

Title (en)
PROCESS FOR PRODUCING DIFFERENTLY DOPED SEMICONDUCTORS

Title (de)
VERFAHREN ZUR ERZEUGUNG UNTERSCHIEDLICH DOTIERTER HALBLEITER

Title (fr)
PROCÉDÉ DE PRODUCTION DE SEMI-CONDUCTEURS À DOPAGE DIFFÉRENT

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Application
EP 15715773 A 20150417

Priority
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Abstract (en)
[origin: WO2015165755A1] The present invention relates to a liquid-phase process for doping a semiconductor substrate, characterized in that a first composition containing at least a first dopant is applied to one or more regions of the surface of the semiconductor substrate, in order to produce one or more regions of the surface of the semiconductor substrate coated with the first composition; a second composition containing at least a second dopant is applied to one or more regions of the surface of the semiconductor substrate, in order to produce one or more regions of the surface of the semiconductor substrate coated with the second composition, wherein the one or more regions that is/are coated with the first composition and the one or more regions that is/are coated with the second composition are different and do not significantly overlap and wherein the first dopant is a dopant of the n type and the second dopant is a dopant of the p type, or vice versa; the regions of the surface of the semiconductor substrate that are coated with the first composition and those that are coated with the second composition are in each case activated completely or partially; optionally, the non-activated regions of the surface of the semiconductor substrate that are coated with the first composition and those that are coated with the second composition are respectively oxidized; and the semiconductor substrate is heated to a temperature at which the dopants diffuse out of the coating into the semiconductor substrate. The invention also relates to the semiconductors that can be obtained by the process and to the use thereof, in particular in the production of solar cells.

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Citation (search report)
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