

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 2017P05561 WO	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2018/048392	International filing date ( <i>day/month/year</i> ) 28 August 2018 (28-08-2018)	(Earliest) Priority Date ( <i>day/month/year</i> ) 29 August 2017 (29-08-2017)
Applicant  CONTINENTAL AUTOMOTIVE SYSTEMS, INC.		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

- the international application in the language in which it was filed  
 a translation of the international application into \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b))

b.  This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).

c.  With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2.  **Certain claims were found unsearchable** (See Box No. II)

3.  **Unity of invention is lacking** (see Box No III)

4. With regard to the **title**,

- the text is approved as submitted by the applicant  
 the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

- the text is approved as submitted by the applicant  
 the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 1

- as suggested by the applicant  
 as selected by this Authority, because the applicant failed to suggest a figure  
 as selected by this Authority, because this figure better characterizes the invention

b.  none of the figures is to be published with the abstract

INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2018/048392

A. CLASSIFICATION OF SUBJECT MATTER  
 INV. G06K9/00 G06K9/20 G08G1/01 G08G1/04 G08G1/052  
 G08G1/056 G08G1/16  
 ADD.  
 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)  
 G06K G08G G01S

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	US 2006/092043 A1 (LAGASSEY PAUL J [US]) 4 May 2006 (2006-05-04) paragraph [0002] paragraph [0006] paragraph [0008] paragraph [0010] paragraph [0015] paragraph [0046] - paragraph [0049] paragraph [0052] - paragraph [0066] paragraph [0069] - paragraph [0076] paragraph [0081] - paragraph [0087] paragraph [0091] - paragraph [0095] paragraph [0098] - paragraph [0101] paragraph [0106] - paragraph [0107] paragraph [0109] paragraph [0118] paragraph [0130] - paragraph [0139] paragraph [0143] - paragraph [0159] paragraph [0161] - paragraph [0162] -/--	1-16

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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</p> <p>"&amp;" document member of the same patent family</p>
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Date of the actual completion of the international search <b>22 November 2018</b>	Date of mailing of the international search report <b>30/11/2018</b>
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Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Authorized officer  <b>Banerjea, Robin</b>
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## INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2018/048392

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	paragraph [0174] - paragraph [0184] paragraph [0187] - paragraph [0194] figures 1-5 ----- EP 3 193 319 A1 (EKIN AKIF [TR]) 19 July 2017 (2017-07-19)	1,4,5, 7-10, 14-16
X	paragraph [0001] paragraph [0013] - paragraph [0021] figures 1,2 ----- US 2004/222904 A1 (CIOLLI ROBERT [AU]) 11 November 2004 (2004-11-11)	1,2,4,5, 7-11, 14-16
A	paragraph [0073] - paragraph [0091] paragraph [0115] - paragraph [0120] paragraph [0142] - paragraph [0146] paragraph [0150] - paragraph [0152] figures 1,6 ----- EP 1 271 406 A2 (FUJITSU LTD [JP]; IKEUCHI KATSUSHI [JP]; SAKAUCHI MASAO [JP]) 2 January 2003 (2003-01-02) the whole document -----	1-16

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2006092043 A1	04-05-2006	US 2006092043 A1 US 2008252485 A1	04-05-2006 16-10-2008
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EP 3193319 A1	19-07-2017	NONE	
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US 2004222904 A1	11-11-2004	US 2004222904 A1 US 2006269104 A1 US 2010128127 A1 US 2012194357 A1 WO 2004100102 A1	11-11-2004 30-11-2006 27-05-2010 02-08-2012 18-11-2004
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EP 1271406 A2	02-01-2003	DE 60224324 T2 DE 60224852 T2 DE 60224853 T2 EP 1271406 A2 EP 1564704 A2 EP 1575014 A2 JP 4480299 B2 JP 2003006655 A US 2002196341 A1 US 2005285939 A1 US 2005285940 A1	31-07-2008 22-01-2009 22-01-2009 02-01-2003 17-08-2005 14-09-2005 16-06-2010 10-01-2003 26-12-2002 29-12-2005 29-12-2005
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