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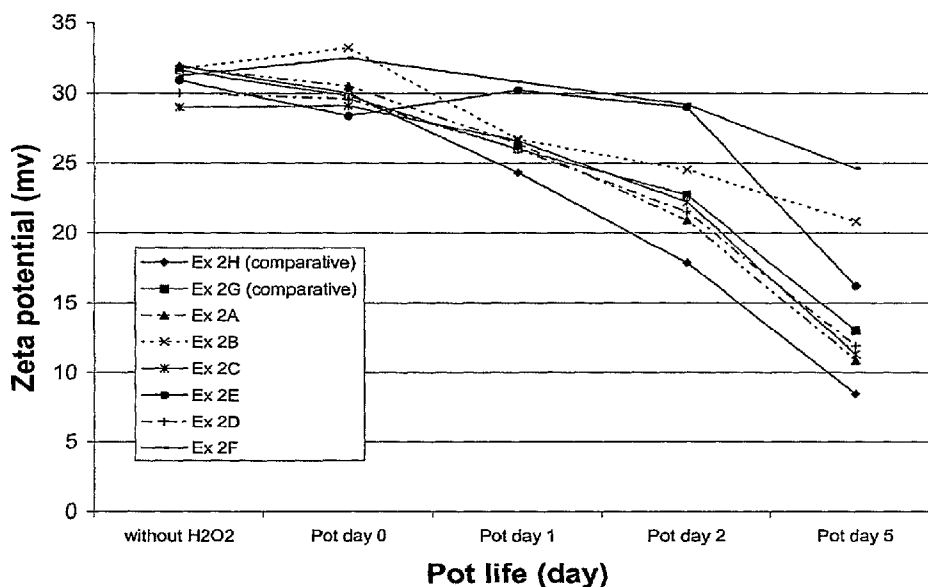
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(54) Title: OXIDATION-STABILIZED CMP COMPOSITIONS AND METHODS



(57) 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). The invention further provides a method of chemically-mechanically polishing a substrate with the CMP compositions, as well as a method of enhancing the shelf-life of CMP compositions containing an amine and a radical-forming oxidizing agent, in which a radical trapping agent is added to the CMP composition.

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