



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 17 90 22 04

Classification of the application (IPC):
B25B 13/06, B25B 23/10, B25B 15/00, B25B 27/18

Technical fields searched (IPC):
B25B

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 5481948 A (ZERKOVITZ JEAN-PAUL [FR])	1-4, 7
Y	09 January 1996 (1996-01-09) * figures 4, 8 *	5, 6, 8
Y	DE 202010006146 U1 (EVER SINEWY IND CORP [TW]) 29 July 2010 (2010-07-29) * figures 5-7 *	5
Y	GB 906839 A (KAYNAR MFG CO) 26 September 1962 (1962-09-26) * figures 5, 6 *	6
Y	US 2006266168 A1 (PACHECO RAYMOND A JR [US]) 30 November 2006 (2006-11-30) * figures 3, 4 *	8

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 28 January 2020	Examiner Hartnack, Kai
------------------------------	-----------------------------------------------------	---------------------------

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 17 90 22 04

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 28-01-2020
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 5481948	A	09-01-1996	DE 69406053 D1	13-11-1997
			DE 69406053 T2	26-02-1998
			EP 0630722 A1	28-12-1994
			ES 2109624 T3	16-01-1998
			FR 2703619 A1	14-10-1994
			JP H0752054 A	28-02-1995
			US 5481948 A	09-01-1996
			DE 202010006146	U1
GB 906839	A	26-09-1962	NONE	
US 2006266168	A1	30-11-2006	AU 2006252765 A1	07-12-2006
			BR PI0610647 A2	13-07-2010
			CA 2610384 A1	07-12-2006
			CN 101208181 A	25-06-2008
			EP 1899112 A1	19-03-2008
			JP 4912396 B2	11-04-2012
			JP 2008542044 A	27-11-2008
			KR 20080009301 A	28-01-2008
			US 2006266168 A1	30-11-2006
			WO 2006130490 A1	07-12-2006
			ZA 200709779 B	26-11-2008