DECISION
of 24 July 2003

Case Number: T 0077/02 - 3.2.5
Application Number: 92919702.8
Publication Number: WO 93/04842
IPC: B29C 49/24
Language of the proceedings: EN
Title of invention: IN-MOLD LABEL FILM AND METHOD
Applicant: AVERY DENNISON CORPORATION
Opponent: -
Headword: -
Relevant legal provisions: EPC Art. 84, 56
Keyword: "Clarity, main request, first and fourth auxiliary requests (no)"
"Inventive Step, fifth auxiliary request (no)"
"Late filed second and third auxiliary requests (not admitted)"
Decisions cited: T 0095/83, T 0153/85
Catchword: -
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DECISION
of the Technical Board of Appeal 3.2.5
of 24 July 2003

Appellant: AVERY DENNISON CORPORATION
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Decision under appeal: Decision of the Examining Division of the European Patent Office posted 6 July 2001 refusing European application No. 92919702.8 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: W. Moser
Members: W. R. Zellhuber
H. M. Schram
Summary of Facts and Submissions

I. The appellant (applicant) lodged an appeal against the decision of the Examining Division refusing European patent application No. 92 919 702.8.

II. With regard to the subject-matter of the claims on which the decision under appeal was based, the Examining Division held that the subject-matter of claim 7 of the main request did not meet the requirements of Articles 84 and 123(2) EPC, and that the subject-matter of claims 1 and 7 of the auxiliary request did not involve an inventive step.

III. In a communication dated 7 April 2003 accompanying the summons to attend oral proceedings and reflecting the provisional opinion of the Board, the Board referred to the following documents:

D5: US-A 4 986 866 and


Furthermore, the Board indicated that the sets of claims filed as main request and auxiliary request together with the grounds of appeal appeared to contravene the requirements of Articles 54, 56, 84 and 123(2) EPC. A time limit ending one month before the date of the oral proceedings was set for filing any written submissions.

IV. Oral proceedings were held before the Board of Appeal as scheduled on 24 July 2003.
V. The appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of the following documents:

(i) main request: claims 1 to 36 filed as main request on 16 November 2001; or
(ii) first auxiliary request: claims 1 to 35 filed as auxiliary request on 16 November 2001; or
(iii) second auxiliary request: claims 1 to 36 filed as auxiliary request II on 18 July 2003; or
(iv) third auxiliary request: claims 1 to 36 filed as auxiliary request III on 18 July 2003; or
(v) fourth auxiliary request: claims 1 to 29 submitted as auxiliary request IV during oral proceedings; or
(vi) fifth auxiliary request: claims 1 to 15 submitted as auxiliary request V during oral proceedings.

VI. Claim 1 of the main request reads as follows:

"1. A method for producing a label film for in-mold labeling comprising the step of coextruding at least two charges of film-forming resin to form a coextrudate having a face side and a back side, wherein said charges are preselected to provide a printable face on said face side and a heat-activatable adhesive on said back side, \textbf{characterized in that} said method comprises the further steps of hot-stretching and annealing said coextrudate such that the dimensional stability of the coextrudate is enhanced sufficiently to enable
linerless printing of said coextrudate, each of said further steps of hot-stretching and annealing being performed on said coextrudate, said annealing step being performed at a temperature equal to or above the adhesive activation temperature without activation of the heat-activatable adhesive to an extent that there is sticking of the adhesive to any of a series of heated and cooled rolls."

Claim 1 of the first auxiliary request differs from claim 1 of the main request in that after the expression "each of said further steps of hot-stretching and annealing being performed on said coextrudate" the expression "said step of hot-stretching being performed uniaxially in the machine direction and" is added.

Claim 1 of the fourth auxiliary request is identical to claim 1 of the main request.

Claim 1 of the fifth auxiliary request differs from claim 1 of the main request in that the expression "sufficiently to enable linerless printing of said coextrudate" is cancelled.

VII. In the written procedure and in the course of the oral proceedings, the appellant argued essentially as follows:

Main request, first and fourth auxiliary requests

The terms "printable" and "sufficiently to enable linerless printing of said coextrudate" used in claim 1 of the main request were sufficiently clear in that
they clearly taught a person skilled in the art what to do. The passage starting from page 4, line 13 to page 5, line 6 of the description of the application as filed (published version) referred to the printing of label stock in conventional printing presses. The requirement of clarity according to Article 84 EPC should not be mixed up with the question, possibly arising in an infringement procedure, of whether or not a label film might fall within the scope of a claim of a granted patent.

