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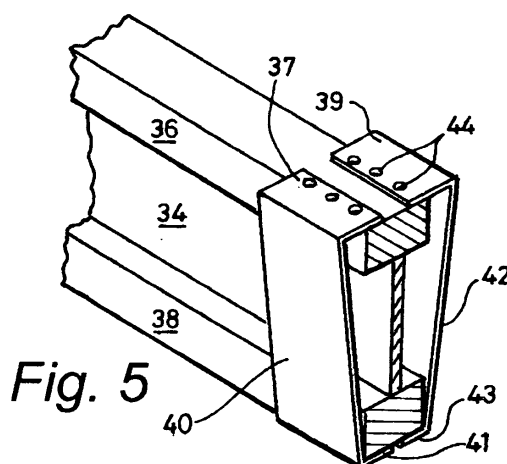
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(54) **Improvements in or relating to joists and floor panels containing same**

(57) Width enlargement means is described, which is adapted to be attached to a joist end to adapt the latter for use with a joist hanger having a joist receiving socket with diverging side cheeks therein. When attached, the cross section shape of the end of the joist becomes trapezoidal so as to form a wedge. The inclined faces engage the diverging side cheeks of the socket thereby to provide lateral support for the joist end when fitted in the joist receiving socket. One form of enlargement means for a conventional rectangular cross section joist comprises triangular cross section fillets, which are adapted to be fitted to the opposite faces of the end of a the joist. Alternatively it may comprise a wedge shaped member having a central slot into which the end of the joist is fitted. Where the joist has an I-beam cross section, fillets are secured to opposite faces of the central web of the I-beam, or the end of the latter is fitted into a slot in a slotted wedge. Alternatively at least one metal structure is adapted to be fitted to one end of the joist, and the outer faces of the metal structure or structures are spaced by a greater distance in the region of the upper edge of the I-beam section than they are in the region of the lower edge thereof. Where the joist has an I-beam cross section the metal structure(s) may be attached to the web or the upper or lower rails, or all three. However formed the included angle between the inclined faces of the enlargement means whether formed by fillets or a wedge shaped member, or one or more metal structures, is substantially the same as, but not greater, than that between the di-

verging cheeks of the joist hanger socket in which the joist is to be received in use.



**Fig. 5**



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## EUROPEAN SEARCH REPORT

Application Number  
EP 07 25 0300

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	GB 223 120 A (ARISTIDE DANIEL) 16 October 1924 (1924-10-16) * figures 4,5 *	1-4,7	INV. E04B1/26
A	AT 181 950 B (KIRCHNER ADOLF) 10 May 1955 (1955-05-10) * figures 2,6 *	1-5	
			TECHNICAL FIELDS SEARCHED (IPC)
			E04B
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 2 June 2008	Examiner Topcuoglu, Sadik Cem
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p> <p>&amp; : member of the same patent family, corresponding document</p>			

7

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

EP 07 25 0300

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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02-06-2008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
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