

Title (en)

SEMI-CONDUCTOR STRUCTURE AND METHOD FOR THE PRODUCTION OF A SEMI-CONDUCTOR STRUCTURE

Title (de)

HALBLEITERSTRUKTUR UND VERFAHREN ZUR HERSTELLUNG EINER HALBLEITERSTRUKTUR

Title (fr)

STRUCTURE SEMI-CONDUCTRICE ET PROCÉDÉ DE PRODUCTION D'UNE STRUCTURE SEMI-CONDUCTRICE

Publication

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Application

**EP 08871574 A 20081215**

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Abstract (en)

[origin: WO2009092424A2] The invention relates to a semi-conductor structure, comprising an n metallization and a p metallization (7), and a semi-conductor substrate having an n-doped base region and a p-doped emitter region (2) adjoining the same at least partially for configuring an emitter/base p-n junction, wherein the emitter region (2) extends at least partially approximately parallel to an emitter surface (2b) of the semi-conductor substrate, and the n metallization is connected to the base region, and the p metallization (7) is connected to the emitter region (2) in an electrically conductive manner. It is essential to the invention that the semi-conductor structure further comprises an n-doped passivation region (5), which is disposed at least partially between the emitter surface (2b) and the emitter region 2, wherein the passivation region (5) is neither connected to the n metallization nor to the p metallization (7) in an electrically conductive manner. The invention further relates to a method for the production of such a semi-conductor structure.

IPC 8 full level

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Citation (search report)

See references of WO 2009092424A2

Citation (examination)

MOEHLECKE A ET AL: "FLOATING JUNCTION PASSIVATION OF P+ EMITTERS", 2ND WORLD CONFERENCE ON PHOTOVOLTAIC SOLAR ENERGY CONVERSION. / 15TH EUROPEAN PV SOLAR ENERGY CONFERENCE. / 27TH US IEEE PHOTOVOLTAICS SPECIALISTS CONFERENCE. / 10TH ASIA/PACIFIC PV SCIENCE AND ENGINEERING CONFERENCE. VIENNA, AUSTRIA, JULY 6 - 10, 19, 6 July 1998 (1998-07-06), pages 1551 - 1554, XP001138009, ISBN: 978-92-828-5419-8

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