Datasheet for the decision of 9 October 2018

Case Number: T 1923/15 - 3.2.03
Application Number: 08168247.8
Publication Number: 2014845
IPC: E04F15/02
Language of the proceedings: EN

Title of invention:
Mechanically joinable rectangular floorboards

Patent Proprietor:
Välinge Innovation AB

Opponent:
Fritz Egger GmbH & Co. OG

Headword:

Relevant legal provisions:
EPC Art. 100(c), 76(1), 123(2)

Keyword:
Decisions cited:

Catchword:
Decision under appeal: Decision of the Opposition Division of the European Patent Office posted on 21 July 2015 revoking European patent No. 2014845 pursuant to Article 101(3)(b) EPC.
Summary of Facts and Submissions

I. By its decision dated 21 July 2015 the opposition division revoked European patent No. 2 014 845 issued from the grant of a divisional application 08168247.8 of earlier application EP 05018797.0 / 1 617 009, which was itself filed as a divisional application of earlier application EP 01920073.2 / 1 272 716. The decision was based on the grounds that the amendments made to claim 1, as defined in the main request and in the auxiliary request, did not meet the requirements of Article 100c) EPC in accordance with Article 76(1) EPC.

II. The patentee, hereinafter the appellant, lodged an appeal against the above decision on 29 September 2015 and paid the appeal fee on 6 October 2015. The statement of grounds of appeal was received on 8 October 2015.

III. Relevant documents:

   E0    WO-A-01/77461, published application of the earlier application EP 01920073.2 / 1 272 716
   E1    EP-A- 1 617 009

IV. The following requests were confirmed during the oral proceedings on 9 October 2018:

   The appellant requested that the decision under appeal be set aside and that the patent be maintained in amended form according to the claims of the main request, originally filed as the auxiliary request in opposition proceedings on 13 May 2015.

   The respondent requested that the appeal be dismissed.
At the end of the oral proceedings the board announced its decision.

V. Claim 1 has the following wording (the numbering of the features corresponds to that introduced by the opposition division in the appealed decision):

[a] "A pair of mechanically joinable rectangular floorboards comprising a first floorboard (1) and a second similar floorboard (1'),

[b] whereby each of said rectangular floorboards (1,1') has a core (30) and opposite first and second joint edge portions (5a,5b), whereby adjoining floorboards (1,1') in the mechanically joined position have their first and second joint edge portion (5a,5b) joined at a vertical joint plane (F), said floorboards comprising:

[c] a) for vertical joining of the first joint edge portion (5a) of said first floorboard (1) and the second joint edge portion (5b) of said adjoining second floorboard (1'), mechanical cooperating means (36,38), and

[d] b) for horizontal joining of the first and second joint edge portions (5a,5b), mechanical cooperating means (6,8,14) which comprise

[da] a locking groove (14) formed in the underside (3) of said second floorboard (1') and extending parallel with and at a distance from the vertical joint plane (F) at said second joint edge portion (5b) and having a downward directed opening, and

[db] a strip (6) integrally formed with the core of said first floorboard (1), which strip at said first joint edge portion (5a) projects from said vertical joint plane (F) and at a distance from the joint plane (F) has a locking element (8) formed on the strip and projecting towards a plane containing the upper side of
said first floorboard (1) and which has at least one operative locking surface (10) for coaction with an operative locking surface (11) in said locking groove (14),
[dc] the locking groove (14), as seen in the plane of the floorboards and away from the vertical joint plane (F), having a greater width than said locking element (8),
characterised in that
[e] the operative locking surface (10) of the strip (6) and the operative locking surface (11) of said locking groove (14) are essentially perpendicular to a horizontal plane,
[f] that the operative locking surface (10) of the locking element (8)
[fa] is essentially plane and
[fb] located at the upper part of the locking element at a distance from the upper side of the projecting strip (6) and
[fc] faces the joint plane (F) and
[g] that the operative locking surface (11) of said locking groove (14)
[ga] is essentially plane and
[gb] is located in the locking groove at a distance from the opening of the locking groove and
(gc] is designed to cooperate with said locking surface (10) of the locking element (8) in the joined position,
[h] the combination that the locking of two adjacent floorboards along the edge portions (5a,5b) can be carried out both by vertical snap action and by inward angling during bending of the strip,
[i] wherein the mechanical means (36,38) of the locking system which cooperate for vertical locking and the mechanical means (6,8;14) of the locking system which cooperate for horizontal locking have a configuration along the edge portions (5a,5b) that allows locking of
two adjacent floorboards both by vertical snap action and by inward angling during bending of the strip, namely

