

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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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).

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See references of WO 2010130950A1

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