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(54) Title: THERMALLY CONTROLLED LID STACK COMPONENTS

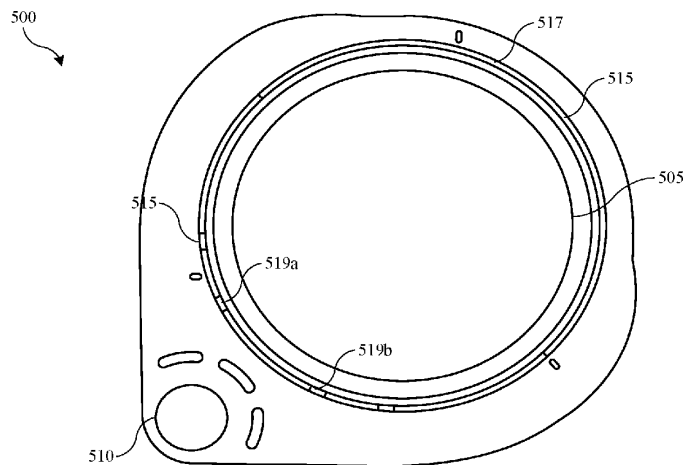


FIG. 5

(57) Abstract: Exemplary substrate processing systems may include chamber body defining a transfer region. The systems may include a lid plate seated on the chamber body. The lid plate may define a first plurality of apertures through the lid plate and a second plurality of apertures through the lid plate. The systems may include a plurality of lid stacks equal to a number of apertures of the first plurality of apertures defined through the lid plate. Each lid stack of the plurality of lid stacks may include a choke plate seated on the lid plate along a first surface of the choke plate. The choke plate may define a first aperture axially aligned with an associated aperture of the first plurality of apertures. The choke plate may define a second aperture axially aligned with an associated aperture of the second plurality of apertures.

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