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Datasheet for the decision of 15 October 2013

Case Number: T 0066/10 - 3.2.05

Application Number: 01987826.3

Publication Number: 1327022

IPC: D21F 7/08

Language of the proceedings: EN

Title of invention:
Papermachine clothing

Patent Proprietor:
Voith Patent GmbH

Opponent:
Heimbach GmbH & Co. KG

Headword:
-

Relevant legal provisions (EPC 1973):
EPC Art. 56, 99(1)
EPC R. 55(c), 56

Keyword:
"Admissibility of the opposition - yes"
"Inventive step - no"

Decisions cited:
J 0010/07

Catchword:
-

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Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0066/10 - 3.2.05

D E C I S I O N
of the technical board of appeal 3.2.05
of 15 October 2013

Appellant: (Opponent)
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Decision under appeal:
Decision of the opposition division of the European Patent Office posted 29 December 2009 rejecting the opposition filed against European patent No. 1327022 pursuant to Article 101(2) EPC.

Composition of the board:

Chairman: M. Poock
Members: H. Schram
G. Weiss

Summary of Facts and Submissions

I. The appellant (opponent) lodged an appeal on 12 January 2010 against the decision of the opposition division, posted on 29 December 2009, by which its opposition against European patent Nr. 1 327 022 was rejected. The statement setting out the grounds of appeal was filed on 6 May 2010.

II. Oral proceedings were held before the board of appeal on 15 October 2013. The representative of the respondent (patent proprietor) had informed the board on 29 July 2013 that the respondent would not attend the oral proceedings.

III. The appellant requested that the decision under appeal be set aside and that the patent in suit be revoked.

The respondent requested that the appeal be dismissed (main request), or that the decision under appeal be set aside and that the patent be maintained on the basis of the claims 1 to 33 filed on 16 August 2010 as auxiliary request 1.

IV. The documents referred to in the appeal proceedings included the following:

D3 DE-A 40 40 861;

D7 DE-A 23 24 985.

V. Claims 1 and 24 of the main request read as follows:

"1. Papermachine clothing comprising a carrier layer (4) and at least two needle punched non-woven layers (6a, 6b) composed of ultra coarse non-continuous fibres on the sheet side of said carrier layer (4), characterized in that the fibres of each layer (6a, 6b) are substantially orientated at a slight angle (A, B) to the intended machine direction (X) of the clothing and with a biaxial lay."

"24. A method of making papermachine clothing comprising the steps of: providing a carrier layer (4); providing a first non-woven layer (6a) composed of ultra-coarse non-continuous fibres whose fibres are orientated substantially in a first direction; providing a second non-woven layer (6b) composed of ultra-coarse non-continuous fibres whose fibres are orientated substantially in a second direction, and mechanically attaching said first (6a) and second nonwoven layers (6b) to the carrier layer (4), characterized in that both layers (6a, 6b) are provided in such a way that said first direction is a first slight angle (A) to the intended machine direction (X) of the clothing, and said second direction is a second slight angle (B) to the intended machine direction (X) of said clothing to provide a non-woven layer (6) whose fibres have a bi-axial construction with respect to the running direction (X)."

Claims 1 and 19 of auxiliary request 1 differ from the corresponding claims 1 and 24 of the main request in that the expression "characterized in that" has been replaced by the word "wherein", and in that the

expression "and wherein each of the non-woven layers composed of ultra-course fibres has a fibre count in the range 75 to 150 dtex" has been added at the end of the claim with the proviso that the expression "ultra-course fibres" reads "ultra-coarse fibres".

VI. The arguments of the appellant, in writing and during the oral proceedings, can be summarized as follows:

In the decision under appeal the opposition division held the opposition to be admissible. It was established case law that the requirements of Rule 55(c) EPC 1973 were satisfied if the contents of the notice of opposition were sufficient for the opponent's case to be properly understood on an objective basis. The issue of the sufficiency of the notice of opposition in this respect had to be distinguished from the issue of the strength of the opponent's case. For the admissibility of an opposition it was not required that an argument brought in support of the opposition had to be conclusive in itself for it to be admissible. The notice of opposition contained an indication of the facts, evidence and arguments presented in support of the ground of opposition, ie lack of inventive step. Incidentally, the admissibility of the opposition was not contested by the respondent in its reply dated 13 August 2007 to the notice of opposition. The opposition met all the requirements of the EPC and was therefore admissible.

