

INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2019/082742

A. CLASSIFICATION OF SUBJECT MATTER**G01D 5/14**(2006.01)i; **G01D 3/028**(2006.01)n; **G01D 5/244**(2006.01)n

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)

G01D

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 Y	US 2015022186 A1 (AUSSELERLECHNER UDO [AT]) 22 January 2015 (2015-01-22) paragraphs [0031], [0038] - [0043], [0047], [0070] - [0073]; figures 1-10	1-6,9,10,13,15 7,8,11,12,14,15
Y	EP 3144639 A1 (MONOLITHIC POWER SYSTEMS INC [US]) 22 March 2017 (2017-03-22) paragraphs [0022], [0024]; figure 4	8,11,12
Y	EP 1939592 A1 (BOSCH GMBH ROBERT [DE]) 02 July 2008 (2008-07-02) paragraphs [0018], [0019], [0021]; figure 1	7
Y	US 2010176804 A1 (AUSSELERLECHNER UDO [AT]) 15 July 2010 (2010-07-15) paragraphs [0020], [0028], [0029], [0035]; figures 4, 5	14
Y	US 2011187350 A1 (AUSSELERLECHNER UDO [AT] ET AL) 04 August 2011 (2011-08-04) paragraphs [0060], [0063]; figures 3, 4	15
A	EP 2888558 A1 (MELEXIS TECHNOLOGIES NV [BE]) 01 July 2015 (2015-07-01) paragraph [0160]	1-15

 Further documents are listed in the continuation of Box C.
 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

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“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

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“&” document member of the same patent family

Date of the actual completion of the international search

13 February 2020

Date of mailing of the international search report

25 February 2020

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

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Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)			Publication date (day/month/year)
US	2015022186	A1	22 January 2015	DE	102014109950	A1	22 January 2015
				US	2015022186	A1	22 January 2015
				US	2018259361	A1	13 September 2018
EP	3144639	A1	22 March 2017	CN	106405454	A	15 February 2017
				EP	3144639	A1	22 March 2017
				US	2017074680	A1	16 March 2017
EP	1939592	A1	02 July 2008	DE	102006061701	A1	03 July 2008
				EP	1939592	A1	02 July 2008
US	2010176804	A1	15 July 2010	DE	102009054864	A1	15 July 2010
				US	2010176804	A1	15 July 2010
US	2011187350	A1	04 August 2011	DE	102007029817	A1	08 January 2009
				US	2009001965	A1	01 January 2009
				US	2011187350	A1	04 August 2011
EP	2888558	A1	01 July 2015	CN	104583727	A	29 April 2015
				EP	2888558	A1	01 July 2015
				GB	2505226	A	26 February 2014
				HK	1208903	A1	18 March 2016
				JP	6236452	B2	22 November 2017
				JP	2015526730	A	10 September 2015
				KR	20150042782	A	21 April 2015
				KR	20190045400	A	02 May 2019
				US	2015226581	A1	13 August 2015
				US	2019242724	A1	08 August 2019
				WO	2014029885	A1	27 February 2014