

ABSTRACT

CHEMICAL MECHANICAL PLANARIZATION FOR TUNGSTEN-CONTAINING SUBSTRATES

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Chemical mechanical polishing (CMP) compositions for polishing tungsten or tungsten-containing substrates comprise an abrasive, at least one solid catalyst, a chemical additive selected from the groups consisting of piperazine derivatives, salts of cyanate, and combinations thereof; and a liquid carrier. Systems and processes use the aqueous

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formulations for polishing tungsten or tungsten-containing substrates.