



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : C11D 1/58, 1/62, 1/66	A1	(11) International Publication Number: WO 00/11125 (43) International Publication Date: 2 March 2000 (02.03.00)
(21) International Application Number: PCT/US99/18974 (22) International Filing Date: 19 August 1999 (19.08.99) (30) Priority Data: 09/136,936 20 August 1998 (20.08.98) US (71) Applicant: MONA INDUSTRIES, INC. [US/US]; 76 East 24th Street, Paterson, NJ 07544 (US). (72) Inventors: PERELLA, James, E.; 49 Brookwood Drive, Mahwah, NJ 07430 (US). KOMOR, Joseph, A.; 15 Colonial Heights Drive, Ramsey, NJ 07446 (US). KATSTRA, Richard, D.; 151 Mt. Peter Road, Warwick, NY 10990 (US). (74) Agent: SCHOENBERG, Franklyn; Norman E. Lehrer, P.C., 1205 North Kings Highway, Cherry Hill, NJ 08034 (US).		(81) Designated States: AU, CA, CN, FI, IN, JP, KR, PL, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: AMPHOTERIC DERIVATIVES OF ALIPHATIC POLYAMINES WITH FATTY ACIDS, ESTERS OR TRIGLYCERIDES (57) Abstract Amphoteric derivatives of aliphatic polyamines, such as diethylenetriamine or triethylenetetramine reacted with long chain fatty acids, esters or triglycerides from various natural or synthetic sources are effective in the softening/texture modification of substrates such as paper, textiles, human skin surfaces and hair tresses, as well as in applications for metal working and lubrication. The polyamines are first reacted with fatty acids, esters or triglycerides derived from various animal, vegetable or synthetic sources ranging in molecular distribution from butyric through erucic acids (e.g. milkfat, soy bean oil, rapeseed oil) to form diamides or imidazolines; they are then further reacted with unsaturated or halogenated carboxylic acids, carboxylated epoxy compounds or acid anhydrides (e.g. acrylic acid, itaconic acid, chloroacetic acid, maleic anhydrides octadecenyl anhydride) to form the various amphoteric structures.		