

What is claimed is:

1. A pedestal for a semiconductor processing chamber, comprising:
 - a first body comprising a ceramic material that includes a first surface, wherein a plurality of heater elements are encapsulated within the first body; and
 - a second body comprising a ceramic material that comprises one or more continuously curved grooves formed in one or more surfaces of the second body, and
 - wherein the first body is coupled to the second body, and the first surface of the first body is positioned to enclose a region that is defined by the grooves formed in the one or more surfaces of the second body and a portion of the first surface.
- ~~2. The pedestal of claim 1, further comprising a temperature monitoring device disposed within the one or more continuously curved grooves, and wherein the temperature monitoring device is a flexible thermocouple.~~
- ~~3. The pedestal of claim 2, wherein the temperature monitoring device further comprises a flexible temperature measurement device that comprises a temperature sensing portion disposed at an end of the flexible temperature measurement device, and wherein the temperature sensing portion is positioned against the sidewall of one or more of the continuously curved grooves.~~
- ~~4. The pedestal of claim 1, wherein one of more of the one or more continuously curved grooves has a constant radius, and wherein the continuously curved groove has a radius of between about 0.5 inches and 50.0 inches.~~
- ~~5. The pedestal of claim 1, wherein the continuously curved groove has a radius of between about 3.0 inches and 5.0 inches.~~
62. A pedestal for a semiconductor processing chamber, comprising:
 - a first body comprising a ceramic material and a second body comprising a ceramic material;
 - a plurality of heater elements encapsulated within the first body;

one or more continuously curved grooves are formed in one or more surfaces of the first body or the second body, wherein the first body is coupled to the second body and encloses the grooves; and

a temperature monitoring device disposed within the one or more continuously curved grooves.

7. ~~—The pedestal of claim 6, wherein the temperature monitoring device is a flexible thermocouple.~~

8. ~~—The pedestal of claim 6, wherein the temperature monitoring device is positioned against the sidewall of one or more of the continuously curved grooves.~~

9. ~~—The pedestal of claim 6, wherein one of more of the one or more continuously curved grooves has a constant radius, and wherein the continuously curved groove has a radius of between about 0.5 inches and 50.0 inches.~~

10. ~~—The pedestal of claim 6, wherein the continuously curved groove has a radius of between about 3.0 inches and 5.0 inches.~~

11. ~~—A pedestal for a semiconductor processing chamber, comprising:~~

~~— a first body comprising a ceramic material that includes a first surface, wherein a plurality of heater elements are encapsulated within the first body; and~~

~~a second body comprising a ceramic material and a center hole positioned in the center of the second body, wherein one or more curved grooves are formed in one or more surfaces of the second body,~~

~~wherein the first body is coupled to the second body, and the first surface of the first body is positioned to enclose a region that is defined by the grooves formed in the one or more surfaces of the second body and a portion of the first surface.~~

12. ~~—The pedestal of claim 11, wherein one or more of the one or more curved grooves is a continuously curved grooved.~~

~~13.—The pedestal of claim 12, wherein the continuously curved groove has a constant radius.~~

~~14.—The pedestal of claim 11, further comprising a temperature monitoring device within the one or more curved grooves.~~

~~15.—The pedestal of claim 14, wherein the temperature monitoring device is a flexible thermocouple.~~