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(54) Title: METHOD TO INCREASE BARRIER FILM REMOVAL RATE IN BULK TUNGSTEN SLURRY

(57) Abstract: The invention relates to a chemical-mechanical polishing composition comprising (a) a first abrasive comprising cation-
ically modified colloidal silica particles, (b) a second abrasive having a Mohs hardness of about 5.5 or more, (c) a cationic polymer, (d)
an iron containing activator, (e) an oxidizing agent, and (f) water. The invention also relates to a method of chemically mechanically
polishing a substrate, especially a substrate comprising tungsten and barrier layers (e.g., nitrides), with the polishing composition.

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