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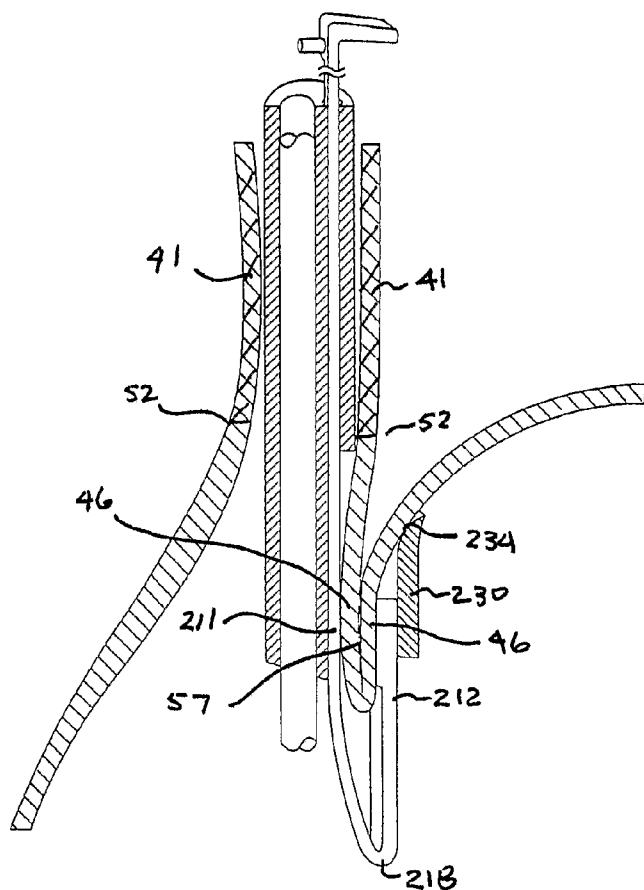
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[Continued on next page]

(54) Title: TRANSORAL ENDOSCOPIC GASTROESOPHAGEAL FLAP VALVE RESTORATION DEVICE, ASSEMBLY, SYSTEM AND METHOD



(57) Abstract: The invention provides a device, assembly, and method for transoral endoscopic restoration of a gastroesophageal flap valve. The invention also provides a self-steering and self-closing tissue fixation device for tissue fixation, and an invaginator device for gripping and maneuvering tissue. The restoration device includes a longitudinal member arranged for transoral placement into a stomach, a tissue shaper carried on the longitudinal member that causes stomach tissue to assume a shape related to a gastroesophageal flap, and a tissue fixation device that maintains the shaped stomach tissue in a shape approximating a gastroesophageal flap. The tissue shaper may include a mold. The gastroesophageal flap may have a length greater than two centimeters and sufficient to cover its associated stomach opening.

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**A. CLASSIFICATION OF SUBJECT MATTER**  
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**B. FIELDS SEARCHED**

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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 6,592,596 B1 (GEITZ) 15 July 2003 (15.07.2003) , entire document.	1-14,18-23
Y	US 5,766,184 A (MATSUNO et al) 16 June 1998 (16.06.1998), column 4 line 32.	4,12,19-21,29
Y	US 6,494,888 B1 (LAUFER et al) 17 December 2002 (17.12.2002), figures 9a-9f.	15-17,24-30
Y	US 6,663,639 B1 (LAUFER et al) 16 December 2003 (16.12.2003), paragraph bridging columns 1 and 2.	15-17,24-30
Y	US 6,149,667 A (HOVLAND et al) 21 November 2000 (21.11.2000), figure 2, elements 80,90.	26,27

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

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"P"	document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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