OXIDATION-STABILIZED CMP COMPOSITIONS AND METHODS

ABSTRACT

The present invention provides a chemical-mechanical polishing (CMP) composition comprising an amino compound, a radical-forming oxidizing agent, a radical trapping agent capable of inhibiting radical-induced oxidation of the amino compound, and an aqueous carrier therefore. The radical trapping agent is a hydroxyl-substituted polyunsaturated cyclic compound, a nitrogenous compound, or a combination thereof. Optionally, the composition comprises a metal oxide abrasive (e.g., silica, alumina, titania, ceria, zirconia, or a combination of two or more of the foregoing abrasives).

Figure 1