(19) World Intellectual Property Organization

International Bureau



(43) International Publication Date

25 January 2007 (25.01.2007)

(51) International Patent Classification: A61M 29/00 (2006.01)

(21) International Application Number:

PCT/US2005/025370

- (22) International Filing Date: 19 July 2005 (19.07.2005)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicant (for all designated States except US): STOUT MEDICAL GROUP L.P. [US/US]; 410 East Walnut Street, Suite 8, Perkasie, PA 18944 (US).
- (72) Inventors: and
- (75) Inventors/Applicants (for US only): KLESHINSKI, Stephen, J. [US/US]; 599 Country Way, Scituate, MA 02066 (US). RUSSELL, Scott, M. [US/US]; 1329 Willow Street, San Jose, CA 95125 (US).
- (74) Agent: LEVINE, David, A.; Levine Bagade Han LLP, 2483 East Bayshore Road, Suite 100, Palo Alto, CA 94303

(10) International Publication Number WO 2007/011353 A3

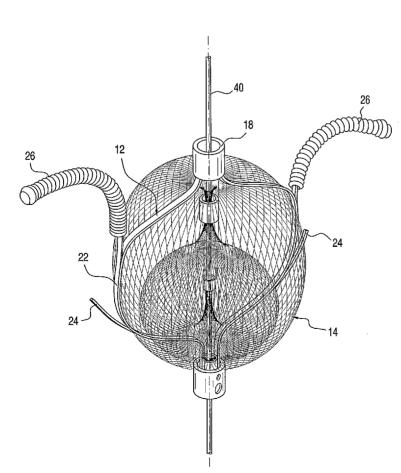
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, 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, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

[Continued on next page]

(54) Title: EMBOLIC FILTERING METHOD AND APPARATUS



(57) Abstract: The present invention relates generally to a device and method for preventing the undesired passage of emboli from a venous blood pool to an arterial blood pool. The invention relates especially to a device and method for treating certain cardiac defects, especially patent foramen ovales and other septal defects, through the use of an embolic filtering device capable of instantaneously deterring the passage of emboli from the moment of implantation. The device consists of a frame, and a braided mesh of sufficient dimensions to prevent passage of emboli through the mesh. The device is preferably composed of shape memory allow, such as nitinol, which conforms to the shape and dimension of the defect to be treated.



(88) Date of publication of the international search report: 25 September 2008

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US05/25370

			1 01/0505/255/0		
A. CLASSIFICATION OF SUBJECT MATTER IPC: A61M 29/00(2006.01)					
USPC: 604/104,114,127,200;606/114,200;623/1.15,1.17,1.18 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)					
U.S. : 604/104, 114, 127, 200; 606/114, 200; 623/1.15, 1.17, 1.18					
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 practicable, search terms used)					
C. DOCI	UMENTS CONSIDERED TO BE RELEVANT				
Category *	Citation of document, with indication, where a	ppropriate, of the releva	nt passages	Relevant to claim No.	
X	US 6,245,012 A (KLESHINSKI) 12 June 2001 (12.06.2001), see entire document.			1-70	
· Y	US 7,001,406 B2 (ESKURI et al) 21 February 2006 (21.02.2006), see entire document.			1-70	
Υ,	US 6,152,947 A (AMBRISCO et al) 28 November 2000 (28.11.2000), see entire document.			1-70	
Further	documents are listed in the continuation of Box C.	See patent fa	amily annex.		
Special categories of cited documents:		"T" later document	published after the intern	national filing date or priority	
'A" document defining the general state of the art which is not considered to be of			conflict with the applica cory underlying the inven	tion but cited to understand the tion	
particular relevance "E" earlier application or patent published on or after the international filing date		considered nov	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 pa considered to it	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		
"O" document	referring to an oral disclosure, use, exhibition or other means		erson skilled in the art	, such comomation being	
"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			
	(19.06.2008) illing address of the ISA/US	Authorized officer			
Mail Stop PCT, Attn: ISA/US			·		
Commissioner for Patents P.O. Box 1450		/JOHN KIM/ Primary Examiner, Art Unit 1797 Telephone No. 571-272-1100			
Alexandria, Virginia 22313-1450 Facsimile No. (571) 273-3201		Telephone No. 571-272-1100			

Form PCT/ISA/210 (second sheet) (April 2007)