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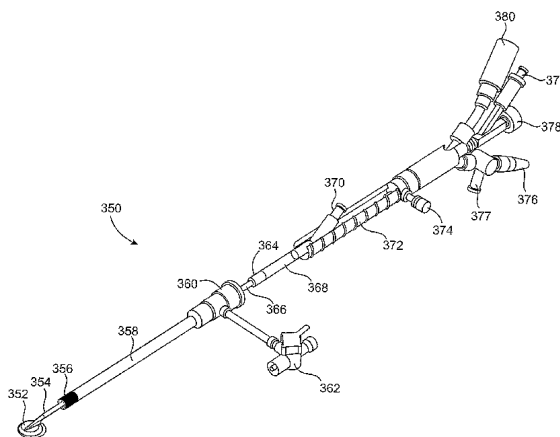
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(54) Title: METHODS AND APPARATUS TO ACHIEVE A CLOSURE OF A LAYERED TISSUE DEFECT



(57) Abstract: Methods for treating anatomic tissue defects such as a patent foramen ovale generally involve positioning a distal end of a catheter device at the site of the defect, exposing a housing and energy transmission member from the distal end of the catheter, engaging the housing with tissues at the site of the defect, applying suction or other approximating tool to the tissue via the housing to bring the tissue together, and applying energy to the tissue with the energy transmission member or to deliver a clip or fixation device to substantially close the defect. Apparatus generally include a catheter body, a housing extending from a distal end of the catheter body for engaging tissue at the site of the defect, and further adapted to house a fusing or fixation device such as an energy transmission member adjacent a distal end of the housing, or a clip or fixation delivery element.

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FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT,
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 USPC: 606/49
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B. FIELDS SEARCHED
 Minimum documentation searched (classification system followed by classification symbols)
 U.S. : 606/27-52

 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)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,416,505 (Fleischman et al.) 09 July 2002 (07.09.2002), entire document.	1-423
Y	US 5,709,224 (Behl et al.) 20 January 1998 (20.01.1998), entire document.	1-423
Y	US 6,273,886 (Edwards et al.) 14 August 2001 (08.14.2001), entire document.	1-423

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	"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
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