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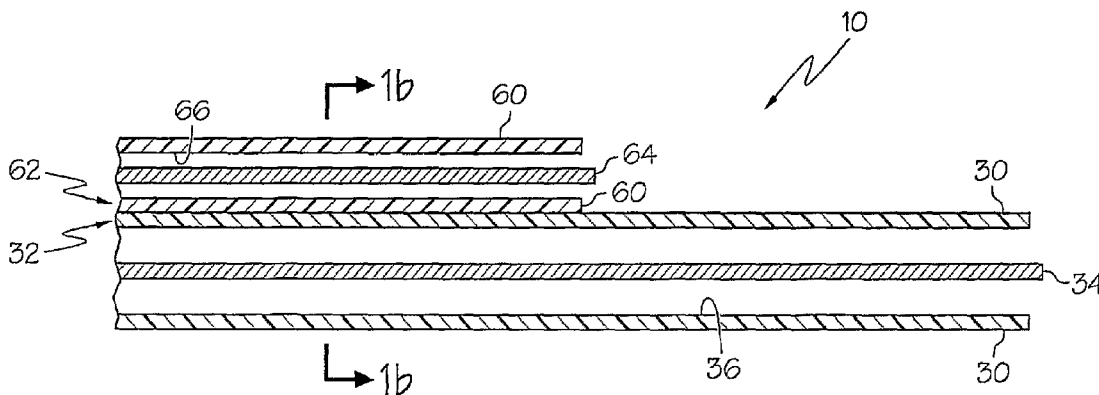
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19 June 2008

(54) Title: ALIGNMENT SHEATH APPARATUS AND METHOD



(57) Abstract: The invention is direction to an alignment apparatus (10) comprising a central sheath (30), an alignment sheath (60), and at least one stent (40). The central sheath and the alignment sheath each have a wall and a distal end where the wall (62) of the alignment sheath is engaged to the wall (32) of the central sheath. The wall of the central sheath defines a central lumen (36) that has a central guide wire (34) extending therethrough and the wall of the alignment sheath defines an alignment lumen (66) that has an alignment guide wire (64) extending therethrough. The distal end of the alignment sheath is positioned proximally to the distal end of the central sheath. The alignment apparatus has at least one stent disposed about one of the alignment guide wire or the central guide wire. The at least one stent has a pre-delivered - state so that when the at least one stent is in the pre-delivered state, it is contained within at least one of the central sheath and the alignment sheath.



WO 2008/024140 A3

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2007/010670

A. CLASSIFICATION OF SUBJECT MATTER
INV. A61F2/84

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.
Y	US 2001/003161 A1 (VARDI GIL M [US] ET AL) 7 June 2001 (2001-06-07) the whole document	1-6, 10
Y	WO 01/34061 A (ANGIOMED GMBH & CO [DE]; DORN JUERGEN [DE]; FEESER JOERG [DE]) 17 May 2001 (2001-05-17) page 18; figure 1f	1-6, 10
A	US 6 096 073 A (WEBSTER MARK [NZ] ET AL) 1 August 2000 (2000-08-01) the whole document	1
A	US 6 143 002 A (VIETMEIER KRISTOPHER H [US]) 7 November 2000 (2000-11-07) the whole document	1

Further documents are listed in the continuation of Box C.

See patent family 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

- *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
- *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
- *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

22 October 2007

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16/04/2008

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INTERNATIONAL SEARCH REPORT

International application No.
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Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 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.:
because they relate to subject matter not required to be searched by this Authority, namely:

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 No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

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

see additional sheet

1. As all required additional search fees were timely paid by the applicant, this international search report covers allsearchable claims.

2. As all searchable claims could be searched without effort justifying an additional fees, this Authority did not invite payment of additional fees.

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.:

see additional sheet(s)

Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

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

1. claims: 1-10

claims 1 - 10 essentially define an alignment apparatus having a central sheath defining a central lumen with a central guide wire running through, an alignment sheath defining an alignment lumen with an alignment guide wire running through, the walls of the two sheaths engaged to each other and the distal end of the alignment sheath being proximal to the distal end of the central sheath, a stent disposed about either the alignment guide wire or the central guide wire and contained in either the central or alignment sheath.

2. claims: 11-17

claims 11 - 17 essentially define: an alignment apparatus having a central sheath defining a central lumen with a central guide wire running through, an alignment sheath defining an alignment lumen with an alignment guide wire running through, the walls of the two sheaths engaged to each other and the distal end of the alignment sheath being proximal to the distal end of the central sheath, a stent with a first portion disposed about at least a portion of the alignment sheath and a second portion disposed about at least a portion of the second sheath.

3. claims: 18-20

claims 18 - 20 essentially define a stent comprising a cylindrical tubular body defining a primary lumen, at least one opening with a proximal end, slit region and distal end in the wall of the body, the proximal opening is the proximal end of the cylindrical body.

4. claim: 21

claim 21 essentially defines a dual stent comprising first and second stents each having a proximal and distal end region, the first stent has a longitudinal axis, the second stent has its distal end region at an oblique angle to the longitudinal axis of the first stent, the proximal end regions of each stent have an edge and the edges are complementary to one another.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/010670

Patent document cited in search report	Publication date	Patent family member(s)	Publication date	
US 2001003161	A1	07-06-2001	US 2003028233 A1	06-02-2003
WO 0134061	A	17-05-2001	AT 368430 T	15-08-2007
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US 6143002	A	07-11-2000	NONE	