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(54) **Structural timber floor assembly**

(57) A method is described of forming a joint between the end of a timber I-beam joist and a transverse closure such as a rim-joist, in which two holes are formed a short distance from the end of the I-beam to be butt-jointed to the rim-joist, one in each of the upper and lower rails of the I-beam section, the two holes being coaxial and generally aligned with and parallel to the web of the I-beam section. The closure is positioned relative to the I-beam and two further holes are formed through the closure and into the ends of the upper and lower I-beam rails, generally perpendicular to and intersecting the first two holes. Two cross-dowels are inserted into the two first holes, each having a transverse threaded opening, and the dowels are inserted so as to align the openings with the holes which intersect the holes containing the cross-dowels, and threaded bolts are introduced into the intersecting holes and screwed into the threaded openings in the cross-dowels so as to draw the joist towards the closure, and thereby clamp the joist thereto. The cross-dowels may be formed from metal, or from a rigid plastics material or from a composite material and may have a smooth exterior or may be externally threaded or formed with one or more annular barbs for securing them in place. The technique may be applied on site, but more preferably in the course of constructing a roofing or flooring panel off-site, the joints serving to resist distortion or bending during handling of prefabricated panels, during storage, transportation, and/or final positioning on site.

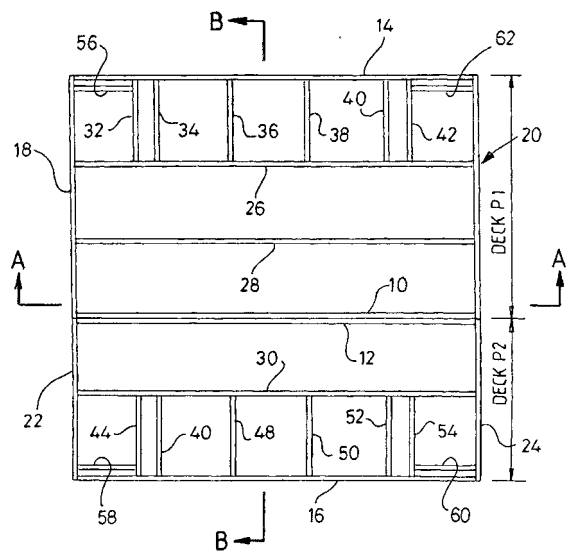


Fig. 1

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82