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- (71) Applicant: SYNAPTICS INCORPORATED [US/US];
1251 McKay Drive, San Jose, CA 95131 (US).
- (72) Inventors: MACDONALD, James; 1251 McKay Drive,
San Jose, CA 95131 (US). GOODELLE, Jason; 1251
McKay Drive, San Jose, CA 95131 (US).
- (74) Agent: WITTMANN, Robert, T.; Two Prudential Plaza,
180 North Stetson Avenue, Suite 4900, Chicago, IL 60601
(US).
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(54) Title: OPTICAL SENSOR WITH SUBSTRATE LIGHT FILTER

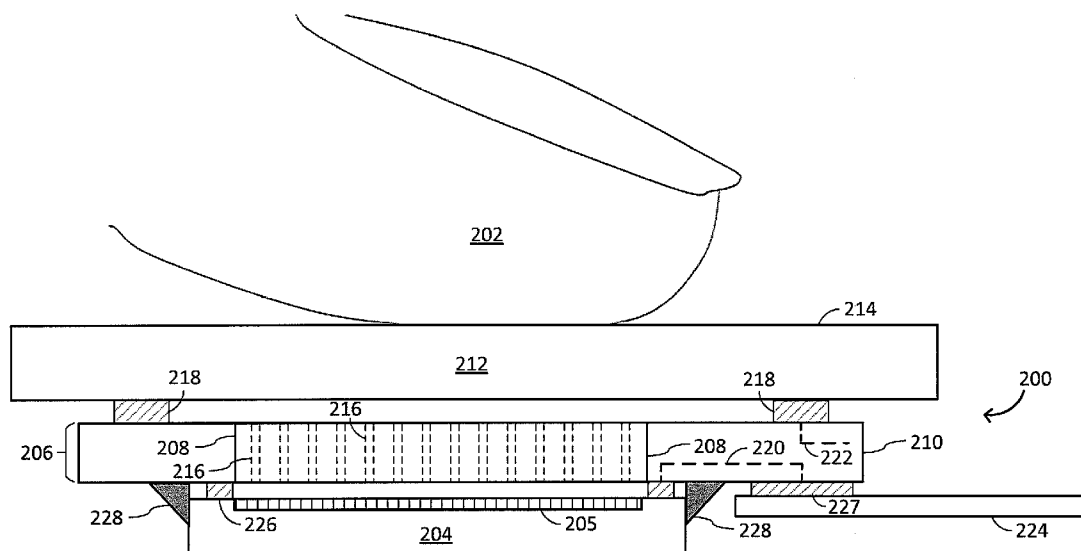


FIG. 2

(57) Abstract: An optical biometric sensor is disclosed. The optical biometric sensor includes a filter layer having a top surface and a bottom surface. The filter layer includes a light filter including a blocking material forming an array of apertures; a substrate including an electrical interconnect comprising a set of electrical conductors. The biometric sensor further includes an optical sensor including an array of sensing elements mounted to the bottom surface of the substrate, wherein sensing elements in the array of sensing elements sensors are aligned with the array of apertures and electrically connected to the electrical interconnect.



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INTERNATIONAL SEARCH REPORT

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PCT/US2017/064893**A. CLASSIFICATION OF SUBJECT MATTER****G06K 9/00(2006.01)i, H01L 27/32(2006.01)i**

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHEDMinimum documentation searched (classification system followed by classification symbols)
G06K 9/00; G06F 3/044; G06K 9/28; H01L 23/31; H05K 1/11; H01L 27/32Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
Korean utility models and applications for utility models
Japanese utility models and applications for utility modelsElectronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKOMPASS(KIPO internal) & Keywords: optical, fingerprint sensor, semiconductor substrate, metal, aperture, array, second, transparent, layer**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2016-0132712 A (SHENZHEN HUIDING TECHNOLOGY CO., LTD.) 12 May 2016 See paragraphs [0030]-[0037]; claims 1, 18; and figures 3B, 4B.	1, 6-8, 11-13, 16
Y		9-10, 15
A		2-5, 14, 17-24
Y	US 8717775 B1 (BOLOGNIA et al.) 06 May 2014 See column 7, line 14 - column 8, line 11; and figure 8.	9-10, 15
A	US 2016-0247009 A1 (BOE TECHNOLOGY GROUP CO., LTD.) 25 August 2016 See figures 1-2.	1-24
A	US 2015-0036065 A1 (APPLE INC.) 05 February 2015 See figures 4A-4B, 13A.	1-24
A	US 7822239 B2 (CHOU) 26 October 2010 See figures 2-6.	1-24

 Further documents are listed in the continuation of Box C. See patent family annex.

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International Application Division
Korean Intellectual Property Office
189 Cheongsa-ro, Seo-gu, Daejeon, 35208, Republic of Korea

Facsimile No. +82-42-481-8578

Authorized officer

KANG, Sung Chul

Telephone No. +82-42-481-8405



INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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