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(54) **Fastener for combination floor and combination floor using the same**

(57) A fastener (10) for a combination floor (30) includes a base portion (20) having a through hole (202) for penetration of a nail (40) so as to secure the fastener (10) to a beam (32), two arm portions (22, 24) extending from the same side of the base portion (20), and two

tongue portions (26, 28) extending from one of the arm portions (22, 24) along opposite directions for stopping against a male panel (34) and a female panel (36) respectively. Thus, the fastener (10) of the present invention can absorb thermal expansions of the male panel (34) and female panel (36).

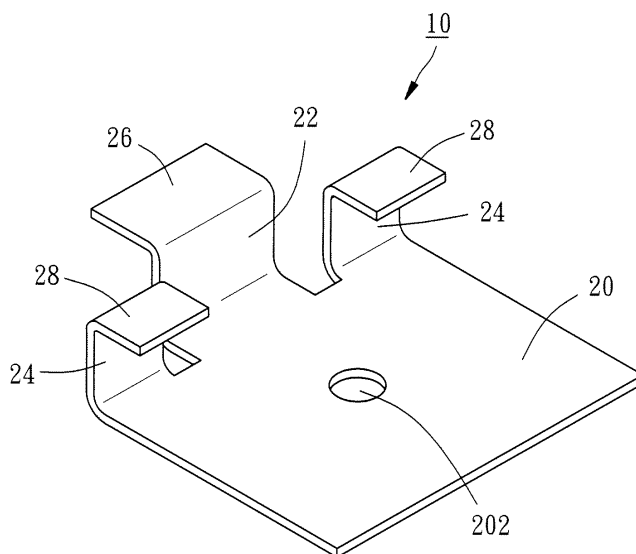


FIG. 1



EUROPEAN SEARCH REPORT

Application Number
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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 (IPC)
X	US 7 546 717 B2 (JUAN PUERTA JOSE [ES]) 16 June 2009 (2009-06-16) * figures 1,2,4-9 *	1,3,5,6	INV. E04F15/02
X	GB 2 312 687 A (LOPEZ JULIO RODRIGUEZ [ES]) 5 November 1997 (1997-11-05) * figures 1,3 *	1,3,5,6	
X	US 2003/019174 A1 (BOLDUC MANUEL [CA]) 30 January 2003 (2003-01-30) * figures 1-5,7 *	1-12	
X	DE 20 2008 001033 U1 (RAUSCHENBERGER UDO [DE]) 27 March 2008 (2008-03-27) * figures 1-5 *	1-3,5,6	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			E04F
Place of search		Date of completion of the search	Examiner
Munich		30 April 2012	Bastian, Almut
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			

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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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30-04-2012

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 7546717 B2	16-06-2009	CA 2555547 A1	22-09-2005
		EP 1722043 A1	15-11-2006
		ES 2215485 A1	01-10-2004
		US 2006283126 A1	21-12-2006
		WO 2005088030 A1	22-09-2005

GB 2312687 A	05-11-1997	FR 2747409 A3	17-10-1997
		GB 2312687 A	05-11-1997

US 2003019174 A1	30-01-2003	US 2003019174 A1	30-01-2003
		US 2003121226 A1	03-07-2003

DE 202008001033 U1	27-03-2008	NONE	
