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D E C I S I O N
of 12 June 1996

Case Number: T 0439/94 - 3.2.4

Application Number: 87109427.2

Publication Number: 0254087

IPC: A47G 9/02

Language of the proceedings: EN

Title of invention:
Comforter

Patentees:
Suzuki, Emi, et al

Opponents:
Werbegemeinschaft Inlettweber GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 54, 56

Keyword:
"Novelty (yes)"
"Inventive step (yes)"

Decisions cited:
T 0002/83

Catchword:
-



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Boards of Appeal

Chambres de recours

Case Number: T 0439/94 - 3.2.4

D E C I S I O N
of the Technical Board of Appeal 3.2.4
of 12 June 1996

Appellants:
(Opponents)

Werbegemeinschaft Inlettweber GmbH
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Representative:

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Respondents:
(Proprietors of the patent)

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Representative:

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Decision under appeal:

Interlocutory decision of the Opposition Division
of the European Patent Office posted 25 April 1994
concerning maintenance of European patent
No. 0 254 087 in amended form.

Composition of the Board:

Chairman: C. A. J. Andries
Members: M. G. Hatherly
J. P. B. Seitz

Summary of Facts and Submissions

I. The interlocutory decision of the opposition division of the European Patent Office to maintain the European patent No. 0 254 087 in amended form was posted on 25 April 1994.

The appellants (opponents) filed an appeal against this decision on 25 May 1994, the appeal fee was paid on the same day. The statement of grounds of appeal was received on 26 August 1994.

II. The following documents were referred to during the appeal proceedings:

- D1: DE-C-845 100
- D2: DE-C-3 108 698
- D3: "Wie man sich bettet ...", Billerbeck
Schlafforschung, Wien, 1. Auflage, 1981, pages 26
to 28
- D4: DE-U-7 639 223
- D5: DE-A-2 237 499
- D7: FR-A-500 136

III. Both parties attended oral proceedings on 12 June 1996 during which the board expressed doubts as to the allowability of the respondents' amendments filed by letter dated 29 May 1996. Following the discussion the respondents submitted an amended claim 1 reading as follows:

"A comforter of a bag-formed body prepared by joining peripheral edges of a front cover cloth (1) and a back cover cloth (2) together with a filling of down inside, and comprising a plurality of parting cloth members (301-310) disposed at specified intervals in transverse

direction of said comforter and joined to said front cover cloth and back cover cloth, the height (H_1-H_{10}) of said parting cloth members gradually lowering from the center portions towards the both right and left ends thereof,

characterised in that the width of the front cover cloth (1) is wider than the back cover cloth (2) and said parting cloth members (301-310) each have a trapezoidal shape or protruding arc shape with the upper sides of the trapezoidal shape or the protruding arc shaped side being joined to said front cover cloth and the lower side of the trapezoidal shape or the protruding arc shape being joined to said back cover cloth, whereby only said front cover cloth (1) is bulged out as a whole."

- IV. In the appeal proceedings the appellants argued that claim 1 was impermissible under Article 123 EPC and that its subject-matter was obvious eg because it was merely a variation of the comforter known from document D2 with no extra effect thereover.

The respondents essentially countered the appellants' arguments, maintaining that claim 1 was not an impermissible generalisation of the application as originally filed and that combinations of the prior art documents were not obvious and would not have led to the claimed subject-matter.

- V. The appellants request that the interlocutory decision under appeal be set aside and the patent revoked.

The respondents request that the interlocutory decision under appeal be set aside and the patent maintained on the following basis:

Claims: No. 1 filed during the present oral proceedings
Nos. 2 to 13 of the patent specification as granted

Description: column 1 presented at the oral proceedings of 9 February 1994 with amendments in lines 15 to 21 and 38 as set out in the letter of 16 March 1995
column 2, line 1 to column 8, line 22 presented at the oral proceedings of 9 February 1994

Drawings: Figures 1 to 4 of the patent specification as granted
Figures 5 to 16 presented at the oral proceedings of 9 February 1994

Reasons for the Decision

1. The appeal is admissible.
2. *Amendments*
 - 2.1 Claim 1
 - 2.1.1 Claim 1 as granted consists of all the features of the originally filed claims 1 and 14. The present claim 1 consists of claim 1 as granted to which have been added various features.

The parting cloth members have either a trapezoidal shape (see page 10, line 18 of the originally filed description and column 6, line 22 of the description as granted) or a protruding arc shape (see page 10, lines 16 and 17 of the originally filed description and column 6, line 19 of the description as granted). The joining of the upper side or sides of these shapes to the front cover cloth and the lower side to the back cover cloth is apparent from page 8, lines 14 to 17 of the originally filed application (column 5, lines 3 to 6 of the description as granted) and the originally filed Figure 12 (now Figure 11). That only the front cover cloth (ie not the back cover cloth) is bulged out as a whole is apparent from the shape of the parting cloth members shown in eg the originally filed Figures 9 and 12 (now Figures 8 and 11), from the front cover cloth being wider than the back cover cloth, and from the term "trapezoidal" (see section 3 below).

