

Title (en)

SYSTEM FOR DETECTING HIGH-FREQUENCY TRANSCEIVERS AND USES THEREOF

Title (de)

System zur Erfassung von Hochfrequenz-Transceichern und dessen Verwendungen

Title (fr)

SYSTÈME DE DÉTECTION D'ÉMETTEURS-RÉCEPTEURS HAUTE FRÉQUENCE ET SES UTILISATIONS

Publication

**EP 2609445 A1 20130703 (DE)**

Application

**EP 11764115 A 20110812**

Priority

- DE 102010037195 A 20100827
- EP 2011063962 W 20110812

Abstract (en)

[origin: WO2012025411A1] The invention relates to high-frequency technology. In particular, the invention relates to a system for detecting the position and/or location of at least one high-frequency transceiver system having at least one receiving antenna set up so that high-frequency signals transmitted by the at least one high-frequency transceiver can be received by means of said receiving antenna, at least one transmitting antenna set up for transmitting high-frequency signals of at least one frequency band provided for being received by the at least one high-frequency transceiver and thereby in turn causing the transmitting of high-frequency signals by the at least one high-frequency transceiver, at least one first antenna signal processing device connected to the at least one receiving antenna and set up for analyzing the high-frequency signals received by the at least one receiving antenna in order to derive a spatial position and/or location and an identification of the transmitting high-frequency transceiver, and at least one data processing device at least indirectly connected to the first antenna signal processing device and receiving information therefrom about the position, location, and/or identification of the transmitting high-frequency transceiver. A data structure is provided in a first memory device connected to the at least one data processing device, at least partially comprising a virtual representation of the space supplied by the antenna field of the at least one transmitting antenna, wherein the virtual representation comprises information about the target position and/or location of at least one high-frequency transceiver having a predefined identification, and transformation information is available to the at least one data processing device on the basis of which an actual position and/or location of at least one high-frequency transceiver having a predefined identification within the virtual representation is associated on the basis of the position, location, and/or identification information obtained from the first antenna signal processing device, and the at least one data processing device carries out a comparison between the target position and the actual position and/or location of a high-frequency transceiver of a predefined identification within the virtual representation, outputting a signal representing "match" or "no match" as the result of the comparison for further processing.

IPC 8 full level

**G01S 5/02** (2010.01); **G01S 13/76** (2006.01); **G01S 13/87** (2006.01)

CPC (source: EP US)

**A61N 5/1049** (2013.01 - EP US); **G01S 5/0247** (2013.01 - EP US); **G01S 5/0289** (2013.01 - EP US); **G01S 13/76** (2013.01 - EP US);  
**G01S 13/874** (2013.01 - EP US); **H04W 64/00** (2013.01 - US); **A61N 2005/1051** (2013.01 - EP US); **H04W 64/003** (2013.01 - US)

Citation (search report)

See references of WO 2012025411A1

Citation (examination)

- WO 2009143814 A1 20091203 - KARLSRUHER INST TECHNOLOGIE [DE], et al
- US 2009267823 A1 20091029 - KONISHI YUSUKE [JP], et al
- US 2009005972 A1 20090101 - DE KONING WILHELMUS G [NL]

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)

**DE 102010037195 A1 20120301**; CN 103097907 A 20130508; CN 103097907 B 20160120; EP 2609445 A1 20130703;  
JP 2013540990 A 20131107; US 2013184005 A1 20130718; US 8938208 B2 20150120; WO 2012025411 A1 20120301

DOCDB simple family (application)

**DE 102010037195 A 20100827**; CN 201180041486 A 20110812; EP 11764115 A 20110812; EP 2011063962 W 20110812;  
JP 2013525237 A 20110812; US 201113818232 A 20110812