

Internal distribution code:

- (A) [] Publication in OJ
(B) [] To Chairmen and Members
(C) [] To Chairmen
(D) [X] No distribution

**Datasheet for the decision
of 19 April 2012**

Case Number: T 0093/09 - 3.3.07
Application Number: 01113464.0
Publication Number: 1162306
IPC: D06N 7/00, C09J 7/04,
B44C 7/00, E04F 13/16,
E04F 13/18

Language of the proceedings: EN

Title of invention:
Pre-glued glass fabric wall covering

Patent Proprietor:
Johns Manville Europe GmbH

Opponents:
SAINT GOBAIN VETROTEX FRANCE SA

Headword:
-

Relevant legal provisions:
EPC Art. 56
RPBA Art. 13(3)

Keyword:
"Amendment to party's case (no) - manifestly untenable new argument"
"Inventi step (no) - obvious solution"
"Admission of a new item of evidence (yes) - submitted in reaction to the decision under appeal"

Decisions cited:
-

Catchword:
-



Case Number: T 0093/09 - 3.3.07

D E C I S I O N
of the Technical Board of Appeal 3.3.07
of 19 April 2012

Appellants: SAINT GOBAIN VETROTEX FRANCE SA
(Opponents) 130, avenue des Follaz
F-73000 CHAMBERY (FR)

Representative: Goldenberg, Virginie Isabelle
Saint-Gobain Recherche
39, quai Lucien Lefranc
B.P. 135
F-93300 Aubervilliers (FR)

Respondents: Johns Manville Europe GmbH
(Patent Proprietors) Bockenheimer Landstrasse 98-100
F-60323 Frankfurt am Main (FR)

Representative: Mai, Dörr, Besier
Postfach 4120
D-65031 Wiesbaden (DE)

Decision under appeal: Decision of the Opposition Division of the
European Patent Office posted 18 November 2008
rejecting the opposition filed against European
patent No. 1162306 pursuant to Article 101(2)
EPC.

Composition of the Board:

Chairman: J. Riolo
Members: G. Santavicca
D. T. Keeling

Summary of Facts and Submissions

I. The appeal by the opponents lies from a decision of the Opposition Division, posted on 18 November 2008, rejecting the opposition against European patent n° 1 162 306.

II. The patent, which was granted on European application n° 01 113 464.0, filed on 2 June 2001 and claiming the priority of national application US 588600 of 7 June 2001, comprised 24 claims, the independent claims of which read as follows:

"1. A process for forming a pre-glued glass fabric wallcovering comprising

- (a) providing a glass fabric,
- (b) forming first dried coatings on both sides of said glass fabric that are applied from an aqueous dispersion comprising starch, and a polymeric latex binder, and
- (c) next forming a second dried coating on said first dried coating on one side only of said glass fabric that is applied from an aqueous dispersion comprising starch in the absence of a polymeric latex binder with said second dried coating being capable of serving as an adhesive for the attachment of the resulting wallcovering to a wall when wetted by water."

"23. A wallcovering formed by the process of Claim 1 which can be readily attached to a wall following the simple application of water by spraying to said second dried coating."

III. The patent was opposed on the grounds that its claimed subject-matter was insufficiently disclosed (Article 100(b) EPC) and lacked novelty and an inventive step (Article 100(a) EPC) having regard to the following documents:

A1: EP-A-1 035 187;

A2: EP-A-1 143 064;

A3a: Letter of 22 February 2000 and delivery note of 25 February 2000;

A3b: Letter of 6 April 2000 and delivery note of 30 May 2000;

A3c: Declaration by Mr Pascal Gevaux of 22 May 2006;

A4: WO-A-98/14655;

A5: GB-A-1 184 563.

IV. In the decision under appeal, it was *inter alia* held that:

(a) Although the feature "wetted by water" was not explicitly mentioned in the claims of the priority documents, it was nevertheless disclosed in the description thereof. So the priority was validly claimed.

(b) The claimed subject-matter was sufficiently disclosed in the application as filed, and on which the patent in suit had been granted.

