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Datasheet for the decision of 7 October 2010

Case Number: T 1425/08 - 3.2.03

Application Number: 02775631.1

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Title of invention:
Flooring

Patentee:
Välinge Innovation AB

Opponent:
Spanolux SA

Headword:
-

Relevant legal provisions:
EPC Art. 100(c)(a), 54, 56

Relevant legal provisions (EPC 1973):
-

Keyword:
"Added subject-matter (no)"
"Novelty and inventive step (yes)"

Decisions cited:
-

Catchword:
-

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Case Number: T 1425/08 **-** 3.2.03

D E C I S I O N
of the Technical Board of Appeal 3.2.03
of 7 October 2010

Appellant: (Opponent)
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Decision under appeal:
Decision of the Opposition Division of the European Patent Office posted 6 May 2008 rejecting the opposition filed against European patent No. 1427902 pursuant to Article 101(2) EPC.

Composition of the Board:

Chairman: U. Krause
Members: E. Frank
K. Garnett

Summary of Facts and Submissions

I. The appeal lies from the decision of the Opposition Division dated 15 April 2008 and posted on 6 May 2008 to reject the opposition against the European patent No. 1 427 902 pursuant to Article 101(2) EPC. Grant of the patent had been opposed in particular on the grounds of Articles 100 (a) (novelty and inventive step) and 100(c) EPC.

II. The Appellant (Opponent) filed a notice of Appeal on 11 July 2008, paying the appeal fee on the same day. The statement of grounds of appeal was submitted on 16 September 2008.

III. A communication pursuant to Article 15(1) RPBA was issued together with a summons to attend oral proceedings, which were duly held on 7 October 2010.

IV. The Appellant requested that the decision under appeal be set aside and that the patent be revoked.

The Respondent (Proprietor) requested that the appeal be dismissed.

V. The wording of claim 1 (as granted) reads as follows:

"1. A flooring, which comprises rectangular floorboards (1,1') with long sides (4a,4b) and short sides (5a,5b), said floorboards being joined in a herringbone pattern, long side (4a) to long side (4b) and long side (4a, 4b) to short side (5b, 5a), wherein said long sides (4a, 4b) have pairs of opposing first mechanical connecting means comprising a tongue

(10) and a tongue groove (9) for locking-together said floorboards vertically (D1),
characterized in that
the flooring comprises floorboards with a surface of laminate,
and in that said flooring comprises second mechanical connecting means comprising an upwardly projecting locking element (8) on one long side cooperating with a locking groove (12) on the other long side of an adjacent floorboard for locking together said floorboards horizontally (D2) whereby said connecting means allow locking-together both horizontally and vertically (D2 and D1 respectively) by inward angling whereby the tongue (10) is received in the tongue groove (9) and the locking element (8) enters the locking grove (12)."

VI. The following evidence has been considered for purposes of the present decision:

D3 = JP 10-219975
D3a = English translation of D3
D7 = WO 94/26999 A.

VII. The parties submitted the following arguments:

VII.1 Amendments of claim 1

The Appellant acknowledged that claim 1 as granted had been based on claim 73 as filed. However, the eleventh aspect on original page 10 (as published), although describing a herringbone pattern at lines 6 and 7, did not mention claim 73. In particular, this aspect addressed a special laminate whereas claim 73 did not

and, as opposed to claim 73, the locking means referred to on page 10 are not specified as inward angling means. The figure 5b embodiment of a herringbone floor on page 24 at line 15 (as published) also did not disclose an "inward angling", since this way of locking related to yet another embodiment at line 30 of page 24, namely to the locking elements of the floorboards shown in figure 13. Moreover, most notably, lines 12 to 16 of page 10 and lines 19 to 22 of page 24 described "short sides" of adjoining floorboards, which could be formed completely without locking means. Since such a blunt short side would abut the tongue of an adjacent floorboard's long side, leaving gaps as wide as the tongue, it could not serve for a herringbone floor. If the floorboards were glued, as was also described on pages 10 and 24, this would contradict the invention, since the herringbone floor as originally disclosed required mechanical locking on both (long and short) sides. Consequently, the features of the various embodiments described on pages 10 and 24 could not be combined with a herringbone floor of claim 73 as filed, and in particular could not form a basis for connecting means being only foreseen on the long sides of the floorboards as claimed by claim 1. Therefore, the subject-matter of claim 1 was not disclosed in the original application.

