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(71) Applicant *(for all designated States except US)*: **MICRON TECHNOLOGY, INC.** [US/US]; 8000 S.Federal Way, Boise, ID 83707-0006 (US).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **JERDEV, Dimitri** [RU/US]; 372 Monterey Rd., #12, South Pasadena, CA 91030 (US). **KHALIULLIN, Nail** [RU/US]; 476 South Los Robles Ave. #3, Pasadena, CA 91101 (US).

(74) Agent: **D'AMICO, Thomas, J.**; Dickstein Shapiro Morin & Oshinsky LLP, 2101 L Street NW, Washington, WA 20037-1526 (US).

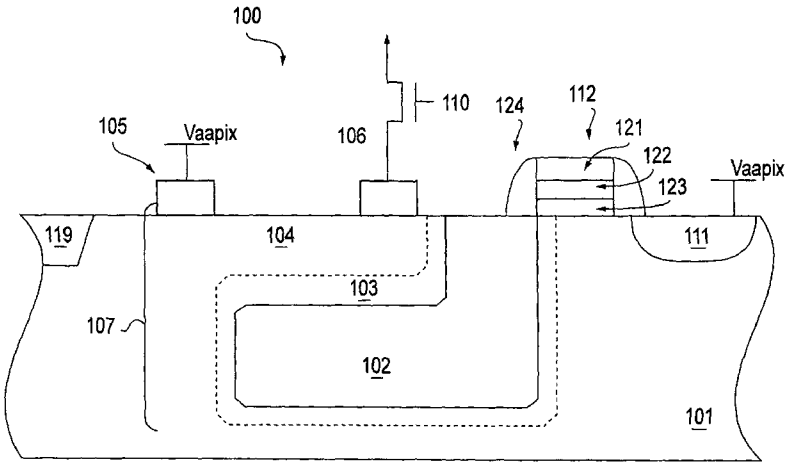
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(54) **Title:** ACTIVE PHOTOSENSITIVE STRUCTURE WITH BURIED DEPLETION LAYER



(57) **Abstract:** An imager pixel has a photosensitive JFET structure having a channel region located above a buried charge accumulation region. The channel region has a resistance characteristic that changes depending on the level of accumulated charge in the accumulation region. During an integration period, incident light causes electrons to be accumulated inside the buried accumulation region. The resistance characteristic of the channel region changes in response to a field created by the charges accumulated in the accumulation region. Thus, when a voltage is applied to one side of the channel, the current read out from the other side is characteristic of the amount of stored charges.

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