

Title (en)

MULTIFUNCTIONAL GUIDEWIRE ASSEMBLIES AND SYSTEM FOR ANALYZING ANATOMICAL AND FUNCTIONAL PARAMETERS

Title (de)

MULTIFUNKTIONELLE FÜHRUNGSDRAHTANORDNUNGEN UND SYSTEM ZUR ANALYSE ANATOMISCHER UND FUNKTIONS-PARAMETER

Title (fr)

ENSEMBLES FILS-GUIDES MULTIFONCTIONNELS ET SYSTÈME POUR ANALYSER DES PARAMÈTRES ANATOMIQUES ET FONCTIONNELS

Publication

EP 2717759 A1 20140416 (EN)

Application

EP 12800949 A 20120420

Priority

- US 201113159298 A 20110613
- US 201113305630 A 20111128
- US 2012034557 W 20120420

Abstract (en)

[origin: WO2012173697A1] Multifunctional guidewire assemblies and system for analyzing anatomical and functional parameters are described. Using a single guidewire, functional and anatomical measurements and identification of lesions may be made. Functional measurements such as pressure may be obtained with a pressure sensor on while anatomical measurements such as luminal dimensions may be obtained by utilizing an electrode. The vascular network and stenosed lesions may be modeled into an equivalent electrical network and solved based on the measured parameters. Treatment plan options may be constructed where each plan may correspond to the treatment of a subset of particular lesions. The anatomical outcome for each treatment plans may be estimated and the equivalent modified electrical parameters may be determined. Then, each of the electrical networks for each plan may be solved to determine the functional outcome for each treatment plan and the outcomes for all treatment plans may be presented to a physician.

IPC 8 full level

A61B 5/00 (2006.01); **A61B 5/296** (2021.01)

CPC (source: EP US)

A61B 5/02007 (2013.01 - EP US); **A61B 5/0538** (2013.01 - EP US); **A61B 5/068** (2013.01 - EP); **A61B 5/1076** (2013.01 - EP US); **A61B 5/6852** (2013.01 - EP); **A61M 25/10188** (2013.11 - EP)

Cited by

JP2014530639A; JP2016165471A

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 2012173697 A1 20121220; AU 2012271236 A1 20140116; BR 112013031673 A2 20161206; CA 2839158 A1 20121220; CN 103732132 A 20140416; EP 2717759 A1 20140416; EP 2717759 A4 20141210; JP 2014530639 A 20141120; JP 2016165471 A 20160915; JP 5911570 B2 20160427; JP 6114853 B2 20170412

DOCDB simple family (application)

US 2012034557 W 20120420; AU 2012271236 A 20120420; BR 112013031673 A 20120420; CA 2839158 A 20120420; CN 201280039464 A 20120420; EP 12800949 A 20120420; JP 2014515818 A 20120420; JP 2016065940 A 20160329