

Title (en)

LOW AREA SCREEN PRINTED METAL CONTACT STRUCTURE AND METHOD

Title (de)

SIEBDRUCK-METALLKONTAKTSTRUKTUR MIT GERINGEM FLÄCHENINHALT UND VERFAHREN

Title (fr)

STRUCTURE DE CONTACT MÉTALLIQUE DÉPOSÉE PAR SÉRIGRAPHIE DE FAIBLE SURFACE ET PROCÉDÉ CORRESPONDANT

Publication

**EP 1955363 A4 20100106 (EN)**

Application

**EP 06804437 A 20061026**

Priority

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- AU 2005906552 A 20051124
- AU 2005906662 A 20051129

Abstract (en)

[origin: WO2007059551A1] A solar cell comprises adjacent regions of oppositely doped semiconductor material forming a pn junction substantially parallel to front and rear surfaces of the solar cell. A surface of the semiconductor material has a plurality of depressions, with semiconductor material regions forming internal wall surface regions of the depressions being doped to the polarity of one of the semiconductor regions, with which they are in electrical communication. The wall surface regions of the depressions are isolated from the other oppositely doped semiconductor region and form contact points for a contact structure contacting the surface in which the depressions are formed. A dielectric layer is formed over the surface, the dielectric layer being thinner or non-existent in at least a portion of each depression, such that a screen printed metal contact structure formed over the dielectric layer and extending into the depressions makes contact with the semiconductor material in the depressions after sintering.

IPC 8 full level

**H01L 31/0224** (2006.01)

CPC (source: EP KR)

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Citation (search report)

- [X] US 6162658 A 20001219 - GREEN MARTIN ANDREW [AU], et al
- [A] US 2005172998 A1 20050811 - GEE JAMES M [US], et al
- See references of WO 2007059551A1

Designated contracting state (EPC)

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DOCDB simple family (application)

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