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Aktenzeichen / Case Number / N° du recours : T 124/85

Anmeldenummer / Filing No / N° de la demande : 79 300 502.6

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Bezeichnung der Erfindung: Process for treating papermaking fabrics
Title of invention:
Titre de l'invention :

Klassifikation / Classification / Classement : D06B 1/14, D21F 1/08, C08L 33/00

## ENTSCHEIDUNG / DECISION
vom / of / du 14 December 1987

Anmelder / Applicant / Demandeur :

Patentinhaber / Proprietor of the patent / Titulaire du brevet : ASTEN GROUP INC.

Einsprechender / Opponent / Opposant : FILZTUCHVERWALTUNGS GmbH

Stichwort / Headword / Référence : Papermaking fabrics/ASTEN

EPÜ / EPC / CBE Articles 83, 123(2)

Kennwort / Keyword / Mot clé : "Sufficiency - immediately obvious which standard system of measurement has been used".

**Leitsatz / Headnote / Sommaire**

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Case Number : T 124/85

# D E C I S I O N
## of the Technical Board of Appeal 3.2.1
## of 14 December 1987

**Appellant :** (Proprietor of the patent)
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**Decision under appeal :** **Decision of the Opposition Division of the European Patent Office dated 18 February 1985 revoking European patent No. 0 004 480 pursuant to Article 102(1) EPC.**

**Composition of the Board :**

**Chairman :** P. Delbecque
**Members :** C.T. Wilson
C. Payraudeau

**Summary of Facts and Submissions**

I. European patent application No. 79 300 502.6 was granted on the basis of 3 claims on 10 February 1982 and published under the publication No. 0 004 480.

Claim 1 reads as follows:

1. A process for treating papermaking fabric in which a woven fabric having an air permeability of from 0.888 to 4.06 metres/second is coated with a liquid polymeric coating composition and then dried, the polymer partially filling the interstices of the fabric to reduce the air permeability, characterized in that the fabric is coated on its rear surface only with a liquid polymeric coating composition having a viscosity of from 1 to 5 Pascal seconds, the composition comprising a solution or dispersion of a polymer, so as to form a continuous film of the coating composition over the interstices of the fabric, while maintaining the front surface of the fabric substantially uncoated, and the coated fabric is then dried to remove the liquid phase of the coating composition whereby the coating film is caused to shrink and break open within the interstices.

II. An opposition was filed to the grant on 10 November 1982 requesting that the patent be revoked in its entirety on the grounds of lack of disclosure, lack of novelty (prior use), and lack of inventive step (in the light of DE A 1 794 293).

III. The Opposition Division revoked the patent in a decision of 18 February 1985. The reason for the revocation was that the invention had not been disclosed in a manner

sufficiently clear and complete for it to be carried out by a person skilled in the art. In particular, since many different methods exist for measuring air permeability, using different testing areas and different pressure drops, the failure to specify in the patent specification both the pressure drop and the testing area used to determine the values of air permeability defined in Claim 1, renders the air permeability range of Claim 1 not clearly defined.

Since the patent was to be revoked for this reason, the Opposition Division did not deem it necessary to comment in detail on the other grounds of opposition put forward by the Opponent.

They did however express the opinion that, since the original air permeability values were expressed in litres per second without specifying a reference area, the conversion into metres per second values (cubic metres/second/square metre) constituted an amendment extending the subject-matter of the patent beyond the content of the application as filed.

IV. The proprietor of the patent filed an appeal on 26 April 1985 having paid the appeal fee on 25 April 1985. A Statement of Grounds was received on 25 June 1985, and further comments on 20 June 1986, 21 February 1987 and 20 June 1987. Replies were received from the Respondent on 21 May 1985 (including a request for oral proceedings), 4 January 1986 and 17 September 1986. In response to a communication from the Board, issued 30 April 1987, the Respondent filed a reply on 10 September 1987, and on 26 November 1987 withdrew his request for oral proceedings.

V. The Appellant argues essentially that it is perfectly clear from the specification that it is the typical open mesh dryer fabrics which are being considered and from the values given it would therefore be immediately obvious to the man skilled in the art that the standard Frazier system of measurement had been used. He was prepared to amend Claim 1 to restrict the claim to a process for treating open mesh dryer fabrics only.

VI. The Respondent argues essentially that it is not clear from the patent specification that the typical open mesh dryer fabrics are being considered. Moreover, in the light of the numerous different methods of measurement used throughout the USA and Europe, it would not be at all clear to the man skilled in the art which particular method of measurement is being used in the patent specification.

VII. The Appellant requests that the decision under appeal be set aside and that the patent be maintained in an unamended form, or subsidiarily amended to restrict the claimed invention to a process for treating open mesh dryer fabrics only.

The Respondent (Opponent) requests that the appeal be rejected.

**Reasons for the Decision**

1. The appeal complies with Articles 106 to 108 and Rule 64 EPC and is admissible.

2. The first question to be answered is whether it is clear from the patent specification that it is the typical open mesh dryer fabrics which are being considered. In the Board's

opinion this is quite clear from the first three columns of the description.

Column 1

Lines 1-4 : The present invention is concerned with a process for treating papermaking fabrics to reduce the air permeability thereof.

