



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 20 96 17 61

Classification of the application (IPC):

B23K 9/16, B23K 9/00, B23K 9/32, B23K 35/02, B23K 9/173, B23K 9/29

Technical fields searched (IPC):

B23K

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
Y	US 9481047 B2 (VICTOR EQUIPMENT CO [US]) 01 November 2016 (2016-11-01)	1, 2, 4-8, 11-15
A	* claim 1; figures 1, 2, 5, 7, 8, 18, 23 * * column 7, line 66 - column 8, line 11 *	3
Y	US 2009107958 A1 (KHAKHALEV ALEXANDER D [US]) 30 April 2009 (2009-04-30) * paragraph [0015]; claims 1-3; figures 2, 3, 4 *	9, 10
Y	US 2016311050 A1 (COOPER EDWARD L [US] ET AL) 27 October 2016 (2016-10-27) * paragraph [0044]; claim 1; figures 1, 3, 10, 11 *	1, 2, 4-15

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 22 July 2024	Examiner Péridis, Marc
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CATEGORY OF CITED DOCUMENTS

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| 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 |
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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

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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 22-07-2024.
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 9481047	B2	01-11-2016	AU 2012334989 A1	05-06-2014
			AU 2012334992 A1	12-06-2014
			AU 2012334995 A1	12-06-2014
			AU 2012334996 A1	05-06-2014
			CA 2855811 A1	16-05-2013
			CA 2855814 A1	16-05-2013
			CA 2855816 A1	16-05-2013
			CA 2855817 A1	16-05-2013
			CN 103998174 A	20-08-2014
			CN 104010757 A	27-08-2014
			CN 104066541 A	24-09-2014
			CN 104245209 A	24-12-2014
			CN 108480827 A	04-09-2018
			EP 2776199 A1	17-09-2014
			EP 2776200 A1	17-09-2014
			EP 2776201 A1	17-09-2014
			EP 2776202 A1	17-09-2014
			ES 2613842 T3	26-05-2017
			ES 2614866 T3	02-06-2017
			MX 350134 B	28-08-2017
			MX 350135 B	28-08-2017
			MX 350327 B	04-09-2017
			MX 352896 B	13-12-2017
			PL 2776200 T3	28-04-2017
			PL 2776201 T3	31-05-2017
			US 2013126504 A1	23-05-2013
			US 2013126505 A1	23-05-2013
			US 2013126506 A1	23-05-2013
			US 2013134143 A1	30-05-2013
			WO 2013071242 A1	16-05-2013
			WO 2013071245 A1	16-05-2013
			WO 2013071248 A1	16-05-2013
			WO 2013071249 A1	16-05-2013
US 2009107958	A1	30-04-2009	CN 101417365 A	29-04-2009
			DE 102008052458 A1	14-05-2009
			US 2009107958 A1	30-04-2009
US 2016311050	A1	27-10-2016	NONE	