

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
10 July 2008 (10.07.2008)

PCT

(10) International Publication Number
WO 2008/082795 A1

(51) International Patent Classification:
A61K 8/00 (2006.01) A61K 8/18 (2006.01)

(21) International Application Number:
PCT/US2007/084020

(22) International Filing Date:
8 November 2007 (08.11.2007)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/646,124 27 December 2006 (27.12.2006) US

(71) Applicant (for all designated States except US): **J.M. HUBER CORPORATION** [US/US]; 333 Thornall Street, Edison, NJ 08837 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MCGILL, Patrick** [US/US]; 2215 Price Road, Darlington, MD 21034 (US).
GALLIS, Karl [US/US]; 722 Concord Point Drive, Perryville, MD 21903 (US).

(74) Agents: **NIEVES, Carlos** et al.; J.M. Huber Corporation, 333 Thornall Street, Edison, NJ 08837 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report

(54) Title: PRECIPITATED SILICA MATERIALS EXHIBITING HIGH COMPATIBILITY WITH CETYLPYRIDINIUM CHLORIDE

(57) Abstract: Precipitated silica comprising porous silica particles having a cumulative surface area for all pores having diameters greater than 500 Å of less than 6 m²/g, as measured by mercury intrusion, and a percentage cetylpyridinium chloride (% CPC) Compatibility of greater than about 85%. The precipitated silica product is especially well-adapted for use in dentifrices containing cetylpyridinium chloride, which do not attach to the low surface area silica product in a meaningful level and thus remain available for antimicrobial action. Processes for making the silica product including the introduction of sodium sulfate powder during different process steps in order to enhance such a compatibility with CPC are provided.



WO 2008/082795 A1