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(54) **Title:** DYNAMIC CALIBRATION OF A CONTROL SYSTEM CONTROLLING A HEATER

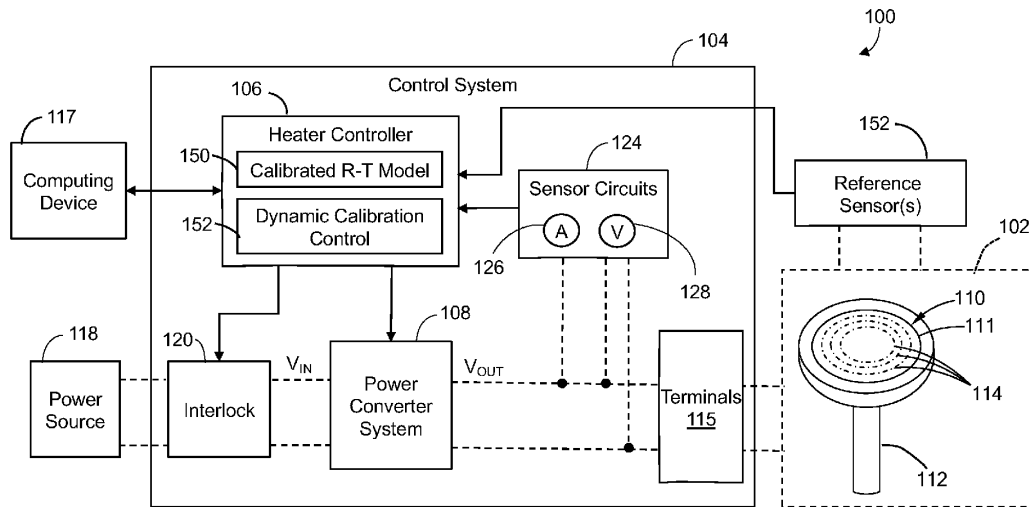


FIG. 1A

(57) **Abstract:** A method of dynamically calibrating a heater having a plurality of zones defined by one or more resistive heating elements includes controlling power to a heater having a plurality of zones based on a dynamic resistance-temperature (R-T) model to control a temperature of the heater to a temperature setpoint. For each of the plurality of zones, the method further includes measuring a temperature of a respective zone based on a resistance of the resistive heating elements of the respective zone and the dynamic R-T model, measuring a reference temperature for the respective zone, and incrementally adjusting a resistance value associated with the temperature setpoint provided in the dynamic R-T model for the respective zone to a calibrated resistance value. The method further includes providing the dynamic R-T model that correlates the calibrated resistance values of the plurality of zones with the temperature setpoint as a calibrated R-T model.

[Continued on next page]

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