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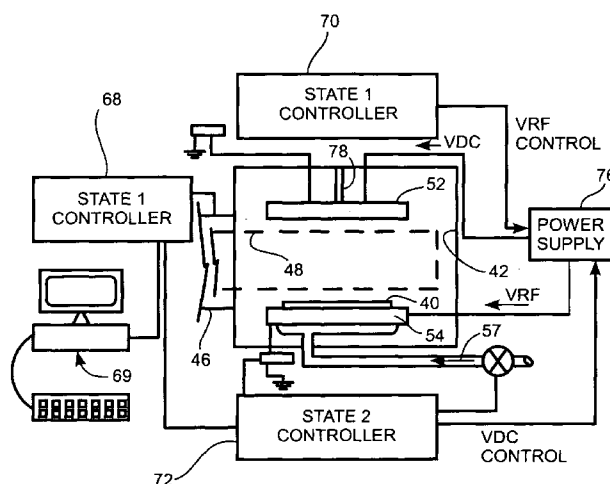


FIG. 4

(57) Abstract: Particles are trapped away from a wafer transport zone in a chamber. A first electrode is on one side of the zone. A second electrode is on an opposite side of the zone. A power supply connected across the electrodes establishes an electrostatic field between the electrodes. The field traps particles at the electrodes, away from the zone. For transporting the wafer from the chamber, the second electrode mounts the wafer for processing, and the first electrode is opposite to the second electrode defining a process space. The zone is in the space with a separate part of the space separating the zone from each electrode. Particles are urged away from the wafer by simultaneously terminating plasma processing of the wafer, connecting the second electrode to ground, applying a positive DC potential to the first electrode, and de-chucking the wafer from the second electrode into the zone.