The Respondent argued that claim 1 was firstly based on claim 73 as filed. Moreover, since claim 73 was the only claim addressing a herringbone pattern, lines 6 to 7 of original page 10 (as published) referred to this claim. Furthermore, claim 73 as well as page 10 disclosed that the short sides of the floorboards of a herringbone floor did not need to have any locking

means, and page 10 further specified that they might also be glued to hold the floorboards together. Even if such a "blunt" short side would lead to a gap in a herringbone pattern, this would be a question of how to carry out the invention, and not of added subject-matter. Although page 10 did not refer to an "inward angling" of the long sides of the floorboards, this was derivable from claim 73 itself. Finally, another basis for "inward angling" of a joint system on the long side(s) with locking features shown in figure 13 can be found on page 24, at line 32 (as published). Claim 1 therefore was disclosed by the application as filed.

VII.2 Novelty and inventive step

The Appellant argued that paragraph [0003] of the patent, lines 28 to 31 and 36 to 41, did not describe a decorative surface layer which necessarily had to be made of high pressure laminate. Thus, a surface of laminate was in fact also present in the decorative layer of D3/D3a. Moreover, figures 7 and 8 of D3/D3a disclosed a projecting locking element (i.e. the "projection 19"), having a narrow stem and a bulbous portion at its end. This locking element of the "connector 18" had to engage a narrow slot of an adjacent floorboard, whereby the slot opened up into a broader ball-shaped space to thus accommodate the bulbous portion. Therefore, the narrow stem and slot and the bulbous portion and ball-shaped space, respectively, of D3/D3a, corresponded to both the first tongue with tongue groove and second projecting locking element with locking groove of claim 1 of the patent. Although "snapping in" of the projecting locking elements was foreseen in D3/D3a, if floorboards of

considerable thickness had to be connected, "angling in" of D3/D3a's locking elements was also possible. Since the "connector 18" and its "projections 19" were flexible, the stem's base was bent at the point of deflection during angling in, but when it had been connected to the adjacent floorboard it remained in shape, thus leaving no gaps between floorboards behind. Therefore claim 1 lacked novelty over D3/D3a.

As for inventive step, the Appellant further argued that if claim 1 differed from D3/D3a in that the decorative surface was a laminate and that locking-together of adjacent floorboards was achieved by inward angling, then firstly the provision of a laminate surface layer was commonly known in the art, and therefore obvious. Secondly, the problem underlying the inward angling was independent from the surface layer's design and, starting from the figure 7 embodiment of D3/D3a, was to further improve the "snapping in" connection of D7, i.e. to make it still simpler, stronger, tighter and better aligned. To this end, although some drawbacks of the "inward angling" locking strip shown in the figure 6 embodiment of D3/D3a, such as gaps and risk of rattling, had been overcome by the u-shaped connectors in the figure 7 embodiment of D3/D3a, D7 taught that u-shaped clips were disadvantageous, and that instead of this an "integrated" locking strip should be foreseen, which was connected by inward angling, cf. D7, figs. 1a and 1b. Paragraph [0043] of D3/D3a would not lead away from an inward angling locking strip as suggested by D7, since such a connection was only described as being "difficult" (but not impossible). Although figures 4 and 5 of D7 did not suggest a herringbone pattern, the

design of suitably opposed panels for such a flooring was common technical knowledge, and thus, in the light of D3/D3a and D7, the skilled person would finally arrive at the subject-matter of claim 1.

The Respondent argued that, as was derivable from paragraph [0034] of D3/D3a, a base layer was prepared and a decorative member was adhered to that base. This decorative surface could be, e.g., linoleum or simply colour. However, no laminate was described by D3/D3a. Moreover, D3/D3a disclosed a typical vertical connection with only one single groove, where a floorboard was firstly placed above the locking means of the adjacent floorboard, and then was pushed downwardly, thereby "snapping in". There was no disclosure anywhere in D3/D3a that the connection of floorboards could be achieved other than by vertical pushing. Claim 1 therefore was novel over D3/D3a. As regards inventive step, D7 represented the closest prior art, since it addressed laminate floors, typically featuring floorboards with dimensions greater than those of usual boards known from D3/D3a. However, when starting from D3/D3a, this document already provided a perfect solution for connecting floorboards in its figure 7 embodiment, in particular for a herring bone floor as shown in figure 10 of D3/D3a. Reference was made to paragraph [0043] of D3/D3a, where it was explicitly taught to use the modular system of figure 7, since the installation in the shape of a flying geese pattern then could be easily performed. Thus, there was no motivation whatsoever for the skilled person to deviate from the system realized in figure 7 of D3/D3a. The subject-matter of claim 1 therefore also involved an inventive step.

