

Abstract

Method for pulling a single silicon crystal by the Czochralski process

- 5 A method for pulling a single silicon crystal having a resistivity of not more than 20 mΩcm by the Czochralski process from a melt, which comprises pulling a first section of a neck at a first pulling velocity whereby the diameter of the first section of the neck, in comparison to the diameter of a seed crystal, tapers at a
- 10 rate of not less than 0.3 mm per mm neck length to a target diameter of not more than 5 mm;
- pulling a second section of a neck at a second pulling velocity of less than 0.2 mm/min over a period of not less than 3 min, without the diameter of the second section of the neck increasing to more than 5.5 mm; and
- 15 pulling a third section of the neck at a third pulling velocity of more than 2 mm/min.

Drawing for the Abstract: fig. 1