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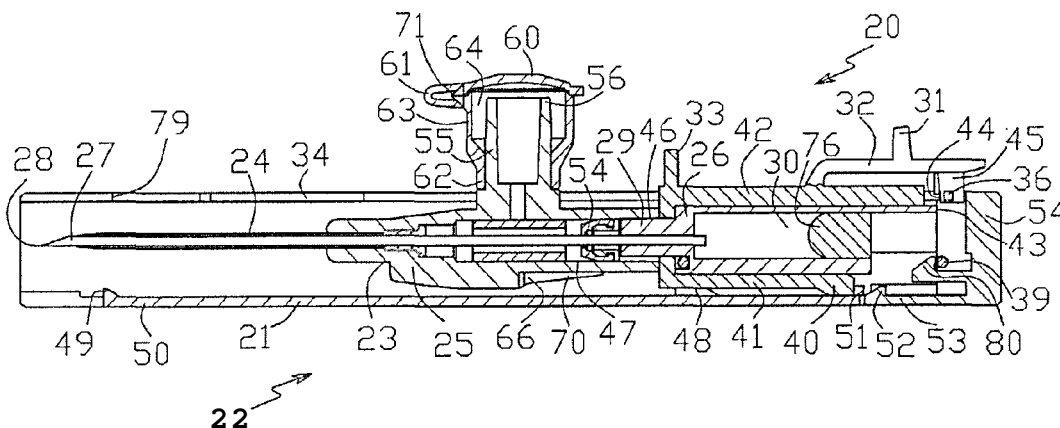
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(54) Title: SAFETY CATHETER INTRODUCER



(57) Abstract: Disclosed is a safety catheter introducer (20) of compact design having decreased length in the shipping and storage states that is also equipped with a passively actuated retraction mechanism for needle retraction into a protected position after use. The safety catheter permits convenient control of the catheter introducer by an associated user using one hand. The safety catheter also permits automatic fixation of introducer constituents in penetration and protection positions without any special operator's actions. The safety catheter includes an improved flash chamber (30) for visualization at the instant an associated patient's blood enters the flash chamber. The safety catheter further includes a safety covering (60) of an injection port (55) that substantially eliminates infecting of the injection port by accidental contact with personal.



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# INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2007/077825

**A. CLASSIFICATION OF SUBJECT MATTER**  
INV. A61M25/06

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 , WPI Data

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/102442 A (OCCUPATIONAL & MEDICAL INNOVAT [AU]; KIEHNE BRUCE LEIGH [AU]) 27 December 2002 (2002-12-27) page 3, line 19 - page 8, line 9	1-8, 10-14
Y	page 9, line 7 - line 27 -----	9,15-22
Y	WO 02/066093 A (SERPOMED LTD [IL]; POPOV SERGEY. [IL]) 29 August 2002 (2002-08-29)	15-22
A	page 5 - page 7 page 10 - page 11 -----	1-13
Y	EP 0 545 671 A (SMITHS INDUSTRIES PLC -[GB]) 9 June 1993 (1993-06-09)	9
A	column 2, line 1 - column 3, line 27 column 5, line 19 - column 6, line 28 ----- -/--	1-14

Further documents are listed in the continuation of Box C.

See patent family annex.

Special categories of cited documents :

<p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"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)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p>	<p>"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</p> <p>"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</p> <p>"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.</p> <p>"&amp;" document member of the same patent family</p>
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Date of the actual completion of the international search	Date of mailing of the international search report
1 April 2008	14/07/2008

Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer  Berndorfer, Urs
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International application No

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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 2005/015053 A1 (PARKER JERRY W [US]) 20 January 2005 (2005-01-20) paragraph [0006] - paragraph [0008] -----	1-22
A	US 2004/122373 A1 (BOTICH MICHAEL J [US] ET AL) 24 June 2004 (2004-06-24) paragraph [0008] - paragraph [0009] -----	1-22

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2007/077825

## 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.:  
because they relate to subject matter not required to be searched by this Authority, namely:
  
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 allsearchable 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.:

1-22

### 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: 1-22

A safety catheter introducer comprising a needle unit and a catheter unit, a handle formed from a hollow elongated housing, a retraction mechanism for needle unit retraction, a catheter coupling mechanism providing a releasable connection between the catheter unit and the needle unit, a retaining coupling mechanism for releasable affixation of the needle unit to the housing during placement of the catheter tube, an actuator for transposing the catheter unit into the penetration position and an automatically actuatable release mechanism retracting the needle unit into the protection position.

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## 2. claims: 23-29

A catheter unit comprising an injection port having a cover including a base part and a cap connected by a link supporting a pivoting movement of the cap, the base part including an upper portion forming a cavity preventing contact between the injection port and the cover surfaces in order to avoid contamination of the injection port.

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## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/077825

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
WO 02102442	A	27-12-2002	CA 2449894	A1 27-12-2002
			CN 1516604	A 28-07-2004
			EP 1395316	A1 10-03-2004
			JP 2004528952	T 24-09-2004
			US 2004138619	A1 15-07-2004
WO 02066093	A	29-08-2002	AU 2002232097	A2 04-09-2002
			CA 2438602	A1 29-08-2002
			CN 1525870	A 01-09-2004
			EP 1395309	A2 10-03-2004
			HK 1069133	A1 25-08-2006
			JP 2004533278	T 04-11-2004
			US 2004116855	A1 17-06-2004
EP 0545671	A	09-06-1993	AT 177017	T 15-03-1999
			DE 69228520	D1 08-04-1999
			DE 69228520	T2 24-06-1999
			JP 7185002	A 25-07-1995
			US 5312359	A 17-05-1994
US 2005015053	A1	20-01-2005	NONE	
US 2004122373	A1	24-06-2004	NONE	