METHOD FOR ANISOTROPICALLY ETCHING TUNGSTEN USING SF_6, CHF_3, AND N_2

ABSTRACT

A method for etching a tungsten containing layer on a substrate substantially anisotropically, with good etching selectivity, and without forming excessive passivating deposits on the etched features. In the method, the substrate is placed in a plasma zone, and process gas comprising SF_6, CHF_3, and N_2, is introduced into the plasma zone. A plasma is formed from the process gas to anisotropically etch the tungsten containing layer. Preferably, the plasma is formed using combined inductive and capacitive plasma operated at a predefined inductive:capacitive power ratio.