

We claim:

1. A semiconductor processing apparatus, comprising:
 - a thermally conductive substrate support comprising a primary mesh and a secondary mesh;
 - a thermally conductive shaft comprising a conductive rod, wherein the conductive rod is coupled to the secondary mesh; and
 - a connection assembly that is configured to electrically couple the secondary mesh to the primary mesh.
2. The semiconductor processing apparatus of claim 1, further comprising a RF generator that is coupled to the conductive rod.
3. The semiconductor processing apparatus of claim 2, wherein a current generated by the RF generator is spread from the secondary mesh to the primary mesh.
4. The semiconductor processing apparatus of claim 1, wherein the primary mesh is configured to act as an electrostatic chucking electrode.
5. A semiconductor processing apparatus, comprising:
 - a thermally conductive substrate support comprising a primary mesh and a secondary mesh, wherein the secondary mesh is spaced below the primary mesh;
 - a thermally conductive shaft comprising a conductive rod, wherein the conductive rod is coupled to the secondary mesh by a brazing joint; and
 - a connection assembly comprising multiple metal posts, wherein each of the multiple metal posts are configured to electrically couple the secondary mesh to the primary mesh via connection junctions.
6. The semiconductor processing apparatus of claim 5, wherein a diameter of each of the multiple metal posts is less than a diameter of the conductive rod.

7. The semiconductor processing apparatus of claim 6, wherein each of the metal posts have smaller cross-sectional areas than a cross-sectional area of the conductive rod.
8. The semiconductor processing apparatus of claim 7, wherein the connection junctions have a smaller contact area than the brazing joint.
9. The semiconductor processing apparatus of claim 5, further comprising a RF generator that is coupled to the conductive rod.
10. The semiconductor processing apparatus of claim 9, wherein a current generated by the RF generator is spread equally through each of the multiple metal posts.
11. The semiconductor processing apparatus of claim 10, wherein the current through each of the multiple metal posts is at least two times less than the current generated by the RF generator.
12. The semiconductor processing apparatus of claim 5, wherein the multiple metal posts comprise at least two metal posts.
13. The semiconductor processing apparatus of claim 5, wherein the multiple metal posts are made of Ni.
14. A semiconductor processing apparatus, comprising:
 - a thermally conductive substrate support comprising a primary mesh, a secondary mesh, and a heating element, wherein the secondary mesh is spaced below the primary mesh;
 - a thermally conductive shaft comprising a conductive rod, wherein the conductive rod is coupled to the secondary mesh by a brazing joint;
 - a connection assembly comprising multiple metal posts, wherein each of the multiple metal posts is configured to electrically couple the secondary mesh to the primary mesh and is physically coupled to the secondary mesh via a connection junction;

a radio frequency (RF) power source configured to distribute RF power to the secondary mesh and the primary mesh; and

an alternating current (AC) power source configured to distribute AC power to the heating element.

15. The semiconductor processing apparatus of claim 14, further comprising a RF generator that is coupled to the conductive rod.

16. The semiconductor processing apparatus of claim 15, wherein a current generated by the RF generator is spread equally through each of the multiple metal posts.

17. The semiconductor processing apparatus of claim 16, wherein the current through each of the multiple metal posts is at least two times less than the current generated by the RF generator.

18. The semiconductor processing apparatus of claim 14, wherein the multiple metal posts comprise at least two metal posts.

19. The semiconductor processing apparatus of claim 14, wherein the multiple metal posts are made of Mo.

20. The semiconductor processing apparatus of claim 14, wherein the primary mesh is configured to act as an electrostatic chucking electrode.