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(54) Title: REMOVAL RATE BEHAVIOR OF SPIN-ON DIELECTRICS WITH CHEMICAL MECHANICAL POLISH

(57) Abstract

A method for forming a gap-filled, planarization structure of dielectric materials on a substrate topography useful for forming microelectronic devices. A dielectric material is first deposited as continuous, dry dielectric layer, preferably a SOG layer. Then the dielectric layer is partially removed by chemical-mechanical polishing (CMP). The chemical and mechanical properties of the structure can be chosen by varying the composition of the SOG layer and the subsequent CMP conditions.