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(54) Improved bar for plane lattice spatial structures without junction knots.

(57) Some embodiments are described of an improved bar or rod (1, 1') adapted to form planar three-dimensional single or multiple layered lattice structures, without the need for connecting knots. The coupling among the various rods is simply performed by fastening together the X-shaped, substantially radially oriented flanges (5) of said bars. The relative angle (φ) between couples of rod flanges (5), which defines the geometrical coupling planes, and therefore the contact surfaces between two bars converging with their axes into the center of a virtual node (O), has to satisfy a predetermined relationship among the direction cosines (a, b, c) of said axes, each of which is coincident with the axis of a sheaf of planes corresponding to said flanges whose angular orientation has to be determined. An improved fastening means (7, 11) is also described, particularly adapted to fasten converging bar flanges (5) to each other, in view of the narrow room available.

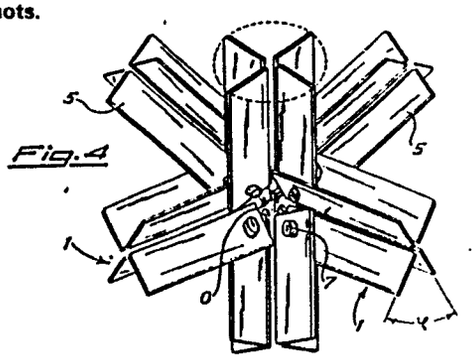

Fig.4

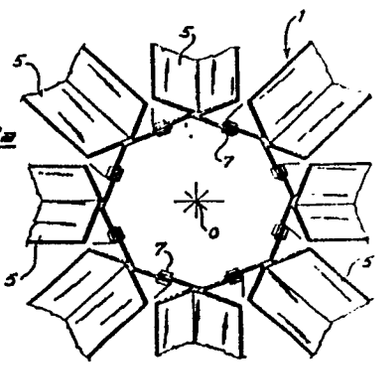

Fig.4a

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EUROPEAN SEARCH REPORT

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EP 86 83 0363

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int Cl 4)
X	AU-B- 520 837 (McDONNALD) * Page 5, line 26 - page 7, line 14; figures 1-3,8-14 *	1,8,10	E 04 B 1/19 F 16 B 21/08
A	-----	2-7,9	

TECHNICAL FIELDS SEARCHED (Int Cl 4)

E 04 B

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	11-06-1987	LAUE F.M.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
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