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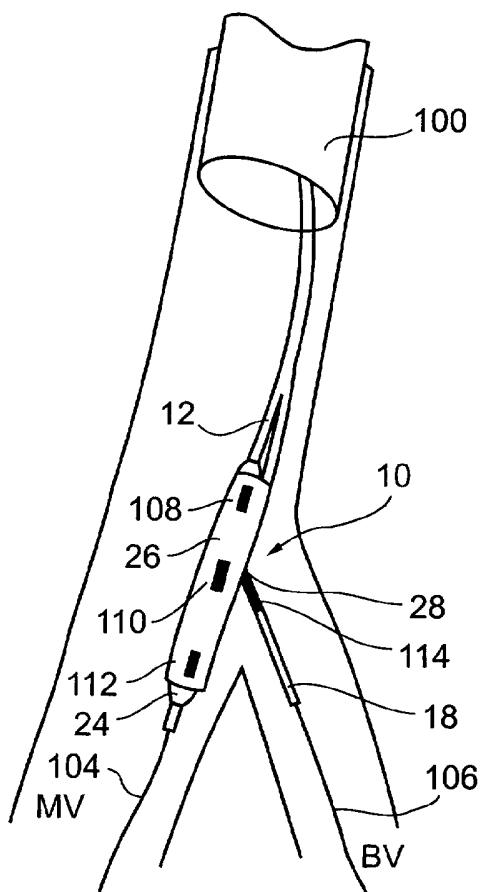
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- (71) Applicant (for all designated States except US): **ADVANCED STENT TECHNOLOGIES, INC.** [US/US]; Suite 201, 7026 Koll Center Parkway, Pleasanton, CA 94566 (US).
- (72) Inventors; and
(75) Inventors/Applicants (for US only): **VARDI, Gil, M.** [IL/US]; 14203 Stifel Lane Court, Town and Country, MO 63017 (US). **DAVIDSON, Charles, J.** [US/US]; 1311 Sunview Lane, Winnetka, IL 60093 (US). **WILLIAMS, Eric** [US/US]; 2068 Davis Drive, Fairfield, CA 94533 (US).
- (74) Agent: **G. E. EHRLICH (1995) LTD.**; 28 Bezalel Street, 52 521 Ramat Gan (IL).
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[Continued on next page]

(54) Title: STENT DELIVERY USING MULTIPLE GUIDEWIRES



(57) Abstract: A method for placing a stent (26) having a side hole (28) into a main vessel such that the side hole (28) is aligned with an ostium of a branch vessel comprises inserting a main vessel guidewire (104) into the main vessel and a branch vessel guidewire (106) into the branch vessel until a distal end of the branch vessel guidewire (106) passes into the branch vessel. A catheter system is positioned over the main vessel guidewire (104) and the branch vessel guidewire (106) and comprises a catheter body (10) having a main vessel guidewire lumen (30) and a branch vessel guidewire lumen (34), and a side member (18) operably coupled to the catheter body (10). The catheter body (10) further includes a balloon (24), with the stent (26) being disposed over the balloon (24). The side member (18) extends into the stent (26) and exits the stent (26) through the side hole (28). The catheter system is advanced over the guidewires until the catheter body (10) passes beyond the ostium of the branch vessel and the side member (18) extends into the branch vessel. Separation of a set of markers (108, 110, 112, 114) is observed to indicate that the catheter body (10) has passed beyond the ostium and the side member (18) extends into the branch vessel. The balloon (24) is inflated to deploy the stent (26).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL02/00150

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61F 2/06

US CL : 623/1.11

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. : Please See Continuation Sheet

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.
Y	US 5,755,735 A (RICHTER et al) 26 May 1998, see entire document.	1, 6, 7, and 9
Y	US 6,129,738A (LASHINSKI et al) 10 October 2000, see the entire document.	1 and 7
Y	US 6,036,682 A (LANGE et al) 14 March 2000, see the entire document.	1, 6, 7, and 9
A	US 6,086,611 A (DUFFY et al) 11 July 2000, see entire document.	1-10



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 or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"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
"E"	earlier application or patent published on or after the international filing date	"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
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"O"	document referring to an oral disclosure, use, exhibition or other means		
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Box PCT
Washington, D.C. 20231

Facsimile No. (703)305-3230

Authorized officer

Paul B. Prebilic

Telephone No. (703) 308-0858

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Continuation of B. FIELDS SEARCHED Item 1:

623/1.11,1,34,1,35

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