28 Oct 02

20020649S-4

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

(19) World Intellectual Property Organization
International Bureau

162162

(43) International Publication Date
22 November 2001 (22.11.2001)

PCT

(10) International Publication Number
WO 01/87387 A1

(51) International Patent Classification[7]: A61M 5/32, 5/34

(21) International Application Number: PCT/IB01/00818

(22) International Filing Date: 14 May 2001 (14.05.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
00810416.8 15 May 2000 (15.05.2000) EP

(71) Applicant *(for all designated States except US)*: **ARES TRADING S.A.** [CH/CH]; Château de Vaumarcus, CH-2028 Vaumarcus (CH).

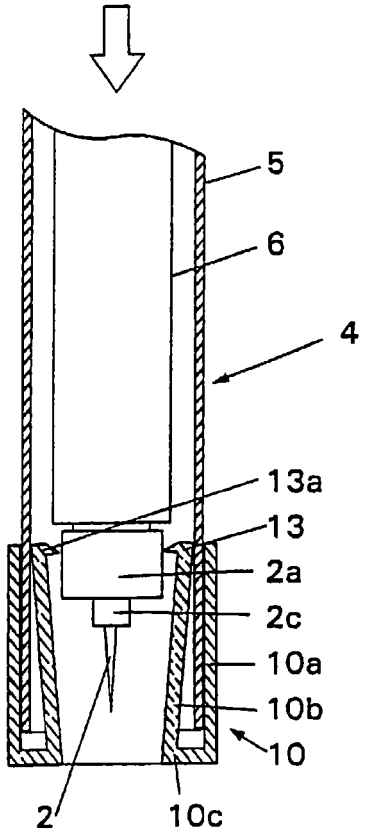
(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **BERGERON, Luc** [CH/CH]; Chemin de la Condémine, CH-1034 Boussens (CH). **BOSSET, Grégoire** [CH/CH]; 39, chemin de Uttins, CH-1208 Preverenges (CH). **MOULIN, Jérôme** [CH/CH]; 48, Grand-Rue, CH-1890 St-Maurice (CH). **SOLDINI, Laurent** [CH/CH]; 14bis, Druey, CH-1018 Lausanne (CH).

(74) Agents: **SAVOYE, Jean-Paul** et al.; Moinas & Savoye S.A., 42, rue Plantamour, CH-1201 Geneva (CH).

(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, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

[Continued on next page]

(54) Title: DEVICE FOR SEPARATING THE CONNECTING END OF A HYPODERMIC NEEDLE FROM THE TIP OF AN INJECTION INSTRUMENT



(57) Abstract: The connecting end (2a) of the hypodermic needle is so designed that it can be attached to and then disconnected from the tip (3) of an injection instrument (4) by pressure, that is, an axial tractional force exerted between the said neele (2) and the said injection instrument (4). The extraction device has an opening (17) delimited by locking elements (13) forming one piece with elastic pieces (10b, 12) so as to allow its diameter to vary between a minimum diameter and a maximum diameter at least equal to the diameter of the said connecting end (2a) and at least one piece (13a) associated with the said locking elements (13) for the purpose of converting an axial force exerted on the said piece (13a) into at least one radial component capable of being applied to the said elastic pieces (10b, 12) so as to deform them radially in order to increase the diameter of the said opening (17) when axial pressure is exerted by the said connecting end (2a).

WO 01/87387 A1

ACTION

(84) **Designated States** *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, 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, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

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.