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Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: AGENT DELIVERY CATHETER HAVING AN INFLATION BRIDGE BETWEEN TWO AXIALLY SPACED BAL-LOONS

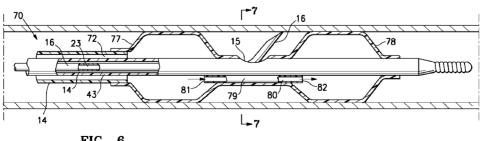


FIG. 6

(57) Abstract: An agent delivery catheter (70) having two or more axially spaced balloons and an inflation bridge providing fluid communication between the two balloons. The catheter generally has a proximal balloon (77), a distal balloon (78), and a tube defining an inflation bridge (79) lumen which is located in part within the inflatable interiors of the balloons, and which extends therebetween, and which has a proximal port (81) within the proximal balloon interior and a distal port (82) within the distal balloon interior to thereby provide for inflation of the distal balloon by placing the distal balloon interior in fluid communication with the proximal balloon interior of the shaft.



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International application No PCT/US2008/085702

A. CLASSIFICATION OF SUBJECT MATTER INV. A61M25/04 A61M25/10

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) $A61\mbox{\it M}$

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. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/072706 A1 (HIBLAR THOMAS [US] ET AL) 13 June 2002 (2002-06-13) paragraphs [0012], [0013], [0017], [0018], [0051] - [0054]; figures 5,6	1,3-5,11
X	US 7 273 469 B1 (CHAN GREGORY WAIMONG [US] ET AL) 25 September 2007 (2007-09-25) column 23, line 55 - column 24, line 51; figure 29	1,5
Α	US 2005/203462 A1 (KATOH OSAMU [JP] ET AL) 15 September 2005 (2005-09-15) paragraphs [0023] - [0037], [0060] - [0066]; figures 6,7	1,11
	-/	

Further documents are listed in the continuation of Box C.	See patent family annex.				
* Special categories of cited documents :	"T" later document published after the international filing date				
"A" document defining the general state of the art which is not considered to be of particular relevance	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 "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. 				
"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	"&" document member of the same patent family				
Date of the actual completion of the international search	Date of mailing of the international search report				
2 March 2009	10/06/2009				
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European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Steiner, Bronwen				

International application, No PCT/US2008/085702

C(Continua	tion). DOCUMENTS CONSIDERED TO BE RELEVANT			
Category*	Citation of document, with indication, where appropriate, of the relevant passages		Relevant to claim No.	
A	US 5 599 294 A (EDWARDS STUART D [US] ET AL) 4 February 1997 (1997-02-04) column 5, line 1 - column 7, line 9; figures 1-3	1,11		
Α .	DE 10 2006 003181 A1 (SIEMENS AG [DE]) 5 July 2007 (2007-07-05) paragraphs [0005], [0037]; figure 5	1,2		
A	WO 92/10142 A (PFIZER HOSPITAL PROD [US]) 25 June 1992 (1992-06-25) the whole document			
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International application No. PCT/US2008/085702

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:
Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
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 reportcovers only those claims for which fees were paid, specifically claims Nos.:
4. Y 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.:
1–13
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: 1-13

Claims 1-13 essentially define an agent delivery catheter having an elongated shaft, two balloons, a tube acting as an inflation bridge lumen and extending between the interiors of the two balloons, a needle-through lumen and a needle-through port located between the two balloons.

2. claims: 14-17

Claims 14 - 17 essentially define a balloon catheter having an elongated shaft, a wire lumen, two balloons, a tube acting as an inflation bridge lumen and extending between the interiors of the two balloons, the tube extending helically between the balloons.

Information on patent family members

International application No PCT/US2008/085702

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