EDGE RING ARRANGEMENTS FOR SUBSTRATE PROCESSING

Abstract

A method for processing a substrate in a plasma processing chamber is provided. The substrate is disposed above a chuck and surrounded by a first edge ring. The first edge ring is electrically isolated from the chuck. The method includes providing a second edge ring. The second edge ring is disposed below an edge of the substrate. The method also includes providing a coupling ring. The coupling ring is configured to facilitate RF coupling from an ESC (electrostatic chuck) assembly to the first edge ring, thereby causing the first edge ring to have an edge ring potential during substrate processing and causing the RF coupling to be maximized at the first edge ring and minimized at the second edge ring during the substrate processing.

Fig. 3