

COMPOSITION AND METHOD FOR ENHANCING POT LIFE OF HYDROGEN PEROXIDE-CONTAINING CMP SLURRIES

ABSTRACT

A composition suitable for copper chemical-mechanical polishing (CMP) comprises an abrasive powder, such as a silica and/or alumina abrasive, in a liquid carrier. The composition has a transition metal content of less than about 5 parts per million (ppm), preferably less than about 2 ppm. Preferably the composition contains less than about 2 ppm of yttrium, zirconium, and/or iron. The CMP compositions, when combined with hydrogen peroxide, provide CMP slurries for copper CMP that have improved pot life by ameliorating hydrogen peroxide degradation in slurries.

No Figure