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**Datasheet for the decision
of 12 November 2014**

Case Number: T 1754/11 - 3.3.06

Application Number: 97307021.2

Publication Number: 0828022

IPC: D06P1/44, D06N3/00

Language of the proceedings: EN

Title of invention:

A treated fabric, a method of treatment and a window covering product comprising such material

Patent Proprietor:

HUNTER DOUGLAS INDUSTRIES B.V.

Opponents:

Junkers + Müllers GmbH
LOUVER-LITE Ltd

Headword:

Roller shade / HUNTER DOUGLAS

Relevant legal provisions:

EPC Art. 52(1), 54, 56, 104(1)

Keyword:

Novelty (yes)
Inventive step (yes)
Apportionment of costs - equitable (confirmed)

Decisions cited:

T 0620/08, T 0514/01

Catchword:



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Case Number: T 1754/11 - 3.3.06

**D E C I S I O N
of Technical Board of Appeal 3.3.06
of 12 November 2014**

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Decision under appeal: Interlocutory decision of the Opposition
Division of the European Patent Office posted on
8 June 2011 concerning maintenance of the
European Patent No. 0828022 in amended form.

Composition of the Board:

Chairman B. Czech
Members: L. Li Voti
 U. Lokys

Summary of Facts and Submissions

- I. The present appeals by Opponents 01 and 02 are from the interlocutory decision of the Opposition Division posted on 8 June 2011 concerning maintenance of European patent no. 0 828 022 in amended form.
- II. During the opposition proceedings the parties relied *inter alia* on the following evidence:
- E3: Sample of fabric material (Article no. 24112/8);
 - E4: Sample of fabric material (Article no. 25219/9);
 - E5: Sample of fabric material (Article no. 40535/4325);
 - E14: Expert opinion by Prof. Dr. Joachim Hilden dated 20 November 2000;
 - D1: Declaration by Mr. Barratt dated 16 December 1999;
 - D2: Declaration by Mr. Birtles dated 16 December 1999;
 - BLB1: Sample of fabric material "Dapple SPC Ecreu";
 - SWB1: Advertisement "Not a Glare in the World" inserted between pages 66 and 67 of the architects' journal, no. 19, vol. 202, of 16 November 1995;
 - D7: Test report by Shirley Technologies on four fabrics including "Dapple Ecreu Batch - 080895" (Sample 6);
 - D11: Four SEM images (D11a - D11d) of "Dapple Ecreu Batch - 080895" (Sample 6).
- III. In the earlier decision T 0681/01 of 28 November 2006 concerning the patent in suit the Board entrusted with the case decided *inter alia* that the public prior uses of fabric materials according to samples E3 and E4 were novelty-destroying for the subject-matter of claim 1 of the patent as granted but not for the subject-matter of claim 1 according to the third auxiliary request then on file. The claims according to the latter

request were also found to meet the requirements of Article 123(2) and (3) EPC.

The Board took no decision regarding the issue of novelty over the other alleged prior uses and the issue of inventive step, and remitted the case to the Opposition Division for further prosecution on the basis of the seven claims according to said third auxiliary request.

IV. Claim 1 according to said third auxiliary request reads as follows:

"1. A pleated blind or roller shade comprising a fabric material having a first finish on a first side and a second finish on a second pearlescent side; said first finish comprising a mixture including a first pigment having a first particle size and said second finish comprising a mixture including said first pigment and a second, light reflective pearlescent pigment having a second particle size; said second particle size being larger than said first particle size; the particles of the first pigment being capable of permeating said fabric, whereas the particles of the second pigment remain substantially on the second side, and said second side of said fabric having substantially the same colour as said first side."

Dependent claims 2 to 7 according to said request relate to specific embodiments of the pleated blind or roller shade of claim 1.

V. During the subsequent (continued) opposition proceedings the Opponents based their arguments mainly on the alleged public prior uses of fabric materials according to sample E5 and of the fabric "Dapple SPC Ecreu", corresponding to that of sample BLB1, and, with

respect to inventive step also on the prior uses of fabrics according to samples E3 and E4.

In a communication sent by fax on 17 February 2009 the Opposition Division pointed out some inconsistencies in the evidence cited, took note of some possible deficiencies of the evidence cited and mentioned that "a written declaration under Article 117g) could be considered". With a fax sent on 24 February 2009, i.e. two days before the scheduled oral proceedings, Opponent 01 submitted the further items of evidence E20 to E25, supposed to supplement the evidence in respect of the alleged prior use of fabrics according to sample E5.

