

ABSTRACT

DIRECT DRIVE ARRANGEMENT TO CONTROL CONFINEMENT RINGS POSITIONING AND METHODS THEREOF

A direct drive arrangement for controlling pressure volume within a confinement region of a processing chamber of a plasma processing system during substrate processing is provided. The confinement region is a chamber volume surrounded by confinement rings is provided. The arrangement includes plunger assemblies configured for changing the pressure of motor assemblies configured for vertically moving the plunger assemblies, and recording set point position values for the plunger assemblies. The arrangement further includes a set of circuits configured for driving the motor assemblies to move the plunger assemblies to change the pressure volume within the confinement region. The set of circuits is also configured for providing power to the motor assemblies. The set of circuits is further configured for receiving the set point position values from the motor assemblies.

FIG. 2