

Claims:

1. A unitary electrical conduit, comprising:
a central conductor;
a socket coupled to a first end of the central conductor;
a male insert coupled to a second end of the central conductor;
a dielectric sheath surrounding the central conductor; and
an outer conductor surrounding the dielectric sheath, wherein a substantially 90 degree bend is formed along a length thereof.
2. The unitary electrical conduit of claim 1, wherein the dielectric sheath includes a first dielectric layer surrounded by a second dielectric layer.
3. The unitary electrical conduit of claim 1, wherein the central conductor comprises a copper (Cu) material.
4. The unitary electrical conduit of claim 3, wherein the outer conductor comprises an aluminum (Al) material.
5. The unitary electrical conduit of claim 3, wherein the central conductor comprises a tube.
6. The unitary electrical conduit of claim 1, further comprising a first flange and a second flange coupled to the outer conductor.
7. The unitary electrical conduit of claim 6, wherein the first flange is coupled to a first end of the outer conductor and the second flange is coupled to a second end of the outer conductor.
8. The unitary electrical conduit of claim 1, wherein the outer conductor is utilized to conduct heat and electricity.

9. A chamber, comprising:
 - a chamber body defining a processing volume;
 - a substrate support movably disposed in the processing volume; and
 - a unitary electrical conduit coupled to the substrate support, wherein the unitary electrical conduit comprises:
 - a central conductor;
 - a dielectric sheath surrounding the central conductor; and
 - an outer conductor surrounding the dielectric sheath, wherein a substantially 90 degree bend is formed along a length thereof.
10. The chamber of claim 9, wherein the dielectric sheath includes a first dielectric layer surrounded by a second dielectric layer.
11. The chamber of claim 9, wherein the central conductor comprises a copper (Cu) material.
12. The chamber of claim 11, wherein the outer conductor comprises an aluminum (Al) material.
13. The chamber of claim 11, wherein the central conductor comprises a tube.
14. The chamber of claim 9, further comprising a first flange and a second flange coupled to the outer conductor.
15. The chamber of claim 14, wherein the first flange is coupled to a first end of the outer conductor and the second flange is coupled to a second end of the outer conductor.
16. A method for forming a unitary electrical conduit, the method comprising:
 - forming a straight article comprising:
 - providing a first tube made of an electrically conductive material;

installing a dielectric sheath about a circumference of the first tube;

providing a second tube made of an electrically conductive material to surround an outer surface of the dielectric sheath; and

forming a bend in the straight article, wherein the bend is substantially 90 degrees.

17. The method of claim 16, wherein the first tube and the second tube are annealed prior to installing the dielectric sheath.

18. The method of claim 16, wherein dielectric sheath comprises a first dielectric layer and a second dielectric layer.

19. The method of claim 16, wherein flanges are coupled to the second tube at opposing ends thereof.

20. The method of claim 19, wherein the flanges are coupled to the second tube prior to forming the bend.