



(12) **United States Patent**
Viola

(10) **Patent No.:** **US 9,510,831 B2**
(45) **Date of Patent:** ***Dec. 6, 2016**

(54) **MAGNETIC COMPRESSION ANASTOMOSIS DEVICE**

A61B 2017/111; A61B 2017/1135; A61B 17/115; A61B 17/32053; A61B 2017/1139; A61B 17/32075; A61B 2017/1132

(71) Applicant: **Covidien LP**, Mansfield, MA (US)

USPC 606/151, 153; 227/180.1
See application file for complete search history.

(72) Inventor: **Frank Viola**, Sandy Hook, CT (US)

(73) Assignee: **Covidien LP**, Mansfield, MA (US)

(56) **References Cited**

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 14 days.

This patent is subject to a terminal disclaimer.

U.S. PATENT DOCUMENTS

3,986,493 A	10/1976	Hendren, III	
4,338,937 A	7/1982	Lerman	
4,765,332 A	8/1988	Fischell et al.	
4,917,114 A	4/1990	Green et al.	
5,250,058 A *	10/1993	Miller	A61B 17/11 24/615

(Continued)

(21) Appl. No.: **14/481,966**

(22) Filed: **Sep. 10, 2014**

FOREIGN PATENT DOCUMENTS

(65) **Prior Publication Data**

US 2014/0379011 A1 Dec. 25, 2014

EP	0517488 A1	12/1992
EP	0595094 A2	5/1994

(Continued)

Related U.S. Application Data

(63) Continuation of application No. 14/175,353, filed on Feb. 7, 2014, now Pat. No. 8,920,446, which is a continuation of application No. 12/486,846, filed on Jun. 18, 2009, now Pat. No. 8,685,046.

(60) Provisional application No. 61/086,340, filed on Aug. 5, 2008.

OTHER PUBLICATIONS

English machine translation from EPO for FR 2 760 627 by Pozzi et al.

(Continued)

(51) **Int. Cl.**

A61B 17/08	(2006.01)
A61B 17/11	(2006.01)
A61B 17/00	(2006.01)

(52) **U.S. Cl.**

CPC **A61B 17/11** (2013.01); **A61B 2017/00876** (2013.01); **A61B 2017/111** (2013.01); **A61B 2017/1135** (2013.01)

Primary Examiner — Katherine M Shi

(57) **ABSTRACT**

An apparatus for joining organ wall portions of first and second hollow organs, including first and second connectors, wherein the first and second connectors are magnetically attracted to one another. A device for delivering and deploying the first and second connectors to portions of the first and second hollow organs can be provided, wherein the device is configured and dimensioned to axially align the first and second connectors for performing circular anastomosis of the first and second hollow organs.

(58) **Field of Classification Search**

CPC A61B 17/11; A61B 2017/00876;

13 Claims, 10 Drawing Sheets