At the oral proceedings held on 26 February 2009 the Opposition Division decided to continue the proceedings in writing as requested by the Patent Proprietor in view of the very late filing of the possibly relevant documents E20 to E25.

Oral proceedings were once more held on 1 April 2011, at the end of which the Opposition Division announced its final decision to maintain the patent with the claims according to the then pending main request, said claims being identical with the claims according to the third auxiliary request, which according to the Board's judgement T 0681/01 were allowable under Article 123(2) and (3) EPC and novel over the public prior uses of fabrics according to samples E3 and E4.

The Opposition Division decided, *inter alia*,
- to admit documents D7 and D11 despite their belated filing,
- not to admit documents E20 to E25 in view of their very late filing, their lack of prima facie relevance and their lack of completeness, in the sense that they

did not prove up to the hilt the alleged public prior use of a fabric according to sample E5;

- that the fabric "Dapple SPC Ecreu" belonged to the prior art under Article 54(2) EPC;

- that, however, the public prior use of the fabric "Dapple SPC Ecreu" was not novelty destroying for the subject-matter of claim 1 at issue since said fabric did not comprise a second finish on the second side containing a mixture of pigment particles as required by claim 1;

- moreover, the claimed subject-matter was inventive with regard to the public prior uses of the fabric "Dapple SPC Ecreu" and of fabrics for shower curtains corresponding to those of samples E3 and E4;

- hence the claimed subject-matter was novel and involved an inventive step over the cited prior art.

The Opposition Division also considered that the second oral proceedings of 1 April 2011 had to be held because of the late filing by Opponent 01 of documents E20 to E25, but that "no voluntary abuse of the proceedings was intended" by Opponent 01. Hence, for reasons of equity, the Opposition Division decided an apportionment to Opponent 01 of 70% of the costs endured by the Patent Proprietor in connection with the second oral proceedings of 1 April 2011.

VI. Appellants 01 and 02 (Opponents 01 and 02) submitted in their statements of grounds of appeal that the claimed subject-matter lacked novelty or at least inventive step in view of the alleged prior uses.

In particular they invoked :

- lack of novelty over the alleged public prior use of a fabric according to sample E5;

- lack of novelty or inventive step over the alleged public prior use of a fabric "Dapple SPC Ecru" and of other Louver-Lite SPC fabrics mentioned in exhibit SWB1; and
- lack of inventive step starting from the public prior uses of a fabric according to samples E3 or E4.

Appellant 02 also submitted as further evidence *inter alia*

- D14: Declaration by Mr. Barratt dated 14 October 2011 including exhibits BLB3 to BLB5;
- D15: Extracts from the Oxford Dictionary of Chemistry, fourth edition 2000, page 364, relating to the definition of "mixture"; and
- D16: Printout (11/10/2011) of four web pages (1/4 to 4/4) from the Online Free Dictionary, relating to the definition of "mixture".

Appellant 01 also contested the decision on apportionment of costs.

- VII. The Respondent (Patent Proprietor) re-submitted with its reply of 2 March 2012 the sets of claims (labelled "main request claims - filed 23 January 2009") held allowable by the Opposition Division, and also filed further sets of amended claims as auxiliary claim requests 1 to 11. It contested also the admissibility of documents that had been filed belatedly during the opposition and appeal proceedings by the Appellants and maintained that the claimed subject-matter was novel and inventive over the cited prior art. Moreover, it also contested the decision on apportionment of costs.
- VIII. In its communication dated 10 June 2014 issued pursuant to Article 15(1) RPBA the Board expressed its

provisional opinion concerning some of the salient issues of the case, *inter alia* with regard to the admissibility of some of the late filed documents and evidence.

IX. Oral proceedings were held on 12 November 2014.

The debate initially focused *inter alia* on the proper interpretation of the term "*mixture*" as used in claim 1 and on the decision of the Opposition Division not to admit documents E20 to E25.

Aware of the Board's opinion in this respect, Appellant 01 no longer maintained its objections based on the alleged public prior use of a fabric according to sample E5.

Appellant 02 confirmed that all the SPC fabrics addressed in SWB1 contained a heat-curable intermediate layer between the dyed fabric layer and the SPC (solar protecting coating) layer, as shown in documents D7 and D11 for the fabric "Dapple SPC Ecreu". It also confirmed that the "SPC" layer contained titanium dioxide coated mica as stated in D1. Therefore, Appellant 02 expressly agreed that in the discussion concerning novelty and inventive step, the prior use of the fabric "Dapple SPC Ecreu" could be considered to be representative for all SPC fabrics referred to in SWB1 and that there was no need to discuss individually the relevance of all the alleged prior uses of other SPC fabrics.

