ABSTRACT OF THE DISCLOSURE

An upper chamber section of a plasma reaction chamber includes a ceramic window with blind bores in an upper surface for receipt of a thermal couple and a resistance temperature detector, a top chamber interface which comprises an upper surface which vacuum seals against the bottom of the window and a gas injection system comprising 8 side injectors mounted in the sidewall of the top chamber interface and a gas delivery system comprising tubing which provides symmetric gas flow to the 8 injectors from a single gas feed connection.