Reasons for the Decision

1. The appeal is admissible.

2. *Sufficiency of disclosure*
(Article 100 (b) EPC)

The Opposition Division found the invention as defined in claim 1 to meet the requirements of sufficiency of disclosure, and the Appellant did not pursue this objection in the appeal and the Board has no reason to take a different view.

3. *Amendments*
(Article 100 (c) EPC)

3.1 The parties agreed that present claim 1 is in the first place based on the subject-matter of claim 73 as filed. Compared to claim 73, claim 1 has now been directed to a "flooring" instead of a "system for making a flooring", and it has been added that the rectangular floorboards are joined "long side to long side" and "long side to short side", to form the herringbone pattern. Moreover, the "pairs of opposing connecting means" of the long sides of original claim 73 have been further specified, namely as "first mechanical connecting means, comprising a tongue and a tongue groove for locking together said floorboards vertically", and as "second mechanical connecting means, comprising an upwardly projecting locking element ... cooperating with a locking groove ... for locking together said floorboards horizontally". During locking-together, "the tongue is received in the tongue

groove, and the locking element enters the locking grove".

3.2 As argued by the Respondent, claim 73 explicitly describes the laying of a herringbone floor with a "surface of laminate", and that on the long sides of the rectangular floorboards locking-together takes place both horizontally and vertically by "inward angling". Moreover, claim 73 does not require connecting means on the short sides to form such a herringbone pattern.

3.3 In respect of the specific design of the joint system according to figure 12, for a herringbone pattern of figure 5b (cf. page 24, lines 14 and 15 (as published)), the Boards agrees with the Appellant that the description of this embodiment (cf. page 23, line 23 to page 24, line 22) is vague on how the floorboards are actually connected in the first place. On page 24, lines 2 to 7, it is merely stated that when the floorboards are released, "snapping-out" on the short side can be facilitated by suitably adapting the "locking element 8" of the short side. This is, however, related to the preceding paragraphs on page 23, lines 7 to 22, where it is pointed out that, after installation, the floorboards "A" and "B" can be taken up again.

The actual installation of these two rectangular floorboards "A" and "B" is referred to in the description of figures 4a and 4b on pages 12 and 13 (as published), whereby joining of the boards "A" and "B" can take place by snapping-in, inward angling or insertion along the joint edge, and the locking means can be of different shapes (cf. page 13, lines 3

to 16). Moreover, following from the subsequent lines 25 to 30 on page 13, the rectangular floorboards according to figures 4a and 4b are joined in the herringbone pattern shown in figure 5b.

Thus, in the view of the Board, the skilled person would readily recognize that snapping-in, inward angling or insertion, together with correspondingly adapted different shapes of locking means, are likewise suitable for the concept of joining floorboards long side to short side in a herringbone pattern according to figure 5b.

3.4 Therefore the Board agrees with the Respondent that the specific shapes of the locking means on the long sides according to the figure 13a embodiment, which are explicitly described as enabling the long sides to be joint by "inward angling" on page 24, line 30 to page 25, line 16 (as published), can be contextually read with the making of a "herringbone floor" according to figure 5b and claim 73 as filed.

Moreover, in the Board's view, using common knowledge (see ,e.g., the prior art connections of figures 1b and 2d as described on page 12, lines 5 to 24 (as published)), the joining of the long sides "by inward angling", as required by original claim 73, is clearly feasible with a tongue-groove design as shown in the figure 12a embodiment, when a "herringbone pattern" of figure 5b is being laid (cf. page 24, lines 14 and 15). Therefore, "inward angling" in the figure 12a embodiment would be considered to be implicitly disclosed by the skilled person in context with the subject-matter of claim 73 as filed.

