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(54) Title: TFT SENSOR HAVING IMPROVED IMAGING SURFACE

(57) Abstract: Disclosed is an image capture sensor (100) including a light detection transistor (112) having a light sensitive layer which conducts electricity in response to detection of a predetermined amount of light and a switch (113) interconnected to the light detection transistor and responsive to detection of light by the light detection transistor. A glass substrate (111) is layered over both the light detection transistor and switch. The glass substrate provides a durable and smooth surface upon which a patterned object to be imaged is placed.



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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/26428

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G06K 9/00; H01L 27/00, 29/15

US CL : 382/124; 250/208.1; 257/72

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)

U.S. : 382/115,116,124,125,126; 250/208.1,214R,553.5; 257/59,72,350,E29.151,E51.005; 345/92; 385/130

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)  
Please See Continuation Sheet

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2002/0027188 A1 (YOON et al.) 07 March 2002 (07.03.2002), page 1.	1-19
Y	US 2001/0033254 A1 (FUTUDSATO et al.) 25 October 2001 (25.10.2001), page 4 and figure 1.	1-13
Y	US 4,932,776 A (DOWLING, JR. et al.) 12 June 1990 (12.06.1990), columns 3-4	5-7,12,14-19
Y	US 5,907,627 A (BORZA) 25 May 1999 (25.05.1999), column 1.	1-13
A	YOUNG ET. AL., "Novel Fingerprint Scanning Arrays Using Polysilicon TFT's on Glass and Polymer Substrates" (Electron Device Letters, IEEE , Volume: 18 , Issue: 1 , Jan. 1997, pages 19-20.	1-19

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents:

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"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

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**INTERNATIONAL SEARCH REPORT**

PCT/US03/26428

**Continuation of B. FIELDS SEARCHED Item 3:**

IEEE

search terms: tft, fingerprint, image sensor