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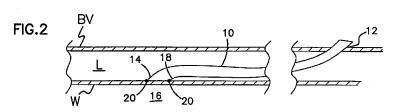
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(54) Title: VASCULAR ACCESS TO EXTRA-VASCULAR SPACE



(57) Abstract: Provided are methods for accessing tissue in the vicinity of a blood vessel. Also provided are devices for use in a lumen of a patient's organ and methods for shunting interior volumes of organs.



International application No. **PCT/US2009/032679**

A. CLASSIFICATION OF SUBJECT MATTER

A61M 25/01(2006.01)i, A61M 25/12(2006.01)i

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)

IPC: A61M 25/01

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Korean Utility models and applications for Utility models since 1975

Japanese Utility models and applications for Utility models since 1975

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) eKIPASS(KIPO internal) "catheter", "lumen", "conduit"

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
US 2007/129719 A1 (KENDALE, AMAR., et al.) 07 JUNE 2007 See Claim 1-225, Figures 1-37	19-26
US 7,112,177 B2 (CHRISTENSEN, MARK A., et al.) 26 SEPTEMBER 2006 See Claims 1-26, Figures 1-27	19-26
US 2007/83215 A1 (HAMER, ROCHELLE M., et al.) 12 APRIL 2007 See Claims 1-23, Figures 1-27	19-26
US 5,336,164 A (SNIDER, MICHAEL T., et al.) 09 AUGUST 1994 See Claims 1-15, Figures 1-11	19-26
	US 2007/129719 A1 (KENDALE, AMAR., et al.) 07 JUNE 2007 See Claim 1-225, Figures 1-37 US 7,112,177 B2 (CHRISTENSEN, MARK A., et al.) 26 SEPTEMBER 2006 See Claims 1-26, Figures 1-27 US 2007/83215 A1 (HAMER, ROCHELLE M., et al.) 12 APRIL 2007 See Claims 1-23, Figures 1-27 US 5,336,164 A (SNIDER, MICHAEL T., et al.) 09 AUGUST 1994

See patent family annex.

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- 'A" document defining the general state of the art which is not considered to be of particular relevance
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- "P" document published prior to the international filing date but later than the priority date claimed
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- "&" document member of the same patent family

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US2009/032679

Box No. II	Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)					
This internat	ional search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:					
bec C o II	ims Nos.: 1-18 cause they relate to subject matter not required to be searched by this Authority, namely: laims 1-18, methods for accessing tissue and for shunting interior volumes of two organs, pertain to a method for treatment of the human or animal body by therapy, as well as diagnostic method, and thus relate to a subject matter which this international Searching Authority is not required, under Article 17(2)(a)(i) of the PCT and Rule 39.1(iv) of the Regulations ander the PCT, to search.					
└ bec	tims Nos.: eause they relate to parts of the international application that do not comply with the prescribed requirements to such an ent that no meaningful international search can be carried out, specifically:					
	nims Nos.: cause 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 Interna	tional Searching Authority found multiple inventions in this international application, as follows:					
1.	all required addtional search fees were timely paid by the applicant, this international search report covers all searchable					
2. As	all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment any additional fee.					
	only some of the required additional search fees were timely paid by the applicant, this international search report covers y those claims for which fees were paid, specifically claims Nos.:					
	required additional search fees were timely paid by the applicant. Consequently, this international search report is tricted 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.					

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/US2009/032679

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2007-0129719 A1	07.06.2007	EP 1883364 A2 EP 2079381 A2 US 2006-0270900 A1	06.02.2008 22.07.2009 30.11.2006
		WO 2006-127238 A2 WO 2006-127238 A3 WO 2008-042034 A2	30.11.2006 30.11.2006 10.04.2008
		WO 2008-042034 A3	10.04.2008
US 07112177 B2	26.09.2006	CA 2517776 A1 EP 1605986 A4 EP 1605986 A2	16.09.2004 25.06.2008 21.12.2005
		JP 2007-524434 A US 2007-0255167 A1 US 2004-0176703 A1	30.08.2007 01.11.2007 09.09.2004
		US 2004-0170703 A1 US 2006-0058702 A1 WO 2004-078235 A2 WO 2004-078235 A3	16.03.2004 16.09.2004 16.09.2004
US 2007-0083215 A1	12.04.2007	CA 2624945 A1	19.04.2007
		EP 1931285 A2 JP 2009-511123 A WO 2007-044405 A2	18.06.2008 19.03.2009 19.04.2007
		WO 2007-044405 A3	19.04.2007
US 05336164 A	09.08.1994	KR 10-1994-0703811 A US 05336164 A US 05487727 A	12. 12. 1994 09.08. 1994 30.01. 1996
		US 05487727 A WO 1993-013828 A3	30.01.1996 22.07.1993