The Respondent no longer contested

- the admissibility of the late filed documents, in particular of D7 and D11, relating to the alleged prior public use of the fabric "Dapple SPC Ecreu", and
- the admissibility of late filed documents D14 to D16.

Moreover, considering its status as Respondent, it no longer challenged the decision on apportionment of costs taken by the Opposition Division.

- X. Both Appellants requested that the decision under appeal be set aside and that the European patent no. 0828022 be revoked.

Appellant 01 requested also that the decision on the apportionment of costs be set aside.

The Respondent requested that the appeals be dismissed (main request) or that the patent be maintained on the basis of the claims according to one of the auxiliary requests 1 to 11, submitted with the letter dated 2 March 2012.

- XI. The arguments of the parties of relevance here can be summarised as follows:

Regarding the meaning of the term "*mixture*" in claim 1, the Appellants submitted that

- there was no support in the patent in suit for interpreting the term "*mixture*" used in claim 1 in a restrictive way; therefore, the word "*mixture*" should be given the broadest possible interpretation as illustrated in a dictionary like, for example, in documents D15 and D16;
- according to the dictionaries the term "*mixture*" was applicable to both homogenous and heterogenous systems of two or more substances, including also lamellar systems wherein the substances were present in distinct layers;
- therefore, the term "*mixture*" could be understood to relate to "a collection of separate and distinct elements arranged to provide a specific finish or

visual effect"; in this sense claim 1 would encompass, for example, embodiments wherein the second, light reflective pearlescent pigment (hereinafter simply referred to as **pearlescent pigment**) and the first pigment of smaller particle size (hereinafter simply referred to as **first pigment**) were contained in different layers disposed on the same side of the fabric and contributed both to the visual effect of the observed side;

- furthermore, pearlescent pigment particles coated with coloured pigment particles of a smaller size could also be considered to represent a "mixture" of pigments in the sense of claim 1.

Appellant 02 submitted that the public prior use in roller shades of the fabric "Dapple SPC Ecu" was proved *inter alia* by documents D1, D2, SWB1, D7 and D11. This fabric comprised a dyed fabric material containing a first pigment permeating the fabric, an intermediate heat-sealable layer coated on one side of the dyed fabric and a layer of titanium dioxide coated mica (a pearlescent pigment) as outer layer on the heat-sealable layer. Since the fabric "Dapple SPC Ecu" contained a pearlescent pigment and a first pigment of smaller particle size in different layers disposed on the same side of the fabric, a roller shade made of this fabric was novelty-destroying for the subject-matter of claim 1 at issue.

As regards inventive step, Appellant 02 submitted that starting from the prior use of a roller shade containing the fabric "Dapple SPC Ecu", the technical problem underlying and solved by the claimed invention could only be seen in the provision of an alternative fabric for a roller shade having on both sides substantially the same colour. In this respect, it

would have been obvious for the skilled person, in order to arrive at a fabric having both sides of substantially the same colour, either to modify the fabrics disclosed in SWB1 which all comprised a white SPC layer by using the coloured first pigment of the fabric "Dapple SPC Ecreu" as coating of the pearlescent pigment contained in the outer layer instead of the white titanium dioxide, or by using the white titanium dioxide used as coating of the pearlescent pigment in "Dapple SPC Ecreu" also for dyeing the base fabric material. The latter option was also implicitly suggested in SWB1, that listed a fabric material named "Dapple SPC White".

According to Appellant 01, considering as the technical problem solved by the claimed invention the provision of a further fabric material for pleated blinds or roller shades capable of adequately reflecting light and heat, it would have been obvious for the skilled person, starting from the prior use of a fabric corresponding to that of samples E3 or E4 in shower curtains, to try these fabrics in pleated blinds or roller shades. As apparent from E14 the fabrics of E3 and E4 were often produced on the same machines used by the same companies for producing fabrics for pleated blinds and roller shades. The skilled person would have immediately recognised the suitability, for the different use as pleated blind or roller shade, of the fabrics according to the samples E3 and E4 which contained pearlescent pigments on one side.

As regards the decision on apportionment of costs the Appellant 01 argued that documents E20 to E25 had been submitted following the incitation to file further evidence contained in the Opposition Division's fax dated 20 February 2009.

The Respondent argued, in essence, as follows:

- The wording of claim 1 required that the finish on the second fabric side contained a pearlescent pigment mixed with a first pigment of smaller particle size, the latter being the same as the first pigment contained in the finish on the first fabric side. Therefore, claim 1 did not encompass embodiments wherein the pearlescent pigment and the first pigment were not contained within a same layer.

