

Title (en)

METHOD FOR PRODUCING A SOLAR CELL INVOLVING DOPING BY ION IMPLANTATION AND THE DEPOSITING OF AN OUTDIFFUSION BARRIER

Title (de)

VERFAHREN ZUR HERSTELLUNG EINER SOLARZELLE UMFASSEND EINE DOTIERUNG DURCH IONENIMPLANTATION UND ABSCHIEDEN EINER AUSDIFFUSIONSBARRIERE

Title (fr)

PROCÉDÉ DE PRODUCTION D'UNE CELLULE SOLAIRE IMPLIQUANT UN DOPAGE PAR IMPLANTATION IONIQUE ET LA SÉPARATION D'UNE BARRIÈRE DE DIFFUSION VERS L'EXTÉRIEUR

Publication

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Application

EP 14753037 A 20140805

Priority

- DE 102013218351 A 20130913
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Abstract (en)

[origin: WO2015036181A1] The invention relates to a method for producing a solar cell (1) from crystalline semiconductor material, wherein a first doping region (5) is formed by means of ion implantation (S2) of a first dopant in a first surface (3a) of a semiconductor substrate (3), and a second doping region (7) is formed by means of ion implantation (S3) or thermal indiffusion of a second dopant in the second surface (3b) of the semiconductor substrate. After the doping of the second surface, a cap (9b) acting as an outdiffusion barrier for the second dopant is applied and an annealing step (S4) is subsequently carried out.

IPC 8 full level

H01L 31/0216 (2006.01); **H01L 21/265** (2006.01); **H01L 31/068** (2012.01); **H01L 31/18** (2006.01)

CPC (source: EP KR US)

H01L 21/26513 (2013.01 - EP KR US); **H01L 31/02167** (2013.01 - EP KR US); **H01L 31/0288** (2013.01 - KR); **H01L 31/0392** (2013.01 - KR); **H01L 31/068** (2013.01 - EP KR US); **H01L 31/18** (2013.01 - KR); **H01L 31/1804** (2013.01 - EP KR US); **H01L 31/1864** (2013.01 - EP KR US); **Y02E 10/547** (2013.01 - EP KR US); **Y02P 70/50** (2015.11 - EP KR US)

Citation (search report)

See references of WO 2015036181A1

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