

Title (en)
METHOD FOR FORMING AN EPITAXIAL SILICON LAYER

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER EPITAKTISCHEN SILICIUMSCHICHT

Title (fr)
PROCEDE DE FORMATION D'UNE COUCHE DE SILICIUM EPITAXIEE

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Application
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Priority

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Abstract (en)
[origin: WO2014045252A1] The invention relates to a method for forming a crystallised silicon layer (2) having a crystallite size higher than or equal to 100 µm, by means of epitaxial growth in a vapour phase, on the surface of at least one silicon substrate (1), comprising at least the steps consisting in: (i) providing a silicon substrate (1) having a particle size higher than or equal to 100 µm and comprising a metal impurities content of between 0 ppb and 1 ppm by weight; and (ii) forming said silicon layer on the surface of said substrate heated to a temperature of between 1000 and 1300 °C, by decomposition of at least one silicon precursor by means of an inductive plasma torch (4), the surface (11) of said substrate for supporting the silicon layer (2) being positioned close to the outlet of the plasma torch in step (ii).

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