

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 175129WO	FOR FURTHER ACTION see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/US2018/047611	International filing date (<i>day/month/year</i>) 22 August 2018 (22-08-2018)	(Earliest) Priority Date (<i>day/month/year</i>) 30 August 2017 (30-08-2017)
Applicant QUALCOMM INCORPORATED		

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/US2018/047611

A. CLASSIFICATION OF SUBJECT MATTER
INV. G06K9/00
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
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	DENNIS MITZEL ET AL: "Real-Time Multi-Person Tracking with Time-Constrained Detection", PROCEEDINGS OF THE BRITISH MACHINE VISION CONFERENCE 2011, 1 January 2011 (2011-01-01), pages 104.1-104.11, XP055139622, DOI: 10.5244/C.25.104 ISBN: 978-1-90-172543-8	1-17, 27-30
Y	abstract sections 3, 4, 5 page 8, section 6, first paragraph page 9, lines 12-13 ----- -/--	18-26

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

"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 6 November 2018	Date of mailing of the international search report 13/11/2018
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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 Sagrebin-Mitzel, M
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INTERNATIONAL SEARCH REPORT

International application No
PCT/US2018/047611

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>Michalis Zervos: "Multi-camera face detection and recognition applied to people tracking", Master Thesis, 1 January 2013 (2013-01-01), XP055521316, Retrieved from the Internet: URL:https://infoscience.epfl.ch/record/183741/files/MSc_Thesis.pdf [retrieved on 2018-11-06] abstract page 35, section 5.1 and 5.1.1.</p>	18-26
A	<p>EP 3 098 755 A1 (ACCENTURE GLOBAL SERVICES LTD [IE]) 30 November 2016 (2016-11-30) paragraphs: [0020], [0022], [0024], [0026], [0028], [0031]-[0032], [0046], [0058]</p>	1-30
A	<p>US 2017/068842 A1 (GARCIA DAVID HARRY [US] ET AL) 9 March 2017 (2017-03-09) the whole document</p>	1-30

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2018/047611

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
EP 3098755	A1	30-11-2016	AU 2016203571 A1	15-12-2016
			AU 2016203579 A1	15-12-2016
			AU 2016203594 A1	15-12-2016
			AU 2017204181 A1	13-07-2017
			AU 2017218930 A1	07-09-2017
			CA 2931713 A1	29-11-2016
			CA 2931743 A1	29-11-2016
			CA 2931748 A1	29-11-2016
			EP 3098754 A1	30-11-2016
			EP 3098755 A1	30-11-2016
			EP 3098756 A1	30-11-2016
			SG 10201604361S A	29-12-2016
			SG 10201604367V A	29-12-2016
			SG 10201604368T A	29-12-2016
			US 2016350587 A1	01-12-2016
			US 2016350596 A1	01-12-2016
			US 2016350597 A1	01-12-2016
			US 2016350599 A1	01-12-2016
			US 2016350921 A1	01-12-2016
			US 2018293443 A1	11-10-2018
US 2017068842	A1	09-03-2017	AU 2012337301 A1	19-06-2014
			CA 2855963 A1	23-05-2013
			JP 5826947 B2	02-12-2015
			JP 2014535122 A	25-12-2014
			KR 20140091599 A	21-07-2014
			US 2013121540 A1	16-05-2013
			US 2015286856 A1	08-10-2015
			US 2017068842 A1	09-03-2017
			WO 2013074233 A1	23-05-2013