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(21) International Application Number: PCT/US96/14892 (22) International Filing Date: 17 September 1996 (17.09.96) (30) Priority Data: 08/529,936 18 September 1995 (18.09.95) US (71) Applicant: COLGATE-PALMOLIVE COMPANY [US/US]; 300 Park Avenue, New York, NY 10022 (US). (72) Inventors: REPINEC, Stephen, Thomas, Jr.; 10 Grandin Drive, Flemington, NJ 08822 (US). ZAPPONE, Marianne; 26 Regency Drive, Mount Holly, NJ 08060 (US). FULLER, Robert, Langley; 129 Valley Station Road, Asbury, NJ 08802 (US). KRISHNAN, Santhana, Vaidyanathan; 20 Timber Lane, Randolph, NJ 07869 (US). (74) Agent: LIEBERMAN, Bernard; Colgate-Palmolive Company, 909 River Road, Piscataway, NJ 08855-1343 (US).	(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, HU, 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, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, 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 With international search report.	

(54) Title: CONCENTRATED AQUEOUS LIQUID DETERGENT COMPOSITIONS

(57) Abstract

The present invention provides for concentrated, structured liquid detergent compositions in the form of lamellar surfactant droplets dispersed in an aqueous electrolytic continuous phase comprising a mixture of: a) from about 10 to 45 % by weight of surfactant; b) at least one detergent builder; c) from about 0.01 to about 5 % by weight of a deflocculating polymer composition containing polymer chains of the structure P-QR, wherein P represents a polymer chain segment of a hydrophilic polymer, and QR represents a hydrophobic end-cap group wherein R is an organic hydrophobic radical containing from about 4 to 28 carbon atoms, and Q is selected from the group consisting of O, S, SO, SO₂, Si OR'R'', Si R'R'', CR'OH, CR'R'' and CR'OR'' wherein R' and R'' are each hydrogen, an alkyl group containing from 1 to 4 carbon atoms or an aryl group; and d) water. The presence of the deflocculating polymer in the composition both stabilizes the detergent composition and retards the propensity of the lamellar droplets dispersed in the aqueous phase to flocculate, particularly where the droplets occupy a higher volume ratio as the result of high concentrations of surfactant present in the detergent. The invention also provides, when necessary, for the addition of a polymeric stabilizing agent to the liquid detergent composition comprised of a high molecular weight cross-linked polyacrylic acid compound for the purpose of maintaining the viscosity of the liquid detergent composition substantially constant when stored at room temperature for a period of at least four weeks.