Title (en)

CMOS INTEGRATION SENSOR WITH FULLY DIFFERENTIAL COLUMN READOUT CIRCUIT FOR LIGHT ADAPTIVE IMAGING

Title (de)

CMOS-INTEGRATIONSSENSOR MIT VOLL DIFFERENTIELLER SPALTENAUSLESESCHALTUNG ZUMHELLICHKEITSADAPTIVEN ABBILDEN

Title (fr)

CAPTEUR D'INTEGRATION CMOS COMPRENANT UN CIRCUIT TOTALEMENT DIFFERENTIEL DE LECTURE DE COLONNES AUX FINS D'IMAGERIE ADAPTATIVE A LA LUMIERE

Publication

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Application

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Abstract (en)

[origin: WO9948281A1] An imager (10) that is better suited for low-light detection capability. In accordance with a preferred embodiment, the imager may be easily configured to provide an imager (10) having multi-resolution capability where SNR can be adjusted for optimum low-level detectibility. Multi-resolution signal processing functionality is provided on-chip to achieve high speed imaging, employs an improved pixel binning approach with fully differential circuits situated so that all extraneous and pick-up noise is eliminated. The current implementation requires no frame transfer memory, thereby reducing chip size. The reduction in area enables larger area format light adaptive imager implementations.

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