

CLAIMS

1. An edge ring configured to be raised and lowered relative to a pedestal, via one or more lift pins, in a processing chamber of a substrate processing system, the edge ring comprising:
 - an upper surface;
 - an annular inner diameter;
 - an annular outer diameter;
 - a lower surface; and
 - a self-centering feature on the edge ring, wherein the self-centering feature is an inclined plane.
2. The edge ring of claim 1, wherein the self-centering feature on the edge ring is arranged to self-center the edge ring relative to the pedestal.
3. The edge ring of claim 1, wherein the inclined plane is a sloped surface on the lower surface of the edge ring.
4. The edge ring of claim 1, wherein the inclined plane is on the lower surface of the edge ring adjacent to the annular inner diameter of the edge ring.
5. The edge ring of claim 1, further comprising at least one second self-centering feature on the edge ring, wherein the inclined plane is on the lower surface of the edge ring adjacent to the annular inner diameter of the edge ring and the at least one second self-centering feature is a second inclined plane adjacent to the annular outer diameter of the edge ring.
6. The edge ring of claim 1, wherein the inclined plane is on the lower surface of the edge ring adjacent to the annular outer diameter of the edge ring.

7. The edge ring of claim 1, further comprising at least one second self-centering feature on the edge ring, wherein the inclined plane is on the lower surface of the edge ring adjacent to the annular outer diameter of the edge ring and the at least one second self-centering feature is a second inclined plane adjacent to the annular inner diameter of the edge ring.
8. The edge ring of claim 1, further comprising at least one second self-centering feature on the edge ring, wherein the inclined plane is on the lower surface of the edge ring adjacent to the annular outer diameter of the edge ring and the at least one second self-centering feature is arranged in the lower surface of the edge ring.
9. The edge ring of claim 8, wherein at least one inner surface of the at least one second self-centering feature has a linear slope.
10. The edge ring of claim 8, wherein at least two inner surfaces of the at least one second self-centering feature have a linear slope.
11. The edge ring of claim 8, wherein the at least one second self-centering feature is triangular in at least one cross-sectional view.
12. The edge ring of claim 1, wherein the lower surface of the edge ring is arranged to receive the one or more lift pins.
13. The edge ring of claim 1, wherein the annular inner diameter includes a ledge.
14. A pedestal comprising the edge ring of claim 1.
15. The pedestal of claim 14, wherein the annular inner diameter of the edge ring overlaps an upper plate of the pedestal.

16. A substrate processing system comprising the pedestal of claim 26 and further comprising an actuator configured to raise and lower the one or more lift pins to raise and lower the edge ring.