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US 60/840,128 (CON)  
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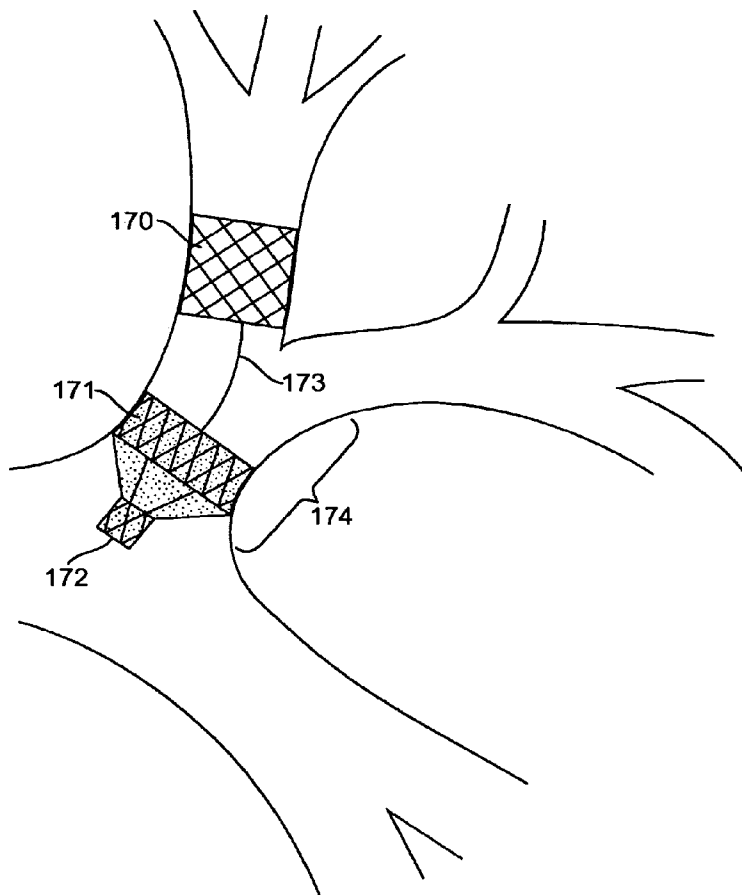
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[Continued on next page]

(54) Title: BRONCHIAL ISOLATION DEVICES FOR PLACEMENT IN SHORT LUMENS



(57) Abstract: Flow control device for a bronchial passageway, comprising a valve member (172) that regulates fluid flow through the flow control device, a frame (171) coupled to the valve member and a seal or membrane covering at least a portion of the frame. In one embodiment the device comprises a first frame (171) and a second frame (170) connected by a tether (173).

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IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US (patent), UZ, VC, VN, ZA, ZM, ZW.

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PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

**Declaration under Rule 4.17:**

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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— *with international search report*

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15 May 2008

INTERNATIONAL SEARCH REPORT

International application No  
PCT/US2007/018689

A. CLASSIFICATION OF SUBJECT MATTER  
INV. A61F2/04

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 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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2004/055606 A1 (HENDRICKSEN MICHAEL [US] ET AL) 25 March 2004 (2004-03-25) paragraphs [0067] - [0124]; figures 1-33	1-10, 13-15
A	-----	16-21
X	US 2006/076023 A1 (RAPACKI ALAN [US] ET AL) 13 April 2006 (2006-04-13) paragraphs [0011] - [0015], [0118] - [0132], [0146], [0159], [0172] - [0175]; figures 1-31, 59-71	1-10, 13-15 16-21
Y	-----	
X	US 6 293 951 B1 (ALFERNESS CLIFTON A [US] ET AL) 25 September 2001 (2001-09-25) column 2, line 56 - column 3, line 5 column 5, line 48 - column 7, line 13 figures 1,2,8-13	13-15
Y	-----	1-6
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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

Date of mailing of the international search report

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C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6 305 436 B1 (ANDERSEN ERIK [DK] ET AL) 23 October 2001 (2001-10-23) column 8, line 42 - column 9, line 54; figures 4-5c column 13, lines 60-65 -----	7-10, 13-15
Y	EP 1 579 823 A (ATRITECH INC [US]) 28 September 2005 (2005-09-28) paragraphs [0006], [0055] - [0060], [0069], [0071]; figures 5-22 -----	1-6, 16-21
X	US 2005/103340 A1 (WONDKA ANTHONY D [US]) 19 May 2005 (2005-05-19)	13-15
Y	paragraph [0022]; figures 1-4g,12b-15c -----	16-21
A	US 6 174 323 B1 (BIGGS MICHAEL J [US] ET AL) 16 January 2001 (2001-01-16) abstract; figures 19,20 -----	16-21

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US2007/018689

## 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.: 11, 12  
because they relate to subject matter not required to be searched by this Authority, namely:  
see FURTHER INFORMATION sheet PCT/ISA/210
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:

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.:

### 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**

Continuation of Box II.1

Claims Nos.: 11,12

Claims 11 and 12 relate to a method of implanting a fluid flow control device in a bronchial passageway. Such a method implies surgical steps to access the patient's bronchial passageway target of the device implantation.

Subject-matter relating to the treatment of the human or animal body by surgery is subject-matter which this International Searching Authority is not required, under the Regulations, to search. For this reason, according to Article 17(2)(a)(i) PCT the subject-matter of claims 11 and 12 has not been searched.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2007/018689

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 2004055606	A1	25-03-2004	NONE
US 2006076023	A1	13-04-2006	NONE
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