What is claimed is:

1. An RF coupler, comprising: a plurality of electrically connected, vertically stacked, coupling sections, each one of the coupling sections comprising: a pair of dielectrically separated strip conductors disposed in an inner region of the electrically connected, vertically stacked, coupling sections, each one of the strip conductors being disposed in a horizontal plane and separated by an electromagnetic coupling region disposed between the pair of strip conductors, a first one of the pair of dielectrically separated strip conductors being disposed over a second one of the dielectrically separated strip conductors; an electrically conductive interconnecting layer disposed on an outer region of the electrically connected, vertically stacked, coupling section and passing vertically between an end of a first one of the pair of dielectrically separated strip conductors of the coupling section to an end of a second one of the pair of dielectrically separated strip conductors of another one of the coupling sections electrically interconnecting the pair dielectrically separated strip conductors; and a dielectric structure, disposed between the pair of dielectrically separated strip conductors, having an end disposed on an inner surface of the electrically conductive interconnecting layer disposed on the outer region of the plurality of electrically connected, vertically stacked, coupling sections.

2. An RF coupler, comprising: a plurality of electrically connected, vertically stacked, coupling sections, each one of the coupling sections comprising: a pair of dielectrically separated strip conductors, the strip conductors being separated by an electromagnetic coupling region disposed between the pair of strip conductors; a plurality of electrically conductive layers, each one of the electrically conductive layers being disposed between a pair of the vertically stacked coupling

o

sections; and an electric shield disposed over top and sides of the coupling sections; a solid dielectric structure disposed between the plurality of electrically connected, vertically stacked, coupling sections and the electric shield; and wherein the dielectric structure comprises: a plurality of dielectric layers, at least one of the dielectric layers having a horizontal portion and a vertical portion, the vertical portion being disposed at an end of the horizontal portion; wherein each one of the plurality of dielectric layers is disposed over at least one electromagnetic coupling region; and wherein the vertical portion of the at least one of the plurality of dielectric layers being disposed between a corresponding one of the plurality of vertically stacked, coupling sections layers and a corresponding portion of an inside surface of the electric shield.

3. The RF coupler recited in claim 2 wherein the vertical portion of the at least one of the plurality of dielectric is a continuous layer.

4. The RF coupler recited in claim 2 wherein the electric shield comprises electrically connected portions of a second plurality of electrically conductive layers.

5. The RF coupler recited in claim 4 including a third plurality of connected electrically conductive layers disposed between adjacent pairs of the horizontal portion of the dielectric layers.

6. An RF coupler, comprising: a plurality of electrically connected, vertically stacked, coupling sections, each one of the coupling sections comprising: a pair of dielectrically separated strip conductors, the strip conductors being separated by an electromagnetic coupling region disposed

o

between the pair of strip conductors; an electrically conductive layer disposed between the pair of dielectrically separated strip conductors of one of the coupling sections and the pair of dielectrically separated strip conductors of another one of the coupling sections; a pair of vertically disposed dielectric layers, the electrically conductive layer being disposed between the pair of dielectrically separated strip conductors; wherein the pair of vertically disposed dielectric layers comprises a dielectric ink; and wherein an end portion of one of the pair of vertically disposed dielectric layers is disposed on an end portion of one of the pair of dielectrically separated strip conductors of one of the coupling sections.

7. The RF coupler recited in claim 6 including an electric shield disposed over top and sides of the plurality of electrically connected, vertically stacked, coupling sections and wherein the pair of vertically disposed dielectric layers is disposed on the electric shield.

8. The RF coupler recited in claim 7 wherein the electric shield comprises a conductive ink.

9. The RF coupler recited in claim 8 wherein the pair of dielectrically separated strip conductors comprise a conductive ink.

10. The RF coupler recited in claim 7 wherein the pair of dielectrically separated strip conductors comprise a conductive ink.

11. The RF coupler recited in claim 6 wherein the pair of dielectrically separated strip conductors comprise a conductive ink.

o

12. An RF coupler, comprising: a plurality of serially connected, vertically stacked, coupling sections, each one of the coupling sections comprising: a pair of strip conductors separated by an electromagnetic coupling region between the pair of strip conductors; and wherein the pair of strip conductors in one of the coupling sections is electrically connected to the pair of strip conductors in another one of coupling sections; wherein the pair of strip conductors in one of the coupling sections is disposed in an overlaying, vertical relationship with the pair of strip conductors in another one of coupling sections; and an electric shield disposed over top and sides of the plurality of serially connected, vertically stacked, coupling sections; a solid dielectric structure disposed between the plurality of serially connected, vertically stacked, coupling sections and the electric shield; and wherein the solid dielectric structure, comprises: a plurality of dielectric layers, at least one the dielectric layers having a horizontal portion and a vertical portion, the vertical portion being disposed at an end of the horizontal portion; wherein each one of the plurality of dielectric layers is disposed over at least one electromagnetic coupling region; and wherein the vertical portion of the at least one of the plurality of dielectric layers is disposed between a corresponding one of the plurality of vertically stacked, coupling sections layers and a corresponding portion of an inside surface of the electric shield.

13. The RF coupler recited in claim 12 wherein the at least one of the dielectric layers having the horizontal portion and a vertical portion is a single continuous layer.

o