CLAIMS

1. A flat Bottom Shadow Ring (fBSR) for processing a substrate in a processing chamber, the fBSR comprising:

an overhang for covering an edge of the substrate in the processing chamber; and a flat zone extending radially outward over an outer edge of the substrate, the flat zone forming a plane that is generally parallel with an upper surface of the fBSR.

2. The fBSR of claim 1, wherein the flat zone is generally parallel with an upper surface of the substrate.

3. The fBSR of claim 1, wherein a radial length of the flat zone is in a range of about 7.62 to 76.2 mm (approximately 0.3 to 3.00 inches).

4. The fBSR of claim 1, wherein the flat zone extends radially outwardly into a radially outer zone of the fBSR, the radially outer zone lying between a radial midpoint of the fBSR and a circumference of the fBSR.

5. The fBSR of claim 4, wherein the flat zone extends radially outward to the circumference of the fBSR.

6. The fBSR of claim 1, wherein the flat zone includes a coating.

7. The fBSR of claim 6, wherein the coating includes an oxide coating.

8. A method of processing a substrate in a processing chamber, the method comprising:

supporting the substrate on a substrate-support assembly within the processing chamber;

installing a flat Bottom Shadow Ring (fBSR) in the processing chamber, wherein the fBSR comprises an overhang for covering an edge of the substrate in the processing chamber, and wherein the overhang includes a flat zone extending radially outward over an outer edge of the substrate;

centering the fBSR over the substrate and covering the edge of the substrate with the overhang of the fBSR; and

processing the substrate in the processing chamber.