

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 October 2004 (14.10.2004)

PCT

(10) International Publication Number
WO 2004/088034 A2

(51) International Patent Classification⁷: **D21H**

(21) International Application Number:
PCT/EP2004/002807

(22) International Filing Date: 18 March 2004 (18.03.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/459,835 2 April 2003 (02.04.2003) US
0401313.2 22 January 2004 (22.01.2004) GB

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

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, 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, IT, LU, MC, 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).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AQUEOUS COMPOSITIONS AND THEIR USE IN THE MANUFACTURE OF PAPER AND PAPERBOARD

(57) Abstract: A process of preparing an aqueous composition comprising a polysilicate, wherein the composition is a substantially uniform liquid when measured at 25°C, comprising the steps of, i) providing an aqueous liquid having a source of silicate, ii) adjusting the pH of the liquid to between about 2 and about 10.5, thereby causing polymerisation of the silicate, iii) allowing sufficient time for the polymerisation to proceed to substantial completion and thereby forming a product comprising gelled material, iv) subjecting the gelled material to sufficient shear to form a substantially uniform liquid. The novel aqueous composition made by this process is useful in the manufacture of paper and paperboard either as a mineral filler or as a retention/drainage aid.



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