Therefore, the method according to claim 1 of the main request, and, for the same reasons, the method according to claim 1 of the first and fourth auxiliary requests was clear within the meaning of Article 84 EPC.

Second and third auxiliary requests

These requests should be admitted to the proceedings although they were filed after the time limit set in the communication of 7 April 2003. They were filed without any comments in view of having the occasion of commenting in the course of the oral proceedings. There was no abuse by filing these requests at that time which would be the only ground for not admitting them.

Fifth auxiliary request

The subject-matter of claim 1 was novel with regard to the cited documents. In particular, document D5 did not disclose the step of annealing a label film above the adhesive activation temperature without activation of the heat-activatable adhesive.
The subject-matter of claim 1 also involved an inventive step. Document D5 concerned a multilayer film having a structure similar to that of the application in suit. It thus represented the closest prior art. The object of document D5 was to avoid the formation of blisters between the label and the article to which the label was to be attached to in an in-mould process. The solution was embossing a heat-activatable resin layer of a multi-layer film prior to orientation of the film. According to document D5, the process of stretching was performed at a temperature above the melting temperature of the heat-activatable resin layer.

The object of the application in suit was to provide label films for linerless applications. The solution was a method according to claim 1 comprising the steps of hot-stretching and annealing the label film wherein the step of annealing was performed at a temperature equal to, or above, the adhesive activation temperature without activation of the heat-activatable adhesive to an extent that there is sticking of the adhesive to any of a series of heated and cooled rolls.

According to document D5, the adhesive layer was melted during stretching and, in the example of preparing synthetic paper (cf. column 13, lines 50 to 52 of document D5), annealing was performed by passing the sheet through an oven set at 165°C, thus above the melting temperature of the adhesive layer. Document D5 did not disclose as to how the steps of stretching and annealing might be carried out with an adhesive layer being in a liquid state. It seemed that the method of document D5 required the use of a liner in order to
avoid sticking of the adhesive layer to the parts of the apparatus coming into contact with the latter.

Therefore, neither document D5 nor any other of the cited documents suggested the method according to claim 1 of the fifth auxiliary request.

Reasons for the Decision

1. Late filed second and third auxiliary requests

The second and third auxiliary requests were filed less than one week before the oral proceedings before the Board, namely on 18 July 2003, thus after the date set in the annex to the summons to oral proceedings of 7 April 2003, according to which any written submissions should have been filed at least one month before the date of the oral proceedings, ie. before 24 June 2003.

Furthermore, as regards the objections concerning formal requirements under Articles 84 and 123(2) EPC, which had been raised by the Board in the communication, the Board comes to the conclusion that they have scarcely been dealt with in these auxiliary requests. Thus, in terms of formal requirements as provided in Articles 84 and 123(2) EPC, it could not be said that the second and third auxiliary requests were clearly allowable as required by the jurisprudence of the Boards of Appeal when it comes to decide whether or not late filed requests pertaining to amended claims are to be admitted into the appeal proceedings, cf. Case Law of the Boards of Appeal, Fourth Edition
2001, Chapter VII D-14.2.1, in particular T 95/83 (OJ EPO 1985, 75) and T 153/85 (OJ EPO 1988, 1). Moreover, there is no clear justification neither for the late submission of these requests nor for the fact of not having dealt with the objections raised in the communication of 7 April 2003.

Under the circumstances, the Board exercises its discretion not to admit the second and third auxiliary requests into the appeal proceedings (cf. "Guidance for parties to oral proceedings and their representatives" (OJ EPO 1996, 342), point 3.3, second paragraph).

2. **Main request, first and fourth auxiliary requests**

The method according to claim 1 according to the main request, the first auxiliary request and the fourth auxiliary request comprises the steps of hot-stretching and annealing the coextrudate such that the dimensional stability of the coextrudate is enhanced sufficiently to enable linerless printing of said coextrudate.

Accordingly, the fact that the coextrudate should be suitable for being printable without using a liner is used for defining the degree of the dimensional stability, ie. the stiffness of the coextrudate. In the Board's judgement, since the criterion of enabling linerless printing is strongly dependent on the selected printing method and printing apparatus, and in view of the large variety of available common and special printing techniques, that criterion is not suitable for clearly defining the minimum degree of stiffness of the coextrudate and of the label film, respectively. The passage in the description of the
application as filed the appellant referred to (viz. page 4, line 13 to page 5, line 6 of the printed version) describes, in general terms, the printing of label stock in conventional printing presses and the problems arising therefrom. There is no indication or definition of any minimum stiffness the film should have for being sufficiently stable for being printable by using any linerless printing technique.

