

ABSTRACT

MULTI-STATION PLASMA REACTOR WITH RF BALANCING

Methods and apparatus for multi-station semiconductor deposition operations with RF power frequency tuning are disclosed. The RF power frequency may be tuned according to a measured impedance of a plasma during the semiconductor deposition operation. In certain implementations of the methods and apparatus, a RF power parameter may be adjusted during or prior to the deposition operation. Certain other implementations of the semiconductor deposition operations may include multiple different deposition processes with corresponding different recipes. The recipes may include different RF power parameters for each respective recipe. The respective recipes may adjust the RF power parameter prior to each deposition process. RF power frequency tuning may be utilized during each deposition process.

Figure 3