Moreover, titanium dioxide-coated mica particles constituted as a whole a pearlescent pigment wherein the titanium dioxide coating was an integral part of the pearlescent pigment particles and contributed to the pearlescent effect, as clearly indicated in BLB3, cited in D14. Hence, titanium dioxide-coated mica particles did not represent a mixture of a pearlescent pigment with a first pigment in the sense of claim 1.

- Hence, even considering, for the sake of argument only, that the public prior use of a roller shade comprising an SPC fabric, such as "Dapple SPC Ecru", was proved, such a public prior use would not take away the novelty of the subject-matter of claim 1 at issue, since the SPC fabrics did not contain a finish on the second fabric side comprising a mixture of a pearlescent pigment with a first pigment in the sense of claim 1.

- As regards inventive step, even considering as the technical problem underlying the invention the one identified by Appellant 02, i.e. the provision of another roller shade containing a fabric having substantially the same colour on both sides, the skilled person, by modifying the fabric "Dapple SPC Ecru" in the way suggested by Appellant 02, would not

arrive at a fabric having a second finish on the second side containing a mixture of a pearlescent pigment with a first pigment in the sense of claim 1.

- The closest prior art was actually represented by a metallized fabric as described e.g. in paragraph [0002] of the patent in suit, the technical problem underlying the invention being the one stated in paragraph [0009] of the patent in suit, i.e. the provision of alternative pleated blinds or roller shades which had substantially equal heat and light reflective properties as those using conventional metallized fabrics but had at the same time an improved resistance against damage and wear during use. Moreover, the fabrics used in the pleated blinds and roller shades of the invention presented the additional advantages that they could be prepared in a more economical way in a single operation (paragraph [0012]).

- In this respect, it would not have been obvious for the skilled person to replace the metallized light and heat reflective layer used in the fabrics of the pleated blinds and roller shades of the prior art with a layer containing a pearlescent pigment in admixture with a first pigment of smaller size with the expectation of obtaining similar results by means of a product which could be prepared in an easier way. Moreover, the skilled person would not have looked for suitable alternatives in the technical field of shower curtains, since shower curtain fabrics were used for different purposes and a pearlescent finish, like that of the fabrics corresponding to samples E3 and E4, was used for aesthetic purposes only and not for reflecting light and heat.

- Therefore, the claimed subject-matter was novel and inventive over the cited prior art.

Reasons for the Decision

Respondent's main request - Construction of claim 1

1. Interpretation of the term "*mixture*" in claim 1

1.1 Claim 1 concerns a "*pleated blind or roller shade comprising a fabric material having a first finish comprising a first pigment on a first side and a second finish on the second pearlescent side*". As regards said second finish the wording of the claim requires that it comprises "*a **mixture** including said first pigment and a second, light reflective pearlescent pigment*".

As regards the meaning to be given to the term "*mixture*" within the context of claim 1 there was no agreement among the parties. Therefore, the Board must decide which is the proper meaning of this term in the context of claim 1, in order to establish the breadth of the claim to be considered in the assessment of novelty and inventive step.

1.2 It is established jurisprudence of the Boards of Appeal of the EPO that claims should be read giving the words the meaning and scope which they normally have in the relevant art unless the description gives the words a special meaning by explicit definition (see e.g. decision T 620/08, point 3.8 of the reasons).

1.3 It is undisputed that in the present case there is no explicit indication in the description of the patent in

suit of any such special meaning to be attributed to the term "*mixture*" within the context of claim 1. Therefore, the term "*mixture*" has in the present case the meaning and scope that it normally has in the relevant art.

- 1.4 The Board agrees in this respect that dictionaries containing definitions for the term "*mixture*", as illustrated in documents D15 and D16, are a suitable basis for the correct interpretation of this term within the context of claim 1 insofar as the definitions are applicable to the specific technical field, which is the chemical technical field of pigment comprising compositions.
 - 1.4.1 The Board remarks also that the admissibility of D15 and D16 was not contested by the Respondent (see point IX supra) despite their late filing. The Board has also no reason for disputing their admissibility.
 - 1.4.2 Moreover, even though the filed pages of D15 and D16 relate to versions of dictionaries published after the priority date claimed by the patent in suit, it was not disputed that the definitions contained therein were already applicable at said priority date.
 - 1.4.3 D15 is an excerpt from a chemical dictionary and defines a "*mixture*" as "*a system of two or more distinct chemical substances*" and specifies that there exist "*homogenous mixtures...in which the atoms or molecules are interspersed*" and "*heterogenous mixtures which have distinguishable phases*".
 - 1.4.4 D16 is a collection of excerpts from various dictionaries. The definitions of the term "*mixture*",

which are at first sight applicable also to the chemical technical field of pigments are the following:

