

Abstract

Method for pulling a single crystal of semiconductor material from a melt which is contained in a crucible

5

The invention relates to a method for pulling a single crystal composed of semiconductor material from a melt contained in a crucible, comprising pulling the single crystal in a phase in which an initial cone of the single crystal is grown until a phase in which the pulling of a cylindrical section of the single crystal is begun. The method comprises

10 measuring the diameter D_{cr} of the initial cone of the single crystal and calculating the change in the diameter dD_{cr}/dt ;

pulling the initial cone of the single crystal from the melt at a pulling rate $v_p(t)$ from a point in time t_1 until a point in time t_2 , starting from which the pulling of the cylindrical

15 section of the single crystal in conjunction with a target diameter D_{crs} is begun, wherein the profile of the pulling rate $v_p(t)$ from the point in time t_1 until the point in time t_2 during the pulling of the initial cone is predetermined by means of an iterative computation process.

20

Drawing for the abstract: Fig. 6