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| <b>(51) International Patent Classification <sup>6</sup> :</b><br><b>B01D 47/00, A61L 9/12, B05B 5/025</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>A1</b> | <b>(11) International Publication Number:</b> <b>WO 97/28883</b><br><b>(43) International Publication Date:</b> 14 August 1997 (14.08.97)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>(21) International Application Number:</b> PCT/GB97/00353<br><b>(22) International Filing Date:</b> 6 February 1997 (06.02.97)<br><br><b>(30) Priority Data:</b><br>9602434.4                    7 February 1996 (07.02.96)        GB<br>9622991.9                  5 November 1996 (05.11.96)        GB<br><br><b>(71) Applicants (for all designated States except US):</b> UNIVERSITY OF SOUTHAMPTON [GB/GB]; Highfield, Southampton SO17 1BJ (GB). RECKITT & COLMAN PRODUCTS LIMITED [GB/GB]; One Burlington Lane, London W4 2RW (GB).<br><br><b>(72) Inventors; and</b><br><b>(75) Inventors/Applicants (for US only):</b> FOX, Rodney, Thomas [GB/GB]; 30 South Street, Cottingham, Hull HU16 4AS (GB). HUGHES, John, Farrell [GB/GB]; 2 Shepherd's Close, Bartley, Southampton SO40 2JL (GB). HARRISON, Neale, Mark [GB/GB]; Tutbury, Burton-on-Trent, Staffs DE13 9HZ (GB). WHITMORE, Lindsey, Faye [GB/GB]; 49 Chase Farm Close, Waltham Chase, Southampton SO32 2UB (GB).<br><br><b>(74) Agent:</b> BOULT WADE TENNANT; 27 Fumival Street, London EC4A 1PQ (GB). |           | <b>(81) Designated States:</b> 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, US, UZ, VN, YU, 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).<br><br><b>Published</b><br><i>With international search report.</i> |
| <b>(54) Title:</b> METHOD OF PRECIPITATING AIRBORNE PARTICLES<br><br><b>(57) Abstract</b><br><p>A method of precipitating airborne particles from air comprising contacting the airborne particles with liquid droplets from a domestic aerosol spray device, a unipolar charge being imparted to the liquid droplets during the spraying of the liquid droplets by the aerosol spray device, the unipolar charge providing the droplets with a charge to mass ratio of at least <math>\pm 1 \times 10^{-4}</math> C/Kg, and the unipolar charge being transferred between the liquid droplets and the airborne particles by contact which causes the airborne particles to precipitate due to mutual repulsion.</p>                                                                                                                                                                                                                                                                                                                                                          |           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |