

Abstract

Method for producing a single crystal composed of silicon using molten granules

Method for producing a silicon single crystal using molten granules, comprising producing a first volume of molten silicon between a growing single crystal and a closed off lower end of a conical silicon tube which encloses a central opening of a rotating silicon plate, below which the tube extends, by means of a first induction heating coil, which is arranged below the plate; producing a second volume of molten silicon by means of a second induction heating coil, which is arranged above the plate; melting the lower end of the tube such that a passage opening for the second volume is produced at a point in time at which the second volume of molten silicon is not yet present or is less than double the volume of the first volume; and crystallizing silicon on the growing single crystal with consumption of molten silicon from the first and the second volume.

Fig. 1