[iia] an inward angling during bending of the strip (6,8) wherein the locking element (8) is inserted into the locking groove (14) by inward angling of one floorboard (1) towards the other floorboard (1') while maintaining contact between the joint edge surface portions (41,42) of the two floorboards close to the border between the joint plane (F) and the upper side of the floorboards,

[iaa] whereby the locking groove (14) has an inclined or rounded guiding part (12) which extends from the locking surface (11) of the locking groove and to the opening of the locking groove and which is designed to guide the locking element (8) into the locking groove (14) during the inward angling of the floorboard relative the first floorboard by engaging a portion of the locking element (8) which is positioned above the locking surface (10) of the locking element or adjacent to its upper edge, and

[ib] a vertical snap action wherein the locking element (8) is inserted into the locking groove (14) by a substantially vertical motion of one floorboard (1) towards the other floorboard (1') during bending of the integrated strip (6,8) for snapping in the locking element (8) into the locking groove (14)."

VI. The appellant submitted essentially the following arguments:

The claimed device was supported in the previous application E0 as originally filed since it was based on the combination of originally filed claims of E0, namely claim 1, dependent claim 5 (locking angle 90°) for feature [e], dependent claim 6 (inward angling
while contact at the joint edge portions) for features [h], [i], [ia] and dependent claim 8 (vertical snap during bending of the strip) for features [h] and [ib]. The further characteristic contained in features [h], [i], [ia] defining an inward angling during bending of the strip was supported by Figures 7, 9, 10 and 12 together with their respective parts in the description. For the person skilled in the art the overall disclosure of E0 unambiguously and unequivocally disclosed the bending of the strip not only for the snap-in laying technique of floorboards but also for the downward angling laying technique. Disclosure in E0 of the feature "downward angling during bending of the strip" was to be found in the general teaching of page 12, lines 8 to 28 and in the embodiments of figures 7, 9, 10 and more particularly in the detailed embodiment according to the claimed invention as shown in figure 12 and described page 23, line 30 to page 24, line 17.

Additional basis for the disclosure in E0 could be found in page 13, lines 11 to 25; page 18, lines 22 to 32; page 20, lines 19 to 22; page 21, lines 25 to 30; and page 23, lines 30 to 32.

According to the general teaching on page 12, the strip was subjected to bending for both upward and inward/ downward angling laying movements. As for the embodiment of figure 12, it explicitly referred to the necessity of bending the strip when laying floorboards. Therefore the amendments made to claim 1 did not add undisclosed subject-matter in the meaning of Article 100c) in accordance with Article 76(1) EPC.

VII. The arguments presented by the respondent can be summarised as follows:
A mechanical locking of two adjoining floorboards which could be carried out both by a vertical snap action and by inward angling during bending of the strip as required by the combination of features [h], [i], [ia] and [ib] was only disclosed in combination with the embodiment of figure 9. This particular embodiment however was not according to the invention as claimed, see column 10, lines 11 to 13. In the patent only the embodiment of figure 12 was presented as being according to the invention. The corresponding description contained no indication of the laying technique applied for figure 12 and no disclosure of an inward angling during bending of the strip as required by the feature added to the combination of claims 1, 5, 6 and 8 of E0. The subject-matter of claim 1 thus contravened the requirements of Article 100c) in accordance with Article 76(1) EPC.

Reasons for the Decision

1. Claim 1- Article 100(c)/76(1) EPC

1.1 In the reasoning of its decision the opposition division saw two major unallowable extensions as compared to the earlier applications E0 and E1. The first objection, which concerned an unallowable generalisation in feature [iaa] contrary to Article 123(2) EPC, was considered to be met by claim 1 of the auxiliary request - now main request filed with the appeal - because of the added feature as underlined:

"whereby the locking groove at its lower edge closest to the joint plane has an inclined or rounded guiding part which..."
The opposition division however considered that claim 1 of the auxiliary request still contravened the requirements of Article 100(c)/76(1) EPC because the feature "an inward angling during bending of the strip" (present in features [h] and [i]) was not disclosed in the previous application E0.

1.2 The board arrives at the same conclusion, i.e. that the earlier application E0 does not disclose a pair of floorboards in accordance with claim 1, since the person skilled in the art cannot derive from the overall disclosure of E0 a mode of realisation according to the invention which fulfills all the requirements defined by features [e], [h], [i], [ia], [iia] and [ib] in combination.
The grounds for this conclusion result from the following considerations.

