

CLAIMS

WHAT IS CLAIMED IS:

1. A reaction chamber including a base in the reaction chamber comprising:
 - a liner disposed in the reaction chamber;
 - the liner comprising:
 - a liner body being arranged around an inner side wall of the reaction chamber and being grounded;
 - a first separator being arranged to surround a periphery of the base disposed in the reaction chamber, a lower end of the first separator being grounded through the base;
 - a dielectric ring being arranged between an inner peripheral wall of the first separator and an outer peripheral wall of the base;
 - a second separator being arranged to be around a lower end of the liner body and an outer peripheral wall of the first separator; and
 - the base includes:
 - a base body, an isolation layer, and a metal interface plate being arranged from top to bottom, wherein
 - the metal interface plate is grounded, and the lower end of the first separator is electrically connected to the metal interface plate;
 - wherein the metal interface plate includes a first protrusion protruding relative to an outer peripheral wall of the isolation layer and a second protrusion at a lower part of the first separator and protruding from the outer peripheral wall of the first separator, the first protrusion and the second protrusion overlap each other and are fixedly connected.

2. The reaction chamber of claim 1, wherein the second separator is integrally connected to the liner body.

3. The reaction chamber of claim 1, wherein the second separator is connected to the first separator as a single piece.

4. The reaction chamber of claim 1, wherein the liner body is connected to the second separator as a single piece, and the second separator is connected to the first separator as a single piece.

5. The reaction chamber of any one of claims 2-4, wherein the lower end of the first separator projects vertically downward with respect to a lower end surface of the second separator.

6. The reaction chamber of any one of claims 1-4, wherein an upper end of the first separator is flush with an upper end of the dielectric ring, and the lower end of the first separator is flush with a lower end of the dielectric ring.

7. The reaction chamber of claim 1, wherein the first protrusion and the second protrusion are fixedly connected by a screw.

8. The reaction chamber of claim 7, wherein one or more conductive layers are being disposed between two surfaces where the second protrusion is in contact with the first protrusion.

9. The reaction chamber of claim 8, wherein the one or more conductive layers are being electroplated on a lower surface of the second protrusion and/or a top surface of the first protrusion.

10. A semiconductor processing device comprising:
the reaction chamber according to any one of claims 1-9.