

Title (en)

WIRELESS POSITION SENSING USING MAGNETIC FIELD OF SINGLE TRANSMITTER

Title (de)

DRAHTLOSE POSITIONSMESSUNG MITHILFE DES MAGNETFELDES EINES EINZELSENDERS

Title (fr)

DÉTECTION DE POSITION SANS FIL À L'AIDE DU CHAMP MAGNÉTIQUE D'UN ÉMETTEUR UNIQUE

Publication

**EP 3295728 A4 20190130 (EN)**

Application

**EP 15892018 A 20150512**

Priority

US 2015030296 W 20150512

Abstract (en)

[origin: WO2016182559A1] A positioning system for determining the location of a receiver relative to a transmitter. The system includes a transmitting coil having a known orientation with respect to the earth's coordinate system and configured to transmit a periodic signal during a positioning event, at least one receiver including a sensing unit for measuring the magnetic field vector produced by the transmitting coil and the orientation of the receiver with respect to the earth's coordinate system, and at least one computing unit configured to estimate a position and orientation of the receiver with respect to the transmitter's coordinate system using the measured magnetic field vector, the measured orientation with respect to the earth's coordinate system, and the known orientation of the transmitting coil with respect to the earth's coordinate system.

IPC 8 full level

**H04W 64/00** (2009.01)

CPC (source: EP KR)

**G01C 21/206** (2013.01 - EP KR); **G01R 31/50** (2020.01 - KR); **G01S 1/68** (2013.01 - KR); **G08C 17/02** (2013.01 - KR)

Citation (search report)

- [X] US 8683707 B1 20140401 - HORTON JR CLAUDE W [US]
- [A] US 6487516 B1 20021126 - AMORAI-MORIYA NETZER [IL]
- [I] US 2013116970 A1 20130509 - DOLGIN BENJAMIN [US], et al
- [I] US 2009009410 A1 20090108 - DOLGIN BENJAMIN P [US], et al
- [I] US 6789043 B1 20040907 - NELSON CARL V [US], et al
- See references of WO 2016182559A1

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)

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DOCDB simple family (application)

**US 2015030296 W 20150512**; EP 15892018 A 20150512; JP 2017558485 A 20150512; KR 20177035768 A 20150512