ABSTRACT

METHOD FOR REMOVING MASKING MATERIALS WITH REDUCED LOW-K DIELECTRIC MATERIAL DAMAGE

Methods for removing masking materials from a substrate having exposed low-k materials while minimizing damage to exposed surfaces of the low-k material are provided herein. In one embodiment a method for removing masking materials from a substrate includes providing a substrate having exposed low-k materials and a masking material to be removed; exposing the masking material to a first plasma formed from a reducing chemistry for a first period of time; and exposing the masking material to a second plasma formed from an oxidizing chemistry for a second period of time. The steps may be repeated as desired and may be performed in reverse order. Optionally, at least one diluent gas may be added to the oxidizing chemistry.