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(54) Title: DEVICES, SYSTEMS, AND METHODS FOR CLOSING THE LEFT ATRIAL APPENDAGE

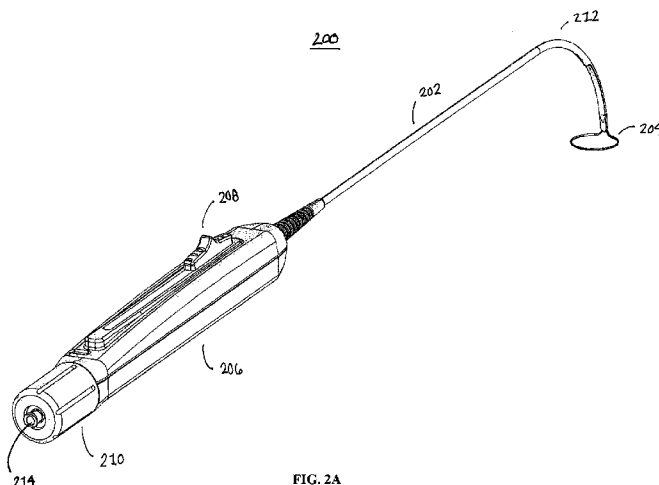


FIG. 2A

(57) Abstract: Described here are devices, systems and methods for closing the left atrial appendage (114). Some of the methods described here utilize one or more guide members having alignment members to aid in positioning of a closure device (200). In general, these methods include advancing a first guide (1300) having a first alignment member (1304) into the left atrial appendage, advancing a second guide (1302), having a second alignment member (1306), into the pericardial space (116), aligning the first and second alignment members, advancing a left atrial appendage closure device into the pericardial space and adjacent to the left atrial appendage, and closing the left atrial appendage with the closure device. In these variations, the closure device typically has an elongate body (202) having a proximal end and a distal end, and a closure element (204) at least partially housed within the elongate body. The closure element comprises a loop defining a continuous aperture therethrough.



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INTERNATIONAL SEARCH REPORT

International application No
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A. CLASSIFICATION OF SUBJECT MATTER
INV. A61B17/12

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)
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 Y	US 5 281 238 A (CHIN ALBERT K [US] ET AL) 25 January 1994 (1994-01-25) column 4, line 48 - column 5, line 2 column 5, lines 30-48 column 5, lines 59-61 column 6, lines 2-10 figures 7,9	40-43, 45, 54-56 44, 52, 53, 57
X	EP 1 010 397 A (AMI GMBH [AT]) 21 June 2000 (2000-06-21) figures 1,5 paragraphs [0001], [0004], [0017], [0027], [0030], [0031]	40, 45, 54, 56
Y	US 5 908 429 A (YOON INBAE [US]) 1 June 1999 (1999-06-01) column 9, lines 63-65	44

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

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

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INTERNATIONAL SEARCH REPORT

International application No

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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.
Y	WO 96/40356 A (EP TECHNOLOGIES [US]) 19 December 1996 (1996-12-19) figure 24A page 10, lines 11-22 page 11, line 23 - page 12, line 5 page 17, lines 19-32 -----	52,53,57
X	US 2006/253129 A1 (LIDDICOAT JOHN R [US] ET AL) 9 November 2006 (2006-11-09) paragraphs [0126] - [0145] paragraphs [0178], [0179] figures 5,12,16,17 -----	58-74
A	US 2004/260273 A1 (WAN ELAINE Y [US]) 23 December 2004 (2004-12-23) the whole document -----	58-74
A	US 2004/102804 A1 (CHIN ALBERT K [US]) 27 May 2004 (2004-05-27) the whole document -----	58-74
P,A	WO 2008/017080 A (HANSEN MEDICAL INC [US]; MOLL FREDERIC H [US]; WALLACE DANIEL T [US];) 7 February 2008 (2008-02-07) the whole document -----	58-74
A	US 2006/020336 A1 (LIDDICOAT JOHN R [US]) 26 January 2006 (2006-01-26) the whole document -----	58-74
A	WO 2004/066828 A (ORIGIN MEDSYTEMS INC [US]) 12 August 2004 (2004-08-12) the whole document -----	58-74

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2008/003938

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.: 1-39, 75-82
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 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.:

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: 40-57

A ligaturing instrument for closing the left atrial appendage comprising a closure element loop and a suture loop;

2. claims: 58-74

A system for closing the left atrial appendage comprising a ligaturing instrument and two guides;

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/US2008/003938

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