Title (en)

METHOD FOR THE THERMAL TREATMENT OF GRANULAR MATERIAL COMPOSED OF SILICON, GRANULAR MATERIAL COMPOSED OF SILICON, AND METHOD FOR PRODUCING A MONOCRYSTAL COMPOSED OF SILICON

Title (de)

VERFAHREN ZUR WÄRMEBEHANDLUNG VON GRANULAT AUS SILIZIUM, GRANULAT AUS SILIZIUM UND VERFAHREN ZUR HERSTELLUNG EINES EINKRISTALLS AUS SILIZIUM

Title (fr)

PROCÉDÉ DE TRAITEMENT THERMIQUE DE GRANULÉS EN SILICIUM, GRANULÉS EN SILICIUM ET PROCÉDÉ DE FABRICATION D'UN MONOCRISTAL EN SILICIUM

Publication

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Application

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Abstract (en)

[origin: WO2017029010A1] The invention relates to a method for the thermal treatment of granular material composed of silicon, which consists of polycrystalline grains, to a method for producing a monocrystal composed of silicon, in the course of which thermally treated granular material composed of silicon is used, and to thermally treated granular material composed of silicon. The method for the thermal treatment of granular material composed of silicon comprises: conducting a process gas through a plasma chamber in a flow direction; producing a plasma zone in the plasma chamber; maintaining the plasma zone by feeding microwave radiation into the plasma chamber; pre-heating the granular material composed of silicon to a temperature of not less than 900 °C by means of the process gas; transporting the pre-heated granular material composed of silicon through the plasma chamber and the plasma zone against the flow direction of the process gas, wherein an outer region of the grains is temporarily melted; and collecting the plasma-treated granular material composed of silicon.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

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