

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2019/080789

A. CLASSIFICATION OF SUBJECT MATTER

A47B 88/53(2017.01)i; E05C 19/06(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)

A47B; E05C; E05B

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.
X A	EP 3245897 A1 (SCHOCK METALLWERK [DE]) 22 November 2017 (2017-11-22) paragraph [0069] - paragraph [0075] paragraph [0082] paragraph [0086] - paragraph [0088] paragraph [0093] - paragraph [0094] paragraph [0098] - paragraph [0104] paragraph [0113] - paragraph [0114]; figures 1-5,13,15,16	1-4 5
X	WO 2006041009 A1 (SUGATSUNE KOGYO [JP]; TAMURA YUKIO [JP]) 20 April 2006 (2006-04-20) paragraph [0047] - paragraph [0053]; figures 1-10	1,2,4,5
X	DE 9001579 U1 (*) 19 April 1990 (1990-04-19) page 5, last paragraph - page 6, paragraph 2; figures 1-3	1,2

 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

“E” earlier application or patent but published on or after the international filing date

“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

“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

“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

“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

“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

“&” document member of the same patent family

Date of the actual completion of the international search

02 December 2019

Date of mailing of the international search report

09 December 2019

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/EP2019/080789

Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
EP	3245897	A1	22 November 2017	CN	103687512	A	26 March 2014
				DE	102011051138	A1	20 December 2012
				EP	2720577	A1	23 April 2014
				EP	3245897	A1	22 November 2017
				US	2014152165	A1	05 June 2014
				WO	2012171913	A1	20 December 2012
WO	2006041009	A1	20 April 2006	CN	101035958	A	12 September 2007
				JP	4481139	B2	16 June 2010
				JP	2006104882	A	20 April 2006
				WO	2006041009	A1	20 April 2006
DE	9001579	U1	19 April 1990	NONE			