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(54) Title: POST-CMP FORMULATION HAVING IMPROVED BARRIER LAYER COMPATIBILITY AND CLEANING PERFORMANCE

(57) Abstract: A cleaning composition and process for cleaning post-chemical mechanical polishing (CMP) residue and contaminants from a microelectronic device having said residue and contaminants thereon. The cleaning compositions include at least one quaternary base, at least one amine, at least one azole corrosion inhibitor, at least one reducing agent, and at least one solvent. The composition achieves highly efficacious cleaning of the post-CMP residue and contaminant material from the surface of the micro-electronic device while being compatible with barrier layers, wherein the barrier layers are substantially devoid of tantalum or titanium.



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