

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2017/079405

A. CLASSIFICATION OF SUBJECT MATTER
INV. F16L53/35
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)
F16L F01N

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 2011/073585 A1 (SINAULT YANN [FR] ET AL) 31 March 2011 (2011-03-31) abstract; figures 1, 2 -----	1-7, 10-12
X	EP 2 706 280 A1 (NORMA GERMANY GMBH [DE]) 12 March 2014 (2014-03-12) paragraph [0030] - paragraph [0043]; figures 1-3 -----	1-12
X	DE 10 2008 018658 A1 (KAYSER AUTOMOTIVE SYSTEMS GMBH [DE]) 15 October 2009 (2009-10-15) cited in the application abstract; figure 4 -----	1,2,6,7, 11,12
A	FR 2 924 786 A1 (COUTIER MOULAGE GEN IND [FR]) 12 June 2009 (2009-06-12) cited in the application page 4 - page 5; figures 1-3 -----	1-12

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>"&" document member of the same patent family</p>
---	---

Date of the actual completion of the international search 12 February 2018	Date of mailing of the international search report 20/02/2018
---	--

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 Wojski, Guadalupe
--	---

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2017/079405

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 2011073585	A1	31-03-2011	CN 102052541 A	11-05-2011
			EP 2302276 A1	30-03-2011
			FR 2950666 A1	01-04-2011
			JP 5745806 B2	08-07-2015
			JP 2011075100 A	14-04-2011
			KR 20110035965 A	06-04-2011
			US 2011073585 A1	31-03-2011

EP 2706280	A1	12-03-2014	BR 102013022833 A2	21-10-2014
			CN 103672281 A	26-03-2014
			EP 2706280 A1	12-03-2014
			ES 2537450 T3	08-06-2015
			JP 2014052075 A	20-03-2014
			KR 20140034076 A	19-03-2014
			US 2014069621 A1	13-03-2014

DE 102008018658	A1	15-10-2009	NONE	

FR 2924786	A1	12-06-2009	DE 112008003310 T5	04-11-2010
			FR 2924786 A1	12-06-2009
			WO 2009103869 A2	27-08-2009
