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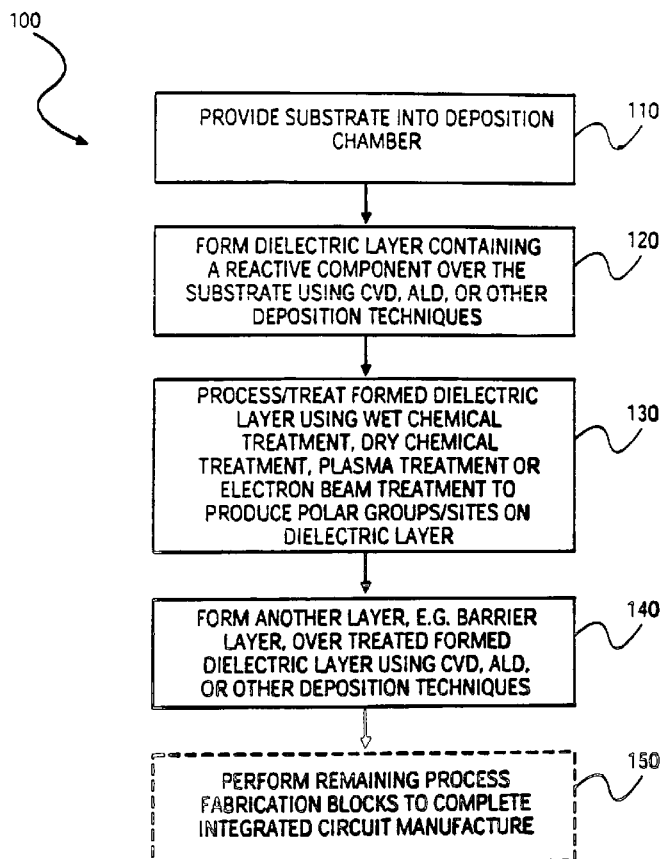
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(54) Title: METHOD OF DEPOSITING CVD AND ALD FILMS ONTO LOW-DIELECTRIC-CONSTANT DIELECTRICS



(57) Abstract: A method to improve nucleation and / or adhesion of a CVD or ALD-deposited film / layer onto a low-dielectric constant (low-k) dielectric layer, such as a polymeric dielectric or a carbon-doped oxide. In an embodiment, the method includes providing a substrate into a deposition chamber. A dielectric layer having a reactive component is formed over the substrate. The formed dielectric layer having the reactive component is then processed to produce polar groups or polar sites at least on a surface of the formed dielectric layer. The present invention forms a low-k organic polymer dielectric layer or an organic-doped oxide dielectric layer having improved nucleation and/or adhesion properties for a subsequently deposited layer such as a barrier material layer.



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