ABSTRACT OF THE DISCLOSURE

PLASMA PROCESSING APPARATUS WITH REAL-TIME PARTICLE FILTER

In the plasma processing device which utilizes a low pressure arc discharge, a method for efficiently capturing and removing electrically charged particles and neutral particles having no charge which are at most 5 μm in particle diameter is demanded. The electrically charged particles can be captured efficiently by installing an electric field filter in a transportation course of plasma. The electric field filter has a cylindrical structure which is uneven in inner wall shape. A voltage in the range of 10 to 90 V is applied to the electric field filter. The neutral filters can be captured efficiently by installing a neutral filter having an opening sectional area which is at most 40% of a sectional area of the transportation course.

(Figure 1)