



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 19 88 52 39

Classification of the application (IPC):
A44B 18/00, D03D 15/283, D03D 15/587, D03D 27/06, D03D 1/00

Technical fields searched (IPC):
A44B

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 6910353 B2 (MILLIKEN & CO [US]) 28 June 2005 (2005-06-28) * column 2, line 55 - column 3, line 12; figures 1,2 *	1, 4
Y	WO 2007074791 A1 (KURARAY FASTENING CO LTD [JP]; KATSUKI TOSHIYUKI [JP] ET AL.) 05 July 2007 (2007-07-05) * paragraphs [0018] - [0021]; figures 1,2 *	2, 3, 5-9
A	US 2014230123 A1 (KAIKOU TAKAYOSHI [JP] ET AL) 21 August 2014 (2014-08-21) * paragraphs [0077], [0087], [0117]; figure 1 *	5, 6, 9
X Y	WO 2005122817 A1 (KURARAY FASTENING CO LTD [JP]; HIGASHINAKA YUKITOSHI [JP] ET AL.) 29 December 2005 (2005-12-29) * paragraphs [0020] - [0040], [0066] - [0068] *	1, 4 2, 3, 5-9

The supplementary search report has been based on the last set of claims valid and available at the start of the search.

Place of search The Hague	Date of completion of the search 20 June 2022	Examiner Gallego, Adoración
------------------------------	--	--------------------------------

CATEGORY OF CITED DOCUMENTS

- | | |
|---|--|
| X: particularly relevant if taken alone | P: intermediate document |
| Y: particularly relevant if combined with another document of the same category | T: theory or principle underlying the invention |
| A: technological background | E: earlier patent document, but published on, or after the filing date |
| O: non-written disclosure | D: document cited in the application |
| & : member of the same patent family, corresponding document | L: document cited for other reasons |

Disclaimer: this document has been automatically generated using data structured in accordance with WIPO standard ST.36 from the database of search reports of the European Patent Office. For technical reasons, its content and layout may differ from that of the original publication. Only the original published information is legally binding.



ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 19 88 52 39

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 20-06-2022
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 6910353	B2	28-06-2005	NONE
WO 2007074791	A1	05-07-2007	JP 5192824 B2 08-05-2013 JP WO2007074791 A1 04-06-2009 WO 2007074791 A1 05-07-2007
US 2014230123	A1	21-08-2014	CN 103957740 A 30-07-2014 EP 2762029 A1 06-08-2014 KR 20140066197 A 30-05-2014 KR 20190016121 A 15-02-2019 TW 201320915 A 01-06-2013 US 2014230123 A1 21-08-2014 WO 2013047098 A1 04-04-2013
WO 2005122817	A1	29-12-2005	CA 2567502 A1 29-12-2005 CN 1968616 A 23-05-2007 EP 1764009 A1 21-03-2007 JP 4690315 B2 01-06-2011 JP WO2005122817 A1 10-04-2008 KR 20070024732 A 02-03-2007 TW I332391 B 01-11-2010 US 2008289157 A1 27-11-2008 WO 2005122817 A1 29-12-2005