## (19) World Intellectual Property Organization International Bureau





# (43) International Publication Date 30 May 2002 (30.05.2002)

### **PCT**

# (10) International Publication Number WO 02/041932 A3

(51) International Patent Classification<sup>7</sup>: A61M 5/178

(21) International Application Number: PCT/IL01/01070

(22) International Filing Date:

20 November 2001 (20.11.2001)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

139802 21 November 2000 (21.11.2000) IL

(71) Applicant (for all designated States except US): SER-POMED LTD. [IL/IL]; P.O. Box 4583, 84144 Beer-Sheva (IL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): POPOV, Sergey [IL/IL]; 32/17 Alexander Yanai Street, P.O. Box 4583, 84144 Beer-Sheva (IL).

(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.

(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).

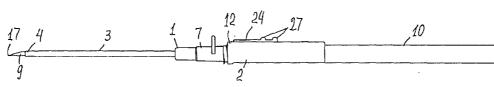
#### **Published:**

with international search report

(88) Date of publication of the international search report: 22 May 2003

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.

(54) Title: CATHETER INSERTION APPARATUS



(57) Abstract: A catheter insertion device (1) including a handle (10), a needle hub (19) disposed inside the handle (10), and a flash chamber (28). A needle (16) is affixed to the needle hub (19) and extends through the handle (10) and a catheter (3). A trigger member (22) retains the needle (16) in a distal position. A slidably disposed securing member (24) prevents the trigger member (22) from accidentally actuating. Actuating the trigger member (22) automatically transposes the needle point into a protected zone by a spring (20). The securing member (24) prevents the catheter unit (1) from disconnecting from the needle assembly (2) until the needle (16) is disposed into the protected zone. The device (1) can be provided with a unidirectional motion mechanism (343, 345) and an expandable sleeve (655) interconnecting a shortened handle (610) with the needle hub (619) to substantially shorten the device in its ready position.



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL01/01070

A. CLASSIFICATION OF SUBJECT MATTER			
IPC(7) : A61M 5/178 US CL : 604/164.01			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation searched (classification system followed by classification symbols)			
U.S.: 604/164.01,164.08,164.12,168.01			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
None			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)			
None			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category *	Citation of document, with indication, where a	Relevant to claim No.	
A	US 5,755,709 A (CUPPY) 26 May 1998, See entire document.		1-71
A	US 5,713,870 A (YOON) 03 February 1998, See entire document.		1-71
A	US 6,056,726 A (ISAACSON) 02 May 2000, See entire document.		1-71
	,		
÷			
<del></del>	documents are listed in the continuation of Box C.	See patent family annex.	
* Special categories of cited documents:		"T" later document published after the inter	national filing date or priority
"A" document defining the general state of the art which is not considered to be of particular relevance		date and not in conflict with the application but cited to understand the principle or theory underlying the invention	
"E" earlier app	olication or patent published on or after the international filing date	"X" document of particular relevance; the considered novel or cannot be considered	
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  "O" document referring to an oral disclosure, use, exhibition or other means		when the document is taken alone	
		"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art	
Date of the actual completion of the international search		Date of mailing of the international search report	
19 July 2002 (19.07.2002)		18 DEC 2002	
Name and ma	iling address of the ISA/US	Authorized officer	
Commissioner of Patents and Trademarks Box PCT		Michael J Haves	
Washington, D.C. 20231			
Facsimile No. (703)305-3230		Telephone No. 703-308-0858	

Form PCT/ISA/210 (second sheet) (July 1998)