Abstract

Method for producing an epitaxially coated semiconductor wafer

The invention relates to a method for producing an epitaxially coated semiconductor wafer, in which a semiconductor wafer polished at least on its front side is provided, is placed on a susceptor in a single-wafer epitaxy reactor and is coated by applying an epitaxial layer on its polished front side by chemical vapor deposition at temperatures of 1000-1200°C, wherein, after epitaxial coating has taken place, the semiconductor wafer is cooled in the temperature range from 1200°C to 900°C at a rate of less than 5°C per second.

Moreover, the invention relates to a method for producing an epitaxially coated semiconductor wafer, in which a semiconductor wafer polished at least on its front side is provided, is placed on a susceptor in a single-wafer epitaxy reactor and is coated by applying an epitaxial layer on its polished front side by chemical vapor deposition at a deposition temperature of 1000-1200°C, wherein, after epitaxial coating has taken place, at deposition temperature, the semiconductor wafer is raised for 1-60 seconds in order to ensure that connections between susceptor and wafer that have been produced by deposited semiconductor material are broken up before the wafer is cooled.

Fig. 1