(c) None of documents A1, A2 and D3 unambiguously disclosed that the starch adhesive did not contain polymeric latex binder. Therefore, novelty was to be acknowledged.

(d) The closest prior art was disclosed in Paragraphs [0003], [0006] and [0008] of the patent in suit. The subject-matter of Claim 1 was distinguished therefrom by the feature that the water-activatable

adhesive did not contain any polymeric latex binder. The problem solved was the preparation of a pre-glued fibreglass wall covering, which could be handled more easily when covering a wall, and which reduced the necessary processing steps for the end-user, since it only required a single painting step, shortly after application to the wall. Since wall coverings made of paper and wall coverings made of glass fibre fabrics had different properties and addressed different problems, they required different technical measures for their production. Thus, it was not obvious to use the starch adhesive not containing any polymeric latex binder known in paper wall coverings (as illustrated in paragraph [0008] of the patent in suit) for the production of the glass fibre fabric (illustrated in Paragraph [0003] of the patent-in-suit). Consequently, the claimed solution was not-obvious.

(e) Therefore, none of the grounds of opposition prejudiced the maintenance of the patent as granted.

V. In their statement setting out the grounds of appeal, the appellants enclosed copy of a new document, namely DD-A-133 692, identified as A6.

VI. The patent proprietors (respondents) countered the objections raised in the statement setting out the grounds for appeal by letter of 22 July 2009.

VII. In a communication of 14 February 2012, in preparation for the oral proceedings, the Board indicated the issues that needed to be debated and decided.

- VIII. By letter of 16 April 2012, the respondents announced that, at the oral proceedings, their representative would be accompanied by technical experts, who could possibly intervene on technical aspects.
- IX. Oral proceedings were held on 19 April 2012. During the oral proceedings, the respondents *inter alia* declared, for the very first time, that they had never said that the disclosure of Paragraph [0003] of the patent in suit was public state of the art. Indeed, that disclosure could well be internal state of the art. The technical experts accompanying the representative of the respondents merely supported him, i.e. did neither address the Board nor the appellants. At the end of the oral proceedings, the decision was announced.
- X. The appellants essentially argued as follows:

Procedural matters

New item of evidence

Document A6 had been submitted with the statement setting out the grounds of appeal, hence it was not a late filed document. The submission of A6 was in reaction to the arguments of the patent proprietors during the oral proceedings before the Opposition Division, as summarised in the minutes, as well as against the decision under appeal, which did not acknowledge that wallpapering and fibre glass wall covering belonged to neighbouring technical fields. Hence, in view of this neighbourhood, A6 aimed at showing that the skilled person would have been incited at trying to apply the adhesive systems known in the

wall papering on the fibre glass wall coverings, which according to Paragraph [0003] of the patent in suit were known. Therefore, A6 should be admitted into the proceedings.

Amendment to respondents' case

The declaration by the respondents during the oral proceedings, for the very first time, that Paragraph [0003] of the patent in suit did not concern public prior art was surprising, late, hence not acceptable.

Main Request (Patent as granted)

Insufficiency of the disclosure

According to the patent in suit, the known adhesives for applying the glass fibre wall coverings were based on a solution of starch which always contained a polymeric latex binder. The presence of the polymeric latex binder, as mentioned in A1, enabled the dispersion of the starch, hence ensured the good cohesion of the coating. The patent in suit did not disclose whether any material replaced the typical polymeric latex binder, nor why its presence was no longer required. Also, the further materials mentioned in the patent in suit, although having further functions, were not presented as being essential. Since a confusion arose about how to correctly carry out the claimed process, in particular in relation to the adhesive coating, the claimed subject-matter was disclosed insufficiently.

Lack of Novelty

Lack of novelty was no longer invoked.