- "1.a. The act or process of mixing: *An alloy made from the mixture of two metals;*

and

"5. *Chemistry* A composition of two or more substances that are not chemically combined with each other and are capable of being separated"

(excerpt from "The American Heritage Dictionary of the English Language", page 1 of D16);

- "1. the act of mixing or state of being mixed;

and

"3. (Chemistry) *Chem* A substance consisting of two or more substances mixed together without any chemical bonding between them"

(excerpt from "Collins English Dictionary - Complete and Unabridged", page 1 of D16);

- "A composition of two or more substances that are not chemically combined with each other and are capable of being separated"

(excerpt from "The American Heritage Science Dictionary" page 1 of D16);

- "(chemistry) a substance consisting of two or more substances mixed together (not in fixed proportions and not with chemical bonding)"

(excerpt from "Based on WordNet 3.0, Farlex clipart collection", page 2 of D16).

From the definitions listed above it can thus consistently be derived that the term "mixture" indicates **normally** in the chemical technical field a homogenous or heterogenous system formed by mixing together two chemical entities which do not bind chemically with each other.

- 1.5 Appellant 02 invoked *inter alia* the following special definition:

"lamellar mixture - a mixture in which substances occur in distinct layers"

(excerpt from "Based on WordNet 3.0, Farlex clipart collection", page 2 of D16).

- 1.5.1 However, it is clear for the Board that this definition concerns a very specific system occurring only under particular circumstances, which system would always be referred to in the relevant art as "**lamellar mixture**" and not simply as "**mixture**". Hence, this definition cannot be considered to represent the normal meaning that a skilled person would apply to the term "*mixture*" in the relevant art, let alone in the context of claim 1.

- 1.5.2 The Board remarks in particular that the wording of claim 1 requires said first pigment particles and said second pearlescent pigment particles to be present in a "*mixture*" comprised in one and the same finish.

Therefore, the Board concludes that the wording of claim 1 does clearly not encompass, on a proper interpretation, a mixture wherein said two types of pigments particles are not contained in the same layer but in different layers.

1.5.3 Consequently, a fabric comprising on one side a coloured first pigment and a pearlescent pigment in different layers, wherein both pigments are, in combination, responsible for the visual colour effect perceived by the observer on said side of the fabric, does not, for the Board, meet the criterion of claim 1 at issue, which requires instead two individual types of pigment particles mixed together in one and the same finish composition.

1.6 As regards the Appellants' submission that the "*mixture*" according to claim 1 at issue would also encompass embodiments wherein the pearlescent pigment comprises a coating consisting of a first pigment of smaller particle size, the Board remarks that such an interpretation is also not in agreement with the normal meaning to be given to the term "*mixture*" as set out above.

1.6.1 In such a case the pearlescent pigment is coated onto the particles of the first pigment but not "mixed" with the first pigment.

1.6.2 Moreover, the fact that at a microscopic level some admixing of the first pigment with the pearlescent pigment could anyway occur is irrelevant since the coating is an integral part of the pearlescent pigment and a pearlescent pigment comprising a coating is, on a proper interpretation, also clearly distinct from a mixture of a first pigment and a second pearlescent pigment.

1.6.3 This is confirmed by the use of the term "pearlescent pigment" in the prior art as, for example, shown in the brochure BLB3, submitted by Appellant 02 with the declaration D14, concerning the commercially available

pearlescent pigments of the Iriodin® series, consisting of mica coated with titanium dioxide. This document reads, in fact, on page 2: "*The mica serves as a carrier for the transparent titanium dioxide layer, which is solely responsible for the pearl lustre*".

- 1.7 Therefore, the Board accepts the argument of the Respondent that a "*mixture*" of a first pigment with a pearlescent pigment in the sense of claim 1 must be understood to concern a composition comprising two types of distinct, individual pigments particles of different particle size mixed together (as opposed to one particle type coating the particles of the other type) within said finish composition without formation of any chemical bond between them.

Respondent's main request - Novelty and inventive step

2. Objections and evidence

2.1 Allegation of prior use relying on sample E5

2.1.1 At the oral proceedings, aware of the opinion of the Board regarding the proper interpretation of the term "*mixture*" and the decision of the Opposition Division not to admit documents E20 to E25, Appellant 01 no longer maintained its earlier objections based on the alleged prior use of a fabric according to sample E5. Neither did Appellant 02 pursue objections based thereon.

