.
2. *Procedural matter*
 - 2.1 As indicated above in paragraph XI (ii), the Respondent requested at the oral proceedings before the Board to be allowed to submit a further auxiliary request in which the compound used in the coating composition would have been restricted to polyester resins.
 - 2.2 According to the Respondent, the filing of this new set of claims was justified in view of the late submissions of Opponent 2 in its letter of 26 April 2004, according to which the technical effect of the claimed invention (i.e. adhesion to printing ink, improved coatability) could not be obtained on the whole scope of the claimed invention.
 - 2.3 However, it is noted by the Board that an objection directed to the same deficiency had been raised by

Opponent 1 in its letter dated 5 September 2001 (cf. page 3, lines 3 to 28), i.e. more than 2 years prior to the oral proceedings, so that the Respondent had ample opportunity to submit an amended set of claims in response to this objection in good time before the oral proceedings.

- 2.4 Thus, in the Board's view there is no justification for the filing of such an auxiliary request at such a late stage of the proceedings, i.e. during the oral proceedings before the Board. Consequently, the Board decided not to consider this auxiliary request (cf. also T 95/83 OJ EPO, 1985, 75).

Main request

3. *Inventive step*

- 3.1 The patent in suit is concerned with opaque voided polyester films provided with a coating and having adhesive properties.
- 3.2 Such polyesters films are known from document D1, which the Board, in common with the Parties and the Opposition Division, regards as the closest state of the art.
- 3.3 Document D1 concerns a process for the production of opaque and voided molecularly oriented and heat set linear polyester films, which comprises (i) forming a loosely blended mixture of particles of a linear polyester with from 3 to 25% by weight of a homopolymer or copolymer of ethylene or propylene, (ii) extruding the blend as a film, (iii) quenching and biaxially

orienting the film by stretching it in mutually perpendicular directions, and (iv) heat setting the film (cf. Claim 1). The films may be coated at some stage before orientation or preferably between the two stages of biaxial orientation. Suitable coatings include for example vinylidene chloride copolymers (cf. page 3, lines 51 to 60).

3.4 These films have a paper-like texture which makes them suitable as paper substitutes for photographic prints, e.g. as supports carrying a photosensitive layer. In particular when the films are used as support for a photosensitive layer one or more coating layers are provided to enhance the adhesion of the photosensitive layer to the film surface (cf. page 3, lines 43 to 110).

3.5 According to Examples 1 to 5 polyethylene terephthalate granules are tumble blended with 5% by weight of granular polypropylene, the resulting blends are then extruded in the form of a film and rapidly quenched to render the polyester component amorphous, the films are subsequently stretched in both the machine direction and the transverse direction, and finally heat set under constant dimensions. The films so obtained are coated firstly with a vinylidene chloride copolymer, secondly with a gelatinous subbing layer and finally overcoated with a gelatinous light sensitive silver bromide emulsion (cf. page 4, lines 72 to 75; page 5, lines 2 to 8).

3.6 According to an alternative embodiment (cf. page 5, lines 12 to 31) the opaque films obtained in Examples 1 to 5 are first coated (off-line coating) with a subbing layer comprising a mixture of a butadiene copolymer and

gelatin, then overcoated with a gelatinous silver bromide emulsion, the subbing composition comprising 10 parts of butadiene/styrene/itaconic acid copolymer, 1 part of gelatin, and 1 part of an active ionic emulsifier available commercially under the registered trade mark "Teepol 610" and 88 parts of distilled water (parts by weight).

- 3.7 The product "Teepol 610" is identified in D12 as being a linear anionic surface active agent available in the form of a 34% aqueous solution of a sodium salt of a secondary alkyl sulphate, which is the active ingredient (cf. page 2, "Introduction"). As stated in the decision under appeal, this means that the above coating composition comprises 3% of the surfactant.
- 3.8 Starting from D1 the Respondent has argued that the technical problem underlying the patent in suit was the provision of polyester films having an excellent whiteness, excellent opacifying properties, excellent coating properties (i.e. uniformity, absence of cissing) and excellent adhesion properties to printing inks.
- 3.9 However, this formulation of the technical problem cannot be accepted by the Board as the problem objectively underlying the claimed subject-matter, for the following reasons:
- 3.9.1 It is firstly evident that opacity and whiteness are inherent properties of the minute cellular polyester films as such and that these properties are not linked to the coating applied to the films. Moreover, D1's process leads exactly to these properties (page 1, lines 58 to 61; page 3, lines 36 to 40).

3.9.2 It is furthermore noted by the Board that Claim 1 is directed to a coated polyester film *per se* without any indication of its end uses. According to the patent in suit, the uses of the claimed films are neither specifically defined nor restricted to uses requiring good adhesion to printing inks (page 6, lines 13 to 14). Most conspicuously, this requirement does not exist for uses encompassed by the patent in suit such as the application of magnetic layers (page 6, line 16 of the patent in suit) or for the application of photosensitive layers (cf. D1).

