

METHOD FOR IMPEDANCE MATCHING OF PLASMA PROCESSING APPARATUS

ABSTRACT

An output of a modulated high frequency power, which is set such that a power of the modulated high frequency power in a second period is smaller than a power of the modulated high frequency power in a first period, is started from the high frequency power supply of a plasma processing apparatus. Here, the first period and the second period are repeated alternately. A moving average value of a load impedance of the high frequency power supply in a first sub-period in the past first period and a moving average value of a load impedance of the high frequency power supply in a second sub-period in the past first period are acquired. A frequency of the modulated high frequency power in the first sub-period and a frequency of the modulated high frequency power in the second sub-period are set according to the moving average values.

Fig. 1