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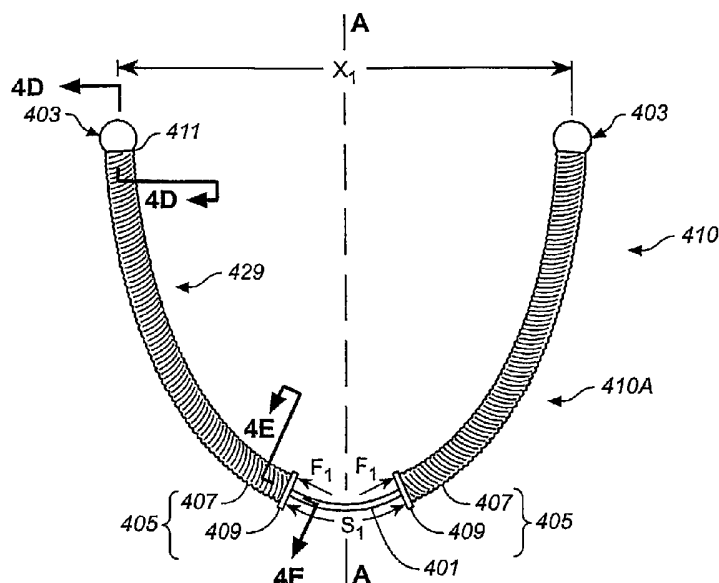
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(54) Title: SEALING CLIP, DELIVERY SYSTEMS, AND METHODS



(57) Abstract: A sealing clip for sealing or holding punctures or openings in tissue closed is applied from the inner surface of the tissue. In one embodiment, the clip has piercing members for penetrating the tissue from an inner surface thereof adjacent the opening. A delivery apparatus is used to releasably hold the clip in one configuration for introduction of the clip through the puncture or opening and expand the clip to a more open configuration for pulling the clip through the tissue as the delivery apparatus is retracted. Further retraction of the delivery apparatus causes the edges of the tissue surrounding the opening to move along the clip and come together after which the clip is released and closed to hold the tissue edges of the opening together. In the case where the clip has a memory set closed shape, the clip returns toward that shape after being released to hold the tissue edges of the opening together, thereby holding the opening closed.

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INTERNATIONAL SEARCH REPORT

International application No.

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A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61B 17/08

US CL : 606/158

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)
U.S. : 606/158,139-157

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 practicable, search terms used)
EAST-ANASTOMOSIS, COIL, SPRING, PIERCE, RETRACT, WITHDRAW

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,533,812 B2 (SWANSON, ET AL.) 18 MARCH 2003 (18.03.2003), SEE FIG. 6,9,10	30
X	US 5,817,113 A (GIFFORD,III ET AL.) 06 OCTOBER 1998 (06.10.1998), SEE FIG. 27	30
X	US 6,551,332 B1 (NGUYEN, ET AL.) 22 APRIL 2003 (22.04.2003), SEE FIG. 1B,1C, 12	1,4-15

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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