



## SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:  
EP 18 74 88 00

### Classification of the application (IPC):

**B25D 17/02, B25D 17/08, B25D 17/00, B25B 31/00, B25B 21/00, B25B 21/02, B25B 23/00, B25F 3/00, F16B 13/10**

### Technical fields searched (IPC):

B25D, B25B, F16B, B25F

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X Y	US 2012074659 A1 (FANOURLAKIS GEORGE [US] ET AL) 29 March 2012 (2012-03-29) * paragraphs [0031] - [0039]; figures 1-10 *	1, 4, 7, 8 9, 10, 14, 15
X	DE 19811458 A1 (HALAMAY HUBERT [DE]) 23 September 1999 (1999-09-23) * column 2, line 55 - column 3, line 8; figure 2 *	1-3, 7, 8
X	DE 102007058772 A1 (FISCHERWERKE GMBH & CO KG [DE]) 10 June 2009 (2009-06-10) * paragraphs [0024] - [0026]; figures 1, 5, 6 *	1-8
X	US 2008286061 A1 (LEFEBVRE RICHARD [US]) 20 November 2008 (2008-11-20) * paragraphs [0026] - [0028]; figures 3-6 *	11, 13
X	DE 9002569 U1 (OETTL, REINHOLD [DE]) 10 January 1991 (1991-01-10) * pages 2, 3; figures 1, 2 *	11-13
Y	US 5992538 A (MARCENGILL RICHARD L [US] ET AL) 30 November 1999 (1999-11-30) * columns 2, 3; figures 1-5 *	9, 10, 14
Y	EP 0348545 A1 (SELL RUDOLF) 03 January 1990 (1990-01-03) * column 4, lines 11-52 *	15

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 25 February 2021	Examiner Lorence, Xavier
------------------------------	--	-----------------------------

### 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 18 74 88 00

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 25-02-2021  
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 2012074659 A1	29-03-2012	US 2012074659 A1 US 2013205561 A1 US 2013205571 A1	29-03-2012 15-08-2013 15-08-2013
DE 19811458 A1	23-09-1999	NONE	
DE 102007058772 A1	10-06-2009	DE 102007058772 A1 EP 2068010 A2	10-06-2009 10-06-2009
US 2008286061 A1	20-11-2008	NONE	
DE 9002569 U1	10-01-1991	NONE	
US 5992538 A	30-11-1999	TW 412452 B US 5992538 A	21-11-2000 30-11-1999
EP 0348545 A1	03-01-1990	EP 0348545 A1 EP 0422088 A1 WO 9000230 A1	03-01-1990 17-04-1991 11-01-1990