



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 17 83 64 45

Classification of the application (IPC):

A63B 21/06, A63B 21/075, A63B 23/02, A63B 23/12, A63B 21/072, A63B 21/00A63B

Technical fields searched (IPC):

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	US 6540649 B1 (NIEDRICH DOUGLAS [US]) 01 April 2003 (2003-04-01) * columns 3-4; figures 1-6, 8 *	1-5, 7, 9
X	US 2014141943 A1 (DIPACE DANIEL [US] ET AL) 22 May 2014 (2014-05-22) * paragraphs [0020] - [0026]; figures *	1-8
X	US 3428325 A (ATKINSON GARLAND P) 18 February 1969 (1969-02-18) * columns 2-4; figures *	1-7, 10
X	US 2307905 A (AMENT CHARLES C) 12 January 1943 (1943-01-12) * page 1; figures *	1-5, 7, 8, 10
X	CN 2366137 Y (CHEN ZHIHAI [CN]) 01 March 2000 (2000-03-01) * figures *	1-3, 7

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 Munich	Date of completion of the search 22 January 2020	Examiner Herry, Manuel
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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 22-01-2020.
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 6540649	B1	01-04-2003	NONE	
US 2014141943	A1	22-05-2014	US 2014141943 A1 WO 2012151273 A1	22-05-2014 08-11-2012
US 3428325	A	18-02-1969	NONE	
US 2307905	A	12-01-1943	NONE	
CN 2366137	Y	01-03-2000	NONE	