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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 August 2012 (23.08.2012)

WIPO | PCT

(10) International Publication Number
WO 2012/110573 A1

(51) International Patent Classification:
A61M 5/20 (2006.01) *A61M 5/32* (2006.01)

(21) International Application Number:
PCT/EP2012/052640

(22) International Filing Date:
16 February 2012 (16.02.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11155032.3 18 February 2011 (18.02.2011) EP
61/445,610 23 February 2011 (23.02.2011) US

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(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, 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, 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, MD, 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).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

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

(54) **Title**: AUTO-INJECTOR

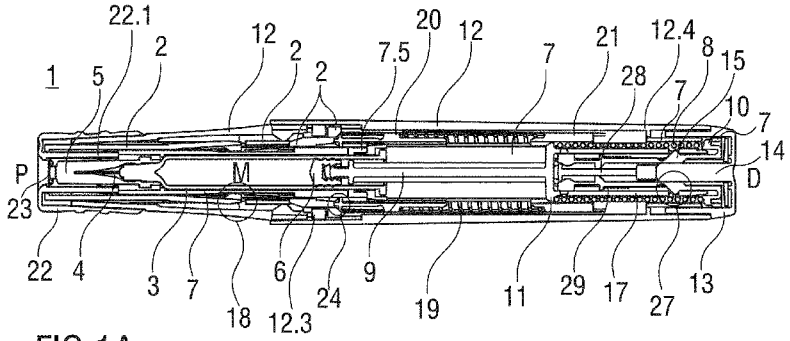


FIG 1A

(57) **Abstract**: The invention refers to an auto-injector (1) for administering a dose of a liquid medicament (M), comprising: - a tubular chassis (2) telescopable in a tubular case (12), - a carrier subassembly comprising a tubular carrier (7) slidably arranged relative to the chassis (2) inside the case (12), the carrier (7) adapted to contain a syringe (3) with a hollow injection needle (4), a drive spring (8) and a plunger (9) for forwarding load of the drive spring (8) to a stopper (6) of the syringe (3), wherein the syringe (3) is lockable for joint axial translation with the carrier (7), - a trigger button (13) arranged distally or laterally in or on the case (12), - a control spring (19) arranged around the carrier (7), - a needle extension control mechanism (24) for coupling a proximal end of the control spring (19) to either the carrier (7) for advancing it for needle extension or to the chassis (2) for needle retraction depending on the relative axial position of the carrier (7) and the chassis (2), - a plunger release mechanism (27) arranged for releasing the plunger (9) for injection when the carrier (7) has at least almost reached an extended proximal position, - a detent mechanism (18) arranged for coupling the chassis (2) to the carrier (7) for joint axial translation relative to the case (12), wherein the detent mechanism (18) is arranged to decouple the chassis (2) from the carrier (7) upon actuation of the trigger button (13) thus allowing the carrier (7) to move relative to the chassis (2) so as to cause the needle extension control mechanism (24) to switch the proximal end of the control spring (19) to the carrier (7) for needle extension, a syringe retraction control mechanism (25) arranged for coupling a distal end of the control spring (19) to either the carrier (7) for needle retraction or to the case (12) otherwise.

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