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(54) Title: OXIDIZING POLISHING SLURRIES FOR LOW DIELECTRIC CONSTANT MATERIALS

(57) Abstract

An oxidizing slurry for removal of low dielectric constant materials. The slurry is formed utilizing non–oxidizing particles with a separate oxidizing agent, oxidizing particles alone or reducible abrasive particles with a compatible oxidizing agent. The particles can be formed of a metal oxide, nitride, or carbide material, by itself or mixtures thereof, or can be coated on a core material such as silicon dioxide or can be coformed therewith. A preferred oxidizing slurry is multi–modal in particle size distribution. Although developed for utilization in CMP semiconductor processing the oxidizing slurry of the present invention also can be utilized for other high precision polishing processes.