

Title (en)

SYSTEMS AND METHODS FOR ELECTRICAL STIMULATION OF BIOLOGICAL SYSTEMS

Title (de)

SYSTÈME UND VERFAHREN ZUR ELEKTRISCHEN STIMULATION VON BIOLOGISCHEN SYSTEMEN

Title (fr)

SYSTÈMES ET PROCÉDÉS DE STIMULATION ÉLECTRIQUE DE SYSTÈMES BIOLOGIQUES

Publication

EP 3071291 A4 20170802 (EN)

Application

EP 14863570 A 20141120

Priority

- US 201361906815 P 20131120
- US 201361906812 P 20131120
- US 2014066565 W 20141120

Abstract (en)

[origin: WO2015077425A1] Systems and methods for the treatment of gastroesophageal reflux disease (GERD) include at least one electrically stimulating electrode coupled to a pulse generator. Individuals with GERD are treated by implanting a stimulation device within and/or proximate the patient's lower esophageal sphincter, gastric fundus, or other nearby gastrointestinal structures and applying electrical stimulation to the patient's lower esophageal sphincter and/or fundus, in accordance with certain predefined protocols. Electrical stimulation provided by the disclosed systems results in an increase in the length of the high pressure zone of the LES and/or modulation of the receptive relaxation response of the fundus to decrease gastric pressure, creating a longer barrier to the reflux of gastric contents or increasing functional lower esophageal pressure respectively, thereby treating GERD.

IPC 8 full level

A61N 1/36 (2006.01)

CPC (source: EP US)

A61N 1/36007 (2013.01 - EP US); A61N 1/3614 (2017.07 - EP US)

Citation (search report)

- [X] US 2011307027 A1 20111215 - SHARMA VIRENDER K [US], et al
- [X] US 2013035740 A1 20130207 - SHARMA VIRENDER K [US], et al
- [X] WO 2012151449 A1 20121108 - ENDOSTIM INC [US], et al
- [A] US 2012265103 A1 20121018 - POLICKER SHAI [US], et al
- [A] US 2012232610 A1 20120913 - SOFFER EDY E [US], et al
- See references of WO 2015077425A1

Cited by

US10376694B2; US10603489B2; US11517749B2

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2015077425 A1 20150528; AU 2014352977 A1 20160609; CN 105899256 A 20160824; EP 3071291 A1 20160928;
EP 3071291 A4 20170802

DOCDB simple family (application)

US 2014066565 W 20141120; AU 2014352977 A 20141120; CN 201480072302 A 20141120; EP 14863570 A 20141120