HIGH PRESSURE, HIGH POWER PLASMA ACTIVATED CONFORMAL FILM DEPOSITION

Abstract

Methods and apparatus for depositing a film on a substrate surface including plasma assisted surface mediated reactions in which a film is grown over one or more cycles of reactant adsorption and reaction are provided. The embodiments disclosed herein relate to methods and apparatus for performing conformal film deposition and atomic layer deposition reactions that result in highly uniform films with low particle contamination. According to various embodiments, the methods and apparatus involve high deposition chamber pressures and plasma generation using high radio frequency powers.

FIG. 3

