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(54) Title: BIPOLAR ELECTROSTATIC CHUCK ELECTRODE WITH SELF-INDUCED DC VOLTAGE

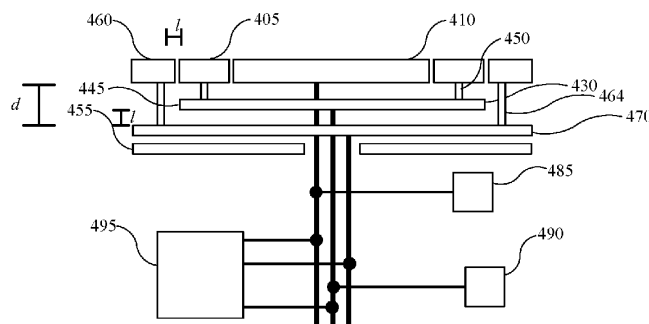


FIG. 4B

(57) Abstract: Substrate support assemblies may include an electrostatic chuck body defining a substrate support surface that defines a substrate seat. Assemblies may include a support stem coupled with the electrostatic chuck body. Assemblies may include a first bipolar electrode embedded within the electrostatic chuck body. Assemblies may include a second bipolar electrode embedded within the electrostatic chuck body radially inward of at least a portion of the first bipolar electrode and coaxial with the first bipolar electrode. Assemblies may include an annular electrode disposed about the first bipolar electrode, where the annular electrode is DC floated and RF powered and exhibits an induced DC current.

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