Abstract:

Method for Producing a Single Crystal of Semiconductor Material

The invention relates to a method for producing a single crystal of semiconductor material, comprising the melting of semiconductor material granules by means of a first induction heating coil on a dish with a run-off tube consisting of the semiconductor material, the formation of a melt of molten granules, which extends from the run-off tube in the form of a melt neck and a melt waist to a phase boundary, the delivery heat to the melt by means of a second induction heating coil, which has an opening through which the melt neck passes, crystallization of the melt at the phase boundary, and the delivery of a cooling gas to the run-off tube and to the melt neck, in order to control the axial position of an interface between the run-off tube and the melt neck. The invention also relates to a device for carrying out the method.

Fig. 1