Therefore, claim 1 of the main request as well as claims 1 of the first and fourth auxiliary requests do not meet the requirements of Article 84 EPC.

Consequently, the main request and the first and fourth auxiliary requests are not allowable.

3. **Fifth auxiliary request**

3.1 The subject-matter of claim 1 of the fifth auxiliary request concerns a method for producing a label film for in-mould labelling comprising the step of hot-stretching and annealing a coextrudate such that the dimensional stability of the coextrudate is enhanced. In contrast to claim 1 of the main request, claim 1 of the fifth auxiliary request does not refer to a minimum degree of dimensional stability by using the vague and unclear definition of that lower limit as specified in claim 1 of the main request. Claim 1 thus meets the requirements of Article 84 EPC.

3.2 However, the subject-matter of claim 1 does not involve an inventive step for the following reasons:
3.2.1 Document D5, which is considered to represent the closest prior art, discloses a method for producing a label film for in-mould labelling comprising the step of coextruding at least two charges of film-forming resin to form a coextrudate having a printable face side and a heat-activatable adhesive on the back side, cf. column 4, lines 25 to 44 and column 9, lines 13 to 24. The method further comprises the step of hot-stretching the coextrudate at a temperature above the adhesive activation temperature of the heat-activatable adhesive (melting point of layer D), cf. column 3, lines 30 to 35 and column 9, lines 25 to 29.

In connection with the method of making synthetic paper according to the example described in column 13, lines 7 to 62 of document D5, it is suggested to pass a multilayer sheet comprising a printable top layer B and a coextruded, heat-activatable adhesive layer C/D both laminated to either side of a base layer A, through an oven set at 165°C for heat setting.

3.2.2 The subject-matter of claim 1 of the fifth auxiliary request differs from the method disclosed in document D5 in that it explicitly comprises the step of annealing a coextrudate having a printable face side and a heat activatable adhesive on the back side at a temperature equal to or above the adhesive activation temperature without activation of the heat-activatable adhesive to an extent that there is sticking of the adhesive to any of a series of heated and cooled rolls.

3.2.3 In the Board's judgement, starting from document D5, the problem intended to have been solved by the subject-matter of claim 1 is to provide a method for
producing a label film allowing enhancing the dimensional stability of the coextrudate forming the label film by performing the steps of stretching and annealing at a temperature above the activation temperature of the adhesive layer of the coextrudate.

The Board cannot agree with the appellant that the object of the invention of the application in suit was to provide label films for linerless applications, since document D5, which, also according to the appellant, represents the closest prior art, does not concern label films supported by a carrier or liner, and, furthermore, the method according to claim 1 of the fifth auxiliary request does not exclude the use of a liner.

The solution to the above-mentioned problem consists, according to claim 1, in the fact that the annealing step is performed without activation of the heat-activatable adhesive to an extent that there is sticking of the adhesive to any of a series of heated and cooled rolls.

3.2.4 It is commonly known that, in order to maintain the orientation and structure of a stretched polymeric material, annealing of the material at a temperature equal to, or above, the stretching temperature is advantageous, cf. in particular document D6, column 10, lines 50 to 66 and column 19, Table V (stretch and sinter temperatures).

Accordingly, a person skilled in the art considering performing the step of annealing of a stretched coextrudate as described in document D5, in particular
in column 9, example 2, would inevitably have to consider that, if the adhesive layer is heated up to the annealing temperature, it would be in a molten state and, consequently, may stick to elements of the apparatus, in particular transport elements like rolls, used for carrying out the stretching and annealing step. In the Board's judgement, in order to avoid that sticking problem, it is an obvious consideration that activation of the adhesive to an extent that there is sticking of the adhesive to any transport elements has to be avoided.

Claim 1 of the fifth auxiliary request does not define as to how the object of avoiding activation and sticking can be achieved. It simply refers to the activation of the adhesive to an extent that sticking of the adhesive to a series of heated and cooled rolls is avoided. The subject-matter of claim 1 thus does not go beyond the considerations of a person skilled in the art.

Consequently, the subject-matter of claim 1 of the fifth auxiliary request does not involve an inventive step within the meaning of Article 56 EPC. Therefore, the fifth auxiliary request of the appellant is not allowable, either.
Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:  The Chairman:

M. Dainese       W. Moser