Closest prior art

- (a) According to the Guidelines (C-IV, 11.7.1), in identifying the closest prior art, account should be given to what the applicant himself acknowledged in his description and claims as known.
- (b) Paragraph [0003] of the patent in suit acknowledged that known glass fibre fabrics for wall covering were coated with an aqueous formulation comprising starch and a polymeric latex binder, in order to protect and manipulate the glass fibre fabrics. Also, the use of an adhesive based on an aqueous formulation of starch and polymeric latex binder, for glass fibre wall covering, was known too, as acknowledged in Paragraph [0002] of the patent in suit. Thus, the closest prior art was that acknowledged in the patent in suit.
- (c) The only distinction between the claimed subject-matter and the known glass fibre wall coverings acknowledged in the patent in suit resided in the adhesive layer not containing a polymeric latex binder.

Problem solved

- (a) No technical effect had ever been related to the dispensing of the known polymeric latex binder in the adhesive for glass fibre wall covering defined

in Claim 1. Nor had any particular data, such as different percentages of components resulting from the absence of the polymeric latex binder, ever been submitted.

(b) This lack of effect due to the absence of the polymeric latex binder was not in line with the EPO case law, e.g. T 37/82 (OJ 1984, 71) [*according to which in assessing the inventive step of a combination of features consideration must be given to a feature only if evidence had been provided that it contributed either independently or in conjunction with one or more of the other features, to the solution of the problem set in the description*].

(a) Hence, the problem solved over the prior art acknowledged in the patent in suit resided in the mere provision of an alternative adhesive system, leading to a simplification of the application.

(b) Since it was generally known that a coating on the glass fibres was necessary to handle them, as also mentioned in A1, the glass fibre fabrics of A4 must have been coated too, even if this was not mentioned. With respect to the argument on low quantities of adhesive, it depended on the fabrics chosen, for which there were no requirements in Claim 1, which indeed was broad. Also, no technical effect over A4 had ever been shown. As regards the thermoplastic adhesive it was not apparent either whether it was excluded by the wording of Claim 1. Nevertheless, the problem solved over A4 was the provision of an alternative simplified system.

Obviousness of the solution

- (a) The use of an adhesive system for wall covering and based on starch without polymeric latex binder was known, as acknowledged in Paragraph [0008] of the patent in suit. Such a system as a coating applied on a substrate was disclosed in A5, which also disclosed compatible first and second coatings, as in the patent in suit, as well as self-adhesiveness activated by water. Paragraph [0008] of the patent in suit as well as A5 related to paper wall coverings.

- (b) Paper wall covering and glass fibre wall covering both related to wall covering and belonged to the same IPC classification. Also, they possessed the same hydrophilic and absorption characteristics, which were essential for their application. Apart from differences such as fire resistance and cost, there was no difference as regards their way of application. Actually, they were applied by the same workers. Although each of paper and glass fibre fabrics were available in different weight sizes, Claim 1 did not specify any requirements therefor. Hence, paper wall covering and glass fibre wall covering belonged to neighbouring technical fields.

- (c) The skilled person aiming at providing a simple adhesive system would have avoided the use of the polymeric latex binder, as it was known that this led to an easier application in the neighbouring field of paper wall covering, illustrated by A5. So

he would obviously have arrived to the claimed invention.

- (d) As regards A4, the claimed process constituted a non preferred way of preparing a pre-glued glass fibre wall covering, which was however obvious.

XI. The respondents essentially argued as follows:

Procedural matters

New item of evidence

New Document A6 lacked any "*prima facie* highly relevance" within the meanings set forth in decisions G 9/91 (OJ EPO 1993, 408), G 10/91 (OJ EPO 1993, 420) and T 1002/92 (OJ EPO 1995, 605). Hence, it should not be considered.

Amendment to respondent's case

The mention in Paragraph [0003] that glass fibre fabric may be coated was a free acknowledgment made by the applicants. At no time have the patent proprietors said that it corresponded to public prior art. Also, that paragraph was silent as to what problem should be solved. Hence, Paragraph [0003] could not be taken as the closest prior art.

Main Request (Patent as granted)

Alleged insufficiency of the disclosure

The second coating defined in Claim 1 was produced by an aqueous dispersion comprising starch in the absence of a polymer latex binder. This second coating did not contain any polymer latex binder and served as an adhesive for the attachment of the wall covering to a wall when wetted by water. Hence, by simply following the wording of Claim 1, there was no confusion for the skilled person about the technical means necessary for the invention and what would permit the process to correctly be realised. Therefore, the ground of insufficiency did not prejudice maintenance of the patent.

