

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
18 January 2007 (18.01.2007)

PCT

(10) International Publication Number
WO 2007/008552 A3

(51) International Patent Classification:
H01L 27/146 (2006.01)

(21) International Application Number:
PCT/US2006/026278

(22) International Filing Date: 7 July 2006 (07.07.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/178,798 12 July 2005 (12.07.2005) US

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

(72) Inventor; and

(75) Inventor/Applicant (for US only): **MCKEE, Jeffrey, A.** [US/US]; 3891 S. Gideon Place, Meridian, ID 83642 (US).

(74) Agent: **D'AMICO, Thomas, J.**; DICKSTEIN SHAPIRO LLP, 1825 Eye Street, NW, Washington, DC 20006-5403 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

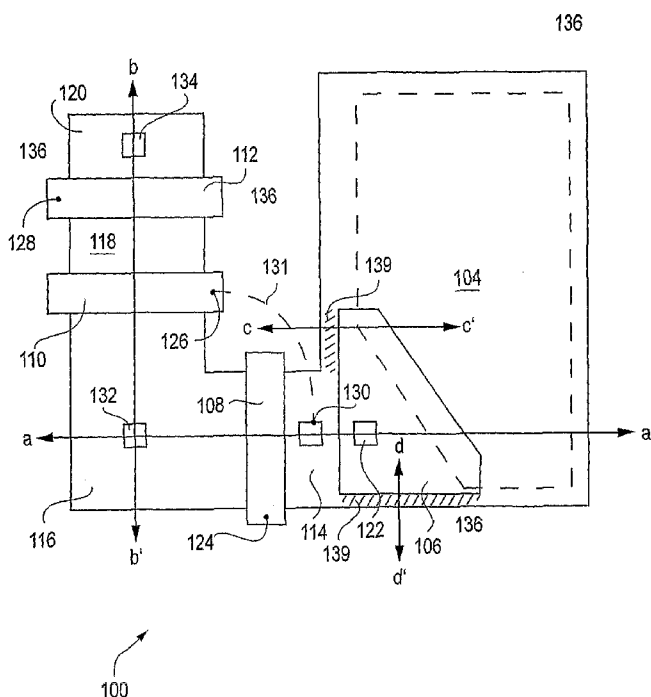
Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
26 April 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: PIXEL WITH TRANSFER GATE WITH NO ISOLATION EDGE



(57) Abstract: A pixel and imager device, and method of forming the same, where the pixel has a transfer transistor gate associated with a photoconversion device and is isolated in a substrate by shallow trench isolation. The transfer transistor gate does not overlap the shallow trench isolation region.

WO 2007/008552 A3