1.2.1 While it can be agreed with the appellant that claim 1 contains all the features of claims 1, 5, 6 and 8 of E0, there is no clear and unambiguous support in E0 for the combination of these features together with the feature requiring an inward angling during bending of the strip.

1.2.2 The board firstly does not share the appellant's interpretation of the sentence on page 12, lines 8 to 28 of E0: "This results in the strip being bent backwards and downwards and the locking element being opened in the same way as in inward angling". It is not a general teaching to the person skilled in the art that inward angling is always accompanied by a bending of the strip. The sentence in question, when read in its context, describes merely a result of the proposed technical solution ("first understanding" referred to
in line 18 on page 12) enabling disengagement of laid floorboards when they are taken up, e.g. by upward angling of a floorboard, see page 12, lines 18 to 25; page 19, line 22 to page 20, line 2 together with figure 8. The embodiment shown in figure 7 and described on page 18, lines 10 to 32 contains similar information for taking-up floorboards, and even suggests an alternative to bending by using a compressible material for the floorboards, which teaches away from the requirement that bending the locking strip is mandatory.

In another passage of E0 cited by the appellant (page 13, lines 11 to 25), the problem addressed concerns a "third understanding" dealing specifically with laying so-called "banana" shapes of a floorboard; here there is no indication of bending the locking strip by inward angling of a floorboard.

Concerning the teaching of the passages of the description on page 20, lines 3 to 27 and on page 21, lines 25 to 30 of E0, they both deal with embodiments, namely the embodiments shown in figures 9 and 10, which are no longer covered by amended claim 1, column 10, lines 11 to 14 and column 13, lines 30 to 32 of the disputed patent. In column 13, line 6 of the patent, the embodiment of figure 9 is still presented as "an embodiment of the invention", but this is clearly erroneous since, for instance, the locking angle is given as about 80° and not 90° as required by feature [i] of claim 1.

In this respect, the board confirms the findings of the opposition division that the floorboard shown in Figure 9, which is said to be not according to the invention, does not disclose features [e], [ia] and [ib] of claim
l and can therefore not form a proper basis for the disclosure of the claimed device.

Apart from the floorboard of figure 9, which is the sole arrangement which is presented as allowing two possible assembling processes, namely a vertical snap and an inward angling during the bending of the strip, the other parts of E0 cited by the appellant all concern the bending of the strip during upward angling when taking up an installed floorboard.

Furthermore the board does not agree with the appellant's views that the person skilled in the art would immediately recognise that the inward angling has to be accompanied by the bending of the strip, because outward/upward angling during bending of the strip when taking-up floorboards is disclosed in E0, and because the inward/downward angling when laying floorboards consisted merely in a kinematic reversal of the process. In the Board's view, the process of laying and disassembling floorboards cannot be considered as pure kinematically reversed processes, at least because of the opposite forces applied during the two motions.

It may be noted that the description of the earlier application E0 comprises a single embodiment in which the laying and mechanical locking of two adjoining floorboards can be carried out both by a vertical snap motion and by inward angling during the bending of the locking strip. This embodiment, which is illustrated in figure 9 and described page 20, lines 3 to 27, is not covered by claim 1 as amended and can therefore not constitute a proper basis for disclosure of the feature introduced in claim 1 defining an inward angling during bending of the strip.
Concerning the other embodiments disclosed in the earlier application E0, the locking process applied is either limited to a sole snap action or not defined, as for instance in the embodiment of figure 12 which is said to be "in line with the invention", see column 10, lines 18 to 20 of the patent.

1.2.3 From these considerations it is concluded that the claimed device is not supported by the disclosure of the earlier application E0 as originally filed. More particularly, the feature directed to an inward angling during bending of the strip is not disclosed in combination with
- feature [e] (locking angle 90°; from claim 5 of E0);
- features [h], [i], [ia] (inward angling while contact at the joint edge portions; from claim 6 of E0), and
  feature [ib] together with [h] (vertical snap during bending of the strip; from claim 8 of E0).

2. The board concurs with the reasoning of the contested decision in the sense that there can be found no clear and unambiguous disclosure in E0/E1 of a mode of realisation having all the features of current claim 1 in combination.

The board arrives therefore at the conclusion that the subject-matter of claim 1 contravenes Article 100c) EPC in accordance with Article 76(1) EPC.

Order

For these reasons it is decided that:

The appeal is dismissed.
The Registrar: C. Spira

The Chairman: G. Ashley

Decision electronically authenticated