ABSTRACT

TUNABLE GROUND PLANES IN PLASMA CHAMBERS

An apparatus and method are provided for controlling the intensity and distribution of a plasma discharge in a plasma chamber. In one embodiment, a shaped electrode is embedded in a substrate support to provide an electric field with radial and axial components inside the chamber. In another embodiment, the face plate electrode of the showerhead assembly is divided into zones by isolators, enabling different voltages to be applied to the different zones. Additionally, one or more electrodes may be embedded in the chamber side walls.

Fig. 2A