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[Continued on next page]

(54) Title: METHODS AND DEVICES FOR TREATING AORTIC ATHEROMA

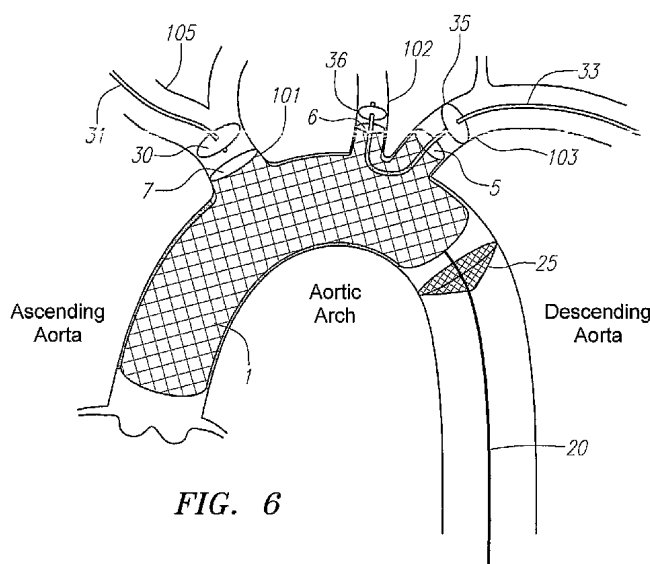


FIG. 6

(57) Abstract: A method for treating both sessile and mobile aortic atheroma is described. A radially expanding device, such as a stent or compliant cast, comprising a generally cylindrical member expandable between a compressed state and an enlarged state is provided. The cylindrical member has a proximal opening, a distal opening, a lumen therebetween, and at least one side opening in the wall of the generally cylindrical member. The methods comprise imaging the aorta to identify position and extent of atheroma. The stent is then advanced into the aortic arch and positioned so that the at least one side-opening is aligned with the takeoff of one or more of the right brachiocephalic artery, the left common carotid artery, or the left subclavian artery. The stent is expanded into contact with the endoluminal surface of the aorta and atheroma is trapped between the stent and the endoluminal surface of the aorta.



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A. CLASSIFICATION OF SUBJECT MATTER

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B. FIELDS SEARCHED

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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. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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X	US 2002/0052648 A1 (MCGUCKIN, JR et al) 02 May 2002 (02.05.2002), figures 2A and 9A-9C, paragraph 72.	69-71 and 73
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Y		1-61 and 72
Y,E	US 7,008,411 B1 (MANDRUSOV et al) 07 March 2006 (07.03.2006), column 18, lines 2-4.	1-61 and 72
Y,E	US 7,144,421 B2 (CARPENTER et al) 05 December 2006 (05.12.2006), figure 6.	2 and 3
Y	US 2001/0001823 A1 (RYAN) 24 May 2001 (24.05.2001), figure2.	6
Y	US 2002/0147491 A1 (KHAN et al) 10 October 2002 (10.10.2002), paragraph 53.	8



Further documents are listed in the continuation of Box C.



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"A"	document defining the general state of the art which is not considered to be of particular relevance	"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
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"O"	document referring to an oral disclosure, use, exhibition or other means		
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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.
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Y	US 2004/0220611 A1 (OGLE) 04 November 2004 (04.11.2004), figure 12.	13, 15, 28, 29, 32, 33, 41, 42, 45, and 46
Y	US 2002/0165573 A1 (BARBUT) 07 November 2002 (07.11.2002), figure 6C.	10, 16-19, 34-39, 47- 52, and 74-76
Y	US 2002/0042650 A1 (VARDI et al) 11 April 2002 (11.04.2002), figures 7-9.	53