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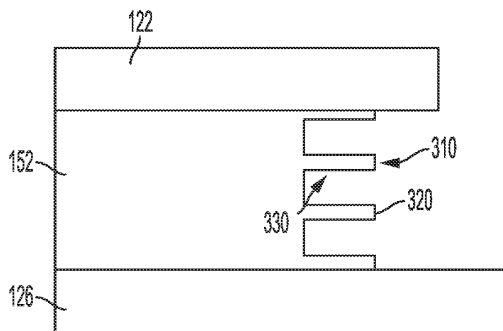


FIG. 3

(57) Abstract: Electrostatic chucks for use in substrate processing chambers are provided herein. In some embodiments, an electrostatic chuck for use in a substrate processing chamber includes: a dielectric plate having an electrode disposed therein, the dielectric plate further including a central portion and a peripheral portion, wherein the peripheral portion comprises at least one of: an outer sidewall having at least one asperity; a porosity greater than a porosity of the central portion of the dielectric plate; or one or more coatings made of a material different than a material of the central portion.

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