- 2.1.2 The appellants argue that the term "protruding arc shape" is an impermissible generalisation of the term "protruding arc shape (convex)" used in column 2, lines 54 and 55 of the description as granted.

However the term "protruding arc shape" is used without the word "convex" in column 5, line 45 and column 6, line 19 of the description as granted, corresponding wording being present in the patent application.

In any case the claimed arc shaped parting cloth members can only be convex and not concave for two reasons. The claim states firstly that the height of the parting cloth members gradually lowers from the centre portions towards the right and left ends and secondly that the arc shaped side is joined to said front cover cloth, whereby the latter is bulged out as a whole.

The respondents point out that "convex" means thicker at the centre than at the edges and agree with the board that the term "protruding arc shape" taken with the wording "height ... gradually lowering from the center portions towards the both right and left ends" gives a definition of a convex shape.

2.1.3 Thus no objection arises under Article 123(2) EPC to the new claim 1 and, since this new claim 1 has a narrower scope than the granted claim 1, no objection arises under Article 123(3) EPC either.

2.2 The present dependent claims 2 to 13 are the same as the granted claims 2 to 13 that are based on the originally filed claims 2 to 13.

2.3 The amendments to the granted description consist merely of an expanded discussion of the prior art and the object of the invention and deletion of the description of a deleted Figure. The remaining Figures are those as granted.

2.4 Thus no objection arises under Article 123 EPC to the present version of the patent documents.

3. *Interpretation of Claim 1*

3.1 The word "trapezoidal" used in the version of claim 1 in the opposition division's decision and in the present claim 1 is to be found in page 10, line 18 and page 11, line 25 of the originally filed description. The meaning of the word "trapezoidal" however has changed over the years from "a quadrilateral with two sides parallel" to "a quadrilateral with no sides parallel".

The originally filed Figure 12 (now Figure 11) shows parting cloth members that approximate to a quadrilateral with two sides parallel but which are said in line 18 of the originally filed page 10 (now line 22 of column 6) to be trapezoidal. On the other hand, there is no disclosure of parting cloth members with no sides parallel.

Therefore, in the light of the originally filed patent application and the granted patent specification in their entirety, including the parting cloth members in the present Figure 11, the board concludes that the term "trapezoidal" is to be interpreted, in line with its now obsolete meaning, as describing a figure having two parallel sides.

- 3.2 It is perhaps worth pointing out that the present Figure 9 falls within the scope of the present claim 1. While member 3a in Figure 9 appears to be upside down compared with what is specified in the claim, this member 3a is in fact merely a part of the parting cloth member 3. As explained in the present column 5, lines 28 to 39, the upper parting piece 3a is sewn along lines 10 and 11 to the lower parting piece 3b to make up the finished parting cloth member 3 which has the shape specified in the claim. Likewise, in the present Figure 10 the upper parting cloth pieces 302a to 308a are sewn to the lower parting pieces 302b to 308b to arrive at the final parting cloth members, see the present column 5, lines 17 to 27.

4. *Novelty*

A comforter as defined by the present claim 1, eg with parting cloth members having either of the specified shapes, is not disclosed by any of the prior art documents available to the board. Novelty is moreover not disputed by the appellants.

Therefore the subject-matter of claim 1 is considered novel within the meaning of Article 54 EPC.

5. *Closest prior art, problem and solution*

5.1 The closest prior art document is D2 which concerns a comforter that has a constant height in the central region and a curving in the edge regions in order to achieve more filling at the longitudinal axis than at the edges for better insulation at the central region and better conformability of the edges to the body, see column 1, lines 41 to 46.

5.2 Despite the fact that document D2 specifically states that its comforter has better conformability to the body, the board sees the problem to be solved by the invention as being to (further) improve the conformability without, however, surrendering the advantage of different insulation achieved by having more filling in the central region than at the edges.

5.3 By making the front cover cloth wider than the back cover cloth and making the crosswise parting cloth members protrude upwards (ie with the arc or the narrower of the parallel sides uppermost) then, if laid on a flat surface, the comforter bulges towards the front cover cloth and the back cover cloth is essentially flat. When the comforter is over a human

body, as shown in the present Figure 14, the back cover cloth 2 or planar side of the essentially plano-convex comforter conforms better to the body shape than would the bi-convex comforter depicted in document D2.

5.4 The board thus considers that the features of the present claim 1 solve the problem presented by the comforter disclosed by document D2.

6. *Inventive step*

6.1 Document D2

6.1.1 The appellants argue that the problems set out in column 1, lines 32 to 38 of the patent description as granted and the insertion in line 38 set out in the letter of 16 March 1995 are the same as the problems addressed by document D2, namely to achieve excellent heat retaining properties with no poorly insulated areas due to wandering of down and in which there is more down in the centre region to give there a higher heat retaining effect. The comforter of document D2 solves these problems and the present comforter allegedly has no advantages over the prior art comforter but is merely the result of a wish for variation and, moreover, the actual variation achieved is not an invention.

6.1.2 However, as set out in section 5.2 above, the board sees the problem somewhat differently to the appellants and concludes that the present invention solves this problem ie that the present invention has an effect going beyond that of the comforter known from document D2. The present comforter is not merely a variation for

variation's sake. Moreover, although an advantage is not a requirement for the presence of an inventive step under the EPC, in fact the board sees the present comforter as having an advantage in its conformability over that known from document D2.

