

PLASMA PROCESSING APPARATUS AND PLASMA PROCESSING METHOD

ABSTRACT

A plasma processing apparatus includes a chamber, a substrate support in the chamber, a
5 plasma generator, a bias power supply, an edge ring, a lifter, a switch, and a controller. At
least one of the bias power supply or a radio-frequency power supply in the plasma generator
is electrically coupled to a base in the substrate support. The lifter includes a conductive ring,
a rod, an actuator, and a connector. The lifter raises and lowers the edge ring supported on the
conductive ring. The connector electrically couples the conductive ring and the base. The
10 switch switches between establishing a first state in which the edge ring and the base are
electrically coupled to each other and establishing a second state in which the edge ring and the
base are electrically disconnected from each other. The controller controls the switch.

Figure 3