

Title (en)

PHOTOVOLTAIC CELL AND METHOD FOR MANUFACTURING A PHOTOVOLTAIC CELL

Title (de)

FOTOVOLTAIKZELLE UND VERFAHREN ZUR HERSTELLUNG EINER FOTOVOLTAIKZELLE

Title (fr)

CELLULE PHOTOVOLTAÏQUE ET PROCEDE DE FABRICATION D'UNE CELLULE PHOTOVOLTAÏQUE

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Application

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Abstract (en)

[origin: WO2017009218A1] The invention relates to a photovoltaic cell and to a method for manufacturing a photovoltaic cell, comprising: a silicon substrate (1) forming a p-n junction; a so-called "barrier" layer (4) made of transparent dielectric material, the barrier layer (4) being deposited on the substrate (1), the barrier layer (4) having a plurality of recesses (5) passing through same; a layer of III-V material (20, 20a, 20b) forming a p-n junction being deposited in each recess (5); a so-called "intermediate" layer (9) made of transparent dielectric material, the intermediate layer (9) being deposited on the barrier layer (4); a layer of microlenses (10) deposited on the intermediate layer (9), the layer of microlenses (10) comprising a plurality of microlenses (11), each microlens (11) having a focal point located in each recess (5).

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

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