6.1.3 Column 1, lines 51 to 56 of document D2 discloses an even tapering of the transverse walls on their upper and lower edges to nothing at the sides. This is consistent with the Figure of document D2 that shows a constant height in the central region and a curving in the edge regions and indeed consistent with the acknowledgement of what is known in the precharacterising portion of the present claim 1. The definition of even tapering would also cover tapering with a straight line instead of a curve and indeed it seems reasonable that tapering with a straight line would be obvious to the skilled person. However both the depicted and the obvious cross-sectional shapes are essentially symmetrical about a horizontal plane (eg a diamond or a hexagon) and so are different from the asymmetric shapes defined by the present claim 1.

6.1.4 The appellants argue that it would be obvious, because of the teaching of document D2 and/or because of a desire to use less filling, to slice the comforter of document D2 at the horizontal plane of symmetry to arrive at a comforter with a plano-convex cross section. The board sees no such teaching in document D2, the concrete teaching is that of the embodiment shown in the Figure whereas the generalisation in claim 1 of document D2 again concerns a tapering with no hint towards an asymmetric result. This horizontal slicing would in any

case not directly result in a comforter at all. A new back cover cloth must be attached and indeed a **flat** back cover cloth to produce a comforter falling within the scope of the present claim 1 whereas no such flat back cover cloth is disclosed by document D2.

6.1.5 A slicing at the horizontal plane of symmetry is something that the skilled person **could** do, but not, in the opinion of the board, something that the skilled person **would** do (see decision T 2/83, OJ EPO 1984, 265). In the absence of knowledge of the present invention there is nothing to lead him to halve the prior art comforter and in fact he would be inhibited from so doing because this would halve its height and thus halve its insulative effect. This could hardly be seen as a sensible solution to the problem of using less down.

6.2 Document D5 discloses a comforter whose front cover cloth is wider than the back cover cloth, the back cover cloth is flat and the filling is in the front cover cloth ie could be said to be bulging the latter outwardly. These are the features which are missing from the comforter of document D2. However the board does not see any reason to combine the teachings of these two documents and could not imagine what sort of comforter might result from the unlikely combination. The front cover cloth of document D5 is wider than the back cover cloth for a different reason, namely to make the ribs (the chamber walls) which are an integral part of the front cover cloth, there are no distinct chamber walls (ie no parting cloth members). The finished comforter is the same width at top and bottom and the document states in lines 17 and 18 of page 2 as well as in the last

three lines of claim 1 that the ribs in all three Figures have an exact prismatic form with right-angled side faces. This is incompatible with the tapering of the walls of the comforter of document D2 and therefore cannot lead to the claimed configuration.

- 6.3 Document D1 refers to various bedding articles and Figure 14 shows a cushion or the like (page 3, lines 18 to 28). Although it might appear that the front cover cloth is wider than the back cover cloth, this would seem to be unintended. The appellants argue that if a plano-convex shape is desired then the front cover cloth must be wider than the back cover cloth and the parting cloth members will have to have the claimed shape. The conclusion appears reasonable but the board sees no reason why the skilled person would be led to provide this plano-convex shape.
- 6.4 Document D3 is a background article on bedding, mentioning in section 13 the conformability aspect of a modern comforter but not disclosing a comforter with an asymmetrical transverse cross sectional shape approaching that of the invention.
- 6.5 Document D4 deals with preventing draughts by increasing the weight at the edge regions of a comforter, not by an asymmetry in the sense of the present invention.
- 6.6 Document D7 explains on page 2 in lines 13 to 21 how to make parting cloth members with curved edges but there is no disclosure of a plano-convex shape or a wider front cover cloth. Figure 1 shows a biconvex article with cover cloths of the same width.

6.7 Thus the board finds that it would not be obvious to use the teachings of these documents, taken singly or in combination, to arrive at a comforter as set out in the present claim 1. In summary the documents available to the board do not contain the idea of a comforter which is asymmetrical in the sense of the invention, and this despite a long history of development of bed coverings.

7. The subject-matter of claim 1 is thus patentable as required by Article 52 EPC. The patent may therefore be maintained amended based on this allowable independent claim and on claims 2 to 13 which are dependent on claim 1.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.
2. The case is remitted to the first instance with the order to maintain the patent in the following version:

Claims: No. 1 filed during the present oral proceedings
Nos. 2 to 13 of the patent specification as granted

Description: column 1 presented at the oral proceedings of 9 February 1994 with amendments in lines 15 to 21 and 38 as set out in the letter of 16 March 1995
column 2, line 1 to column 8, line 22 presented at the oral proceedings of 9 February 1994

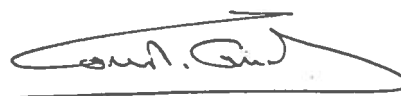
Drawings: Figures 1 to 4 of the patent specification as granted
Figures 5 to 16 presented at the oral proceedings of 9 February 1994

The Registrar:



N. Maslin

The Chairman:



C. Andries

