

WAFER CHUCK, TEMPERATURE CONTROL SYSTEM, AND TEMPERATURE CONTROL METHOD

ABSTRACT

A wafer chuck that can measure the temperature without increasing the number of installed temperature sensors, and a temperature control system and a temperature control method that can appropriately control the temperature of the wafer chuck are provided. A heating and cooling unit (40) configured to heat or cool a wafer chuck (18), at least one temperature sensor (52) disposed in the wafer chuck (18), and a heat flow sensor (54) which is disposed in the wafer chuck (18), and connects thermocouples (56) in series, and in which connecting parts of thermocouples (56) adjacent to each other are alternately disposed at a first depth position from a holding surface (18A) and at a second depth position deeper than the first depth position, are provided. The heat flow sensor (54) has temperature measurement points (60) provided for the respective thermocouples (56), and the temperature measurement points (60) are disposed over the entirety of the wafer chuck (18) when this wafer chuck (18) is seen in plan view.

Figure 3