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9804614-7

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : A61M 15/00 — A2

(11) International Publication Number: WO 97/30743

(43) International Publication Date: 28 August 1997 (28.08.97)

(21) International Application Number: PCT/US97/01562

(22) International Filing Date: 13 February 1997 (13.02.97)

(30) Priority Data:
08/604,549 21 February 1996 (21.02.96) US

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(81) Designated States: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, 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).

Published
Without international search report and to be republished upon receipt of that report.

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(54) Title: POWDERED MEDICATION INHALER

(57) Abstract

A powder dispenser includes a reservoir body including a supply of powder and an inhalation conduit; a driving body for rotating the reservoir body and including upper recesses and two spring fingers in lower driving recesses thereof; a rotatable metering plate for carrying a metered amount of powder from the supply to theinhalation conduit, and having an underside with ribs; a gas permeable retainer welded to the ribs; a spring biasing the metering plate toward the reservoir body; a nozzle having spiked ribs welded in the upper recesses of the driving body and including a chimney with vertical flutes; an adapter non-rotatably mounted with respect to the metering plate and including two locking recesses for receiving the spring fingers for locking engagement and two helical cam tracks with a square cross section; a closure cap covering the driving body and including priming ribs biasing the spring fingers out of the locking recesses and engaging with the locking recesses to rotate the driving body, and two cams riding within the cam tracks; a base non-rotatably connected with the metering plate; and a counter rotatably mounted on the base and including rotatable counter rings providing a visual count of the number of doses of powder to be dispensed, and a pawl assembly engaging with gear teeth of the counter rings for rotating the same, the pawl assembly including an outer wall, a pawl and a pawl spring integrally molded as a single piece.

