**CLAIMS**

1. An apparatus for retaining a substrate, the apparatus comprising:

a base;

a pair of arms positioned adjacent to a bottom surface of the base, the pair of arms including a first arm and a second arm;

an actuator coupled to the base and the pair of arms, wherein the actuator is configured to move the pair of arms toward and away from one another along the bottom surface of the base;

a first plurality of retention pads positioned on the first arm in a first arrangement; and

a second plurality of retention pads positioned on the second arm in a second arrangement that is different from the first arrangement.

2. The apparatus of claim 1, wherein the first arm comprises a first elongate body, wherein the second arm comprises a second elongate body, and wherein the first elongate body and the second elongate body extend parallel to one another along and adjacent to the bottom surface of the base.

3. The apparatus of claim 2, wherein the first arm and the second arm are positioned on opposite sides of the base.

4. The apparatus of claim 3, where the second plurality of retention pads are at least partially misaligned with the first plurality of retention pads.

5. The apparatus of claim 1, further comprising a second actuator coupled to the base that is configured to rotate the pair of arms about an axis that extends normally to the bottom surface of the base.

6. The apparatus of claim 1, further comprising a visualization system coupled to the base, wherein the visualization system comprises one or more cameras and/or one or more sensors communicatively coupled to a controller.

7. The apparatus of claim 1, further comprising a light source configured to provide light to the substrate by the pair of arms.

8. The apparatus of claim 1, wherein the actuator is configured to apply a configurable lateral force to edges of the substrate via the first plurality of retention pads and the second plurality of retention pads.

9. An apparatus for retaining a substrate, the apparatus comprising:

a first arm including a first body;

a second arm including a second body, the first body being opposite to the first body about a longitudinal axis;

an actuator that is coupled to the first arm and the second arm that is configured to adjust a radial distance between the first body and the second body about the longitudinal axis;

a first plurality of retention pads arranged in a first arrangement on the first body; and

a second plurality of retention pads arranged in a second arrangement on he second body, the second arrangement being different from the first arrangement.

10. The apparatus of claim 9, wherein the first body and the second body are elongate members that extend parallel to one another in a radially oriented plane relative to the longitudinal axis.

11. The apparatus of claim 10, wherein the second plurality of retention pads are at least partially misaligned with the first plurality of retention pads about the longitudinal axis.

12. The apparatus of claim 10, wherein the actuator is a first actuator, and wherein the apparatus further comprises a second actuator that is configured to rotate the first body and the second body about the longitudinal axis.

13. A method comprising:

positioning a substrate below a retaining device comprising a first arm having a first plurality of retention pads in a first arrangement, and a second arm having a second plurality of retention pads in a second arrangement, the second arrangement being different from the first arrangement;

moving the retaining device to align the substrate between the first plurality of retention pads and the second plurality of retention pads;

moving the first arm toward the second arm to contact an edge of the substrate with the first plurality of retention pads; and

moving the second arm toward the first arm to contact the edge with the second plurality of retention pads and to apply a lateral force to the substrate.

14. The method of claim 13, further comprising scanning the substrate to be retained with a visualization system coupled to the retaining device, wherein the visualization system comprises one or more cameras and/or one or more sensors communicatively coupled to a controller.

15. The method of claim 13, wherein the second plurality of retention pads are at least partially misaligned with the first plurality of retention pads.