Title (en)

BUILT-IN VERY HIGH SENSITIVITY IMAGE SENSOR

Title (de)

INTEGRIERTER HOCHSENSIBLER BILDSENSOR

Title (fr)

CAPTEUR D'IMAGE INTEGRE A TRES GRANDE SENSIBILITE

Publication

EP 2430659 A1 20120321 (FR)

Application

EP 10731767 A 20100511

Priority

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- FR 0953192 A 20090514

Abstract (en)

[origin: WO2010130950A1] The invention relates to a basic device for an image sensor, including a photodiode consisting of a doped area having a first type of conductivity (32) and formed at the surface of a semiconductor substrate having a second type of conductivity (30), adapted to be biased at a first reference voltage (Vref1), wherein the photodiode is combined with a device for the transfer (36), multiplication (38, 40, 42) and insulation (44) of charges, the photodiode being a fully depleted one and including, at the surface of the doped area having a first type of conductivity, a strongly doped region having the second type of conductivity (34) and adapted to be biased at a second reference voltage (Vref2).

IPC 8 full level

H01L 27/146 (2006.01); **H01L 27/148** (2006.01)

CPC (source: EP US)

H01L 27/14609 (2013.01 - EP US); **H01L 27/14818** (2013.01 - EP US); **H01L 27/14843** (2013.01 - EP US)

Citation (search report)

See references of WO 2010130950A1

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