



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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| <b>(51) International Patent Classification <sup>7</sup> :</b><br><b>C08B 11/20, 1/00, 1/02</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>A2</b> | <b>(11) International Publication Number:</b> <b>WO 00/47628</b><br><b>(43) International Publication Date:</b> 17 August 2000 (17.08.00)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>(21) International Application Number:</b> PCT/US00/03319<br><b>(22) International Filing Date:</b> 8 February 2000 (08.02.00)<br><b>(30) Priority Data:</b><br>09/248,246                      10 February 1999 (10.02.99)                      US<br><b>(71) Applicant:</b> HERCULES INCORPORATED [US/US]; 1313 North Market Street, Wilmington, DE 19894-0001 (US).<br><b>(72) Inventors:</b> CASH, Mary, Jean; 28370 Grubb Road, Wilmington, DE 19810 (US). CHAN, Anita, N.; 709 Ashford Road, Wilmington, DE 19803 (US). CONNER, Herbert, Thompson; 121 Glennann Drive, Landenberg, PA 19350 (US). COWAN, Patrick, Joseph; 13 Bernard Boulevard, Hockessin, DE 19707 (US). GELMAN, Robert, Alan; 507 Langwater Drive, Newark, DE 19711 (US). LUSVARDI, Kate, Marritt; 7 Cardinal Lane, Chadds Ford, PA 19317 (US). THOMPSON, Samuel, Anthony; 113 Glenside Avenue, Wilmington, DE 19803 (US). TISE, Frank, Peine; 5907 Stone Pine Road, Wilmington, DE 19808 (US).<br><b>(74) Agent:</b> EDWARDS, David; Hercules Incorporated, 1313 North Market Street, Wilmington, DE 19894-0001 (US). |           | <b>(81) Designated States:</b> AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).<br><br><b>Published</b><br><i>Without international search report and to be republished upon receipt of that report.</i> |
| <b>(54) Title:</b> DERIVATIZED MICROFIBRILLAR POLYSACCHARIDE<br><b>(57) Abstract</b><br><p>A method for producing derivatized microfibrillar polysaccharide, including but not limited to cellulose, derivatized by steric and/or electrostatic forces, where the electrostatic forces are provided by anionic charge or by a combination of both anionic and cationic charge, by stabilizing and/or microfibrillating a polysaccharide starting material. A method of modifying the rheological properties of a composition of matter using derivatized microfibrillar polysaccharide. Method of improving coatings, paper manufacture, and the stability of emulsions, dispersions, and foams using a derivatized microfibrillar polysaccharide. Compositions that include derivatized microfibrillar polysaccharide, including paper compositions, comestible compositions, non-comestible spreadable compositions, and emulsions, dispersion, and foams.</p>                                                                                                                                  |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |