(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 February 2005 (24.02.2005)

PCT

(10) International Publication Number
WO 2005/016424 A3

(51) International Patent Classification[7]: A61M 15/00

(21) International Application Number:
PCT/US2004/004843

(22) International Filing Date: 20 February 2004 (20.02.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0303870.0 20 February 2003 (20.02.2003) GB

(71) Applicant *(for all designated States except US)*: **IVAX CORPORATION** [US/US]; 4400 Biscayne Boulevard, Miami, FL 33137 (US).

(72) Inventors: **BARNEY, Brian**; 50 Stortford Road, Great Dunmow, Essex CM6 1DN (GB). **O'LEARY, David**; 25 Newburgh Road, Grays, Little Thurrock, Essex RM17 6UG (GB). **PEREA-BOROBIO, Esther**; 44 Flanders Road, London W4 1NG (GB). **DICKSON, Andrew**; 415 Milwards, Harlow, Essex CM19 4SR (GB). **CHEW, Sophia**; 301 Pacific Wharf, 165 Rotherhithe Street, London SE16 5QF (GB). **STRIEBIG, Rachel**; Flat 3, Finlay House, 13 Victoria Park Square, Bethnal Green, London E2 9PB (GB).

(74) Agent: **EMMA, Dennis, A.**; Ivax Corporation, 4400 Biscayne Boulevard, Miami, FL 33137 (US).

(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, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

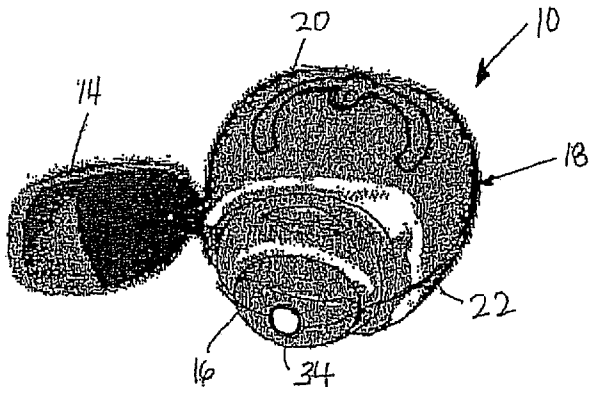
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, 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*

(88) Date of publication of the international search report:
23 June 2005

[Continued on next page]

(54) Title: PRE-METERED DOSE MAGAZINE FOR DRY POWDER INHALER



(57) Abstract: A dry powder inhaler (10) including a housing (18) having a mouthpiece (16) and a delivery passageway connected to the mouthpiece, a magazine positioned within the housing and including a plurality of reservoirs for holding doses of dry powder, and wherein the magazine is movable within the housing so that the reservoirs are sequentially positioned within the delivery passageway of the housing upon movement of the magazine, a cover (14) connected to the housing and movable to open and close the mouthpiece of the housing, and a rake connected to the cover, extending into the housing and engageable with the magazine so that, upon the cover being moved to open the mouthpiece, the rake moves the magazine and causes one of the reservoirs of the magazine to be positioned within the delivery passageway.

WO 2005/016424 A3

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.