Hence, on the basis of installing a herringbone flooring according to original claim 73, the specific mechanical joint system according to present claim 1, i.e. both tongue with tongue groove and locking element with locking groove on the respective long sides of adjacent floorboards for inward angling, is derivable from the description as filed. In accordance with claim 73 as filed, both the embodiments of figure 13 (cf. page 25, lines 14 to 16) and figure 12 (cf. page 24, lines 19 to 22) need not have any locking means on the short sides for locking together adjoining floorboards when the herringbone pattern is being installed.

3.5 To conclude, the subject-matter of claim 1 is based on original claim 73, and in particular on page 24 (as published) and figures 5b and 13a (or 12a) of the description as filed.

As to whether the omission of mechanical locking means on the short sides of the floorboards, or the prevention of parallel displacement by means of glue, may lead to problems whilst laying a herringbone floor as claimed in claim 1, this lies within the framework of the assessment of sufficiency of disclosure. This has not been, however, objected to by the Appellant during the appeal procedure, cf. also point 2 of this decision.

Therefore claim 1 fulfils the requirements of Article 100 (c) EPC.

4. *Novelty*
(Article 100(a) EPC, see Article 54 EPC)

4.1 The document D3/D3a describes in its figure 7 to 11 embodiment a herringbone floor comprising rectangular floorboards with a decorative surface (cf. D3/D3a; paragraphs [0033],[0034],[0037] to [0039], [0042] to [0044] and [0050] of D3a; and in particular figure 10 of D3/D3a).

4.2 Firstly, the Board agrees with the Respondent that the term "surface of laminate" in context with floorings is commonly known to the flooring industry as laminate flooring. That is, the (decorative) top layer of such a laminate flooring is invariably made from impregnated sheets of paper being pressed together under pressure and heat, irrespective of whether the laminate flooring has been put together by means of direct-lamination (the most common method) or high-pressure lamination: cf. patent, paragraph [0003], lines 36 to 44 (direct-lamination, i.e. all layers of the flooring are assembled at once), and lines 31 to 36 (high-pressure lamination, i.e. top layer and balancing layer are treated separately, then fused to the core layer). Thus, as also argued by the Respondent, D3/D3a (cf. D3a; paragraph [0034]) does not disclose a surface of laminate, since the "decorative member" of D3/D3a apparently is made of any material, e.g., linoleum or colour, and then is adhered to the front of a prepared woody base.

4.3 Moreover, as to the connection of adjacent floorboards in D3/D3a, the "projections 19" of "connectors 18" engage with the "slots 201" of "fitting recessed

members 20" provided on both sides of each board, by way of vertical "snapping-in" (cf.D3/D3a; paragraph [0037] of D3a and in particular figure 9). In the view of the Board, even if the "projection 19", with its top end slightly expanded compared to its smaller stem, and the correspondingly formed "slot 201", were considered both comprising first and second connecting means within the ambit of claim 1, and the "projections 19" were also slightly flexible as argued by the Appellant, there would be no implicit disclosure for the skilled person anywhere in D3/D3a that the "slots 201" of adjacent floorboards would then be suitable to be connected other than by way of being pushed in a straightforward direction onto the "projections 19" when locking-together without gaps is taking place (cf. D3a; paragraphs [0048] and [0050]). Hence, no locking-together of floorboards by way of "inward angling" is derivable from the figure 7 embodiment of D3/D3a.

4.4 The subject-matter of claim 1 thus differs from the figure 7 disclosure of D3/D3a in that the herringbone flooring comprises a surface of laminate and that the locking-together of adjacent floorboards is achieved by inward angling.

Novelty of claim 1 over the remaining known prior art was not disputed by the Appellant, and is also acknowledged by the Board. Therefore the subject-matter of claim 1 meets the requirements of novelty.

5. *Inventive step*
(Article 100(a) EPC, see Article 56 EPC)

5.1 During the oral proceedings, the figure 7 embodiment of document D3/D3a was taken by the Appellant as representing the closest prior art, as to which, reference is made to point 4 above.