Document D3 represented the closest state of the art. This document discloses a papermachine clothing comprising a carrier layer and a non-woven layer 15 composed of non-continuous fibres in the range from

7 to 100 dtex located on the sheet side of said carrier layer. This range included ultra-coarse fibres. A second non-woven layer 16 composed of non-continuous fibres in the range from 2 to 44 dtex, preferably from 3 to 11 dtex, was located on top of layer 15, just as in a preferred embodiment of the patent in suit (see claims 17 to 21 of the patent). The problem to be solved by the person skilled in the art starting from document D3 was to find a suitable method to apply the fibre web 15 to the carrier layer. In the art of papermaking felts two methods were known for applying a fibre web, namely a folding technique and a spiralling technique. It was obvious to the person skilled in art to use the spiralling technique known from document D7 (rather than using a conventional cross-lapping or folding technique) in view of the advantages of the former (see page 2, last paragraph, and page 3, lines 3 to 7) and disadvantages of the latter mentioned in document D7. The folding technique resulted in longitudinal unevenness in the papermachine clothing obtained, which caused vibration of the pressure rollers in paper machines and led to premature wear, see document D7, paragraph bridging pages 1 and 2. It was further obvious to the person skilled in art to deposit a second layer of overlapping loops on a first layer of overlapping loops as shown with a bias angle which was equal and opposite to that of the underlying layer so that any asymmetry due to the bias angle of one layer with respect to the longitudinal direction of the carrier layer could be compensated. The person skilled in the art would therefore use the spiralling technique taught and shown in figure 6 of document D7, which inevitably resulted in a biaxial lay as claimed in claim 1 of the patent in suit. The preferred method

in the patent in suit for applying the ultra-coarse layers involved also a spiralling technique, see paragraph [0021] of the patent in suit. The subject-matter of claim 1 as granted lacked therefore an inventive step. This reasoning also applied to method claim 24 as granted. For this claim document D7 could also be taken as a starting point for assessing inventive step. The only difference of claim 24 as granted with the method known from document D7 (see figure 6) was that the fibres of the layers 14b and 14d were said to be coarse fibres. The advantages of using coarse fibres were known from document D3 (see column 2, line 53 to column 3, line 7).

The lower part of the range for the fibre count claimed in claims 1 and 19 of auxiliary request 1 was already known from document D3. The subject-matter of these claims did also not involve an inventive step.

VII. The arguments of the respondent, in writing, can be summarized as follows:

The opposition was not admissible, since the grounds of opposition in the notice of opposition were not sufficiently substantiated. In said notice it was merely alleged that claim 1 of the patent in suit was not inventive with respect a combination of a document selected from a first group of documents disclosing substantially the preamble of said claim and a further document selected from of a second group of documents disclosing a method resulting in a papermachine clothing having the fibre orientation as claimed in the characterizing part of said claim. Moreover, the appellant had based its objection of lack of inventive

step inter alia on a document published after the relevant priority date of the patent in suit. The notice of opposition contained only general statements: a closest prior art, the objective problem to be solved in the art starting from that prior art, and reasons for the person skilled to combine that prior art with other documents with a view to solve said problem were not identified.

The papermachine clothing known from document D3 reduced the risk of paper markings and had a good dewatering. The person skilled in the art had thus no reason to modify the papermachine clothing shown in the sole drawing of that document. In particular, the person skilled in the art had no motivation to replace the inner layer 15 by a double layer of coarse fibres, since the papermachine clothing already required a structure comprising a double layer: an inner layer 15 of coarser fibres and an outer layer 16 of finer fibres. Document D7 showed five examples of forming a batt layer onto a carrier layer, of which only one corresponded to a biaxial lay as claimed in the patent in suit (disregarding the fact that document D7 was silent about the fibre count of the batt layer). Document D7 did not mention the problems of improving dewatering and/or reducing marking. The person skilled in the art had no motivation to apply the teaching of document D7 for forming the papermachine clothing known from document D3. The attack of the appellant was thus the result of an ex post facto analysis, ie based on hindsight with knowledge of the invention. It followed that the subject-matter of claim 1 of the patent involved an inventive step. The same arguments applied to claim 24 of the patent.

The term "ultra-coarse fibres" in claims 1 and 24 of the patent meant in the light of the description that said fibres had a fibre count in the range of 75 to 150 dtex. This interpretation was made explicit in claims 1 and 19 of auxiliary request 1. For the same reasons as for the main request, the subject-matter of these claims also involved an inventive step

Reasons for the Decision

1. *Admissibility of the opposition, Rules 55(c) and 56 EPC 1973*

1.1 The requirements of Rule 55(c) EPC 1973 (applicable according to J 0010/07 reasons 1,2), are satisfied, when the contents of the notice of opposition, ie the indication of facts and evidence in support of the grounds on which the opposition is based, are sufficient for the opponent's case to be properly understood on an objective basis. These requirements must be distinguished from the strength of the opponent's case, i.e. whether the facts and evidence submitted actually prove what is alleged.

