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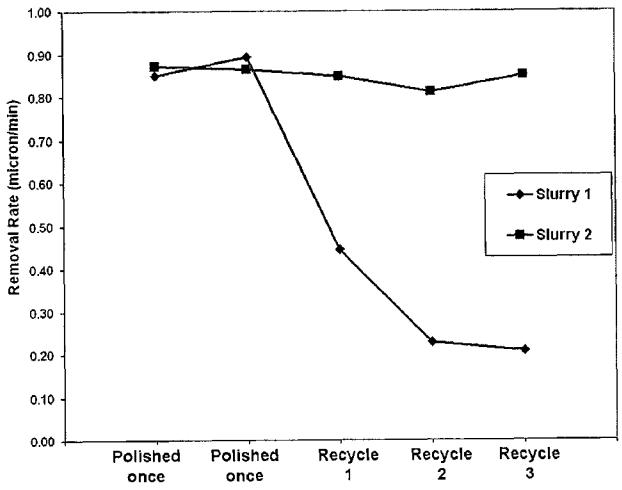
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(54) Title: GLASS POLISHING COMPOSITIONS AND METHODS



(57) Abstract: The present invention provides glass polishing compositions and methods suitable for polishing a glass substrate at a down force of about 110 g/cm^2 or less. One preferred polishing composition comprises a particulate cerium oxide abrasive (e.g., about 1 to about 15 percent by weight) suspended in an aqueous carrier containing a polymeric stabilizer, e.g., about 50 to about 1500 ppm of the stabilizer, and optionally, a water soluble inorganic salt. Preferably, the particulate cerium oxide abrasive has a mean particle size in the range of about 0.35 to about 0.9 μm. Another preferred composition comprises about 1 to about 15 percent by weight of a particulate cerium oxide abrasive characterized by a mean particle size of at least about 0.2 μm and a purity of at least about 99.9% CeO^2, on a weight basis, suspended in an aqueous carrier at a pH at least about 1 unit higher or lower than the isoelectric point (IEP) of the cerium oxide abrasive.

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