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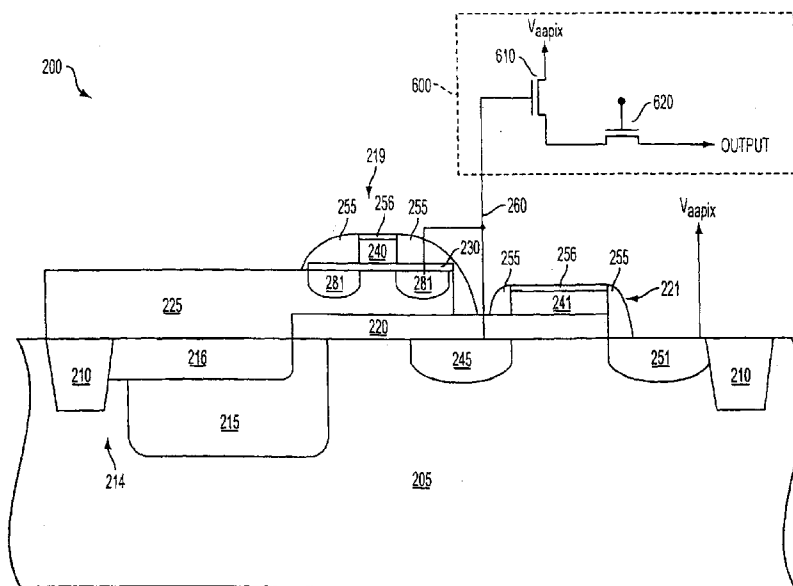
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(54) Title: STACKED TRANSPARENT-DUAL-CHANNEL THIN-FILM TRANSISTOR-BASED PIXELS FOR CMOS IMAGE SENSORS



(57) Abstract: A pixel circuit, and method of forming a pixel circuit, an imager device, and a processing system include a photo-conversion device (214), a floating diffusion region (245) for receiving and storing charge from the photo-conversion device (214), and a transparent transistor (219) for use in operation of the pixel, wherein the transparent transistor (219) is at least partially over the photo-conversion device (214), such that the photo-conversion device (214) receives light passing through the transparent transistor (219).

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# INTERNATIONAL SEARCH REPORT

International application No  
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**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. H01L27/146

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)  
H01L

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 practical, 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	US 6 380 572 B1 (PAIN BEDABRATA [US] ET AL) 30 April 2002 (2002-04-30)	1-6, 8-10,16, 17, 20-25, 27,28, 34-40, 42-44, 50-55, 57,58, 64-68
Y	column 5, line 19 - column 6, line 50; figures 2,3,5,6a-6h  ----- -/--	7,11-15, 18,26, 29-33, 41, 45-49, 56,59-63

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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