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(54) Title: AMINE CURING SILICON-NITRIDE-HYDRIDE FILMS

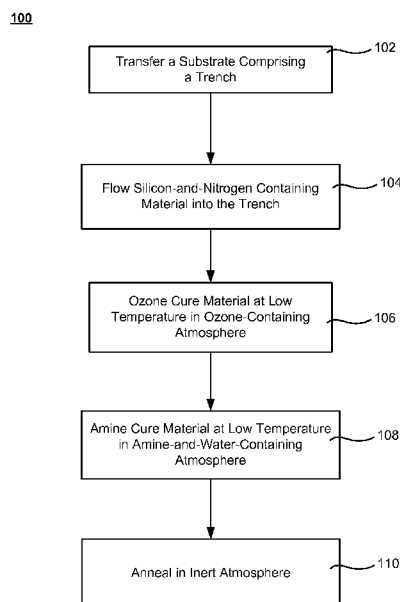


FIG 1

(57) Abstract: Methods of forming dielectric layers are described. The methods may include forming a silicon-nitrogen-and-hydrogen-containing layer on a substrate. The methods include ozone curing the silicon-nitrogen-and-hydrogen-containing layer to turn the silicon-nitrogen-and-hydrogen-containing layer into a silicon-and-oxygen-containing layer. Following ozone curing, the layer is exposed to an amine-water combination at low temperature before an anneal. The presence of the amine cure allows the conversion to silicon-and-oxygen-containing layer to occur more rapidly and completely at a lower temperature during the anneal. The amine cure also enables the anneal to use a less oxidative environment to effect the conversion to the silicon-and-oxygen-containing layer.



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