

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
16 February 2006 (16.02.2006)

PCT

(10) International Publication Number
WO 2006/015869 A1

(51) International Patent Classification⁷: **B05B 1/02**,
1/04, 1/06, B05D 1/02

(21) International Application Number:
PCT/EP2005/008760

(22) International Filing Date: 10 August 2005 (10.08.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
04380170.3 13 August 2004 (13.08.2004) EP

(71) Applicant (for all designated States except US): **IMPERIAL CHEMICAL INDUSTRIES PLC** [GB/GB]; 20 Manchester Square, London W1V 3AN (GB).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **INSAUSTI-ECI-OLAZA, Saturnino** [ES/ES]; Trinkete Plaza N°4 1B, E-20400 Tolosa-Guipúzcoa (ES). **MOUZOURAS, Renos** [GB/GB]; Woodforde Cottage, Ansford Hill, Castle Carey, Somerset BA7 7JL (GB).

(74) Agent: **FRANGOU, Andrew**; ICI Group Intellectual Property, Wexham Road, Slough, Berkshire SL2 5DS (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

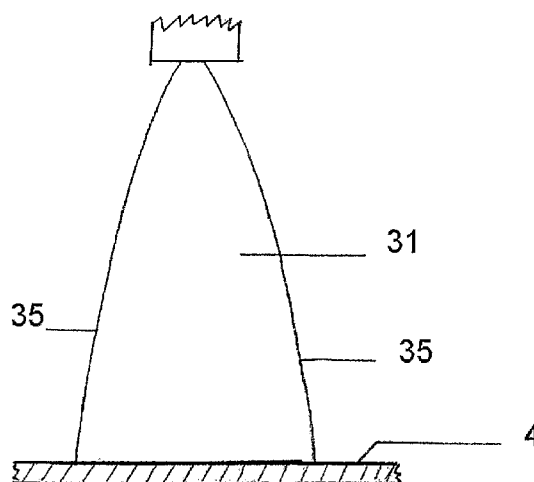
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, 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 receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: AIRLESS SPRAY-COATING OF A SURFACE WITH A VISCOUS AQUEOUS ARCHITECTURAL COATING COMPOSITION



(57) Abstract: A process for the airless spray-coating of a surface with a viscous aqueous non-Newtonian architectural coating composition wherein the composition contains a preferably associative thickener and is subjected to a pressure of from 2.5 to 5 bar generated preferably by hand-operated compressor and then sprayed from a preferably slot-shaped outlet orifice (52) in a nozzle (50) to produce an outflow (31) of composition having boundaries (35) which diverge at least until it has formed a front of at least 30mm in width. The composition preferably has a Brookfield viscosity of at least 0.5 pa.sec and a solids content of 7 wt %. Also apparatus for performing the process comprising a container containing the coating composition together with a nozzle having an outlet orifice, a hand-operated compressor and a pressure release valve actuatable in the pressure range 2.5 to 5 bar and preferably an auxiliary orifice upstream of the outlet orifice. The process and apparatus enable the viscous compositions to be applied quickly using low pressures easily generated by a hand compressor.

WO 2006/015869 A1