Novelty

Novelty was no longer contested.

Closest prior art

- (a) Paragraph [0003] mentioned that glass fibre fabrics may be coated but was silent as to what problem should then be solved. Hence, Paragraph [0003] could not be taken as the closest prior art.
- (b) A6 dealt with washable wall coverings, *inter alia* made of glass silk fabrics, hence comprising polymeric melt coatings.

- (c) A5 did not concern glass fibre fabrics. Also, the first coating illustrated therein was a shear coating.
- (d) A4 concerned a self-adhesive glass fabric wall covering provided on one face thereof with a thermoplastic adhesive. A4 aimed at providing a self-adhesive wall covering that could be painted immediately after application, hence without waste of time. Therefore, A4, if any, could be considered as the closest prior art.

Problem solved by the claimed solution

- (a) The claimed product comprised first coatings to stabilise the glass fibres and a second coating, which was compatible with the first coatings and suitable to be activated by water to enable adhesion at the site where the wall covering was applied.
- (b) A4 did not disclose glass fibre fabrics with first coatings. At most, coating on a site was implicitly disclosed. The penetration of the adhesive through the fabric could affect the colour on the other side. Also, the wall covering of A4 was provided with a protective foil on the adhesive layer, which thus had to be removed before application.
- (c) In contrast thereto, the wall covering as claimed was provided with smaller amounts of adhesive (25 to 50 g compared to the usual 100 g or more) and nevertheless a strong adhesion was ensured.

- (d) The appellants, who had the onus therefor, had never proven that the claimed invention did not afford any advantage.
- (e) Having regard to A4, the problem solved could be formulated as the provision of a self-adhesive wall covering system, which required less adhesive, which adhesive did not penetrate the fabric, nor required a protection foil, and could be activated by water at any place of use.

Non obviousness of the solution

- (a) Paper wall covering and glass fibre wall covering did not belong to neighbouring fields. Paper was made of cellulose, whilst glass fibres were inorganic. Their specific weights were different, as were different the way in which they were prepared and applied. Hence, the knowledge from one field was not directly transposable to the other.

XII. The appellants (opponents) requested that the decision under appeal be set aside and the patent be revoked.

XIII. The respondents requested that the appeal be dismissed.

Reasons for the Decision

1. The appeal is admissible.

Main Request (patent as granted)

Novelty

2. Novelty is no longer in dispute. The distinguishing features over the prior art will become apparent from the decision on inventive step (*infra*).

Inventive step

Procedural matters

Amendments to respondents' case

3. At the oral proceedings the respondents argued that the matters referred to in Paragraph [0003] of the patent in suit should not be treated as forming part of the state of the art, within the meaning of Article 54(2) EPC, because there was no proof that they had been made available to the public before the filing date. On the contrary, it was possible, according to the respondents, that the techniques described in Paragraph [0003] were known only to the respondents and had not been the subject of a public disclosure.

- 3.1 The respondents did not raise that argument in the proceedings before the Examination Division or the Opposition Division or in their written observations in response to the opponents' appeal. The argument was raised for the first time at the oral proceedings before the Board of Appeal. Moreover, the respondents did not categorically state that Paragraph [0003] related to undisclosed matters known only to the

respondents; they merely argued that there was no proof of disclosure.

3.2 If the argument had been raised at an earlier stage it would have been possible for the Office and the opponents to verify whether there was any substance in it by carrying out the necessary searches. It is questionable therefore whether the argument should be admitted, in the light of Article 13(3) of the Rules of Procedure of the Boards of Appeal, which precludes the Board from admitting amendments to a party's case "if they raise issues which the Board or the other party or parties cannot reasonably be expected to deal with without adjournment of the oral proceedings".

3.3 However, it is not necessary to rule on the admissibility of the argument, since it is in any event manifestly untenable, for the following reasons:

3.3.1 Paragraph [0003] must be construed in its context.

3.3.2 Paragraph [0003] belongs to the first section of the description of the invention. That section consists of Paragraphs [0001] to [0009] and bears the heading "Background of the invention".

