



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C04B 24/24, C08G 65/48	A1	(11) International Publication Number: WO 99/02466 (43) International Publication Date: 21 January 1999 (21.01.99)
(21) International Application Number: PCT/EP98/03964 (22) International Filing Date: 29 June 1998 (29.06.98) (30) Priority Data: 08/890,092 9 July 1997 (09.07.97) US (71) Applicant (for all designated States except MN): ARCO CHEMICAL TECHNOLOGY, L.P. [US/US]; Two Greenville Crossing, Suite 238, 4001 Kennett Pike, Greenville, DE 19807 (US). (71) Applicant (for MN only): ARCO CHEMIE TECHNOLOGIE NEDERLAND B.V. [NL/NL]; Theemsweg 14, NL-3197 KM Botlek Rotterdam (NL). (72) Inventors: SHAWL, Edward, T.; 208 Martroy Lane, Walling- ford, PA 19086 (US). ZHOU, Xinhau; 1231 Gail Road, West Chester, PA 19380 (US). (74) Agent: SMAGGASGALE, Gillian, Helen; Mathys & Squire, 100 Gray's Inn Road, London WC1X 8AL (GB).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, 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, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, 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, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the</i> <i>claims and to be republished in the event of the receipt of</i> <i>amendments.</i>
(54) Title: METHOD OF MAKING A WATER REDUCING ADDITIVE FOR CEMENT (57) Abstract Substances useful as water reducing and superplasticizer additives for cement compositions are formed by <i>in situ</i> polymerization of one or more ethylenically unsaturated acid monomers such as acrylic acid or maleic anhydride in a reaction medium comprising a polyether such as polypropylene glycol or a copolymer of ethylene oxide and propylene oxide to form a carboxylic acid polymer, followed by reaction of the polyether and carboxylic acid polymer. The composition and properties of the resulting additives may be readily varied as desired through the use of different acid monomers, polyethers, reaction conditions, reagent proportions and the like.		