Title (en)

SYSTEM AND METHOD FOR IDENTIFYING A LOCATION AND/OR AN ORIENTATION OF AN ELECTROMAGNETIC SENSOR BASED ON A MAP

Title (de)

SYSTEM UND VERFAHREN ZUR IDENTIFIZIERUNG EINER POSITION UND/ODER AUSRICHTUNG EINES ELEKTROMAGNETISCHEN SENSOR AUF BASIS EINER KARTE

Title (fr)

SYSTÈME ET PROCÉDÉ POUR IDENTIFIER L'EMPLACEMENT ET/OU L'ORIENTATION D'UN CAPTEUR ÉLECTROMAGNÉTIQUE SUR LA BASE D'UNE CARTE

Publication

EP 3531950 A4 20200527 (EN)

Application

EP 17863634 A 20171026

Priority

- US 201615337166 A 20161028
- US 201615337129 A 20161028
- US 2017058421 W 20171026

Abstract (en)

[origin: WO2018081356A1] Systems and methods for identifying a location and/or an orientation of an electromagnetic (EM) sensor navigated within an EM volume are provided. Calculated EM field strengths at each gridpoint of a second set of gridpoints of the EM volume are retrieved from a memory. An EM field is generated by way of an antenna assembly. A measured EM field strength is received from the EM sensor. A first gridpoint among a first set of gridpoints of the EM volume is identified based on the measured EM field strength and a high density (HD) map. The location and/or the orientation of the EM sensor is identified based on the HD map, using the first gridpoint as an initial condition, with the second set of gridpoints also including the first set of gridpoints.

IPC 8 full level

A61B 34/20 (2016.01); **A61B 5/06** (2006.01); **G01R 33/24** (2006.01)

CPC (source: EP)

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Citation (search report)

- [XY] WO 9742517 A1 19971113 - BIOSENSE INC [US], et al
- [X] US 2004102696 A1 20040527 - GOVARI ASSAF [IL]
- [Y] EP 1174082 A1 20020123 - BIOSENSE INC [US]
- See references of WO 2018081356A1

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 2018081356 A1 20180503; AU 2017348161 A1 20190502; AU 2017348161 B2 20220630; CA 3040718 A1 20180503; CN 109890312 A 20190614; CN 109890312 B 20220401; EP 3531950 A1 20190904; EP 3531950 A4 20200527; JP 2020503082 A 20200130; JP 7035043 B2 20220314

DOCDB simple family (application)

US 2017058421 W 20171026; AU 2017348161 A 20171026; CA 3040718 A 20171026; CN 201780066962 A 20171026; EP 17863634 A 20171026; JP 2019523099 A 20171026