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(54) **SEMICONDUCTOR SUBSTRATE HEATING
DEVICE, SEMICONDUCTOR DEVICE AND
TEMPERATURE CONTROL METHOD**

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(57) **ABSTRACT**

The disclosure provides a semiconductor substrate heating device, comprising a heating cavity, a main heating part, a compensation control part and at least one temperature compensation unit. The compensation control part and several temperature compensation units are arranged in the heating cavity of the semiconductor substrate heating device, a top surface of the compensation control part and a bottom surface of a heating plate are arranged in a correspondence manner, and the several temperature compensation units arranged between the heating plate and the compensation control part and being in communication connection with the compensation control part are arranged in one-to-one correspondence with several temperature control compensation areas at the bottom surface of the heating plate. Complicated outgoing design is avoided, and temperature compensation adjustment can be performed on the temperature control compensation areas under the control of the compensation control part, thereby effectively controlling the temperature uniformity of the semiconductor substrate with as little manufacturing and maintenance costs as possible.

