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(71) Applicant (for all designated States except US): **J. M. HUBER CORPORATION** [US/US]; A Corporation of the State of New Jersey, 333 Thornall Street, Edison, NJ 08837 (US).(72) Inventors: **McGILL, Patrick, D.**; 2215 Price Road, Darlington, MD 21034 (US). **FULTZ, William, C.**; 1114 Telegraph Road, Rising Sun, MD 21911 (US).(74) Agent: **NIEVES, Carlos**; David Mitchell Goodrich, William Parks, J.M. Huber Corporation, 333 Thornall Street, Edison, NJ 08837 (US).

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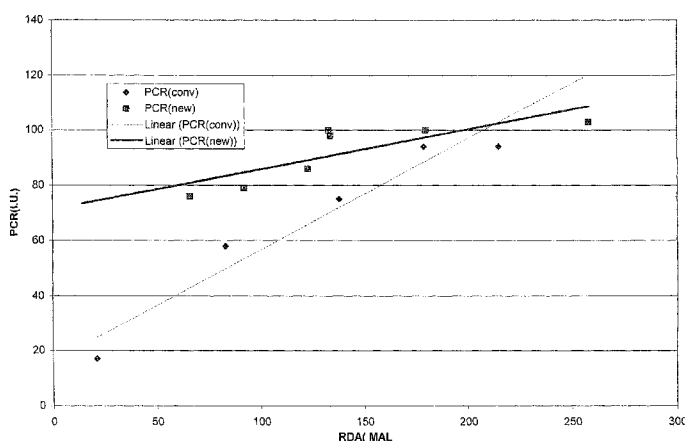
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(54) Title: HIGH-CLEANING SILICA MATERIALS MADE VIA PRODUCT MORPHOLOGY CONTROL AND DENTIFRICE CONTAINING SUCH

New Vs Precipitated Conventional Technology



(57) Abstract: Unique abrasive and/or thickening materials that are *in situ* generated compositions of precipitated silicas and silica gels are provided. Such compositions exhibit different beneficial characteristics depending on the structure of the composite *in situ* generated material. With low structured composites, simultaneously high pellicle film cleaning properties and moderate dentin abrasion levels are possible. Increased amounts of high structure composite materials tend to accord greater viscosity build and thickening benefits together with desirable abrasion and cleaning properties, albeit to a lesser extent than for the low structure types. Thus, mid-range cleaning materials will exhibit oil absorption levels from an excess of 100 to 150, and high thickening/low abrasion composite exhibits oil absorption properties in excess of 150. Such an *in situ*, simultaneously produced precipitated silica/silica gel combination provides unexpectedly effective low abrasion and high cleaning capability and different thickening characteristics as compared to physical mixtures of such components.

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