Moreover, the document D7 provides a system for the joining of floor panels by means of angling in first and second tongue-groove connecting means. In particular, a horizontal (locking) "strip 6" is foreseen on the underside of the strip panels, which can be made of various (resilient) materials. This strip is "integrated" with the strip panel, i.e. should not be mounted on the strip panel in connection with laying. A protruding "locking element 8" of the strip enters a corresponding "locking groove 14" formed in the underside of the adjacent groove panel when the panels are joined together by angling down the groove panel (cf. D7; page 12, lines 11 to 28 and 35 to 37; page 13, lines 1 to 15; page 16, lines 23 to 29; and figures). This system is especially suited for thin laminated floorboards having, as a rule, a dimension of 200 by 1200 mm (cf. D7; page 1, lines 2 to 18; page 2, lines 4 to 26; page 5, line 14 to page 6, line 9).

5.2 As regards the distinguishing features of the subject-matter of claim 1 with respect to D3/D3a's disclosure, the problem to be solved by a surface of laminate may be seen in the provision of a flooring at lower cost, whereas locking-together of the floorboards by inward angling can be regarded as improving the installation or disassembly (and reuse) of a herringbone flooring,

that is, of an advanced pattern (cf. also the patent: paragraph [0017](as published)).

Apparently no common technical problem can be deduced in the light of a floorboard's laminated surface and the connection of such floorboards by way of angling in, i.e. these features do not functionally interact. This has, however, not been objected to by the Respondent.

5.3 As argued by the Respondent, D3/D3a explicitly suggests, for various reasons, that the vertical snap-in connection of the modular system of D3/D3a's invention according to figures 7 to 11 was perfectly suitable for an accurately and readily performed installation of a "flying geese" (i.e. a herringbone) pattern without gaps. The floor covers then could be immediately removed or reused (cf. D3a; paragraphs [0043] and [0050] to [0052]). As opposed to this, the known prior art tongue and groove connections had numerous disadvantages, even if a "hooked protrusion 13" (formed below the tongue, i.e. being "integrated" prior to laying) and a "second groove 14" (formed in the adjacent floor cover) were provided as second connecting means, cf. paragraph [0025] and figure 6 of D3/D3a. Furthermore, these prior art embodiments were in particular problematic when installing a herringbone pattern (cf. D3a; paragraph [0027]). As is also stated in paragraph [0043] of D3a, a connection in the right angle was difficult in the prior art joints, due to errors in the angle.

Although no way of locking-together is derivable in detail from paragraph [0025] and figure 6 of D3/D3a,

this prior art tongue-groove connection with its horizontal hook and second groove corresponds with the design as suggested by D7's invention. Therefore, contrary to the Appellant's view, if the floorboards of the herringbone floor of D3/D3a had to be better installed or disassembled, the skilled person would not consider the joining of floorboards by means of connecting means taught by D7, since then he would return to the disadvantageous prior art starting point of D3/D3a, which actually had led to the improvements according to D3/D3a's invention of figures 7 to 11.

5.4 Moreover, the Board notes that D7 also does not describe the laying of any advanced patterns such as a herringbone flooring, let alone hinting at suitably adapted opposed "locking grooves 14" and "locking strips 6" on the long sides of adjacent floorboards (of considerable dimension), to be joined in such a herringbone floor. For the sake of completeness, the Board finally notes that the u-shaped clips, which are referred to in D7 as being a disadvantageous prior art connection means (cf. D7; page 4, lines 27 to 34), are biased, i.e. seem to provide a (horizontal) spring force when adjacent floorboards are being connected. As to their function, therefore these clips appear to be different from the u-shaped "connectors 18" suggested by D3/D3a, and thus do not seem to be any indication to "further improve" the snapping-in connection of D3/D3a, as argued by the Appellant. Hence, for these reasons, the teaching of D7 also would not be considered by the skilled person in order to solve the problem of better installing/disassembling the advanced pattern of the herringbone floor of D3/D3a.

5.5 Summing up, starting from D3/D3a, and accepting that the surface of laminate would have had no influence on the connecting means of such a laminate flooring, and was obvious, since this is commonly known as cost-saving, there would be no incentive for the skilled person in the light of D7, to replace the connecting means for vertical snapping-in of D3/D3a by connecting means for inward angling, if better joints for the herringbone pattern of D3/D3a had to be obtained, and thus to arrive at the subject-matter of claim 1 without hindsight.

Therefore the subject-matter of claim 1 involves an inventive step.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar The Chairman

A. Counillon U. Krause