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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 November 2013 (28.11.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/175176 A1

(51) International Patent Classification:
A61M 15/00 (2006.01)

(21) International Application Number:
PCT/GB2013/051261

(22) International Filing Date:
16 May 2013 (16.05.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
1209267.2 25 May 2012 (25.05.2012) GB

(71) Applicant: **VECTURA DELIVERY DEVICES LIMITED** [GB/GB]; One Prospect West, Chippenham, Wiltshire SN14 6FH (GB).

(72) Inventors: **MELINIOTIS, Andreas**; c/o Vectura Delivery Devices Limited, 21 Cambridge Science Park, Milton Road, Cambridge, Cambridgeshire CB4 0FJ (GB). **SOLLY, Andrew**; c/o Vectura Delivery Devices Limited, 21 Cambridge Science Park, Milton Road, Cambridge, Cambridgeshire CB4 0FJ (GB). **CLARKE, Roger**; c/o Vectura Delivery Devices Limited, 21 Cambridge Science Park, Milton Road, Cambridge, Cambridgeshire CB4 0FJ (GB). **MCGUINNESS, Liam**; 24 Hailes Wood, Elsenham, Bishops Stortford, Hertfordshire CM22 6DQ (GB).

(74) Agents: **ROLLINSON, Gabrielle** et al.; Vectura Limited, Intellectual Property Department, One Prospect West, Chippenham, Wiltshire SN14 6FH (GB).

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

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

[Continued on next page]

(54) Title: INHALER

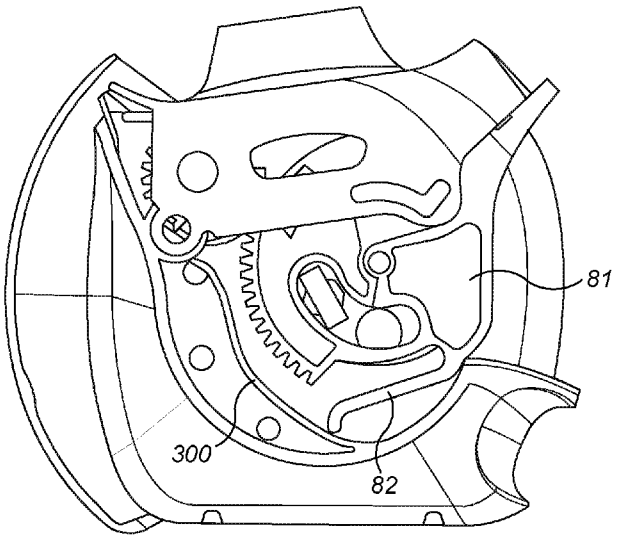


FIG. 18A

(57) Abstract: An inhaler comprising a housing defining a chamber to receive a strip having a plurality of blisters each containing a dose of medicament for inhalation by a user is disclosed. It comprises an inhaler comprising a housing to receive a strip having a plurality of blisters, each blister having a puncturable lid and containing a dose of medicament for inhalation by a user, a mouthpiece mounted to the housing and through which a dose of medicament is inhaled by a user, a blister piercing member mounted for rotation about a first axis and an actuating mechanism including an actuating lever mounted for rotation about a second axis to sequentially move each blister into alignment with the blister piercing member, wherein the actuating lever cooperates with the blister piercing member so that the blister piercing member pivots about said first axis in response to rotation of the actuating member from an initial position about the second axis to puncture the lid of an aligned blister so an airflow through the blister is generated to entrain the dose contained therein and carry it, via the mouthpiece, into the user"s airway when a user inhales through the mouthpiece. The inhaler comprises an actuating lever load control member to control the force that must be applied to the actuating lever to cause it to rotate from its initial position such that a biasing force is applied to the actuating lever throughout all, or at least a substantial portion of, the stroke of the actuating lever.

WO 2013/175176 A1

— *with amended claims (Art. 19(1))*