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(21) International Application Number: PCT/GB97/03317 (22) International Filing Date: 3 December 1997 (03.12.97) (30) Priority Data: 9625664.9 4 December 1996 (04.12.96) GB 9718934.4 5 September 1997 (05.09.97) GB (71) Applicants (for all designated States except US): UNIVERSITY OF SOUTHAMPTON [GB/GB]; Highfield, Southampton SO17 1BJ (GB). RECKITT AND COLMAN PRODUCTS LIMITED [GB/GB]; One Burlington Lane, London W4 2RW (GB). (72) Inventors; and (75) Inventors/Applicants (for US only): McKECHNIE, Malcolm, Tom [GB/GB]; Spring Rise, 12A North Road, Lund, Driffield, East Yorkshire YO25 9TF (GB). GAYNOR, Paul, Terence [NZ/GB]; 23 Spring Crescent, Portswood, Southampton SO17 2FZ (GB). HUGHES, John, Farrell [GB/GB]; 2 Shepherd's Close, Bartley, Southampton SO40 2JL (GB). SWINGLER, Jonathan [GB/GB]; Morse Court, Flat 2, 6 New Road, Netley Abbey, Southampton SO31 5RR (GB).		(74) Agent: BOULT WADE TENNANT; 27 Fumival Street, London EC4A 1PQ (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, 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, <u>SG</u> , SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, 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 <i>With international search report.</i> <i>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: METHOD FOR CONTROLLING AND REMOVING DUST AND OTHER PARTICLES FROM A MATERIAL (57) Abstract A method for controlling and removing dust and other fine particles in a material comprising i) electrostatically charging carrier particles in powder form to give the carrier particles a minimum charge to mass ratio of $\pm 1 \times 10^{-4}$ C/kg, ii) delivering the electrostatically charged carrier particles to the material, whereby the dust and other fine particles in the material agglomerate with the charged carrier particles and iii) removing the resultant agglomerates from the material (for example by vacuuming or brushing). An apparatus for delivering electrostatically charged particles to a material, the apparatus comprising a) a container, in which particles to be electrostatically charged are stored and b) means for delivering the particles from the container to the carpet of fabric material, the delivery means comprising i) a tube or pipe for delivering the carrier particles to the carpet or fine fabric material; and ii) means for expelling particles at high velocity from the container to the material; the tube or pipe being made of such a material that, when carrier particles are passed down the delivery tube at high velocity, a minimum charge to mass ratio of $\pm 1 \times 10^{-4}$ C/kg is imparted to the particles by the frictional contact of the particles on the inside of the tube or pipe.		