

ABSTRACT

CHEMICAL MECHANICAL PLANARIZATION COMPOSITION FOR POLISHING OXIDE MATERIALS AND METHOD OF USE THEREOF

Polishing compositions comprising ceria coated silica particles and organic acids having one selected from the group consisting of sulfonic acid group, phosphonic acid group, pyridine compound, and combinations thereof, with pH between 5 and 10 and electrical conductivity between 0.2 and 10 millisiemens per centimeter provide very high silicon oxide removal rates for advanced semiconductor device manufacturing.

[No figure]