ABSTRACT

A PROTECTIVE COATING FOR A PLASMA PROCESSING CHAMBER PART AND A METHOD OF USE

A flexible polymer or elastomer coated RF return strap to be used in a plasma chamber to protect the RF strap from plasma generated radicals such as fluorine and oxygen radicals, and a method of processing a semiconductor substrate with reduced particle contamination in a plasma processing apparatus. The coated RF strap minimizes particle generation and exhibits lower erosion rates than an uncoated base component. Such a coated member having a flexible coating on a conductive flexible base component provides an RF ground return configured to allow movement of one or more electrodes in an adjustable gap capacitively coupled plasma reactor chamber.

FIG. 1