Title (en)

ELECTROMAGNETIC NAVIGATION ANTENNA ASSEMBLY AND ELECTROMAGNETIC NAVIGATION SYSTEM INCLUDING THE SAME

Title (de)

ELEKTROMAGNETISCHE NAVIGATIONSANTENNENANORDNUNG UND ELEKTROMAGNETISCHES NAVIGATIONSSYSTEM DAMIT

Title (fr)

ENSEMBLE ANTENNE DE NAVIGATION ÉLECTROMAGNÉTIQUE ET SYSTÈME DE NAVIGATION ÉLECTROMAGNÉTIQUE LE COMPRENANT

Publication

EP 3531952 A4 20200513 (EN)

Application

EP 17866177 A 20171026

Priority

- US 201615337056 A 20161028
- US 201615337092 A 20161028
- US 201615337074 A 20161028
- US 2017058406 W 20171026

Abstract (en)

[origin: WO2018081344A2] An antenna assembly for radiating at least one electromagnetic field for electromagnetic navigation and an electromagnetic navigation system including such an antenna assembly are provided. The antenna assembly includes a substrate and a planar antenna including a trace that is deposited on the substrate and arranged in a plurality of loops. Respective distances between adjacent pairs of the loops increase in a direction from an innermost loop to an outermost loop.

IPC 8 full level

A61B 34/20 (2016.01); **H01Q 7/00** (2006.01); **H01Q 13/00** (2006.01); **H04B 5/00** (2006.01)

CPC (source: EP)

A61B 34/20 (2016.02); **H04B 5/24** (2024.01); **H04B 5/43** (2024.01); A61B 2034/2051 (2016.02); H01Q 1/36 (2013.01); H01Q 7/00 (2013.01)

Citation (search report)

- [XY] KR 20140049300 A 20140425 - HAN INC [KR]
- [X] EP 2871712 A1 20150513 - SAMSUNG ELECTRO MECH [KR]
- [Y] US 2016174873 A1 20160623 - GREENBURG BENJAMIN [IL], et al
- [Y] US 2007090790 A1 20070426 - HUI SHU-YUEN R [CN]

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 2018081344 A2 20180503; **WO 2018081344 A3 20180726**; AU 2017348101 A1 20190418; AU 2017348101 B2 20220818; CN 109922752 A 20190621; CN 109922752 B 20220916; EP 3531952 A2 20190904; EP 3531952 A4 20200513; JP 2020195159 A 20201203; JP 2020195160 A 20201203; JP 2020502860 A 20200123; JP 7018488 B2 20220210; JP 7074813 B2 20220524

DOCDB simple family (application)

US 2017058406 W 20171026; AU 2017348101 A 20171026; CN 201780067029 A 20171026; EP 17866177 A 20171026; JP 2019521447 A 20171026; JP 2020141539 A 20200825; JP 2020141540 A 20200825