

Title (en)
BACK CONTACT SOLAR CELL AND METHOD FOR THE PRODUCTION THEREOF

Title (de)
RÜCKSEITENKONTAKTIERTES HALBLEITERBAUELEMENT UND VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)
CELLULE SOLAIRE AVEC MISE EN CONTACT PAR LA FACE ARRIÈRE ET PROCÉDÉ DE FABRICATION DE LADITE CELLULE SOLAIRE

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Application
EP 14712259 A 20140319

Priority
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• EP 2014055551 W 20140319

Abstract (en)
[origin: WO2014147151A1] The invention relates to a method for the back-surface contacting of solar cells having a substrate, which substrate is substantially composed of silicon, wherein an aluminum layer (2) is applied to the back surface of the substrate at least in some regions, an aluminum layer (2a) doped with silicon and having a eutectic of silicon and aluminum and a silicon layer (2b) doped with aluminum as a back surface field (BSF) thereby being formed. The porosity of the aluminum layer is reduced simultaneously with the bonded connection (6) of the solar cell to an electrical conductor (5). The invention further relates to a back contact solar cell that can be produced by means of said method.

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Citation (search report)
See references of WO 2014147151A1

Citation (examination)
• WO 2013032336 A1 20130307 - STICHTING ENERGIE [NL], et al
• H V CAMPE ET AL: "DIRECT TIN-COATING OF THE ALUMINUM REAR CONTACT BY ULTRASONIC SOLDERING", 27TH EUROPEAN PHOTOVOLTAIC SOLAR ENERGY CONFERENCE, PROCEEDINGS OF THE 27TH INTERNATIONAL CONFERENCE, WIP-RENEWABLE ENERGIES, 31 October 2012 (2012-10-31), pages 1150 - 1153, XP040633870, ISBN: 978-3-936338-28-7

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