

## INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2018/068049

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
A61M 37/00(2006.01)i; A01K 11/00(2006.01)i; H01L 41/12(2006.01)i; A61M 5/30(2006.01)i		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols)		
A61M; A01K; H01L; H02N; F03G		
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		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	US 6515382 B1 (ULLAKKO KARI M [FI]) 04 February 2003 (2003-02-04) column 3, lines 52-66 column 6, line 60 - column 7, line 4 column 11, lines 7-30 column 13, lines 13-39 column 14, lines 33-41 column 16, lines 5-21 column 24, lines 25-67 column 33, lines 32-54 figures 23-25	1-4,9,17,20-24 5-8,10-15,25
Y	US 2008009788 A1 (HUNTER IAN W [US] ET AL) 10 January 2008 (2008-01-10) paragraphs [0002], [0003], [0005] - [0008], [0032] - [0034], [0036] - [0039], [0059], [0061], [0064] - [0067] figures 1,8	5-8,10-15,25
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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		Date of mailing of the international search report
12 October 2018		22 October 2018
Name and mailing address of the ISA/EP		Authorized officer
European Patent Office p.b. 5818, Patentlaan 2, 2280 HV Rijswijk Netherlands Telephone No. (+31-70)340-2040 Facsimile No. (+31-70)340-3016		Jankowska, M  Telephone No.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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X	DE 102006046400 A1 (BOSCH GMBH ROBERT [DE]) 03 April 2008 (2008-04-03) paragraphs [0001], [0002], [0022] - [0024], [0026] claims 1,4,6-8,11,12 figure 1	1,9-11,15,16,18,20-24
X	DE 10196450 B3 (CONTINENTAL AUTOMOTIVE SYSTEMS [US]) 06 November 2014 (2014-11-06) paragraphs [0001], [0005], [0011], [0035] figure 2	1,9-16,18-20,23,24
X,P	WO 2017167684 A1 (ETO MAGNETIC GMBH [DE]) 05 October 2017 (2017-10-05)  page 1, lines 1-10 page 3, lines 13-18 page 3, line 24 - page 4, line 2 page 4, lines 11-27 page 5, lines 4-10 page 5, line 31 - page 6, line 4 page 6, line 19 - page 7, line 2 claims page 1	1-5,9-11,16, 17,20,23-25
A	US 2012089114 A1 (HEMOND BRIAN D [US] ET AL) 12 April 2012 (2012-04-12) the whole document	1-16,23-25

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**Information on patent family members**

International application No.

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