2.1.2 The Board also sees no reason for calling into question the finding decision of the Opposition Division that said allegation of public prior does not meet the strict standard of proof applicable. Hence, this

alleged prior use is not further considered as prior art in the following reasons.

2.2 Public prior uses of fabrics according to samples E3 and E4

2.2.1 The subject-matter of claim 1 was found to be novel over the proven public prior uses of fabrics according to samples E3 and E4, as decided in earlier decision T 0681/01.

2.2.2 These fabrics may thus be taken into consideration as prior art in the assessment of inventive step.

2.3 Alleged public prior uses of SPC fabrics

2.3.1 Since the novelty and inventive step objections based on the alleged public prior uses of SPC fabrics are not convincing for the mere reasons exposed hereinafter (points 3 and 4), it need neither to be decided whether one or more of said allegations of public prior use actually meet(s) the required standard of proof, nor whether or not the documents filed belatedly as evidence in support of said alleged prior uses are actually admissible.

2.3.2 Purely for the sake of argument and in favour of the Appellants, the following assessment of novelty and inventive step is thus based on the assumption that the public prior use of the fabric "Dapple SPC Ecru" has been convincingly proved and that all belated supporting documents for such a prior use are admissible. At the oral proceedings, novelty and inventive step over the products comprising SPC fabrics were discussed based on this assumption.

2.3.3 At the oral proceedings, Appellant 02 expressly conceded that the fabric "Dapple SPC E cru" can be considered as being representative of all SPC fabrics mentioned in SWB1 and that no different arguments against novelty and inventive step would arise when considering the other alleged prior uses based on other "SPC" fabrics that it had referred to in the course of the proceedings (see point IX supra).

2.3.4 Therefore, in the following, the prior uses based on SPC fabrics are all dealt with by referring to the fabric "Dapple SPC E cru" only.

3. Novelty

3.1 As confirmed by Appellant 02 at the oral proceedings, the fabric "Dapple SPC E cru", which can be used in a roller blind or shade as disclosed in SWB1 (see e.g. page 3, section Solar Protective Coating (SPC); section "Shades of Perfection"; sub-section "Roller Blinds" and Figure; Table on page 4), comprises a dyed fabric material containing a first pigment permeating the fabric, an intermediate heat-sealable layer coated on one side of the dyed fabric and a white layer of titanium dioxide coated mica (a pearlescent pigment) as outer layer on the heat-sealable layer.

3.2 Based on its interpretation of the term "*mixture*" as used in claim 1 (point 1.7 supra), the Board concludes that this SPC fabric does not contain on a second side a finish comprising a "*mixture*" of a pearlescent pigment and a first pigment of smaller particle size.

3.3 Hence, the subject-matter of claim 1 and, consequently, of claim 2 to 7 dependent thereon, is novel over a roller blind comprising the fabric "Dapple SPC E cru" or

any other SPC fabric made available to the public by prior use.

3.4 Since no other prior art was cited against the novelty of claim 1 according to the main request (see point XI supra), the Board concludes that the subject-matter of claim 1 and, consequently, that of claims 2 to 7 dependent thereon is novel (Articles 52(1) and 54(1)(2) EPC).

4. Inventive step

4.1 The invention

4.1.1 The invention concerns a pleated blind or roller shade.

4.1.2 As explained in the patent in suit (paragraph [0002]), pleated blinds and roller shades of the prior art usually incorporated fabric material coloured on the first side to enhance the decorative function of such window covering product, while being metallized on the opposite second side for reflecting sunlight or heat.

4.1.3 Therefore, according to the patent in suit (see paragraphs [0009], [0011] and [0016]), the invention aimed at providing alternative pleated blinds or roller shades which have substantially equal heat and light reflective properties as conventional metallized fabrics, have an improved resistance against damage and wear during use, may be prepared in a more economical way in a single operation and wherein both sides may have substantially the same colour.

4.2 Closest prior art

4.2.1 The Respondent considered the known metallized pleated blinds described in paragraph [0002] of the patent in

suit as the most appropriate starting point for the evaluation of inventive step, i.e. pleated blinds which *incorporate fabric material that is coloured on the first side to enhance the decorative function of such window covering product, while being metallized on the opposite second side to reflecting sunlight or heat.*

4.2.2 For the Board, the starting points indicated by Appellant 01, i.e. the prior used fabrics according to samples E3 or E4 are a less appropriate starting point than the prior art cited by the Respondent, since they were made for use in shower curtains, i.e. they belong to a different technical field than that of the patent in suit and were not intended to have substantially equal heat and light reflective properties as conventional metallized fabrics.

