METHOD OF FORMING ULTRA THIN SILICON OXYNITRIDE FOR GATE DIELECTRIC APPLICATIONS

ABSTRACT

A method of forming a gate dielectric layer is disclosed. The method comprises the following steps. A substrate is provided having silicon regions containing surfaces upon which gate dielectrics are to be disposed. An oxide is formed over the surfaces. A silicon layer is formed over the oxide layer. A nitridation process is performed. An optional high temperature annealing step may be performed.

Fig : 3