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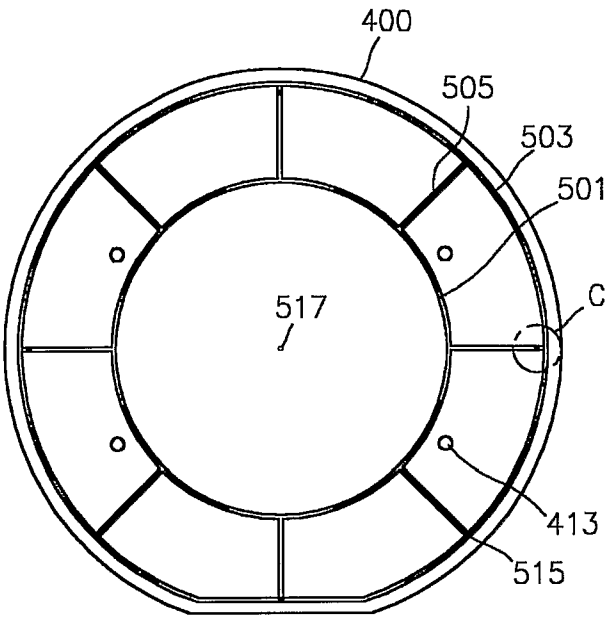
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(54) Title: ELECTROSTATIC CHUCK AND CHUCK BASE HAVING COOLING PATH FOR COOLING WAFER



(57) Abstract: Disclosed herein is an electrostatic chuck having a cooling channel formed at the surface thereof. The electrostatic chuck comprises a chuck base for supporting a wafer, a dielectric film mounted on the chuck base, the dielectric film having an electrode for supplying direct current voltage to provide an electrostatic force necessary to fix the wafer, the electrode being disposed in the dielectric film, and a cooling channel for supplying refrigerant to the dielectric film to control the temperature of the wafer. The cooling channel comprises at least two first cooling channel parts formed at the surface of the dielectric film corresponding to the edge part of the wafer such that the first cooling channel parts form concentric circles, second cooling channel parts formed at the surface of the dielectric film such that the first cooling channel parts are connected to each other through the second cooling channel parts, first through channels formed through the dielectric film for supplying the refrigerant to the first and second cooling channel parts, and a second through channel formed through the center of the dielectric film for supplying the refrigerant to the center of the wafer.

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