Lines 12-16 : The process has been primarily developed for treating the dryer fabrics.

Lines 42-51 : In recent years, the speeds at which the dryer cylinders are operated have been significantly increased, leading to the creation of air currents between the cylinders which due to high air permeability of the dryer fabric, causes the fabric and the paper to flutter, damaging the paper.

Lines 58-60 : The dryer fabrics that are commonly used in the papermaking machine are generally woven.

Line 60 to column 2, line 3 : The resulting woven fabric lacks sufficient rigidity. In order to increase the rigidity, such fabrics have been coated with a liquid polymeric coating composition.

Column 2

Lines 9-11 : One coating procedure which has been used in the coating of papermaking fabrics is a kiss coating process.

Lines 26-33 : Before being treated, the woven dryer fabric as an air permeability of from 0.888 to 4.06 metres/second. In order to reduce the air permeability of a particular dryer fabric significantly, for example to a value of approximately 0.382 metres/second when utilizing the kiss coating process, it was necessary to apply a plurality of coatings to the fabric.

Lines 60-62 : The present invention seeks to provide a more efficient and better controlled process of treating the woven fabric.

Column 3

Lines 14-17 : This process enables the air permeability of the fabric to be reduced to a desired useful range in fewer coating stages than was necessary in the prior art processes.

An impartial reading of these columns makes clear that the invention is particularly concerned with an improved process for reducing the air permeability in dryer fabrics having an unacceptably high air permeability for high speed operation. The Appellant argues that it is exactly the typical open mesh dryer fabrics that have this high air permeability. To prove his point he filed, with his Statement of Grounds, a review of paper drying techniques, "Paper Trade Journal, March 29th, 1971, pages 38 to 45", written by a "widely recognised UK expert" (according to Appellant and not contradicted by Respondent). On page 42, columns 2 and 3 of this review, it is stated that it is reasonable to define an open mesh dryer fabric as having an air permeability not less than 100 c.f.m. per $ft^2$ at 0.5 inch water gauge pressure differential (1830 m/hr at 12.5 mm water gauge). From the

table on page 38, open mesh dryer fabrics are defined as having air permeabilities from 100-750 $ft^2/min/ft^2$ at 0.5 inch water gauge or 1830 to 13,720 m/hr at 12.5 mm water gauge. This corresponds to 0.508 to 3.811 m/sec at 12.5 mm water gauge.

It is therefore clear, in the Board's opinion, that it is the typical open mesh dryer fabrics which are being considered.

3. The second question to be answered is therefore whether the skilled man, knowing that the patent is discussing the usual open mesh dryer fabrics, which according to the review have an air permeability of 0.508 to 3.811 m/sec at 12.5 mm water and measured over an area of 1 square foot, could be expected to realize that the range of 0.888 to 4.06 m/sec referred to in the specification were measured with a pressure drop of 0.5 inches or 12.5 mm water gauge and over an area of one square foot. Given that according to the above-named review, the Frazier method of measuring in cubic feet per minute per square foot under a pressure drop of 0.5 inch water gauge "is that in common use in the US", the only answer can be that it is only to be expected that the man skilled in the art would assume that it was the commonly used method that had been used here.

4. There is, of course, no suggestion that the Frazier method was the only method in use in the US. Most certainly there were other methods, e.g. the Fabric Porositi. Also in Europe there were clearly other methods. According to the review, however, the Frazier method expressed in metres per hour "is commonly applied in Europe". According to the "Heimbach Kalender 1974" (a copy of pages 2 and 3 of which was filed with the Respondent's reply received 17 September 1986) at least three methods were in general use.

5. All of this merely demonstrates that various methods, including the Frazier method, were in common use. However, the values given under the various methods differed considerably. No other method in general use would apparently give values of even approximately 0.888 to 4.06 metres/sec for the usual dryer fabrics, so that assuming that the values of 0.508 to 3.811 metres/sec given in the table on page 38 of the review are correct, the man skilled in the art cannot be considered to have difficulty in identifying the measurement method used.

6. Whilst the Respondent appears to question whether the range 0.888 to 4.06 metres/sec can be considered to be the typical range for open mesh dryer fabrics (see his reply received 4 January 1986, page 2, penultimate paragraph), he does not attempt to substantiate this. The Board sees no reason to question this.

7. It is not necessary here to consider whether and to what extent the "European" man skilled in the art differs from the "American" man skilled in the art since it is beyond doubt that the Frazier method was well known on both continents.

8. The above arguments in respect of establishing which method was used to arrive at the quoted permeability range apply equally to the question of whether these figures constitute added subject-matter. Insofar as it is established that the man skilled in the art would realise that the figures quoted are arrived at by the standard Frazier method, the method of converting the litres/sec for metres/sec must also be allowable.

9. From the foregoing, it follows that the decision under appeal is not supported by the grounds for revocation. However, the Opposition Division has not considered in detail the question of inventive step and novelty in the

light of the cited prior art and alleged prior use. The Board finds it inappropriate to decide these issues and makes use of its power under Article 111(1) EPC to remit the case to the Opposition Division for further prosecution.

10. Since the main request has been allowed, it is not necessary for the Board to consider the subsidiary request.

**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 for further prosecution.

The Registrar

F.Klein

The Chairman

P. Delbecque