

Title (en)

METHOD FOR MANUFACTURING STRUCTURES FOR A PHOTOVOLTAIC CELL

Title (de)

VERFAHREN ZUR HERSTELLUNG VON STRUKTUREN FÜR EINE FOTOVOLTAISCHE ZELLE

Title (fr)

PROCÉDÉ DE FABRICATION DE STRUCTURES POUR CELLULE PHOTOVOLTAÏQUE

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Application

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Abstract (en)

[origin: WO2017051004A1] The present invention relates to a method for manufacturing structures for a multijunction photovoltaic cell and a structure obtained by said method, the method comprising the following consecutive steps of: a) supplying a stack which includes in series: a supporting substrate (1), a multijunction structure for a photovoltaic cell (2), and a rear metal layer (4); b) forming a plurality of holes extending from the rear metal layer (4) to the surface of the photovoltaic cell (2); c) forming an electrically insulating layer (9) on the flanks of the plurality of holes; d) forming a front metal layer (8) on the electrically insulating layer; e) providing a receiving substrate (200) on which two metal tracks are arranged (6, 6'); f) electrically connecting the front metal layer (8) to the first metal track (6); g) electrically connecting the rear metal layer (4) to the second metal track (6'); h) removing the supporting substrate (1); i) forming metal studs (12) vertically adjacent to the holes and as a continuation of the front metal layer so as to partially cover a first doped layer (7) on the front surface of the multijunctions; and j) removing the exposed portions of the first doped layer (7) from the front surface so as to form doped patterns covered by the metal pads (12) formed in step i).

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