



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 17 86 38 53

Classification of the application (IPC):
G10C 3/02, G10C 3/00

Technical fields searched (IPC):
G10C, A47G

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	CN 103767441 A (XU LISHENG) 07 May 2014 (2014-05-07)	1-3, 7, 10, 12
Y	* claim 1; figure 1 *	1, 3-14
X	US 2009241308 A1 (KOVACS MARTY L R [US]) 01 October 2009 (2009-10-01)	1-3, 5, 7, 10, 12, 14
Y	* paragraphs [0015], [0017], [0019]; figure 2 *	1, 3-14
Y	US 6172293 B1 (ANDERSON KRISTINA I [US]) 09 January 2001 (2001-01-09)	1, 3-14
	* col. 3, l. 41-45; claim 1; figures 1-9 *	
A	JP S57195188 U (UNKNOWN) 10 December 1982 (1982-12-10)	1-14
	* the whole document *	
A	JP S523524 U (UNKNOWN) 11 January 1977 (1977-01-11)	1-14
	* claim 1 *	

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 27 May 2020	Examiner Pitzer, Hanna
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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 27-05-2020
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Patent document cited in search report		Publication date	Patent family member(s)	Publication date
CN 103767441	A	07-05-2014	NONE	
US 2009241308	A1	01-10-2009	NONE	
US 6172293	B1	09-01-2001	NONE	
JP S57195188	U	10-12-1982	NONE	
JP S523524	U	11-01-1977	NONE	