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(54) Title: TITANIUM DIOXIDE CHEMICAL-MECHANICAL POLISHING COMPOSITION FOR POLISHING NICKEL SUBSTRATES

(57) Abstract: The invention provides a chemical-mechanical polishing composition comprising: (a) a rutile titanium dioxide abrasive; (b) an organic polishing promoter comprising a carboxylic acid, a urea, an amine, a thiol, a hydroxyl, an amide, a sulfonic acid, salts thereof, or combinations thereof; and (c) water, wherein the chemical-mechanical polishing composition has a pH of about 5 to about 12. The invention also provides a method of chemicallymechanically polishing a substrate, especially a substrate comprising a nickel layer on a surface of the substrate, using a chemical-mechanical polishing composition comprising a rutile titanium dioxide abrasive.



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