

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2020/056789

A. CLASSIFICATION OF SUBJECT MATTER**B66B 7/02**(2006.01)i; **B66B 19/00**(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

B66B; E01B; F16B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2018095739 A1 (INVENTIO AG [CH]) 31 May 2018 (2018-05-31) cited in the application figures 2-4 abstract page 14, line 16 - page 15, line 27	1-15
A	EP 3085660 A1 (KONE CORP [FI]) 26 October 2016 (2016-10-26) figures 14, 15 abstract	1-15
A	DE 3010826 A1 (MASCHF AUGSBURG NUERNBERG AG [DE]) 01 October 1981 (1981-10-01) the whole document	1-15
A	DE 202009014434 U1 (VOSSLOH WERKE GMBH [DE]) 11 February 2010 (2010-02-11) figures 1, 2 abstract paragraphs [0004], [0036], [0037], [0049], [0054]	1-15

 Further documents are listed in the continuation of Box C.
 See patent family annex.

* Special categories of cited documents:

“A” document defining the general state of the art which is not considered to be of particular relevance

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“O” document referring to an oral disclosure, use, exhibition or other means

“P” document published prior to the international filing date but later than the priority date claimed

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“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

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“&” document member of the same patent family

Date of the actual completion of the international search

09 June 2020

Date of mailing of the international search report

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

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Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
WO	2018095739	A1	31 May 2018	AU	2017365063	A1	30 May 2019
				BR	112019007154	A2	25 June 2019
				CA	3041820	A1	31 May 2018
				CN	109982957	A	05 July 2019
				EP	3544920	A1	02 October 2019
				US	2020055709	A1	20 February 2020
				WO	2018095739	A1	31 May 2018
				ZA	201903203	B	30 September 2020
EP	3085660	A1	26 October 2016	CN	106064800	A	02 November 2016
				EP	3085660	A1	26 October 2016
				US	2016311659	A1	27 October 2016
DE	3010826	A1	01 October 1981	NONE			
DE	202009014434	U1	11 February 2010	AR	079285	A1	18 January 2012
				CN	102498246	A	13 June 2012
				DE	102009041816	A1	05 May 2011
				DE	202009014434	U1	11 February 2010
				EA	201200308	A1	30 October 2012
				EP	2478155	A1	25 July 2012
				JP	2013505378	A	14 February 2013
				PL	2478155	T3	31 August 2016
				TW	201122179	A	01 July 2011
				US	2011068183	A1	24 March 2011
				UY	32891	A	29 April 2011
				WO	2011032974	A1	24 March 2011