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(54) Title: POLYCATIONIC POLYMER OR COPOLYMER HAVING DIFFERENT CATION TYPES FOR SLURRIES IN CHEMICAL MECHANICAL PLANARIZATION

(57) Abstract: Synthesis of polycationic polymer or copolymer is disclosed. The polycationic polymer or copolymer are formed by at least one first cationic monomer and at least one second cationic monomer wherein the first cationic monomer and the second cationic monomer have different cationic groups; such as imidazolium group and non- imidazolium group. Chemical Mechanical Planarization (CMP) slurries comprise abrasives; activator; oxidizing agent; additive comprising polycationic polymer or copolymer; and water are also disclosed. The use of the synthesized polycationic polymer or copolymer in the CMP slurries reduces dislging and erosion in highly selective tungsten slurries.