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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 March 2013 (28.03.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/044161 A1

(51) International Patent Classification:
A61M 5/20 (2006.01)

(21) International Application Number:
PCT/US2012/056744

(22) International Filing Date:
21 September 2012 (21.09.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/538,098 22 September 2011 (22.09.2011) US

(71) Applicants: **ABBVIE INC.** [US/US]; 1 N Waukegan Road, North Chicago, IL 60064 (US). **MUMFORD, Owen** [GB/GB]; Brook Hill, Woodstock, Oxfordshire, OX20 1TU (GB).

(72) Inventors: **SHANG, Sherwin S.**; 346 Southgate Drive, Vernon Hills, IL 60061 (US). **JULIAN, Joseph F.**; 629 Dawes Street, Libertyville, IL 60048 (US). **LI, Chuan**; 555 Longfellow Avenue, Deerfield, IL 60015 (US). **WOZENCROFT, Robert Michael**; 35 Horton Hill, Epsom, Surrey, KT19 8SS (GB). **BICKNELL, Stephen**; 70 Manchester Drive, Kelvindale, Glasgow, G12 0NQ (GB). **DIX, Robert**; 19 Bury Mead, Stanton Harcourt, Witney, Oxford, OX29 5SD (GB).

(74) Agents: **HULSEBERG, Daniel J.** et al.; Baker Botts LLP, 30 Rockefeller Plaza, New York, NY 10112-4498 (US).

(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))*

(54) **Title**: AUTOMATIC INJECTION DEVICE

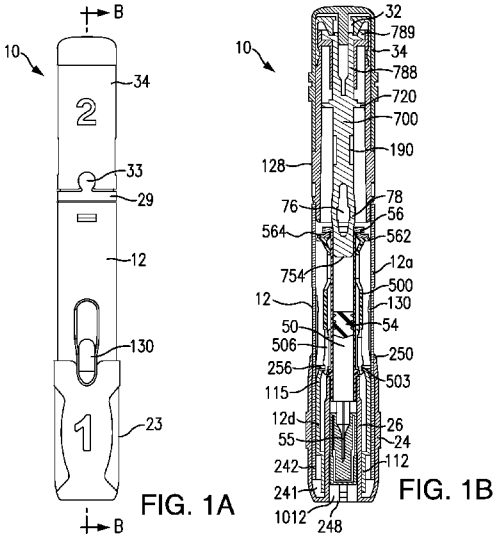


FIG. 1A FIG. 1B

(57) **Abstract**: Automatic injection device includes a housing, a syringe, a plunger, and a syringe carrier. The housing includes a barrel. The barrel includes an elongated window to allow viewing of contents inside the housing. The syringe is disposed within the housing and has a reservoir. The plunger is at least partially disposed within the syringe and includes a visual indicator. The syringe carrier is disposed within the housing and configured to contain the syringe and displace the syringe within the housing between a first position and a second position. The syringe carrier has a first opening and a second opening. The first opening is configured to align with the window and the reservoir when the syringe carrier is in the first position, and the second opening is configured to align with the window and the visual indicator when the syringe carrier is in the second position.

WO 2013/044161 A1