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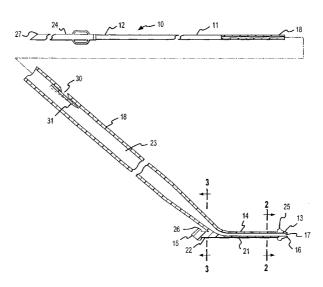
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(54) Title: PERFUSION CANNULA



(57) Abstract: A perfusion cannula having a proximal section configured for attachment to a source of perfusion fluid, and a distal section configured for insertion in a blood vessel for delivering perfusion fluid to the blood vessel. In one embodiment, the cannula generally comprises a shaft having a proximal end, a distal end, a distal shaft section between the proximal and distal ends of the distal shaft section such that an acute angle is formed between the proximal shaft section and the proximal end of the distal shaft section. A lumen in the elongated shaft extends within the proximal shaft section and the distal shaft section to and in fluid communication with a port in the distal end of the distal shaft section. The lumen is configured for delivery of fluid, and may be configured for slidably receiving a guidewire therein.



### INTERNATIONAL SEARCH REPORT

ional Application No PCT/IB 01/01640

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61M39/02 A61B17/12

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

 $\begin{array}{ll} \mbox{Minimum documentation searched (classification system followed by classification symbols)} \\ \mbox{IPC 7} & \mbox{A61M} & \mbox{A61B} \end{array}$ 

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, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 053 901 A (BURBANK JEFFREY H ET AL) 25 April 2000 (2000-04-25)  column 8, line 37 -column 9, line 11; figures	1,3-9, 13,14, 19,20
Χ	 EP 0 791 332 A (CARDIOTHORACIC SYS INC) 27 August 1997 (1997-08-27)	21,22
Α	column 21, line 55 -column 22, line 24; figures	1,2,4, 19,20
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Α	abstract; figures	1,2
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Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents:  A' document defining the general state of the art which is not considered to be of particular relevance  E' earlier document but published on or after the international filing date  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)  O' document referring to an oral disclosure, use, exhibition or other means  P' document published prior to the international filing date but later than the priority date claimed	<ul> <li>'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</li> <li>'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</li> <li>'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.</li> <li>'&amp;' document member of the same patent family</li> </ul>
Date of the actual completion of the international search	Date of mailing of the international search report
22 March 2002	02/04/2002
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, Fax: (+31-70) 340-3016	Kousouretas, I

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PCT/IB 01/01640

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT									
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.							
		Relevant to claim No.							

### FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. Claims: 1-20

A perfusion cannula comprising a distal shaft section having a distal end, a proximal end and a port in the distal end, a proximal shaft section having a lumen, wherein the proximal shaft section is connected to the distal shaft section at a location between the proximal and the distal ends of the distal shaft section, such that an acute angle is formed at the location at which the proximal shaft section is connected to the distal shaft section.

2. Claims: 21-23

A perfusion cannula comprising a distal shaft section having a distal end, a proximal end and a port in the distal end, a proximal shaft section having a lumen, wherein the proximal portion of the distal shaft section has a solid proximal end.

### INTERNATIONAL SEARCH REPORT

Information on patent family members

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