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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: SHOWERHEAD ELECTRODE ASSEMBLIES FOR PLASMA PROCESSING APPARATUSES

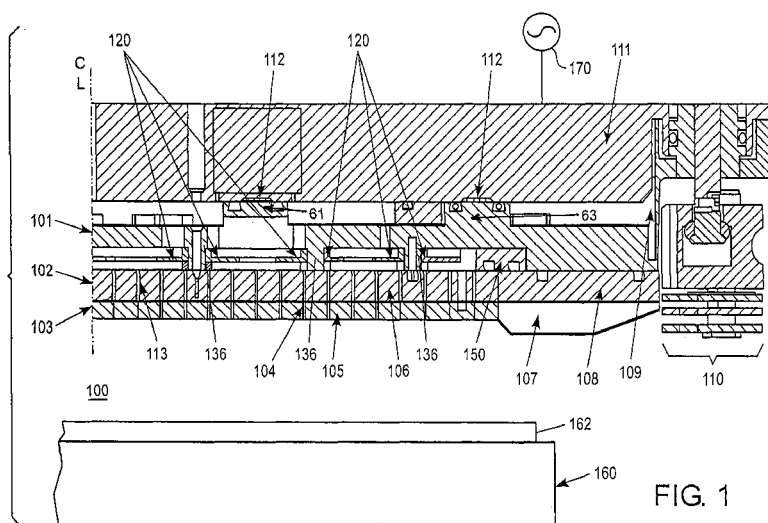


FIG. 1

(57) Abstract: Showerhead electrode assemblies are disclosed, which include a showerhead electrode adapted to be mounted in an interior of a vacuum chamber; an optional backing plate attached to the showerhead electrode; a thermal control plate attached to the backing plate or to the showerhead electrode at multiple contact regions across the backing plate; and at least one interface member separating the backing plate and the thermal control plate, or the thermal control plate and showerhead electrode, at the contact regions, the interface member having a thermally and electrically conductive gasket portion and a particle mitigating seal portion. Methods of processing semiconductor substrates using the showerhead electrode assemblies are also disclosed.