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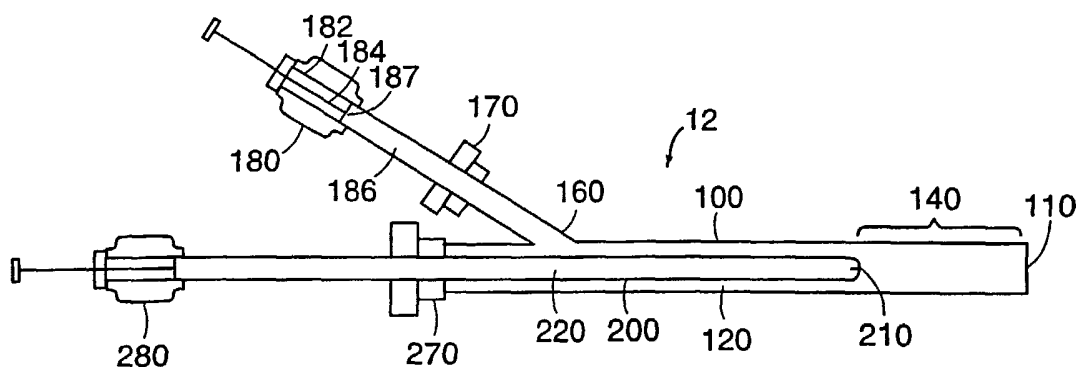
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DELIVERING MATERIAL TO A PATIENT



(57) Abstract: A delivery catheter (10) for delivering material(s) into the body of a mammal can include a first elongated member (100) and a second elongated member (200). At least a portion of the second elongated member (200) can be slidably disposed within a lumen of the first elongated member (100). The delivery catheter (10) can mix two materials and then introduce the mixed materials into the body of a mammal.

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/US 02/25020

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61M25/00

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)
IPC 7 A61M A61B

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X A A A	<p>WO 99 11191 A (BOSTON SCIENT CORP) 11 March 1999 (1999-03-11) page 7, paragraph 2 page 6, paragraph 3; claims 1,4,10,11,17,20,21,46; figures 1,2,4-9 ---</p> <p>WO 00 18469 A (BIOSURGICAL CORP) 6 April 2000 (2000-04-06) abstract; figures ---</p> <p>US 6 146 373 A (PERL JOHN ET AL) 14 November 2000 (2000-11-14) column 6, line 26-32; figures -----</p>	<p>1-12,14, 15 13</p> <p>1-15</p> <p>10,11</p>

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
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- *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

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- *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.
- *&* document member of the same patent family

Date of the actual completion of the international search

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 02/25020

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: 16-30
because they relate to subject matter not required to be searched by this Authority, namely:
Rule 39.1(iv) PCT - Method for treatment of the human or animal body by surgery
2. Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
- No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

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Patent document cited in search report		Publication date		Patent family member(s)	Publication date
WO 9911191	A	11-03-1999	AU	8913998 A	22-03-1999
			EP	1009317 A1	21-06-2000
			WO	9911191 A1	11-03-1999
			US	6258055 B1	10-07-2001
WO 0018469	A	06-04-2000	AU	6284499 A	17-04-2000
			CA	2344280 A1	06-04-2000
			EP	1117460 A1	25-07-2001
			WO	0018469 A1	06-04-2000
US 6146373	A	14-11-2000	AU	1697799 A	10-05-1999
			CA	2306992 A1	29-04-1999
			EP	1030703 A1	30-08-2000
			JP	2001520085 T	30-10-2001
			WO	9920326 A1	29-04-1999