In Section III of the notice of opposition (see page 6 to 15) it was argued that the subject-matter of claims 1 and 24 as granted did not involve an inventive step. In Section III-A 1, passages in five documents were identified with a view to show that a papermachine clothing comprising a carrier layer and at least two needle punched non-woven layers composed of non-continuous fibres on the sheet side of the carrier

layer were generally known in the art, four of which disclosing ultra-coarse non-continuous fibres. In Section III-A 2 it was argued that it did not require an inventive step to orientate the fibres of said layers as claimed in claim 1 as granted, since this was an inevitable consequence of using a spiralling technique for applying at least two layers of a carded fibre web on a carrier layer in a manner as taught in document D7 having regard to document D8.

In the judgment of the board, the indication of the facts and evidence presented in support of the grounds of opposition in the notice of opposition is sufficient for the appellant's case to be understood.

1.2 It has not been disputed that the notice of opposition filed by the appellant meets all the requirements of Article 99(1) EPC 1973 and Rule 55(a) and (b) EPC 1973 and that it contains a statement of the extent to which the European patent is opposed and of the grounds on which the opposition is based.

1.3 It follows that the opposition of the appellant is admissible.

2. The appeal of the appellant is also admissible. Since this has not been contested by the respondent, there is no need for further substantiation of this matter.

MAIN REQUEST

3. Ground for opposition under Article 100(a) EPC 1973 in combination with Article 56 EPC 1973

3.1 Document D7 discloses (see claims 1 to 4, figures 1 and 6, and example 4, page 6, last paragraph) a method of manufacturing a machine felt ("papermachine clothing") comprising the steps of moving an endless base fabric ("Grundgewebe 1") longitudinally in one direction, applying a carded fibre web ("Kardierflor 14") to the base fabric by feeding the web longitudinally on to the base fabric in the direction of movement of the base fabric while imparting to the web a movement in one direction transverse to the direction of movement of the surface of the base fabric on to which the web is fed and at such a speed in relation to that of the base fabric that the web is spirally wound on the base fabric in a manner such that the web covers the base fabric from one edge to the other thereof, and needling the web to the base fabric. According to this method, a non-woven layer 14 is provided consisting of two layers ("Florschichte 14b, 14d"), whose fibres have a biaxial construction with respect to the running direction

Claim 24 of the main request differs from the method of making a papermachine clothing known from document D7 in that the fibres of the carded fibre web are ultra-coarse fibres. It is plain physics that the distinguishing feature, ie using ultra-coarse fibres rather than fine fibres, will enhance the dewatering of the papermachine clothing, but will have a negative effect on the smoothness thereof.

3.2 The use of ultra-coarse fibres in a two-layered fibre layer consisting of two needle punched non-woven layers is known from document D3 (see claim 5, column 2, line 53 to column 3, line 7, and column 4, lines 50

to 58). This construction provides inter alia an enhanced dewatering of the papermachine clothing, see column 2, lines 14 to 18, of document D3. The sole drawing shows a fibre layer 14 consisting of two needle punched non-woven layers 15, 16 ("Basisfaserschicht 15", "Deckfaserschicht 16"). Inner layer 15 has fibres in the range from 7 to 100 dtex (see column 3, line 6), which range includes ultra-coarse fibres. The fibre count of the outer layer 16 is in the range from 2 to 44 dtex, preferably from 3 to 11 dtex, see column 3, lines 2 to 5. The two-layered structure of an inner layer 15 having a higher fibre count than the outer layer 16 further reduces the risk of vibrations and paper markings, and further improves the dewatering (see column 2, line 61 to column 3, line 2).

In the judgment of the board, it is therefore obvious to the person skilled in the art, starting from the method known from document D7 and seeking to enhance the dewatering of the papermachine clothing produced by said method, to use ultra-coarse fibres for the carded fibre web as taught by document D3, and thus to arrive at the invention.

3.3 It follows that the subject-matter of claim 24 of the patent in suit was obvious to the person skilled in the art and thus does not involve an inventive step in the meaning of Article 56 EPC 1973.

AUXILIARY REQUEST 1

4. The additional feature of claim 19 of the auxiliary request 1, ie "and wherein each of the non-woven layers composed of ultra-coarse fibres has a fibre count in

the range 75 to 150 dtex", is already known from document D3 and cannot lead to a different conclusion than given in point 3.3.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The patent is revoked.

The Registrar: The Chairman:

D. Meyfarth M. Poock