



- (51) **International Patent Classification:**
C08F 265/06 (2006.01) *C04B 24/26* (2006.01)
- (21) **International Application Number:**
PCT/EP2013/059303
- (22) **International Filing Date:**
3 May 2013 (03.05.2013)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
61/642,665 4 May 2012 (04.05.2012) US
- (71) **Applicants** (for all designated States except MW): **W.R. GRACE & CO.-CONN.** [US/US]; 7500 Grace Drive, Columbia, Maryland 21044 (US). **L'BESTE GAT LTD.** [KR/KR]; 7F Line Building, Yeoksam-Dong, Kangnam-Gu, Seoul, 823-30 (KR).
- (71) **Applicant** (for MW only): **BENSON, John Everett** [GB/GB]; 14 South Square, Gray's Inn, London Greater London WC1R 5JJ (GB).
- (72) **Inventors:** **KUO, Lawrence**; 43, Lexington Drive, Acton, MA 01720 (US). **TREGGER, Nathan**; 19, Arakelian Drive, Billerica, MA 01821 (US). **LEE, Ho**; 1001ho 416-dong, Seohae Geurangbeaul Apt, 140, Bansong-dong, Hwaseong-si, Gyeonggi-do 445-758 (KR). **KWON, O-il**; 702ho 103-dong, 35 Chopyeongno, Osan-si, Gyeonggi-do 447-710 (KR).
- (74) **Agents:** **DUCKWORTH, Timothy, John** et al.; J A Kemp, 14 South Square, Gray's Inn, London WC1R 5JJ (GB).
- (81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, 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, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, 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, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:**
— with international search report (Art. 21(3))

(54) **Title:** METHOD FOR TREATING CLAY AND CLAY-BEARING AGGREGATES AND COMPOSITIONS THEREFOR

(57) **Abstract:** The present invention provides compositions and methods involving the use of a carboxylate graft polymer having high molecular weight and low ratio of acid-to-polyoxyalkylene groups. Such clay-mitigation is particularly useful for treating clay and clay-bearing aggregates, particularly those aggregates used for construction purposes. The present invention minimizes the need to wash the aggregates, thus preserving fine aggregates ("fines") content in construction materials, and thereby benefiting the performance and/or properties of construction materials containing the clay-bearing aggregates.

