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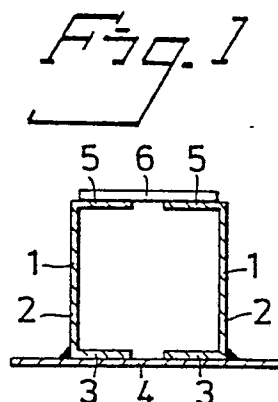
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54 Fire resistant steel beam coacting with concrete.

57 The fire resistant, pre-stressed structural flooring carrying beam of steel includes two vertical webs (2) and a bearing plate (4) along the bottom of the beam extending outside the webs (2) for bearing the floor structure, the upper side of which is above the upper side of the steel beam after finished concrete pouring. The webs (2) are those of two channels (1) fixed to the bearing plate (4) with their toes in opposing, mutual, spaced relationship. The upper flanges (5) of the channels are provided with projecting means (6, 6') fixed at pre-determined mutual spacing along the beam. An open space between the channels (1) is thus provided between the toes of the channels for filling with concrete (10) when concrete is poured, such as to achieve static co-action between the steel beam and concrete via the means (6).





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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	US-A-4 333 285 (KOIZUMI et al.) * Column 1, lines 43-46; column 3, line 37 - column 4, line 49; figures 1-3,6,13-16 *	1,2	E 04 C 3/07 E 04 C 3/293 E 04 B 5/29
Y	---	3,5-7	
A	US-A-2 731 824 (HADLEY) * Column 5, lines 34-50; column 5, line 74 - column 6, line 10; figures 3,6,8,9 *	1	
Y	---		
Y	DE-A-3 525 934 (FEICHTMAYR) * Page 7, line 30 - page 8, line 27; page 9, lines 11-26; figures 2,3 *	3,5	
Y	---		
Y	DE-A-1 016 427 (FORSSELL) * Column 2, lines 32-50; figures 1,7 *	6	
Y	---		
Y	EP-A-0 189 785 (ARBED S.A.) * Page 4, lines 1-11; figures 1,2 *	7	
A	TECHNISCHE MITTEILUNGEN KRUPP.FORSCHUNGSBERICHTE, vol. 39, no. 3, December 1981, pages 87-110, Essen, DE; E. REYER: "Ausführungsalternativen in Stahl bei Skelettkonstruktionen mit Betondecken" * Page 103, paragraph 3.3.3; figure 46 *	1	TECHNICAL FIELDS SEARCHED (Int. Cl.4) E 04 C E 04 B E 04 G
A	---		
A	CH-A- 188 563 (ISELE-SUTER) * Page 1, left-hand column, line 12 - right-hand column, line 21; figure * --- -/-	1,4	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 03-11-1988	Examiner BELTZUNG F.C.
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	



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)
A	US-A-1 957 176 (KOTRBATRY) * Page 1, line 70 - page 2, line 18; figures 1,2 * -----	1	
			TECHNICAL FIELDS SEARCHED (Int. Cl. 4)
The present search report has been drawn up for all claims			
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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			