3.9.3 In that context it is further apparent from the patent in suit (page 6, lines 13 to 14) that the required adhesive properties depend on the intended use of the film and that the coating compositions need to be specifically adapted accordingly. The wide scope of end uses of the claimed films according to the patent in suit which *per se* require totally different adhesive properties, is correspondingly reflected by the very broad scope of the coating compositions specified in Claim 1. Consequently, it is, in the Board's view, inherently unlikely that all of these coating compositions, including e.g. those adapted for photosensitive layers or magnetic layers, will possess the alleged beneficial adhesive properties to printing inks. In this connection, the burden of proof of the possession of adhesive properties to printing inks, can indeed rest only upon the shoulders of the person alleging it, i.e. of the Respondent (Patentee).

3.9.4 In the present case, however, the tests contained in the patent in suit (Examples 1 to 3) as well as those

submitted in the course of the opposition proceedings refer only to compositions comprising polyester resins and cannot thus be regarded as sufficient evidence to justify the conclusion that substantially all the claimed coating compositions possess this specific activity i.e. superior adhesion to printing inks.

- 3.9.5 It thus follows that the object of the patent in suit is to be seen as the provision of polyester films having adhesive properties adapted to their eventual use and not restricted to uses in which the adhesion to printing inks is at stake. Consequently, the disclosure of document D1 which relates to voided polyester films having adhesive properties adapted to their intended use as support for photosensitive layers, cannot be considered, contrary to the submissions of the Respondent, as representing a purely accidental coincidence.
- 3.9.6 This conclusion applies as well to the coated opaque voided polyester film disclosed as the alternative embodiment of D1 (cf. point 3.6 to 3.7, above) which only differs from the subject-matter of Claim 1 by the fact that the thickness of the coating comprising a water dispersible vinyl resin, i.e. a butadiene/styrene/itaconic acid, is not disclosed in D1. Irrespective of the lack of indication of the thickness of this coating it is self-evident that the coating according to this specific embodiment must necessarily have a thickness adapted to its application.
- 3.9.7 Thus, the question arises whether there is a special effect related to the choice of the specific range of

thickness of the coating defined in present Claim 1 (i.e. from 0.01 to 0.5 μm).

3.10 The Respondent has argued, in view of the comparative data submitted with its letter of 5 December 1997, that the choice of the thickness range 0.01 to 0.5 μm according to Claim 1 was purposive in order to obtain excellent adhesive and coating properties. As opposed thereto, the experimental data submitted by the Appellant with its letter of 10 December 1997 show, however, no specific influence of the coating thickness on these properties.

3.11 While these respective tests *prima facie* appear as bringing contradicting results, it is noted by the Board that the coating compositions used in the tests carried out by the Respondent and by the Appellant are not the same. This implies, in the Board's view, that *de facto* these tests do not exhibit contradictory results but merely show that there is no criticality as such of the claimed range of thickness as defined in Claim 1 independent of the constitution of the coating composition which is however subject to the eventual use of the coated film which is not specified in Claim 1.

3.12 Thus, starting from D1, the technical problem underlying the patent in suit must be seen in the optimisation of the thickness of the coating according to the desired end use.

3.13 In the Board's view, such optimisation clearly belongs to the normal practice of the man skilled in the art.

3.14 It thus follows that the subject-matter of Claim 1 of the main request lacks inventive step in view of D1 (Article 56 EPC).

3.15 Consequently, the main request must be rejected.

Auxiliary request

4. *Wording of the claims*

4.1 Claim 1 of the auxiliary request submitted with letter of 23 August 2001 differs from Claim 1 of the main request only by the fact that the vinyl resins have been limited to vinyl chloride-vinyl acetate type, vinylidene chloride type, and vinyl acetate type. Claim 2 is the same as Claim 2 of the main request

4.2 No objection under Articles 123(2), 123(3) and 84 EPC has been raised against the claims of the auxiliary request by the Opponents. The Board is also satisfied that no objection under these articles arises against these claims.

5. *Inventive step*

5.1 As indicated above in paragraph XI (iii) the Parties relied in that respect on their arguments presented for the main request.

5.2 In this context, it is further apparent from the patent in suit that no particular emphasis was put on the use of the specific vinyl type resins specified in Claim 1 (cf. page 6, lines 9 to 11).

- 5.3 Thus, the Board can only come to the conclusion that the restriction of the vinyl type resin carried out in Claim 1 is not associated with any specific effect vis-à-vis other vinyl type resins e.g. those disclosed in D1 for improving the adhesion of photosensitive layers to opaque voided polyester films (cf. page 3, lines 51 to 60; lines 93 to 106). The choice of vinyl resins according to Claim 1 of the auxiliary request thus amounts to an arbitrary selection.
- 5.4 Since the modification in Claim 1 of the auxiliary request does not provide any inventive contribution in comparison to the subject-matter of the main request, the subject-matter of Claim 1 of the auxiliary request must also be regarded as lacking inventive step in respect of D1.
- 5.5 It thus follows that the auxiliary request must be rejected.
6. In the absence of any request complying with the requirements of Article 56 EPC, the patent must be revoked.

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:

D. Meyfarth

P. Kitzmantel