

Title (en)

Solar cell and method for producing high doped regions on the front surface of a solar cell

Title (de)

Solarzelle und Verfahren zur Herstellung hochdotierter Bereiche auf der Vorderseite einer Solarzelle

Title (fr)

Cellule solaire et procédé de fabrication de régions hautement dopées sur la face supérieure d'une cellule solaire

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Application

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Priority

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Abstract (en)

[origin: WO2008068336A2] The invention relates to a solar cell (1), comprising a flat semiconductor substrate (13) having a front (11) and a back (12), a plurality of holes (14) connecting the front (11) and the back (12), and electric contacts (31, 32) collecting energy arranged exclusively on the back (12). The front (11) comprises highly doped regions (21, 25) and weakly doped regions (22) of a first type such that the holes (14) are located in a highly doped region (21) or are adjacent thereto. According to a first aspect of the invention, the highly doped regions (21) are arranged locally around the holes (14). According to a second aspect of the invention, the front (11) comprises at least one region (15) without holes and the highly doped regions comprise one or more regions (25), extending into the at least one region without holes (15). The invention further relates to methods for producing said solar cells.

IPC 8 full level

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