



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 17 92 40 85

Classification of the application (IPC):
B25D 17/00, B25D 17/22, B25D 9/12, E02F 3/96

Technical fields searched (IPC):
B25D, E02F

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X A	US 2012138328 A1 (TEIPEL BLAKE [US] ET AL) 07 June 2012 (2012-06-07) * paragraphs [0018], [0020], [0021], [0024] - [0027]; figures 1-7 *	1, 4 2, 3
A	WO 9322106 A1 (BEREMA ATLAS COPCO AB [SE]; BRAENNSTROEM OESTEN [SE] ET AL.) 11 November 1993 (1993-11-11) * the whole document *	1-4
A	US 2014262407 A1 (MOORE CODY [US]) 18 September 2014 (2014-09-18) * the whole document *	1-4
A	FR 2657806 A1 (KARAGANDIN POLITEKHN [SU]) 09 August 1991 (1991-08-09) * the whole document *	1-4

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 September 2020	Examiner Coja, Michael
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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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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 01-09-2020.
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2012138328 A1	07-06-2012	CN 103347657 A	09-10-2013
		EP 2646199 A1	09-10-2013
		KR 20130133785 A	09-12-2013
		US 2012138328 A1	07-06-2012
		WO 2012075214 A1	07-06-2012
WO 9322106 A1	11-11-1993	AT 154536 T	15-07-1997
		DE 69311717 T2	23-07-1998
		EP 0638013 A1	15-02-1995
		ES 2105270 T3	16-10-1997
		FI 945096 A	28-10-1994
		JP 3679804 B2	03-08-2005
		JP H07506058 A	06-07-1995
		US 5445232 A	29-08-1995
		WO 9322106 A1	11-11-1993
US 2014262407 A1	18-09-2014	CN 105050773 A	11-11-2015
		DE 112014000807 T5	29-10-2015
		US 2014262407 A1	18-09-2014
		WO 2014150521 A1	25-09-2014
FR 2657806 A1	09-08-1991	DE 4003814 A1	14-08-1991
		FR 2657806 A1	09-08-1991