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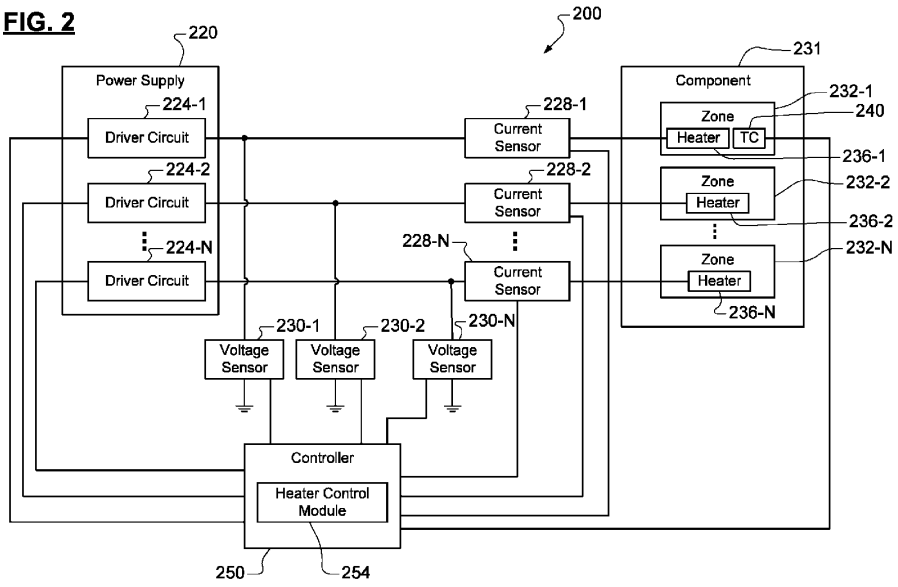
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(54) Title: DYNAMIC TEMPERATURE CONTROL OF ZONED SUBSTRATE SUPPORT IN SUBSTRATE PROCESSING SYSTEM

FIG. 2



(57) Abstract: A method for controlling a substrate support temperature includes setting a temperature of the substrate support in one of Z zones in response to a temperature sensor embedded in the one of the Z zones; setting the temperature of the substrate support in Z-1 zones of the Z zones using Z-1 power ratios, respectively; measuring Z resistances of Z resistive heaters embedded in the Z zones at first and second temperatures; setting the temperature of the substrate support to a third temperature in response to the temperature sensor and the Z-1 power ratios; determining Z-1 first target resistances for the Z-1 zones, respectively, at the third temperature; measuring the Z resistances of the Z resistive heaters at the third temperature, respectively; and comparing Z-1 resistances of Z-1 resistive heaters for the Z-1 zones and the Z-1 first target resistances at the third temperature, respectively, and adjusting the Z-1 power ratios.

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