



## SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
EP 17 87 87 30

Classification of the application (IPC):  
F24F 7/02, E04D 13/17, F24F 13/28

Technical fields searched (IPC):  
E04D, F24F

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
Y	US 6361434 B1 (BRANDON RALPH EDWIN [US]) 26 March 2002 (2002-03-26) * column 2, lines 27-28; figure 1 *	1-11
Y	US 2008287053 A1 (CARLSON JACOB [US] ET AL) 20 November 2008 (2008-11-20) * figures 1, 6A *	1-11
Y	US 2015321131 A1 (BOURQUE ANTOINE [CA] ET AL) 12 November 2015 (2015-11-12) * figures 5-7 *	1-11
Y	US 5094041 A (KASNER GARY P [US] ET AL) 10 March 1992 (1992-03-10) * column 5, lines 14-30; figure 3 *	1-11
A	US 5921863 A (SELLS GARY L [US]) 13 July 1999 (1999-07-13) * figure 11 *	1-11
A	US 2011201266 A1 (HENDERSON JOHN C [US]) 18 August 2011 (2011-08-18) * figure 4 *	1-11
A	DE 3611163 A1 (GABANYI PETER DIPL ING) 22 October 1987 (1987-10-22) * figure 3 *	1

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 08 May 2020	Examiner Tran, Kim Lien
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### 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

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**ANNEX TO SUPPLEMENTARY EUROPEAN  
SEARCH REPORT**

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EP 17 87 87 30

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 08-05-2020  
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6361434	B1	26-03-2002	NONE	
US 2008287053	A1	20-11-2008	NONE	
US 2015321131	A1	12-11-2015	US 2015321131 A1	12-11-2015
			US 2017051930 A1	23-02-2017
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			US 5331783 A	26-07-1994
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US 2011201266	A1	18-08-2011	NONE	
DE 3611163	A1	22-10-1987	NONE	