3.3.3 The language used throughout those nine paragraphs, in particular in Paragraphs [0001] to [0003] shows that the person who drafted the patent application on behalf of the then applicants was describing the pre-existing technology available to any person skilled in the art before the filing date. There is nothing in the language of those paragraphs to suggest that reference

was being made to secret technology known and used only within the private sphere of the respondents.

- 3.3.4 On the contrary, much of the vocabulary used confirms the public nature of the disclosure.
- 3.3.5 Paragraph [0001] states that the benefits of using fabric glass wall coverings are "well known" and that fibreglass wall coverings "of the prior art" require the use of special glues or adhesives with strong binding forces and require cost-intensive and time consuming painting procedures. The expressions "well known" and "of the prior art" leave no doubt as to the public nature of the matters disclosed.
- 3.3.6 Paragraph [0002] states: "**Typically**, when covering a wall with a glass fabric, the wall as well as the fabric must be treated with a special glue or adhesive. The **commonly used** wet adhesive is primarily based on a starch-solution and **always** contains some latex binder, and must be rolled onto or sprayed onto the wall or onto the fabric." (emphasis added). The expressions "typically", "commonly used" and "always" again suggest a public disclosure.
- 3.3.7 Paragraph [0003] states: "In order to enable easy handling and the use of such wallcoverings, the woven glass fabric **often** is impregnated with a water-based formulation which contains mainly starch, binder and an inorganic cross-linker. The finished wallcovering **typically** contains up to 25 weight percent of such chemicals." (emphasis added). The words "often" and "typically" also imply a public disclosure.

- 3.3.8 Paragraph [0004] goes on to state: "**In the past, many attempts have been made** to avoid the disadvantages of **standard adhesives used with glass fabrics** and to reduce the complexity and time-consuming procedures encountered by the end user." (emphasis added). The words in bold show that techniques in general use are being described.
- 3.4 The conclusion must be that Paragraphs [0001] to [0003] were intended to describe matters that were common general knowledge, available to any person skilled in the art before the filing date. There is not the slightest indication in the wording of those paragraphs, or anywhere else in the application, that technical procedures known only within the private sphere of the respondents are being described.
- 3.5 Moreover, the drafting of the application was entirely under the control of the respondents as patent applicants. If any of the matters they referred to when describing the background of the invention were purely internal and had not previously been made available to the public, they were at liberty to state that expressly in the application.
- 3.6 The fact that they did not do so tends to confirm that the matters in question were indeed public knowledge.
- 3.7 The idea that those matters might not have been publically disclosed looks very much like an afterthought which happened to suit the respondents' purpose at a particular stage of these proceedings. It is not a plausible hypothesis.

3.8 Consequently, the content of Paragraph [0003] of the patent in suit was public (Article 54(2) EPC).

New items of evidence submitted by the appellants

4. Document A6 was submitted with the statement setting out the grounds of appeal. Its submission was in reaction to the decision under appeal, which found that glass fibre wall covering and paper wall covering pertained to non-neighbouring fields, hence that the adhesives used in wallpapering would not have been obviously used in fibreglass wall covering.

4.1 As regards the time of submission, A6 was enclosed in the statement setting out the grounds of appeal, it represents a legitimate reaction to the decision under appeal. So the submission of D6 cannot be considered to be late, as acknowledged in the Case Law of the Boards of Appeal of the EPO (6th edition, 2010, VII.C.1.5.2).

4.2 The respondents, who objected to the admissibility of A6 (supra), had had sufficient time to react to A6. In fact, they were not surprised by the consideration of A6 during the oral proceedings.

4.3 Claim 1 and the examples of A6 deal with adhesive coatings of both paper and glass silk fabric wall coverings. Hence, the content of D6 reflects the alleged lack of evidence on the neighbourhood of the fields of wallpapers and fibreglass wall coverings. In fact, A6 is the only document on file illustrating the use of a water activatable adhesive for both paper and glass fibre wall coverings.

