



- (51) **International Patent Classification:**
A61M 5/24 (2006.01) *A61M 5/315* (2006.01)
- (21) **International Application Number:**
PCT/IB2015/051843
- (22) **International Filing Date:**
13 March 2015 (13.03.2015)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
1008/MUM2014 25 March 2014 (25.03.2014) IN
- (71) **Applicant:** WOCKHARDT LIMITED [IN/IN]; D-4, MIDC Area, Chikalthana, Aurangabad 431006 (IN).
- (72) **Inventors:** STEPHENSON, Matthew; 255 Te Rehunga North Road, Dannevirke 4972, NEW ZEALAND, Dannevirke, 4972 (NZ). KNIGHT, Barry; 10 Dorchester Road, Weybridge, Surrey, KT13 8PG, UK, Weybridge (AU). KNOWLES, Stephen; 22 Santos Road, London, Sw18 1ns, UK, London (GB). JOSHI, Umesh; D-302, Kasliwal Marvels, West Wing, Beed Bypass, Near AGP Public School, Aurangabad – 431001, Maharashtra, India

Aurangabad 431001 (IN). TYAGI, Ashok; D-501, Kasliwal Marvels, West Wing, Beed Bypass, Near AGP Public School, Aurangabad – 431001, Maharashtra, India India Aurangabad 431001 (IN).

- (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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, 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, SA, 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, ST, 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,

[Continued on next page]

- (54) **Title:** FLUID DELIVERY PEN WITH FINAL DOSE STOP AND IMPROVED DOSE SETTING FEATURES

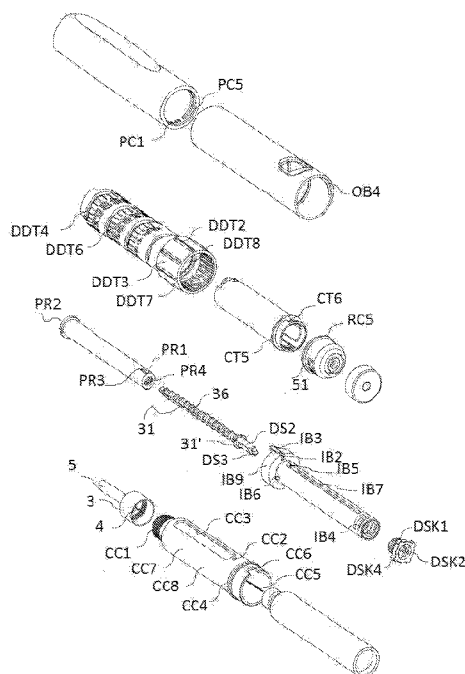


FIG. 23

(57) **Abstract:** The fluid delivery pen of the present invention has a reduced dose setting friction mechanism which may produce a sound of higher audibility for each click corresponding to one unit dose set using a dose setting mechanism and also produces a sound of lower audibility than the former for each click when the set dose is reduced using the dose setting mechanism. The fluid delivery pen driving mechanism of the present invention has an indication to an end of dose of fluid in a cartridge.



SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, —
GW, KM, ML, MR, NE, SN, TD, TG).

*before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments (Rule 48.2(h))*

Published:

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