ABSTRACT OF THE DISCLOSURE

METHOD FOR ETCHING HIGH DIELECTRIC CONSTANT MATERIALS AND FOR CLEANING DEPOSITION CHAMBERS FOR HIGH DIELECTRIC CONSTANT MATERIALS

A process for the removal of a substance from a substrate for etching and/or cleaning applications is disclosed herein. In one embodiment, there is provided a process for removing a substance having a dielectric constant greater than silicon dioxide from a substrate by reacting the substance with a reactive agent that comprises at least one member from the group consisting a halogen-containing compound, a boron-containing compound, a hydrogen-containing compound, nitrogen-containing compound, a chelating compound, a carbon-containing compound, a chlorosilane, a hydrochlorosilane, or an organochlorosilane to form a volatile product and removing the volatile product from the substrate to thereby remove the substance from the substrate.

Figure 3