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(54) Title: SELECTIVE DEPOSITION OF SILICON DIELECTRIC FILM

(57) Abstract: A method for selective deposition of a silicon and oxygen containing dielectric film onto a substrate is disclosed. The method includes the steps of providing a substrate comprising a dielectric surface and a metal, or metal hydride, surface to a reactor. A halogenated silicon-containing compound may be introduced to the reactor to form a silicon-containing layer more abundantly on the dielectric surface than on the metal, or metal hydride, surface. A nitrogen source may be introduced into the reactor to react with the silicon-containing layer to form a silicon nitride film or carbon doped silicon nitride film. An oxygen-containing source may be introduced to the reactor to react with the silicon nitride or carbon doped silicon nitride film to form the silicon and oxygen containing dielectric film.

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