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(21) International Application Number: PCT/US98/00451 (22) International Filing Date: 6 January 1998 (06.01.98) (30) Priority Data: 08/782,457 13 January 1997 (13.01.97) US (71) Applicant: ECOLAB INC. [US/US]; Ecolab Center, St. Paul, MN 55102 (US). (72) Inventors: LENTSCH, Steven, E.; 21 Orme Court, St. Paul, MN 55116 (US). DOLSON, Keith, E.; 13966 Edenwood Court, Apple Valley, MN 55124 (US). (74) Agent: DAIGNAULT, Ronald, A.; Merchant, Gould, Smith, Edell, Welter & Schmidt, P.A., 1000 Norwest Center, 55 E. Fifth Street, St. Paul, MN 55101 (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, 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, 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. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
(54) Title: ALKALINE DETERGENT CONTAINING MIXED ORGANIC AND INORGANIC SEQUESTANTS RESULTING IN IMPROVED SOIL REMOVAL (57) Abstract Detergents, especially solid block alkaline detergent compositions, are disclosed comprising a source of alkalinity, and other detergent additives including sequestrants. The detergents of the invention use a mixed condensed phosphate and organic phosphonate sequestant composition that successfully softens service water used in manufacturing aqueous detergents from the composition, but also obtains substantially improved organic soil removal on dishware or flatware. The solid block detergents of the invention comprises large masses of the chemical ingredients having a weight of greater than about 500 grams in a solid block product format that is typically dispensed using a spray on water dispenser that creates an aqueous concentrate that is used in a washing machine.		