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

(19) World Intellectual Property Organization
International Bureau

G00002

(43) International Publication Date
5 December 2002 (05.12.2002)

PCT

(10) International Publication Number
WO 02/096488 A1

(51) International Patent Classification[7]: A61M 5/32

(21) International Application Number: PCT/EP02/04008

(22) International Filing Date: 9 April 2002 (09.04.2002)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/282,765 10 April 2001 (10.04.2001) US

(71) Applicant *(for all designated States except US)*: **SOCIETE DE CONSEILS DE RECHERCHES ET D'APPLICATIONS SCIENTIFIQUES SAS** [FR/FR]; 51, 53 rue du Docteur Blanche, F-75016 Paris (FR).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **CHERIF-CHEIKH, Roland** [ES/ES]; Paseo Farigola, 12, E-08860 Castelldefels (ES).

(74) Agents: **LUNT, Mark, George, Francis**; Harrison Goddard Foote, Fountain Precinct, Leopold Street, Sheffield S1 2QD et al. (GB).

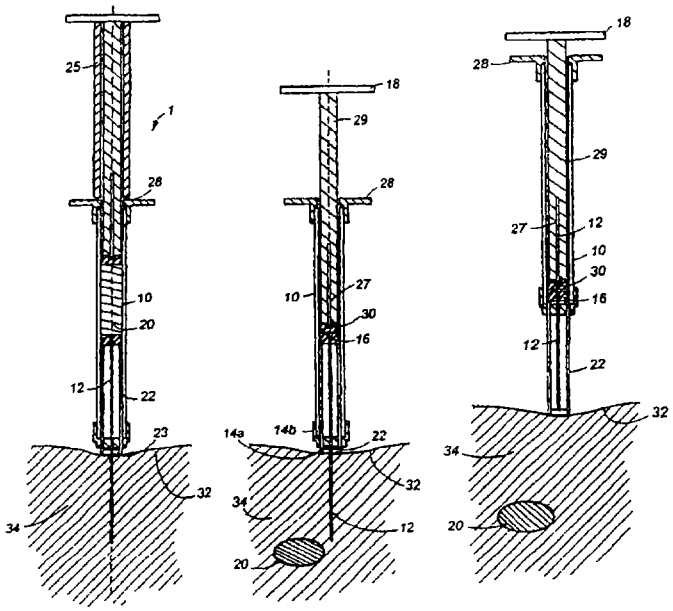
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

[Continued on next page]

(54) Title: SAFETY INJECTION DEVICE FOR A LIQUID OR SEMI-SOLID COMPOSITION



162162

(57) Abstract: In general, the invention features an injection device including a housing, the housing having proximal and distal ends and designed to contain a liquid or semi-solid drug composition; a hollow needle, the needle affixed to the distal end of the housing and extending longitudinally within the housing; a plunger, the plunger arranged to slide within the proximal end of the housing; and a hollow sleeve, the hollow sleeve arranged to cover the needle prior to injection and to retract into the housing during injection ; wherein the device is designed such that when the sleeve is pressed against the subject, the sleeve retracts into the housing and the drug composition is delivered through the needle and into the subject.

WO 02/096488 A1

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.