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(54) Title: SYSTEMS AND METHODS FOR TREATMENT OF SLEEP APNEA

(57) Abstract: An implant for treating an obstructive airway disorder includes an elongate implant body configured for implanting in airway-interface tissue. The implant body has a medial portion extending between first and second anchoring end portions. The medial portion of the implant body is axially compliant and the end portions are axially non-compliant. Methods of treating an airway disorder comprising implanting an axially-extending implant in an airway-interface tissue are also provided.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2011/062706**A. CLASSIFICATION OF SUBJECT MATTER****A61F 5/56(2006.01)i, A61F 2/02(2006.01)1, A61L 27/14(2006.01)i**

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 5/56; A61F 2/02; A01K 29/00; A61F 2/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) & Keywords: sleep apnea, airway disorder, implant

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2007-0227545 AI (TIMOTHY R. CONRAD et al.) 04 October 2007 See Abstract, Paragraphs 0025-0030, Figures 1-4, 8, 10	1-20
X	US 2006-0207606 AI (CHAD C. ROUE et al.) 21 September 2006 See Abstract, Paragraph 0037, Figures 1-6, 13, 29, Claims 1-34	1-20
A	WO 02-076354 AI (PI MEDICAL, Inc.) 03 October 2002 See Abstract, Figure 11, Claims 1, 4	1-20
A	LIS 2009-0177027 AI (EDWARD M. GILLIS) 09 July 2009 See Abstract, Figures 9C, 24, 25, Claims 1-36	1-20
A	US 2008-0188947 AI (IRA SANDERS) 07 August 2008 See Abstract, Figure 5A	1-20
A	WO 2010-045546 AI (LINGUAFLEX, LLC) 22 April 2010 See Abstract, Figure 1B	1-20
PX	OS 2011-0226263 AI (EDWARD M. GILLIS et al.) 22 September 2011 See Whole-document	1-20

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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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

"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

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"&" 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/US20 11/062706

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.: 2 1
because they relate to subject matter not required to be searched by this Authority, namely:
Claim 2 1 pertains to methods for treatment or diagnosis of the human body by therapy, and thus relate to a subject matter which this International Searching Authority is not required, under Article 17(2)(a)(i) of PCT and Rule 39.1(iv) of the Regulations under the PCT, to search.
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 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 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

INTERNATIONAL SEARCH REPORT

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