ABSTRACT

FORMATION OF INTERFACIAL OXIDE LAYER AT THE SI3N4/Si INTERFACE BY H2/O2 ANNEALING

A method of forming an interfacial oxide layer at a semiconductor/ dielectric interface is disclosed. The method comprises the following steps. A partially processed semiconductor wafer is provided having semiconductor surfaces upon which gate dielectrics are to be disposed. These semiconductor surfaces are cleaned of contaminants and particles. A thin dielectric layer is deposited on these semiconductor surfaces. The semiconductor wafer is then annealed in a gaseous environment to induce the growth of an oxide layer under the thin dielectric layer.

Fig 2a

This Sheet Has Been Replaced

