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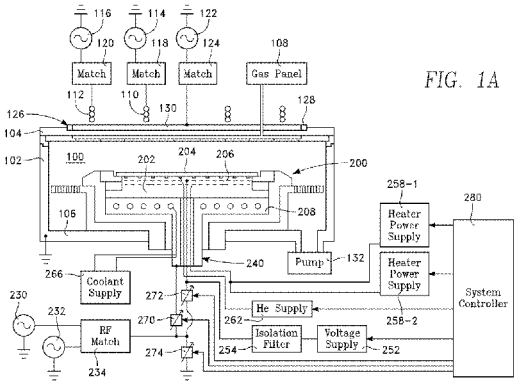


FIG. 1A

(57) Abstract: In an electrostatic chuck, RF bias power is separately applied to a workpiece and to a process kit collar surrounding the workpiece. At least one variable impedance element governed by a system controller adjusts the apportionment of RF bias power between the workpiece and the process kit collar, allowing dynamic adjustment of the plasma sheath electric field at the extreme edge of the workpiece, for optimum electric field uniformity under varying plasma conditions, for example.

WO 2010/011521 A3