



SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 20 83 22 38

Classification of the application (IPC):
F02G 1/043, F02G 1/05, F02G 1/055

Technical fields searched (IPC):
F02G

DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
X	CA 1021947 A (PHILIPS NV) 06 December 1977 (1977-12-06)	1-6, 9-15
Y	* figures *	7, 8
Y	GB 2040003 A (UNITED STIRLING AB & CO) 20 August 1980 (1980-08-20)	7, 8
	* figures *	
X	US 4881372 A (NAITO YOSHIHIRO [JP]) 21 November 1989 (1989-11-21)	1-4, 6, 9, 11
Y	* figures *	5, 12-15
A		7, 8, 10
Y	US 9151243 B2 (STRIMLING JONATHAN [US]; BOUCHARD CLEMENT D [US] ET AL.) 06 October 2015 (2015-10-06)	5
	* figures *	
Y	Popoo : "Aluminum magnesium boride" <i>Article Field</i> , 09 July 2010 (2010-07-09), pages 1-3 URL: http://www.articlefield.com/26791/aluminium-magnesium-boride [retrieved on 24 November 2021 (2021-11-24)] XP055865087 * abstract *	12
Y	Sridhar K ET AL : "Thermal barrier Analysis in Diesel" <i>International Journal of Modern Engineering Research</i> , 01 May 2013 (2013-05-01), pages 1435-1441 URL: http://www.ijmer.com/papers/Vol3_Issue3/BI3314351441.pdf [retrieved on 02 March 2021 (2021-03-02)] XP055780961 * abstract *	13
Y	US 5780116 A (SILEO GERARD A [US] ET AL) 14 July 1998 (1998-07-14)	14
	* figures *	

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 Munich	Date of completion of the search 14 June 2023	Examiner Matray, J
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Application number:
EP 20 83 22 38

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim
Y	WO 2015114080 A1 (NUOVO PIGNONE SRL [IT]) 06 August 2015 (2015-08-06) * figures *	15

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 Munich	Date of completion of the search 14 June 2023	Examiner Matray, J
---------------------------	--	-----------------------

CATEGORY OF CITED DOCUMENTS

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ANNEX TO SUPPLEMENTARY EUROPEAN SEARCH REPORT

Application number:
EP 20 83 22 38

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 14-06-2023
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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
CA 1021947 A	06-12-1977	CA 1021947 A	06-12-1977
		DE 2524455 A1	02-01-1976
		FR 2274790 A1	09-01-1976
		GB 1515347 A	21-06-1978
		JP S5110407 A	27-01-1976
		JP S5514908 B2	19-04-1980
		NL 7407951 A	16-12-1975
		SE 425017 B	23-08-1982
GB 2040003 A	20-08-1980	DE 3002669 A1	07-08-1980
		GB 2040003 A	20-08-1980
		JP S6261778 B2	23-12-1987
		JP S55109744 A	23-08-1980
		US 4261173 A	14-04-1981
US 4881372 A	21-11-1989	NONE	
US 9151243 B2	06-10-2015	AT E347649 T1	15-12-2006
		CA 2515483 A1	26-08-2004
		CA 2759752 A1	26-08-2004
		DE 602004003560 T2	27-09-2007
		EP 1592876 A2	09-11-2005
		JP 2006518021 A	03-08-2006
		MX PA05008465 A	17-11-2005
		US 2004154297 A1	12-08-2004
		US 2008092536 A1	24-04-2008
		US 2012227403 A1	13-09-2012
		US 2016025036 A1	28-01-2016
		WO 2004072464 A2	26-08-2004
US 5780116 A	14-07-1998	DE 69407811 T2	23-04-1998
		EP 0725842 A1	14-08-1996
		JP 3142003 B2	07-03-2001
		JP H09504340 A	28-04-1997
		US 5536022 A	16-07-1996
		US 5780116 A	14-07-1998
		WO 9512004 A1	04-05-1995
WO 2015114080 A1	06-08-2015	BR 112016016149 A2	08-08-2017
		CN 106164457 A	23-11-2016
		DE 112015000585 T5	03-11-2016
		GB 2537560 A	19-10-2016
		JP 2017508911 A	30-03-2017
		RU 2016128417 A	05-03-2018
		US 2016341187 A1	24-11-2016
		WO 2015114080 A1	06-08-2015