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(54) **CERAMIC TILE HANGING SYSTEM**

- (57) A tile hanging system attached to an installation surface, including mounting components fixed to the installation surface and tiles attached to the mounting component. The mounting component includes fitting members extending upward from top surface of the mounting component. The fitting members are integrally formed with the mounting components. The tiles are abutted against to each other, and each tile has an inclined groove. The inclined groove is attached to the
- fitting member. The inclined groove includes a first mounting portion arranged on side of the tile away from the decorative surface and a second mounting portion extending from the first mounting portion into the interior of the tile. The fitting member includes a first connecting portion extending upward from the mounting component. The first connecting portion abuts the first mounting portion, and a second connecting portion extending from the first connecting portion into the second mounting portion.

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EUROPEAN SEARCH REPORT

Application Number

EP 24 15 4814

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	US 10 138 635 B1 (YEO YONG SOO [KR]) 27 November 2018 (2018-11-27) * figure 3 *	1 - 10	INV. E04F13/076 E04F13/077 E04F13/08
A	US 6 945 001 B1 (SUZUKI MASAO [JP]) 20 September 2005 (2005-09-20) * figure 5 *	1 - 10	E04F13/09 E04F13/12 E04F13/14 E04F13/24
			TECHNICAL FIELDS SEARCHED (IPC)
			E04F
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		27 January 2025	Topcuoglu, Sadik Cem
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			
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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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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 10138635 B1	27-11-2018	CN 109958255 A	02-07-2019
		KR 101937711 B1	11-01-2019
		US 10138635 B1	27-11-2018
		WO 2019124710 A1	27-06-2019

US 6945001 B1	20-09-2005	AU 783959 B2	05-01-2006
		CA 2407510 A1	08-11-2001
		CN 1452681 A	29-10-2003
		EP 1279776 A1	29-01-2003
		JP 4520684 B2	11-08-2010
		KR 20020092461 A	11-12-2002
		US 6945001 B1	20-09-2005
		WO 0183910 A1	08-11-2001

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