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(54) Title: SUSCEPTOR FOR BARREL REACTOR

(57) Abstract

A susceptor (40) for supporting wafers (W) in a reaction chamber of a barrel reactor during a chemical vapor deposition process. The susceptor includes a body sized and shaped for receipt within the reaction chamber of the barrel reactor. The body includes a generally laterally facing, sloped face (44) having a plurality of circular recesses (46a-46c) therein for receiving wafers to support the wafers with one surface directed generally laterally outward for exposure to reactant gas inside the reaction chamber of the barrel reactor during the chemical vapor deposition process. Each of the plurality of recesses has a substantially planar bottom (50) and opposing arcuate wall portions (52a, 52b) on opposite sides of the planar bottom. Each wall portion intersects and merges with a corresponding wall portion of at least one adjoining recess of the plurality of recesses at an intersection (56). The wall portions at the intersections have a smooth shape which is continuous and uninterrupted with respect to at least one adjoining wall portion thereby inhibiting epitaxial deposition between the wafers and the susceptor at the intersections and reducing wafer chipping when the wafers are removed from the recesses following the chemical vapor deposition process.