4.4 Also, A6 is acknowledged in A4, which was filed with the notice of opposition.

4.5 Therefore, A6 has been admitted into the proceedings.

Closest prior art

5. The patent in suit concerns a pre-glued glass fabric wall covering. More particularly, the patent in suit aims at providing pre-glued fibreglass wall coverings that can be handled more easily when covering a wall and which reduce the necessary processing steps for the end-user (Paragraph [0010]).

5.1 Glass fibre wall coverings and their benefits were known at the priority date, which fact is acknowledged in the patent in suit (Paragraph [0001]).

5.2 According to the patent in suit (Paragraph [0002]), the commonly used wet adhesives for (non pre-glued) wall coverings were primarily based on a starch-solution and always contained some latex binder, whereby the wet adhesive should be rolled or sprayed onto the wall and onto the fabric. After drying the wall covering must be painted twice, i.e. between first and second application the wall and the wall covering must be dried.

5.3 Still according to the background art acknowledged in the patent in suit (Paragraph [0003]), in order to enable easy handling and the use of such wall coverings, the woven glass fabric often is impregnated with a water-based formulation which contains mainly starch, binder and an inorganic cross-linker. The finished wall

- covering typically contains up to 25 weight percent of such chemicals.
- 5.4 It is not contested that adhesive or pre-glued wall coverings were known before the priority date of the patent in suit, as disclosed e.g. in A4 (which concerns glass fibre wall coverings, *infra*) and A5 (which concerns paper wall coverings, *infra*), both being acknowledged in the patent in suit (Paragraphs [0004] to [0007]).
- 5.5 The appellants still consider the known wall covering as described in Paragraph [0003] of the patent in suit, which is applied by rolling onto or spraying onto the wall and onto the fabric wet adhesives based on a starch-solution and always containing some latex binder, as acknowledged in Paragraph [0002] of the patent in suit, as the closest prior art for assessing inventive step. The decision under appeal also considered Paragraph [0003] of the patent in suit as the closest prior art for assessing inventive step.
- 5.6 The respondents instead consider A4 as the closest prior art document, which is acknowledged in the patent in suit (Paragraph [0004]).
- 5.6.1 A4 discloses a glass fibre fabric wallpaper comprising a two-dimensional glass fibre fabric, wherein the glass fibre fabric is provided on one side with a layer of a thermoplastic long-term adhesive (Claim 1), which is insoluble in water (Claim 2) or a pressure-sensitive hot melt adhesive (Claim 3). The glass fibre fabric of the wallpaper of A4 should essentially be impermeable to the adhesive (Claim 4).

5.6.2 A4 acknowledges that the known glass fibre fabric wall coverings (either provided on the reverse with an adhesive, which is applied as an aqueous dispersion, or as disclosed in A6, wherein an adhesive layer provided on one side of the wall covering must be moistened before the glass fibre fabric wall covering is applied to the wall, because the adhesive is soluble in water and is tacky only in the moist state), require laborious and expensive wall covering and painting. Also, there is the disadvantage that after initial bonding the glass fibre fabric wall covering must dry out before it can be coated.

5.6.3 Therefore, A4 aims at improving the known glass fibre fabric wall coverings in such a way that wall covering can be carried out more effectively and more rapidly without re-wetting by water.

5.7 Both the disclosure of Paragraphs [0002] and [0003] of the patent in suit and the disclosure of A4 belong to the same technical field of glass fabric wall coverings. The subject-matter of Claim 1 is distinguished from the prior art acknowledged in Paragraphs [0002] and [0003] of the patent in suit by the dried, water activated, adhesive second coating not containing any latex binder. The subject-matter of Claim 1 is distinguished from the disclosure of A4 not only by the said second coating but also by the first coatings. Therefore, the Board considers that the prior art described in Paragraph [0003] of the patent in suit is the appropriate starting point for assessing inventive step.

