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ACTION

(54) Title: A TA BARRIER SLURRY CONTAINING AN ORGANIC ADDITIVE

(57) Abstract: A Ta barrier slurry for Chemical-Mechanical Polishing (CMP) during copper metallization contains an organic additive which suppresses formation of precipitates and copper staining. The organic additive is chosen from a class of compounds which form multiple strong adsorbant bonds to the surface of silica or copper, which provide a high degree of surface coverage onto the reactive species, thereby occupying potential reaction sites, and which are sized to sterically hinder the collisions between two reactant molecules which result in new bond formation.

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