METHOD FOR SHAPING A MAGNETIC FIELD IN A MAGNETIC FIELD-ENHANCED PLASMA REACTOR

ABSTRACT

Methods for rotating a magnetic field in a process chamber is provided herein. In one embodiment, a method for rotating a magnetic field in a process chamber includes forming a magnetic field having a primary shape; changing the primary shape to at least two sequential transitional shapes; and changing the transitional shape to a rotated primary shape. Optionally, the magnetic field may be maintained at an approximately constant magnitude throughout each step. Optionally, a maximum of one current applied to one or more magnetic field producing coils is equal to zero or has its polarity reversed between any two adjacent steps.

FIG. 24