4.2.3 As regards a roller blind according to SWB1 comprising the allegedly prior used fabric "Dapple SPC Ecreu", the advertisement SWB1 clearly describes on its last page under the heading "Solar, Optical and Colour Fastness Properties" the outstanding heat and light reflective properties of the SPC fabrics described.

Therefore, the Board accepts that the public prior use of such a fabric, if proven, could well be considered to represent a suitable starting point for the evaluation of inventive step.

4.2.4 In the following assessment of inventive step the Board thus follows, for the sake of completeness, each of the two possible approaches, which, however, both lead to the same conclusion that the claimed subject-matter is not obvious. Approach A starts from a roller blind containing the fabric "Dapple SPC Ecreu" (assuming for the sake of argument that it belongs to the state of

the art to be considered) and approach B starts from a pleated blind comprising a metallized fabric as mentioned in the patent in suit.

Approach A

4.3 Technical problem underlying the invention

4.3.1 According to Appellant 02, the technical problem underlying the claimed invention, in the light of a roller blind comprising the fabric "Dapple SPC Ecrú", consisted only in the provision of an alternative roller shade having a fabric of substantially the same colour on both sides.

4.4 The solution

As the solution to the technical problem indicated above, the patent in suit proposes the roller shade according to claim 1 at issue, which is characterised in that it comprises " *a fabric material having a first finish on a first side and a second finish on a second pearlescent side; said first finish comprising a mixture including a first pigment having a first particle size and said second finish comprising a mixture including said first pigment and a second, light reflective pearlescent pigment having a second particle size; said second particle size being larger than said first particle size; the particles of the first pigment being capable of permeating said fabric, whereas the particles of the second pigment remain substantially on the second side, and said second side of said fabric having substantially the same colour as said first side*".

4.5 Success of the solution

The parties did not contest that the technical problem indicated above was successfully solved by means of the claimed solution. The Board has also no reason to doubt the success of this solution.

4.6 Non-obviousness of the solution

4.6.1 It remains thus to be decided whether it was obvious for the skilled person, starting from a roller blind comprising the fabric "Dapple SPC Ecrú", to modify such a fabric in such a manner as to arrive at a roller shade falling within the terms of claim 1 at issue.

4.6.2 As already noted above (point 3.1 supra) the fabric "Dapple SPC Ecrú" has an intermediate heat-seal layer between the dyed fabric and the outer SPC pearlescent layer. Moreover, SWB1 explicitly discloses that (emphasis added) "*As the SPC backing (the pearlescent outer layer) is **white**, blinds will **always** give a uniform appearance to the **outside** of a building **irrespective of the colours chosen for individual work area**".*

4.6.3 Therefore, SWB1 does not induce the skilled person to modify the colour of the pearlescent outer layer. Consequently, it does also not suggest to modify the structure of the SPC fabrics, for example, by removing the intermediate heat-sealing layer in the attempt to allow the coloured first pigment present on the other side and in the fabric to migrate till the SPC layer, or by using a different pearlescent pigment which contains an appropriate coloured coating matching the colour of the other fabric side.

4.6.4 Furthermore, even if the skilled person were to consider replacing the white pearlescent pigment of "Dapple SPC Ecreu" with a differently coloured one, the resulting fabric would still be different from the fabric of the roller shades according to claim 1 at issue, since it would not contain a finish comprising a mixture of a first pigment with a pearlescent pigment.

4.6.5 As was submitted by Appellant 02 the skilled person, faced with the technical problem mentioned above, could, in theory, try to modify the fabric "Dapple SPC Ecreu" by maintaining the white pearlescent backing whilst replacing the coloured pigment used for dyeing the fabric with, for example, a white pigment like titanium dioxide (which is the coating material of the pearlescent pigment). According to Appellant 02, this approach was suggested by the listing of a product "Dapple SPC White" on the last page of SWB1.

However, the Board observes that further details of said fabric are not given in SWB1 and were not provided by Appellant 02. Moreover, even if the skilled person were to consider putting said theoretically possible concept into practice, the resulting fabric would still be different from the one defined in claim 1 at issue, since the latter must contain a mixture of two different pigments in the pearlescent finishing layer.

4.6.6 Therefore, the Board concludes that the skilled person, starting from a roller blind comprising "Dapple SPC Ecreu" (or any of other SPC fabrics invoked), would not, without considerations based on hindsight, arrive in an obvious way at a roller shade falling within the terms of claim 1 at issue.

Approach B

4.7 Technical problem

4.7.1 In the light of the pleated blinds containing a metallized fabric (see paragraph [0002] of the patent in suit) taken as closest prior art, the technical problem was stated to consist in the provision of pleated blinds having improved properties and which can be produced in a more economical way (see point 4.1.3 *supra*).

