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**Datasheet for the decision
of 22 October 2007**

Case Number: T 0887/06 - 3.2.03

Application Number: 02006617.1

Publication Number: 1215352

IPC: E04F 15/04

Language of the proceedings: EN

Title of invention:
Rectangular floorboard

Patentee:
Välinge Innovation AB

Opponent:
tilo GmbH

Headword:
-

Relevant legal provisions:
EPC Art. 56, 123(2)
RPBA Art. 10b

Keyword:
"Main request: lack of inventive step"
"First auxiliary request: extended subject-matter"
"Second auxiliary request: belated, not admitted"

Decisions cited:
T 1142/02

Catchword:
-



Case Number: T 0887/06 - 3.2.03

D E C I S I O N
of the Technical Board of Appeal 3.2.03
of 22 October 2007

Appellant:
(Patent Proprietor)

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Decision under appeal:

Decision of the Opposition Division of the
European Patent Office posted 14 March 2006
revoking European patent No. 1215352 pursuant
to Article 102(1) EPC.

Composition of the Board:

Chairman: U. Krause
Members: Y. Jest
K. Garnett

Summary of Facts and Submissions

- I. By its decision dated 14 March 2006 the Opposition Division revoked European Patent No. 1215352, which had been granted on the basis of European divisional patent application No. 02006617.1 filed in accordance with Article 76 EPC on the basis of earlier European patent application No. 99930053.6 filed on 31 May 1999 and published as WO-A-99/66152 (D0).

Claim 1 of European patent No. 1215352 as granted reads:

"A rectangular floorboard (1,1') comprising a body (30,32,34) and first and second locking means (6,8,14; 6',8',14') integrated with the body and adapted to provide mechanical joining of adjacent joint edges (4a,4b;5a,5b) of such floorboards (1,1') along long sides (4a,4b) and short sides (5a,5b), respectively, of the floorboards in a direction (D2) perpendicular to the respective joint edges and in parallel with the principal plane of the floorboards and in a direction (D1) perpendicular to the principal plane of the floorboards, each of said locking means comprising a portion (P), projecting from the lower part of the joint edge and supporting a locking element (8,8') at a distance from the joint edge, respectively, said locking element being adapted to cooperate with a locking groove (14,14'), said locking groove being formed in the underside (3) of such a floorboard (1,1') and extending in parallel with the respective joint edge (4a, 4b; 5a, 5b), characterized in that said projecting portion (P) at the long side is formed in one piece with the body (30,32,34) of the floorboard, and said projecting portion (P) at the short side is

made of a material other than that included in the body of the floorboard."

The Opposition Division found that the requirement of Article 56 EPC and the corresponding ground of opposition, namely lack of inventive step when compared to prior art document WO-A-9626999 (D2), did prejudice the maintenance of the patent as granted.

II. The Proprietor (hereinafter Appellant) lodged an appeal against this decision on 24 May 2006, paid the appeal fee and filed the statement of the grounds on the same day.

The appellant requests the decision to be set aside and the maintenance of the patent as granted (main request) or auxiliary in amended form on the basis of one of the following amended claims:

Claim 1 of the first auxiliary request filed with letter of 24 May 2006, which had been amended, with respect to claim 1 as granted, by the addition of the following feature shown in bold characters:

"said projecting portion (P) at the short side is made of a **wood fiber** material other than that included in the body of the floorboard."

Claim 1 of the second auxiliary request filed with letter of 10 October 2007, which had been amended, with respect to claim 1 as granted, by the addition of the following feature shown in bold characters:

"said projecting portion (P) at the short side is made of a material other than that included in the body of the floorboard **and consists of three laminated layers.**"

III. The Appellant argued essentially that the distinguishing features of claim 1 as granted when compared to D2, namely the provision of connecting means at the short sides made of a material different from the material of the core of the panel together with connecting means formed integrally from the core material at the long sides of the panel, were shown neither in D2 nor in any other prior art. This distinction even went against the general teaching in the field, as illustrated in a large number of documents disclosing identical connection means on both the long and short sides of floor panels.

The amendment made to claim 1 of the first and respectively second auxiliary requests was supported by the application as filed as well as by the initially filed application D0, in particular pages 13, 20 and 21. The late filing of the second auxiliary request was made necessary because of the provisional opinion communicated by the Board as well as being in response to the late filing by the Respondent of a piece of evidence.

