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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, RO, RS, RU, 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.

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**Published:**

- 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))

- (88) **Date of publication of the international search report:**  
10 February 2011

(54) **Title:** EXTERNAL END DEVICE FOR PERMANENT CATHETERS

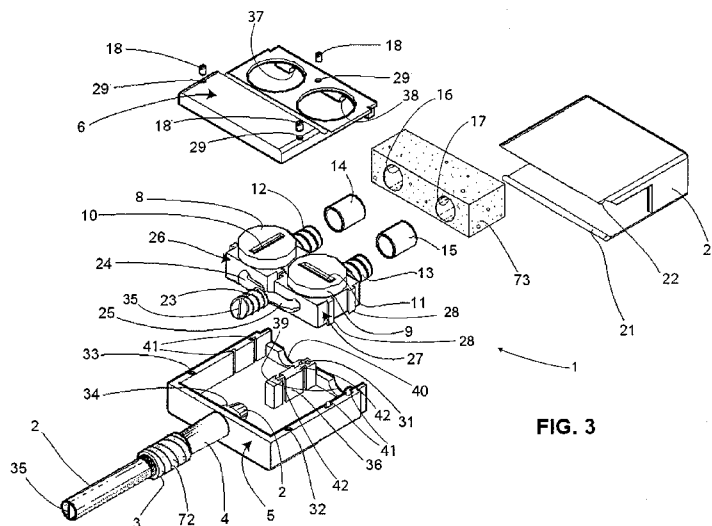


FIG. 3

(57) **Abstract:** An external end device for permanent catheters comprises a container (5) that houses two taps (26, 27) being provided with knobs (8, 9) and having, at one hand, a first connector (23) for the connection to the catheters (2) and, at the other hand, second connectors (12, 13) projecting from the container for the connection to an external equipment. The first connector (23) is connected to the catheter (2) by a coupling (4) exiting the container (5) and externally holding a subcutaneous cuff (3) designed to be positioned in the subcutaneous tissue of the patient's body. The second connectors (12, 13) are provided with caps (14, 15) surrounded by the disposable absorbent material (73) being received in the closure lid (20) and having spaces (16, 17) for housing the caps for protecting them externally from a bacterial attack by means of the antiseptic substance by which it is impregnated. Further an implantation method of the device in a patient is disclosed.

**INTERNATIONAL SEARCH REPORT**

International application No  
**PCT/IT2010/000269**

**A. CLASSIFICATION OF SUBJECT MATTER**  
 INV. A61M39/16 A61M39/22  
 ADD.

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)  
**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.
A	EP 0 070 087 A1 (BAXTER TRAVENOL LAB [US]) 19 January 1983 (1983-01-19) figure 1	1
A	US 4 242 310 A (GREFF RICHARD [US] ET AL) 30 December 1980 (1980-12-30) figures 1-3	1
A	US 5 324 274 A (MARTIN GEOFFREY [CA]) 28 June 1994 (1994-06-28) figures 1-8	1
A	EP 0 227 219 A1 (NIPPON MEDICAL SUPPLY [JP]) 1 July 1987 (1987-07-01) figures 1-3	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	"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
"E" earlier document but published on or after the international filing date	"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
"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)	"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.
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search <b>17 December 2010</b>	Date of mailing of the international search report <b>23/12/2010</b>
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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  <b>Krassow, Heiko</b>
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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IT2010/000269

## 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.: **11, 12**  
because they relate to subject matter not required to be searched by this Authority, namely:  
**see FURTHER INFORMATION sheet PCT/ISA/210**
  
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:

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.:
  
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**

Continuation of Box II.1

Claims Nos.: 11, 12

Claims 11 and 12 define subject-matter considered by this Authority to be covered by the provisions of Rule 67.1(iv) PCT, and no search report has been drawn up on said claims. The subject-matter defined comprises methods for treatment of the human body by surgery, i.e. methods for implanting a catheter into a patient. Consequently, no International Preliminary Examination of that subject-matter (Article 34(4)(a)(i) PCT) was carried out.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No PCT/IT2010/000269
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Patent document cited in search report	Publication date	Publication date	Patent family member(s)	Publication date
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