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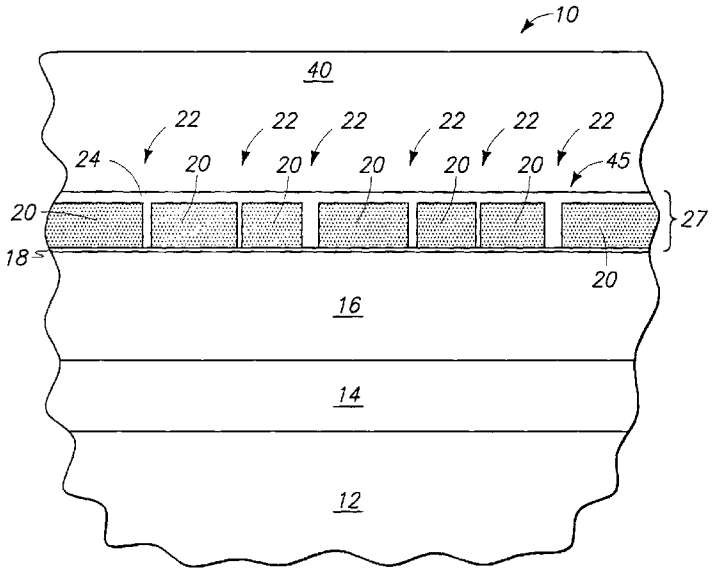
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(54) Title: METHODS OF FORMING CAPACITORS AND METHODS OF FORMING CAPCITOR DIELECTRIC LAYERS



(57) Abstract: A method of forming a capacitor includes forming first capacitor electrode material over a semiconductor substrate. A silicon nitride comprising layer is formed over the first capacitor electrode material. The semiconductor substrate with silicon nitride comprising layer is provided within a chamber. An oxygen comprising plasma is generated remote from the chamber. The remote plasma generated oxygen is fed to the semiconductor substrate within the chamber at a substrate temperature of no greater than 750 °C effective to form a silicon oxide comprising layer over the silicon nitride comprising layer. After the feeding, a second capacitor electrode material is formed over the silicon oxide comprising layer. Methods of forming capacitor dielectric layers are also disclosed.

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