

Title (en)
PHOTOACTIVE SEMICONDUCTOR COMPONENT AND METHOD FOR PRODUCING A PHOTOACTIVE SEMICONDUCTOR COMPONENT

Title (de)
PHOTOAKTIVES HALBLEITERBAUELEMENT SOWIE VERFAHREN ZUM HERSTELLEN EINES PHOTOAKTIVEN
HALBLEITERBAUELEMENTES

Title (fr)
COMPOSANT SEMI-CONDUCTEUR PHOTOSENSIBLE ET PROCÉDÉ DE FABRICATION D'UN COMPOSANT SEMI-CONDUCTEUR
PHOTOSENSIBLE

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Application
EP 15708220 A 20150306

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Abstract (en)
[origin: WO2015139975A1] The invention relates to a photoactive semiconductor component, especially a photovoltaic solar cell, having a semiconductor substrate (1), a carbon-containing SiC layer (3) disposed indirectly upon a surface of the semiconductor substrate, and a passivating intermediate layer (2) disposed indirectly or directly between the SiC layer and semiconductor substrate, and a metallic contact connection disposed indirectly or directly upon a side of the SiC layer facing away from the passivating intermediate layer and in electrically conductive connection with the SiC layer, where the SiC layer has p-type or n-type doping, which is characterized in that the SiC layer partly has a partly amorphous structure and partly has a crystalline structure.

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Citation (search report)
See references of WO 2015139975A1

Citation (examination)
C-K JUNG ET AL: "Hydrogenated amorphous and crystalline SiC thin films grown by RF-PECVD and thermal MOCVD; comparative study of structural and optical properties", SURFACE AND COATINGS TECHNOLOGY, ELSEVIER BV, AMSTERDAM, NL, vol. 171, no. 1-3, 1 July 2003 (2003-07-01), pages 46 - 50, XP001599005, ISSN: 0257-8972, DOI: 10.1016/S0257-8972(03)00234-2

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