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(54) **Title:** ROTATABLE ELECTROSTATIC CHUCK HAVING BACKSIDE GAS SUPPLY

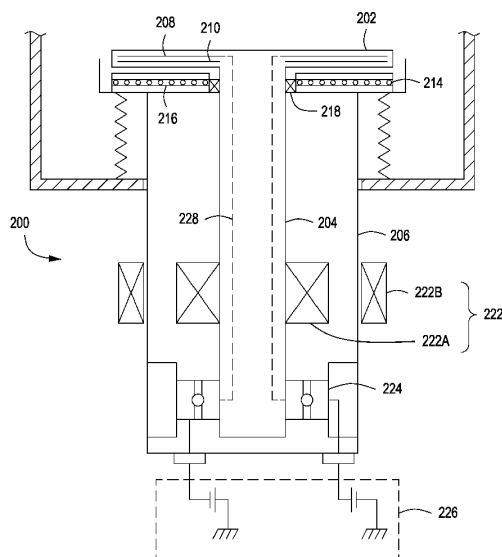


FIG. 2

(57) **Abstract:** Embodiments of a substrate support pedestal and an electrostatic chuck incorporating same are disclosed herein. In some embodiments, a substrate support pedestal includes: a body having an upper surface and a lower surface opposite the upper surface; one or more chucking electrodes disposed within the body; a plurality of substrate support elements protruding from the upper surface to support a substrate; a hole disposed in the lower surface at a center of and partially through the body; a plurality of gas holes disposed in the upper surface proximate the center of the body, wherein the plurality of gas holes is disposed above and fluidly coupled to the hole; and a plurality of gas distribution grooves formed in the upper surface and fluidly coupled to the plurality of gas holes.

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