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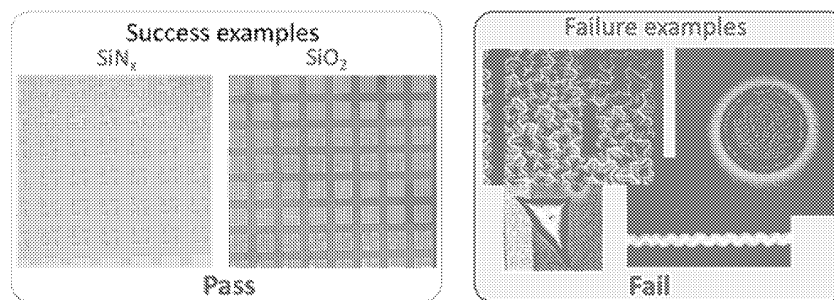


Fig. 1

(57) Abstract: A high-temperature-stable spin-on-carbon ("SOC") material that fills topography features on a substrate while planarizing the surface in a one-step, thin layer coating process is provided. The material comprises low molecular weight polyimides or diimides that are pre-imidized in solution rather than on the wafer. The SOC layers can survive harsh CVD conditions and are also SCI resistant, especially on TiN and SiOx surfaces.

[Continued on next page]

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