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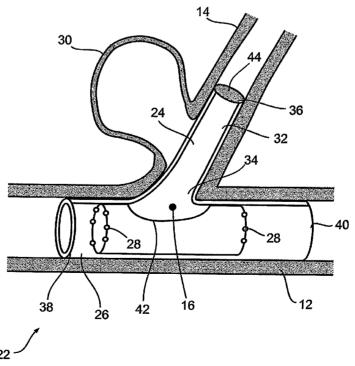
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#### (54) Title: GRAFT-STENT ASSEMBLY



(57) Abstract: A graft-stent assembly (22) comprising a stent (26) and a substantially- tubular graft (24) branching therefrom is disclosed. The stent is preferably deployed in a trunk vessel to support trunk vessel patency while the tubular graft is preferably deployed in a branching vessel. In embodiments, the downstream end of the tubular graft is provided with an expandable ring-shaped support member to anchor the downstream end of the tubular graft in place.





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A. CLASSIFICATION OF SUBJECT MATTER INV. A61F2/06 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) A61F 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. DOCUMENTS CONSIDERED TO BE RELEVANT Category\* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. χ WO 03/065933 A (SENTIENT ENGINEERING & 1 - 11TECHNOL [US]) 14 August 2003 (2003-08-14) page 6, line 9 - page 11, line 22; figures χ WO 02/30329 A (REX MEDICAL L P [US]) 1-718 April 2002 (2002-04-18) Α 8-11 claims 1,9-11,22-24; figures 1A,2A,3,4 page 3, paragraph 5 - page 4, paragraph 4 page 11, paragraph 2 page 12, paragraph 2 page 13, paragraphs 2,3 Further documents are listed in the continuation of Box C. X See patent family annex. Special categories of cited documents: later document published after the international filing date or priority date and not in conflict with the application but document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance invention earlier document but published on or after the international 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date 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) 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 docudocument referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. 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 22 May 2007 31/05/2007 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,

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## INTERNATIONAL SEARCH REPORT

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C(Continua	ation). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A	WO 01/97717 A (INTELLICARDIA INC [US]) 27 December 2001 (2001-12-27) abstract; claims 1,12; figures 1A,2B-2D,3A-3B page 11, line 5 - page 12, line 19 page 13, line 24 - page 14, line 25 page 16, line 24 - page 17, line 5	1,2,5-8 3,4,9-11
X A	US 2002/032458 A1 (BERG TODD A [US] ET AL BERG TODD ALLEN [US] ET AL) 14 March 2002 (2002-03-14)  abstract; figures 1,15,16,18-20,23-25 paragraphs [0055] - [0058], [0069] - [0072]	1,2,5-7 3,4,8-11
A	US 5 617 878 A (TAHERI SYDE A [US]) 8 April 1997 (1997-04-08) abstract; claim 1; figures 2,4,10-12 column 3, lines 28-35,46-62 column 4, line 60 - column 5, line 23	1-11

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/IL2006/001285

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
WO 03065933	A	14-08-2003	AU EP US US	2003209304 A1 1480581 A1 2005228474 A1 2005273162 A1	02-09-2003 01-12-2004 13-10-2005 08-12-2005
WO 0230329	Α	18-04-2002	AU CA	9671601 A 2424042 A1	22-04-2002 18-04-2002
WO 0197717	Α	27-12-2001	AU	6053100 A	02-01-2002
US 2002032458	A1	14-03-2002	NONE		
US 5617878	Α	08-04-1997	NONE		