4.7.2 In the following assessment, the Board considers, purely for the sake of argument and in favour of Appellant 01, that this technical problem was not convincingly solved.

4.7.3 Therefore, the technical problem formulated, accordingly, in less ambitious terms, can be seen in the provision of alternative pleated blinds having heat and reflective properties and comprising a fabric of substantially the same colour on both sides.

4.8 The solution

4.8.1 As the solution to this technical problem, the patent in suit proposes a pleated blind according to claim 1 at issue (see 4.4 *supra* as regards all the characterising features) wherein one side of the fabric is provided with a finish comprising a mixture of the first pigment, which is also present in the finish on the other fabric side, with a pearlescent pigment.

4.8.2 The parties did not contest that the stated technical problem is successfully solved by the claimed solution. The Board has also no reason to doubt this.

4.9 Non-obviousness of the solution

4.9.1 It remains thus to be decided whether it was obvious for the skilled person, starting from a pleated blind comprising a metallized fabric, to modify the metallized fabric side in a manner leading to a pleated blind falling within the terms of claim 1 at issue.

4.9.2 In the Board's judgement the skilled person faced with the less ambitious technical problem posed (point 4.7.3 *supra*), would not even take into consideration a fabric according to sample E3 or E4, intended to be used for a very different technical application which does not require the fabric to have solar and heat reflective properties.

4.9.3 Consequently, the argument invoked by Appellant 01 that such fabrics were prepared on the same machine by the same companies as fabrics for pleated blinds and roller shades, as allegedly derivable from document E14, is of no relevance. In fact, even if this would be the case, it would not amount to a suggestion to the skilled person to try the application of said fabrics, prepared for complying with the technical requirements of a shower curtain, in products belonging to a different technical field, requiring different technical properties.

4.10 Hence, in the Board's judgement, irrespective of the starting point considered (approach A or B), the subject-matter of claim 1 at issue and, consequently, of claims 2 to 7 dependent thereon, involves an inventive step (Articles 52(1) and 56 EPC).

Apportionment of costs - Article 104(1) EPC

5. Appellant 01 submitted that it had filed documents E20 to E25 shortly before the oral proceedings of 26 February 2009 in reply to the fax of the Opposition Division of 20 February 2009, which it considered to contain an incitation to file further evidence (see points V and XI supra).
- 5.1 The fax by the Opposition Division, apart from indicating some possible inconsistencies and deficiencies concerning the evidence supposed to prove the alleged prior uses, reads indeed under point 2: *"Should the parties request to hear Mr. Feicks as a witness under Article 117d), they are invited to file such a request as soon as possible. Alternatively, a written declaration under Article 117g) could be considered."*
- 5.2 However, even considering, purely for the sake of argument, that the Opposition Division had really intended to incite Opponent 01 to file additional evidence, it is a fact that the new evidence E20 to E25 was faxed to the Office and to the other party only two days before oral proceedings with the mere indication that were filed in relation to the properties and the prior use of a fabric corresponding to sample E5 but without any explanation concerning the specific purpose for which they were filed and/or their relevance, and without any indication of the reasons for which this evidence, although stemming from Opponent 01, could not have been filed at some earlier point in time.
- 5.3 In view of the very short time available till the oral proceedings and the absence of explanations concerning the relevance of said late filed evidence, it is comprehensible that it was not possible for the Patent Proprietor to seriously evaluate and take position on

said newly filed documents (in German) without an adjournment of the oral proceedings.

- 5.4 For the Board, no procedural or legal mistake was thus made by the Opposition Division in deciding to adjourn oral proceedings because of the late filing of the items of evidence E20 to E25.

Moreover, it is clear that in the present case the only cause leading to the continuation of the proceedings in writing and to the scheduling of second oral proceedings laid only in the very late filing of the items of evidence E20 to E25.

6. According to established jurisprudence of the Board of Appeal of the EPO, in case the late filing of new evidence causes oral proceedings to be continued in writing, an apportionment of costs in favour of the adverse party to the proceedings may be ordered for reasons of equity (see e.g. decisions T 0514/01, point 4.1 and 4.1.1 of the reasons).

In the present case, the apportionment of costs in favour of the Patent Proprietor, decided by the Opposition Division, was thus, in the Board's view, fully justified and equitable.

- 6.1 Hence, the request of Appellant 01 that the decision on the apportionment of costs be set aside is not allowable.

Order

For these reasons it is decided that:

The appeals are dismissed.

The Registrar:

The Chairman:



D. Magliano

B. Czech

Decision electronically authenticated