Title (en)

PHOTODIODE WITH A REDUCED DARK CURRENT AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

PHOTODIODE MIT VERRINGERTEM DUNKELSTROM UND VERFAHREN ZUR HERSTELLUNG

Title (fr)

PHOTODIODE PRESENTANT UN COURANT D'OBSCURITE REDUIT ET PROCEDE DE FABRICATION

Publication

EP 1891682 A1 20080227 (DE)

Application

EP 06742752 A 20060428

Priority

- EP 2006004027 W 20060428
- DE 102005027456 A 20050614

Abstract (en)

[origin: WO2006133765A1] The invention relates to a photodiode comprising a PN junction between the doping region (DG) created in the surface of a crystalline semiconductor substrate and a semiconductor layer (HS) deposited thereover. An additional doping (GD) is provided in the edge of the doped region, and used to extend the PN junction deeper into the substrate (SU). The thus increased distance between the PN junction and irregularities on phase boundaries enables the dark current to be reduced inside the photodiode.

IPC 8 full level

H01L 31/18 (2006.01); **H01L 31/103** (2006.01)

CPC (source: EP US)

H01L 31/1035 (2013.01 - EP US); **H01L 31/1812** (2013.01 - EP US); Y02E 10/50 (2013.01 - US)

Citation (search report)

See references of WO 2006133765A1

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DOCDB simple family (publication)

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