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— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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(54) **Title:** TEMPERATURE CONTROL MODULES FOR SHOWERHEAD ELECTRODE ASSEMBLIES FOR PLASMA PROCESSING APPARATUSES

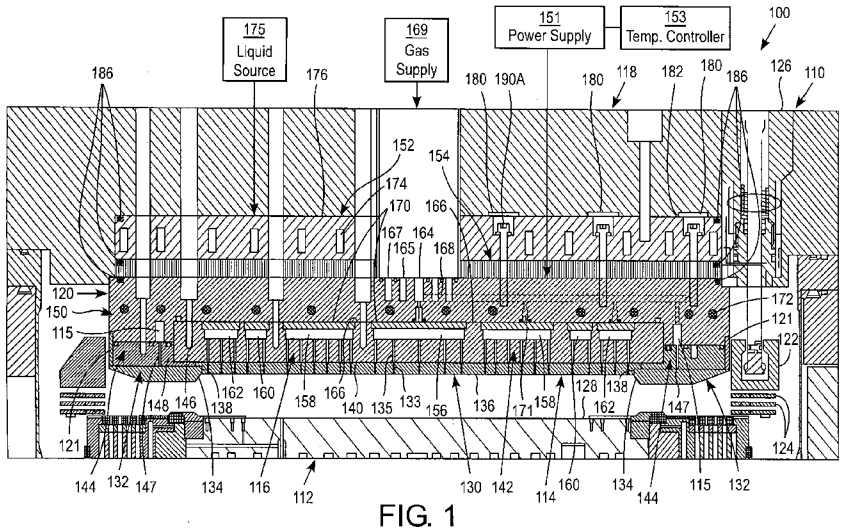


FIG. 1

(57) **Abstract:** A temperature control module for a showerhead electrode assembly for a semiconductor material plasma processing chamber includes a heater plate adapted to be secured to a top surface of a top electrode of the showerhead electrode assembly, and which supplies heat to the top electrode to control the temperature of the top electrode; a cooling plate adapted to be secured to and thermally isolated from a surface of a top plate of the showerhead electrode assembly, and to cool the heater plate and control heat conduction between the top electrode and heater plate; and at least one thermal choke adapted to control heat conduction between the heater plate and cooling plate.

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