Problem solved

6. The application as originally filed, and on which the patent in suit has been granted, aims at providing pre-glued fibreglass wall coverings that can be handled more easily when covering a wall and which reduce the necessary processing steps for the end-user (Paragraph [0010]), i.e. less complicated and time consuming procedures (Paragraph [0009]).
 - 6.1 It is not contested that a pre-glued glass fibre fabric wall covering which can be applied by only water wetting (hence having the features "pre-glued" and "water wettable" as implied from step (c) of Claim 1) can be handled more easily, when covering a wall, and can reduce the necessary processing steps for the end-user, hence require complicated and time consuming procedures, compared to a glass fibre fabric wall covering according to Paragraph [0003] applied as described in Paragraph [0002].
 - 6.2 Having regard to the requirement of Claim 1 for the adhesive layer resulting from its step (c) (i.e. the presence of starch and the absence of a polymeric latex binder as well as the functionally defined relevant capability), it is however contested that if only starch is present the mentioned capability is still attained and the desired physical properties of the wall covering are not impaired. In fact, no application test whatsoever has been carried out. Nor has any effect whatsoever related to the absence of a polymeric latex binder ever been made available.

6.3 The only example of the patent in suit illustrates the production of a wall covering possessing the features of Claims 14 to 22, i.e. of a particular embodiment of Claim 1 including two starches (potato and corn) and an inorganic compound for enhancing water absorption. So it has not been shown that if only one starch is present, without inorganic compounds, that capability is still attained and the physical properties of the wall covering are not impaired.

6.4 Consequently, the problem effectively solved over the prior art acknowledged in Paragraph [0003] of the patent in suit was to provide a manufacturing process of a pre-glued glass fabric wall covering, which is applicable on any wall by water wetting.

Obviousness of the solution

7. The process of Claim 1 (and the wall covering of Claim 23 as well) is distinguished from the prior art acknowledged in Paragraph [0003] of the patent in suit by feature (c) of Claim 1, namely by:

- (a) applying a second coating on one side only of the glass fabric by an aqueous dispersion comprising starch in the absence of a polymeric latex binder,
- (b) drying that applied second coating,
- (c) said second dried coating being capable of serving as an adhesive for the attachment of the resulting wall covering to a wall when wetted by water.

7.1 For the skilled person starting from a known glass fibre fabric as described in Paragraph [0003] of the patent in suit and aiming at manufacturing a pre-glued glass fibre wall covering to be applied by water

wetting, any measure conventional for preparing pre-glued wall coverings that are activated by water wetting represents an equally obvious suggestion for solving the problem.

7.2 Also, the skilled person would not only consider the state of the art in the specific technical field of the application (glass fibre wall covering) but also look for suggestions in the neighbouring fields (such as paper wall coverings) or in a broader general technical field (wall coverings and adhesives), in which the same or similar problems arise, if he could be expected to be aware of them.

7.3 The patent in suit itself acknowledges that:

- (a) (Paragraph [0005]) the use of a starch adhesive in the preparation of pre-glued non-woven wall covering is known from A5; and
- (b) (Paragraph [0008]) for paper wall coverings a starch-based adhesive in the absence of a latex binder is most commonly used, whereby such starch-based adhesives can be dried and re-wetted again without a significant change in the gluing capability.

This acknowledgment essentially corresponds to the features distinguishing the process of Claim 1 from the prior art. Hence, the questions arise whether A5 actually discloses it and whether the skilled person would have considered this disclosure for paper wall coverings in order to solve the problem posed.

7.3.1 A5 discloses (Claim 25) a process for the production of a wall covering which comprises applying an adhesive coating on to a resinous or wax shear coating supported

