



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 20 84 61 57

Classification of the application (IPC):

B25B 15/00, B21K 5/04, B23P 15/00, B25B 13/04, B25B 13/06, B25B 15/02

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 2018354102 A1 (KUKUCKA PAUL [US] ET AL) 13 December 2018 (2018-12-13) * the whole document *	1-10
X A	WO 2018172831 A1 (GRIP TOOLING TECH LLC [US]) 27 September 2018 (2018-09-27) * page 2, line 23 - page 7, line 18; figures 1-7 *	1, 3-6, 9 2, 7, 8, 10
X A	US 2017312897 A1 (DOROSLOVAC R S; KUKUCKA P; KUKUCKA T S) 02 November 2017 (2017-11-02) * paragraph [0011] - paragraph [0024]; figures 1-7 *	1, 3-6, 9 2, 7, 8, 10
A	US 2006266168 A1 (PACHECO RAYMOND A JR [US]) 30 November 2006 (2006-11-30) * abstract; figures 1-9D *	1
A	WO 2018150360 A1 (GRIP TOOLING TECH LLC [US]) 23 August 2018 (2018-08-23) * abstract; figures 1-8 *	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 01 July 2022	Examiner Pothmann, Johannes
------------------------------	--	--------------------------------

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 20 84 61 57

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 01-07-2022
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 2018354102	A1	13-12-2018	NONE		
WO 2018172831	A1	27-09-2018	AU	2017404582 B2	12-09-2019
			CA	3056534 A1	27-09-2018
			CN	110573302 A	13-12-2019
			CN	113770963 A	10-12-2021
			EP	3571016 A1	27-11-2019
			EP	3895844 A1	20-10-2021
			ES	2895766 T3	22-02-2022
			JP	6714262 B2	24-06-2020
			JP	2020128007 A	27-08-2020
			JP	2020508887 A	26-03-2020
			PL	3571016 T3	21-02-2022
			WO	2018172831 A1	27-09-2018
US 2017312897	A1	02-11-2017	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
WO 2018150360	A1	23-08-2018	TW	201838776 A	01-11-2018
			WO	2018150360 A1	23-08-2018