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(54) **Laminated beam construction**

(57) The invention relates to a laminated beam construction (1, 1', 1'') comprising surface layers (2a, 2b) of wood material and between them an inner part (3) of insulating material. The insulating material is structural wool glued to the surface layers. In the structural wool (3), the fibres are essentially perpendicular to the surfaces of the surface layers (2a, 2b) directed at one another.

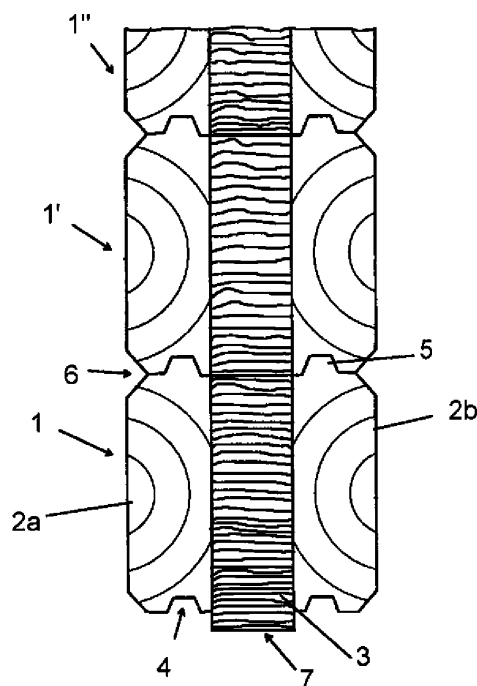


Fig. 1



EUROPEAN SEARCH REPORT

Application Number
EP 11 16 8069

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	CH 692 993 A5 (FRINORM AG [LI]) 15 January 2003 (2003-01-15) * column 5, line 52 - column 6, line 9; figure 7 * * column 3, lines 24-37 * -----	1-6	INV. E04C3/14 E04C3/29 E04C1/40 E04C2/24 E04B2/70
Y	GB 1 596 780 A (ROCKWOOL INT) 26 August 1981 (1981-08-26) * page 2, lines 6-13; figures 1-2 * -----	1-6	
Y	EP 2 141 303 A2 (KNAUF INSULATION GMBH [AT]) 6 January 2010 (2010-01-06) * paragraph [0008] * -----	1-6	
Y	GB 2 302 346 A (ROCKWOOL LTD [GB]) 15 January 1997 (1997-01-15) * page 3, lines 20-23 * * page 5, lines 24-31 * -----	1-6	
Y	DE 23 09 878 A1 (BAU FRITZ INH JOHANN FRITZ) 29 August 1974 (1974-08-29) * claim 1; figures 1-8 * -----	2,3	TECHNICAL FIELDS SEARCHED (IPC)
Y	DE 299 23 387 U1 (JASPERS HELMUT [DE]) 24 August 2000 (2000-08-24) * abstract; figures 1, 3 * -----	6	E04C E04B
A	DE 26 50 915 A1 (IHLEFELD KARL HELMUT) 18 May 1978 (1978-05-18) * page 6; figures 1-2 * -----	1-6	
A	WO 03/008724 A1 (SAINT GOBAIN ISOVER AS [DK]; JESSEN ERLING [DK]; HOEJHOLT SUSANNE [DK]) 30 January 2003 (2003-01-30) * page 6, lines 3-9; claim 1; figure 1 * -----	1-6	
The present search report has been drawn up for all claims			
Place of search Munich		Date of completion of the search 18 October 2012	Examiner Vratsanou, Violandi
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

1

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

EP 11 16 8069

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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18-10-2012

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
CH 692993	A5	15-01-2003	NONE	

GB 1596780	A	26-08-1981	BE 860986 A1	16-03-1978
			CH 631224 A5	30-07-1982
			DE 2751542 A1	24-05-1978
			DK 521676 A	20-05-1978
			FR 2371556 A1	16-06-1978
			GB 1596780 A	26-08-1981
			NL 7712768 A	23-05-1978
			NO 773864 A	22-05-1978
			SE 416149 B	01-12-1980
			SE 7712832 A	20-05-1978

EP 2141303	A2	06-01-2010	DE 102008030944 A1	07-01-2010
			EP 2141303 A2	06-01-2010

GB 2302346	A	15-01-1997	AT 188269 T	15-01-2000
			AU 1805797 A	10-09-1997
			CA 2247220 A1	28-08-1997
			CZ 9802600 A3	17-03-1999
			DE 69701032 D1	03-02-2000
			DE 69701032 T2	25-05-2000
			EP 0882165 A1	09-12-1998
			GB 2302346 A	15-01-1997
			HU 9901654 A2	30-08-1999
			NO 983827 A	20-10-1998
			PL 328602 A1	01-02-1999
			US 6119424 A	19-09-2000
			WO 9731164 A1	28-08-1997

DE 2309878	A1	29-08-1974	AT 328682 B	12-04-1976
			CH 578096 A5	30-07-1976
			DE 2309878 A1	29-08-1974

DE 29923387	U1	24-08-2000	NONE	

DE 2650915	A1	18-05-1978	NONE	

WO 03008724	A1	30-01-2003	AT 462844 T	15-04-2010
			DK 1417385 T3	19-07-2010
			EP 1417385 A1	12-05-2004
			SI 1417385 T1	31-08-2010
			WO 03008724 A1	30-01-2003

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82