on a moistened nonwoven fibrous sheet material and drying to produce a water-activatable adhesive coating on the said shear coating, the tensile and cohesive strength of the shear coating being such that, upon application of the wall covering on to a wall following water activation of the adhesive coating, the wall covering is bonded to the wall but is dry strippable (as defined herein) from the wall. In this process: the nonwoven fibrous sheet material can contain only paper fibres or a blend of paper fibres with artificial fibres such as nylon, rayon or acrylic (left column of page 2, lines 24-28); the adhesive coating may be applied in liquid form (Claim 28), e.g. as an aqueous solution, dispersion or emulsion, to a dry shear coating (sentence bridging the left and right column on page 3); the shear coating can be formed by applying an aqueous composition, which can contain resin and starch, followed by drying (Claim 29 and page 3, left column, lines 10-24). A protective coating can be formed on the other, wear side by application of an aqueous emulsion or lacquer coating of e.g. vinyl acetate homo- or copolymer (Paragraph bridging left and right columns of page 2). As regards the adhesive, A5 mentions and illustrates soluble starches (page 3, left column, line 50), which together with carboxymethyl cellulose-based are acknowledged as being conventional for affixing wallpapers to walls (page 1, left column, lines 18-21). Still according to A5, the adhesive coating can incorporate ingredients such as surface active agents for improving the water-absorption properties and fungicides to inhibit mould growth. There is no requirement in A5 that the adhesive coating should comprise a polymeric latex binder. Hence, the

disclosure of A5 fully reflects what is acknowledged in the patent in suit.

7.3.2 Therefore, the use of starch-based adhesive for wall coverings, which can be applied as aqueous dispersions, was known for paper wall coverings.

7.4 As regards the question whether the skilled person would have considered the neighbouring field of paper wall covering (which was the crucial point also in the decision under appeal, Point 5 of the Reasons) for suggestions in order to solve the problem posed, the Board notes that:

7.4.1 D4, which is acknowledged in Paragraph [0004] of the patent in suit, concerns glass fibre wall coverings and *inter alia* mentions that:

- (a) Glass fibre fabric wall coverings comprising on one side thereof an adhesive formed by application of a water dispersion were known (page 1, first two lines).
- (b) Also known, from A6, acknowledged in A4, was the measure of providing on one side of a glass fibre fabric wall covering an adhesive coating, which before application could be activated by water wetting, as the adhesive was water soluble and adhered only when wetted.

Hence, A4 discloses that water activated adhesive layers provided on one side of a glass fibre fabric wall coverings were known before the priority date of the patent in suit.

7.4.2 A6, acknowledged in A4 and admitted in the appeal proceedings (*supra*), concerns (Claim 1) an easy-to-

apply, washable wall covering comprising a support, which can be made of cellulosic- or duplex-paper, or of glass fibre fabric, the support being coated on one side with a plastic made of polyethylene and on the other side with a vinyl-acetate copolymer, the copolymer coating comprising an added powdery cellulose derivative such as carboxymethylcellulose (which, according to A5, was another commonly used adhesive beside starch). A6 illustrates three wall coverings having respectively a substrate made of cellulosic paper (Example 1), duplex-paper (Example 2) and glass fibre fabric (Example 3). A6 also acknowledges that application of a layer with water activated adhesive on wall coverings was known (Page 2, lines 5-8). A6, like A5, does not require that the water activated adhesive layer comprises also a polymeric latex binder. Hence, A6 shows that the same water activated adhesive layer can be applied to paper and glass fibre wall coverings, i.e. that an adhesion problem can be solved in the same way for paper and glass fibre wall coverings.

7.4.3 Therefore, document A6 shows that the skilled person for glass fibre wall coverings was aware of the neighbouring field of paper wall covering, e.g. as regards coatings and adhesives thereof.

7.4.4 Finally, concerning the argument that glass fibre and paper wall coverings have different properties and problems to solve, such as different swelling properties and interaction, hence behaviour, or different physical characteristics, it is noted that Claim 1 does not contain any limitation for physical characteristics suitable to reflect any such alleged

difference, let alone any limitation concerning the quantities of the adhesive, such as lower quantities.

7.5 It follows from the foregoing that the skilled person aiming at solving the problem posed would have transferred the solution that was suitable for the production of paper wall coverings to the production of glass fibre wall coverings, because he would been aware that water activated adhesive layers were used in both neighbouring fields in order to produce wall coverings that could be handled more easily.

7.6 Therefore, the subject-matter of Claim 1 was obvious (Article 56 EPC).

Conclusion

8. A ground of opposition prejudices the maintenance of the patent as granted (Main Request).

9. Consequently, the Board need not decide on the alleged insufficiency of the disclosure.

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:

S. Fabiani

J. Riolo