

Title (en)

Rear-contact solar cell having large rear side emitter regions and method for producing the same

Title (de)

Rückkontaktsolarzelle mit grossflächigen Rückseiten-Emitterbereichen und Herstellungsverfahren hierfür

Title (fr)

Cellule solaire à contact arrière comportant des zones d'émetteur de côté arrière de grande surface et procédé de fabrication de la cellule solaire

Publication

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Application

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Abstract (en)

[origin: CA2708616A1] The invention relates to a rear-contact solar cell and to a method for producing the same. The rear-contact solar cell comprises a semiconductor substrate (1) on the rear side surface (3) of which emitter regions (5), contacted by emitter contacts (11), and base regions (7), contacted by base contacts (13), are defined. The emitter regions and the base regions overlap at least in overlap regions (19), the emitter regions (5) in the overlap regions (19) reaching deeper into the semiconductor substrate (1) than the base regions (7), when seen from the rear side surface of the solar cell. As a result, a large area percentage of the rear side of the semiconductor substrate can be covered with a charge-collecting emitter, said emitter being at least partially buried in the interior of the semiconductor substrate (1) so that there is no risk of the base contacts (13) provoking a short circuit towards the buried emitter regions (5).

IPC 8 full level

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CPC (source: EP US)

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