ABSTRACT OF THE DISCLOSURE

SUBSTRATE SUPPORT PROVIDING GAP HEIGHT AND PLANARIZATION ADJUSTMENT IN PLASMA PROCESSING CHAMBER

A semiconductor substrate support for use in a plasma processing apparatus comprises a chuck body having a plenum and three radially extending bores extending between the plenum and an outer periphery of the chuck body, wherein the chuck body is sized to support a semiconductor substrate having a diameter of at least 450 mm. The semiconductor substrate support further comprises three tubular support arms which include a first section extending radially outward from the outer periphery of the chuck body, and a second section extending vertically from the first section. The tubular support arms provide a passage therethrough which communicates with a respective bore in the chuck body. The second section of each tubular support arm is configured to engage with a respective actuation mechanism outside the chamber operable to effect vertical translation and planarization of the chuck body in the interior of a plasma processing chamber.

FIG. 1