

Title (en)
METHOD FOR PRODUCING DOPED POLYCRYSTALLINE SEMICONDUCTOR LAYERS

Title (de)
VERFAHREN ZUR ERZEUGUNG VON DOTIERTEN, POLYKRISTALLINEN HALBLEITERSCHICHTEN

Title (fr)
PROCÉDÉ DE GÉNÉRATION DE COUCHES SEMICONDUCTRICES POLYCRISTALLINES DOPÉES

Publication
EP 3221901 A1 20170927 (DE)

Application
EP 15794943 A 20151117

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Abstract (en)
[origin: WO2016079087A1] The invention relates to a method for generating highly doped polycrystalline semiconductor layers on a semiconductor substrate. A first Si precursor composition containing at least one first dopant is applied onto one or more regions of the surface of the semiconductor substrate; optionally a second Si precursor composition containing at least one second dopant is applied onto one or more additional regions of the surface of the semiconductor substrate, wherein the first dopant is an n-type dopant, and the second dopant is a p-type dopant or vice versa; and each of the coated regions of the surface of the semiconductor substrate is converted such that polycrystalline silicon is produced from the Si precursor. The invention further relates to the semiconductors which can be obtained according to the method and to the use thereof, in particular in the production of solar cells.

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Citation (search report)
See references of WO 2016079087A1

Citation (examination)
• US 7485691 B1 20090203 - GUO WENZHUO [US], et al
• RÖMER UDO ET AL: "Recombination behavior and contact resistance of n+ and p+ poly-crystalline Si/mono-crystalline Si junctions", SOLAR ENERGY MATERIALS AND SOLAR CELLS, ELSEVIER SCIENCE PUBLISHERS, AMSTERDAM, NL, vol. 131, 26 June 2014 (2014-06-26), pages 85 - 91, XP029075019, ISSN: 0927-0248, DOI: 10.1016/J.SOLMAT.2014.06.003

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