



(51) International Patent Classification:

A61F 2/26 (2006.01) A61M 5/142 (2006.01)
A61F 5/41 (2006.01)

(21) International Application Number:

PCT/EP2009/007292

(22) International Filing Date:

9 October 2009 (09.10.2009)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/136,872 10 October 2008 (10.10.2008) US

(71) Applicant (for all designated States except US): **MILUX HOLDING SA** [LU/LU]; 12, rue Guillaume Schneider, L-2522 Luxembourg (LU).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **FORSELL, Peter** [SE/CH]; Aegeristrasse 66, CH-6300 Zug (CH).

(74) Agent: **KLUNKER . SCHMITT-NILSON . HIRSCH**; Destouchesstrasse 68, 80796 München (DE).

(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, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, 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, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (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, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

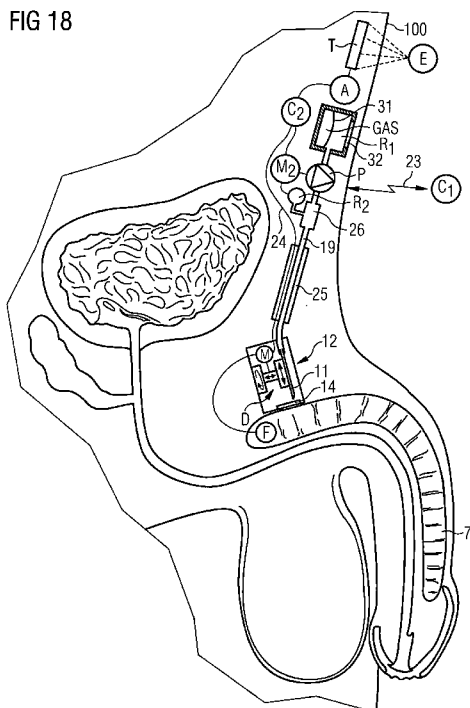
Declarations under Rule 4.17:

— of inventorship (Rule 4.17(iv))

[Continued on next page]

(54) Title: INFUSION OF DRUGS

FIG 18



(57) Abstract: An at least partly implantable system for injecting a substance into a patient's body, in particular a penis erection stimulation system, comprises one or more infusion needles disposed within and implanted along with one or more housings adjacent the patient's left and right corpora cavernosa. A reservoir and a pump are also implanted inside the patient's body to supply the infusion needle with infusion liquid. A drive unit also adapted for implantation inside the patient's body is arranged for advancing and retracting the tip end of the infusion needle such that it penetrates the housing at least in two different penetration areas either simultaneously or in immediate time succession, thereby injecting drugs along with the infusion liquid into the patient's body for stimulating penis erection. The drive unit is configured to laterally displace the tip end of at least one infusion needle in at least two different lateral directions to different penetration sites within said at least one penetration area.

**Published:****(88) Date of publication of the international search report:**

3 June 2010

- *with international search report (Art. 21(3))*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

INTERNATIONAL SEARCH REPORT

International application No

PCT/EP2009/007292

A. CLASSIFICATION OF SUBJECT MATTER

INV. A61F2/26 A61F5/41 A61M5/142

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)

A61F A61M

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2007/051563 A1 (POTENCIA MEDICAL AG [CH]; FORSELL PETER [CH]) 10 May 2007 (2007-05-10) page 17, lines 11-24 page 23, lines 1-25 figure 8	1-2, 4-8, 21
A	US 2006/129028 A1 (KRAKOUSKY ALEXANDER A [US]) 15 June 2006 (2006-06-15) paragraphs [0009], [0060]; figure 9	1, 3, 22
A	FR 2 908 979 A1 (ABDELKADER SAIDI [FR]) 30 May 2008 (2008-05-30) page 11, line 12 - page 12, line 10; figure 8	1
	----- -/--	

☒ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "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
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step 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.
- "&" document member of the same patent family

Date of the actual completion of the international search

25 March 2010

Date of mailing of the international search report

01/04/2010

Name and mailing address of the ISA/

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040,
Fax: (+31-70) 340-3016

Authorized officer

Espuch, Antonio

INTERNATIONAL SEARCH REPORT

International application No
PCT/EP2009/007292

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2001/041824 A1 (ZAPPALA STEPHEN M [US]) 15 November 2001 (2001-11-15) paragraphs [0019], [0020]; figures 1,2 -----	1
A	US 5 518 499 A (AGHA ARIF H [US]) 21 May 1996 (1996-05-21) column 4, line 53 - column 5, line 52; figures 3,6 -----	1

INTERNATIONAL SEARCH REPORT

International application No.
PCT/EP2009/007292

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 149-175
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.
3. ☒ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
3, 22-39
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☒ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- ☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-2, 4-8, 21

An implantable system where the wall is self sealing.

2. claim: 9

An implantable system where the wall has a flap

3. claims: 10-13

An implantable system where the wall comprises a door

4. claim: 14

An implantable system with two needles placed adjacent to the corpus cavernosum

5. claim: 15

An implantable system with a tube at the tip

6. claims: 16-20

An implantable system where the needle is long and flexible bendable

7. claims: 3, 22-39

An implantable system where the needle penetrates two different areas

8. claims: 40-45

An implantable system with special needle lateral displacemen.

9. claims: 46-68

An implantable system with two reservoirs

10. claims: 69-72

An implantable system with a conduit

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

11. claims: 73-80

An implantable system with a cooling system

12. claims: 81-82

An implantable system with a pump

13. claims: 83-84

An implantable system with manual operation means

14. claims: 85-113

An implantable system with a mechanical drive unit

15. claims: 114-119

An implantable system with a motor

16. claims: 120-121

An implantable system with energy supply means

17. claims: 122-126

An implantable system with an energy source

18. claims: 127-136

An implantable system with a control unit

19. claims: 137-144

An implantable system with a feedback sensor

20. claims: 145-148

An implantable system with a tube

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/EP2009/007292

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 2007051563 A1	10-05-2007	AU 2006310807 A1	10-05-2007
		CA 2625954 A1	10-05-2007
		CN 101351240 A	21-01-2009
		EP 1960027 A1	27-08-2008
		JP 2009514580 T	09-04-2009
		US 2007233019 A1	04-10-2007
US 2006129028 A1	15-06-2006	NONE	
FR 2908979 A1	30-05-2008	NONE	
US 2001041824 A1	15-11-2001	NONE	
US 5518499 A	21-05-1996	NONE	