CLAIMS

1. A system for positioning a wafer relative to a datum structure, the system comprising:

a camera arrangement including ~~at least two~~one or more cameras, each of the ~~at least two~~one or more cameras including a field of view when positioned in the camera arrangement, each field of view including a peripheral edge of the wafer and a peripheral edge of the datum structure;

a processor to receive positional data from the or each ~~of the at least two~~ camera~~s~~ and determine, in relation to each field of view, a gap size between the respective peripheral edges of the wafer and the datum ~~location~~ structure included in the respective field of view; and

a controller to adjust a position of the wafer relative to the datum structure based on the determined respective gap sizes,

wherein the controller includes a robotic arm of a vacuum transfer module (VTM), the robotic arm being adapted to move the one or more cameras between camera positions along the peripheral edges of the wafer and the datum structure to obtain respective fields of view of the camera positions.

2. The system of claim 1, wherein the datum ~~location~~ structure includes an edge ring.

3. The system of claim 1, wherein the datum structure~~location~~ includes a chuck.

~~4. The system of claim 1, wherein the camera arrangement is provided in a wall of a wafer processing chamber.~~

~~5~~4. The system of claim 1, wherein the camera arrangement includes a ~~third~~ further camera, the further~~third~~ camera providing positional data in relation to a respective further~~third~~ field of view, to the processor.

~~6~~5. The system of claim 1, wherein the determined respective gap sizes are compared against respective predetermined gap sizes, the respective

predetermined gap sizes associated with a centered or desired position of the wafer in relation to the datum structure.

~~7. The system of claim 1, wherein the controller includes a robotic arm of a vacuum transfer module (VTM).~~

~~8~~6. The system of claim 1, wherein the processor identifies a center of the wafer based on the determined respective gap sizes.

7. The system of claim 1, wherein the one or more cameras include a single moveable camera.

8. The system of claim 7, wherein the single moveable camera is mounted on the robotic arm.

9. A method for positioning a wafer relative to a datum structure, the method comprising:

placing, adjacent a wafer processing chamber, a camera arrangement including ~~at least two~~one or more cameras, each of the ~~at least two~~one or more cameras including a field of view when positioned in the camera arrangement, each field of view including a peripheral edge of the wafer and a peripheral edge of the datum structure;

receiving positional data from the or each ~~of the at least two~~ camera~~s~~ and determining, in relation to each field of view, a gap size between the respective peripheral edges of the wafer and the datum ~~location~~ structure included in the respective field of view; and

adjusting, using a controller, a position of the wafer relative to the datum structure based on the determined respective gap sizes,

wherein the controller includes a robotic arm of a vacuum transfer module (VTM), the one or more cameras are mounted onto the robotic arm and the robotic arm is adapted to move the one or more cameras between camera positions along the peripheral edges of the wafer and the datum structure to obtain respective fields of view of the camera positions.

10. The method of claim 9, wherein the datum structure~~location~~ includes an edge ring.

11. The method of claim 9, wherein the datum structure~~location~~ includes a chuck.

~~12. The method of claim 9, further comprising providing the camera arrangement in a wall of the wafer processing chamber.~~

~~13~~12. The method of claim 9, further comprising including a further~~third~~ camera in the camera arrangement, and providing positional data from the further~~third~~ camera, in relation to a respective further~~third~~ field of view, to the processor.

~~14~~13. The method of claim 9, further comprising comparing the determined respective gap sizes against respective predetermined gap sizes, the respective predetermined gap sizes associated with a centered or desired position of the wafer in relation to the datum structure or the wafer processing chamber.

14. The method of claim 9, further comprising identifying a center of the wafer based on the determined respective gap sizes.

15. The method of claim 9, wherein the one or more cameras include a single moveable camera.

16. The method of claim 15, wherein the single moveable camera is mounted on the robotic arm.

~~15. The method of claim 9, further comprising including, in the controller, a robotic arm of a vacuum transfer module (VTM).~~

~~16. A system for positioning a wafer relative to a datum structure, the system comprising:~~

a camera arrangement including one or more cameras, each of the one or more cameras including a field of view when positioned in the camera arrangement, each field of view including a peripheral edge of the wafer and a peripheral edge of the datum structure;

a processor to receive positional data from the or each camera and determine, in relation to each field of view, a gap size between the respective peripheral edges of the wafer and the datum location included in the respective field of view; and

a controller to adjust a position of the wafer relative to the datum structure based on the determined respective gap sizes.

17. The system of claim 16, wherein the one or more cameras includes a single movable camera.

18. The system of claim 17, wherein the single movable camera is mounted on a robotic arm.

19. The system of claim 18, wherein the robotic arm is mounted on a vacuum transfer module (VTM).

20. The system of claim 16, wherein the camera arrangement is provided in a wall of a wafer processing chamber.