IV. The Opponent, hereinafter the respondent, requests the dismissal of the appeal on the grounds that the subject-matter of the patent as granted lacks an inventive step and that the auxiliary requests do not fulfil the requirements of Article 123(2) EPC.

The subject-matter of claim 1 as granted lacked inventive step when compared to prior art D2 for the reasons set out in the grounds of the impugned decision of the Opposition Division. The skilled person reading D2 would recognise that the choice of the kind of locking means (integrally formed with the core material or made of a separate strip) used for the long and short sides of the panels depends on the assembly method (angling or snapping-in) required and on the flexibility of the projecting tongue needed for the method. He would envisage a combined solution comprising an integrally formed projection for the long sides and a separate flexible strip, preferably made of aluminium, for the short edges especially if these are to be joined by a snap-in movement.

The objections raised on the grounds of Articles 76(1) and 100c) EPC against the patent as granted have not been pursued in the appeal procedure.

Furthermore claim 1 according to both first and second auxiliary requests infringed Articles 123(2) and 76(1) EPC since there was no original disclosure of a panel having integrally formed locking means at its long sides and a projection at the short sides made of a material different from the material used for the core of the panel, namely either a wooden fibre material (first auxiliary request) or of a laminated structure having three layers (second auxiliary request).

Reasons for the Decision

1. The appeal is admissible.

2. *Main request - Inventive step*

There is general agreement that prior art D2 discloses the closest prior art as set out in the preamble portion of claim 1 in combination with the first feature of the characterising portion of claim 1. This document has already been discussed in detail by the Board in its earlier decision T 1142/02-3.2.3 (not published), especially in item 2 of its "Reasons".

Document D2 is directed to the assembling and laying of floor panels using mechanical connections (without glue) locking the panels in both horizontal and vertical directions. The connections may be made of separate strips (embodiments of Figures 2a to 2c and 3a to 3c) or strips integrally formed with the material of the core of the panel (Figure 5). The panels can be provided with such mechanical connections at all four edges (claim 16).

The floor panels described in D2 can be assembled either by angling or by horizontal snap-in, though it is generally recommended to apply the angling technique at the long sides (Fig. 2a to 2c) and to snap-in the short sides (Fig. 3a to 3c), see page 10, lines 6 to 19, and pages 15 to 17 together with Figures 2a to 3c.

In the embodiments of Figures 2a to 2c and respectively Figures 3a to 3c, the mechanical connections are made of separate strips (made of aluminium, plastics or any suitable material providing sufficient strength and flexibility as explained page 8, lines 34 to 36, and page 12, lines 21-22) and designed so as to allow

coupling of the long sides by angling and respectively by snap-in of the short sides.

The embodiment shown in Figure 5 differs from the aforementioned construction of the floorboards by the fact that the locking strip panels at both the long and short sides are integrally formed with the core material of the boards (page 12, lines 23-24 and page 17, line 36 to page 18, line 2).

Accordingly there is no explicit disclosure in D2 of an embodiment provided with "mixed" connection means, namely integrally formed locking elements at the long sides in combination with locking strips made of a different material at the short sides.

The claimed floorboard thus differs from the embodiment of Figure 5 of D2 by the following feature of claim 1:

the projecting portion at the short side is made of a material other than that included in the body of the floorboard.

In other terms, the invention suggests a "mixed" arrangement of the projecting portions as compared to the single one-piece connection type of Figure 5 of D2.

The objective problem to be derived from this distinction corresponds to the problem defined in paragraph [0021] of the patent, namely to provide a floorboard with mechanical joints at low costs without however lowering the strength of the connections and their laying/locking properties.

The Appellant contests the reasons in the impugned decision and argues that the technical solution offered by the invention would not obviously have been derivable by the skilled person.

The embodiment of Figure 5, characterised by integral projection portions or locking strips at all four sides of the floorboard, is further discussed in D2, page 18, lines 18 to 32. Here the hypothesis is taken that the material of the floorboard, and thus of the locking strips, does not permit downward bending of said strips, which implicitly means that the usually preferred snap-in connection at the short sides cannot be performed. In accordance with Figure 5, D2 therefore suggests using, as for the long sides, the angling technique for coupling the boards at their short sides. The Appellant concludes from this passage of D2 that the skilled person would not amend the structure of the connecting strips but merely change the laying technique allowed by the selected material. The applicant disputes the analysis of the Opposition Division that the skilled person was given a hint in D2 to replace the one-piece strip at the short edges by a separate strip made of a material differing from the material of the board and having a higher degree of flexibility allowing the coupling at the short edges by snap-in.

