

Title (en)
OPTOELECTRONIC SENSOR

Title (de)
OPTOELEKTRONISCHER SENSOR

Title (fr)
CAPTEUR OPTOELECTRONIQUE

Publication
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Application
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Abstract (en)
[origin: WO2004040904A1] Disclosed is an optoelectronic sensor comprising at least one photodiode (1) which can be connected to a first potential (Vreset,Vreset1) via a first transistor (T1) or a first diode (D1). Said photodiode (1) can also be connected to the input of a readout amplifier (T3) via a second transistor (T2). A third transistor (T5), via which the input of the readout amplifier (T3) can be connected to a second potential (Vreset, Vreset2), is disposed between the second transistor (T2) and the input of the readout amplifier (T3). The inventive optoelectronic sensor further comprises means (C2) for temporarily storing the integrated signal value until readout time, whereby an optoelectronic sensor having a great dynamic range is created, i.e. the sensitivity thereof towards small signals is increased while the sensitivity thereof towards large signals is reduced, said optoelectronic sensor additionally allowing the signal value to be stored in the pixel until readout time following integration (global shutter exposure control).

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