The arguments and conclusions presented by the Appellant cannot be accepted by the Board for the following reasons.

The laying by angling technique of a floorboard requires pivoting around an axis parallel to the sides to be connected. In case of an angling connection at

both the long and short sides of boards it is thus necessary to couple a first row of boards along either their short or long sides; in a second laying step, this first row, which may comprise a large number of boards, must then be manipulated and coupled to another row of boards along the other sides. The skilled person would quickly become aware of practical difficulties in applying the laying process recommended for the embodiment of Figure 5 of D2, namely applying the angling/angling technique at all sides, and, as a matter of consequence, of the increased amount of required man power and thus of higher costs in contrast with the expected benefits (cost reduction).

Facing this problem, the skilled person would thus have envisaged another solution for laying floorboards made of relatively hard material. For embodiments in which the core material of the floorboards is not expensive, waste of material by machining coupling elements directly out of the core material could prove a cheaper choice than producing and attaching separate strips to the board. In that case, the skilled person might then consider keeping connection strips made integrally with the core material wherever possible. Such integral strips are well adapted to the angling laying technique, which is generally applied for connecting the panels at their long sides.

For the short sides, prompted by the explicit teaching of the advantages of a flexible separate strip for connecting the short sides, given for example on page 16, lines 23 to 29 of D2, the skilled person would have envisaged the provision of separate strips having sufficient flexibility so as to enable the generally

recommended snap-in connection at the short edges, especially since this arrangement would obviously constitute a less complicated and expensive alternative to the angling/angling process suggested by D2 in connection with its Figure 5.

By following this step-by-step approach one would inevitably arrive at the product defined in the patent.

The subject-matter of claim 1 of the main request thus lacks an inventive step in the meaning of Article 56 EPC.

3. *First auxiliary request*

The Appellant referred to several passages of the description as originally filed and of the earlier application as originally filed as support for the amendment of claim 1:

"said projecting portion (P) at the short side is made of a **wood fiber** material other than that included in the body of the floorboard."

Though the term "wood fiber" or "wood fiber strip" can be found as such in the application as filed, see:

- page 6, line 32 or page 21, line 16 and line 22, and
- page 13, lines 25 to 31 and page 14, lines 10 to 11 (here in connection with the "short sides"),

it is not explicitly disclosed that this wood fibre material is different from the core material of the floorboard as required by amended claim 1.

Furthermore there is no clear disclosure of a floorboard having, in combination, at the long side a projecting portion (P) formed in one piece with the body of the floorboard and at the short side a projecting portion made of wood fibre material other than that included in the body of the floorboard.

The Appellant also referred to the passage of the description which deals with Figures 10 to 12, and especially to the passage at page 20 as filed, lines 21 to 29, which defines an alternative to the embodiment shown in Figures 10 to 12 based on projecting portions made separately from the core material and with different compositions of material at the long and short sides.

This alternative means only that the projecting portion P shown in Figures 10 to 12 can be made as a separate strip especially at the short side of the board, but the projecting portion would still be made of three different parts P1, P2, P3, each made of a material differing from a sole wood fibre material.

In conclusion, no support for a separate projecting portion at the short side made of wood fibre material different from the core material together with an integrally formed projecting portion at the long side of the board can be found in the application documents as originally filed.

The amendment made to claim 1 of the first auxiliary request thus contravenes Article 123(2) EPC.

4. *Second auxiliary request*

The amended documents of this request were filed with a letter dated 10 October 2007, thus less than two weeks before the oral proceedings of 22 October 2007. This request is thus late filed. The arguments advanced by the Appellant for justifying the late filing are not convincing because there is no apparent relation between the new claim and the comments made by the Board in its communication, and the Respondent did not submit a new piece of evidence but the original of a document already on file.

In addition, the amendment made to the last feature of claim 1, namely that:

"said projecting portion (P) at the short side is made of a material other than that included in the body of the floorboard **and consists of three laminated layers**"

does not at first sight appear to be disclosed in the application as originally filed. The meaning of the amended feature and clarity of the definition would also be questionable.

Taking account of the fact that the second auxiliary request is belated and not prima facie allowable the Board, exercising its discretion in accordance with Article 10b of the RPBA, does not admit this request into the proceedings.

Order

For these reasons it is decided that:

The appeal is dismissed.

The Registrar:

The Chairman:

A. Counillon

U. Krause