Title (en)

LINE-OF-SIGHT (LOS) OR NON-LOS (NLOS) IDENTIFICATION METHOD USING MULTIPATH CHANNEL STATISTICS

Title (de)

IDENTIFIKATIONSVERFAHREN MITHILFE VON MEHRPFAD-KANALSTATISTIKEN MIT ODER OHNE SICHTVERBINDUNG

Title (fr)

MÉTHODE D'IDENTIFICATION EN VISIBILITÉ DIRECTE (LOS) OU EN NON VISIBILITÉ (NLOS) EXPLOITANT DES STATISTIQUES DE VOIE UTILISANT LA PROPAGATION PAR TRAJETS MULTIPLES

Publication

EP 2047694 A2 20090415 (EN)

Application

EP 07813712 A 20070802

Priority

- US 2007075084 W 20070802
- US 82137806 P 20060803
- US 82212706 P 20060811
- US 83254707 A 20070801
- US 83255107 A 20070801

Abstract (en)

[origin: WO2008017033A2] Non-line-of-sight (NLOS) identification and mitigation are carried out in a wireless positioning system based on channel statistics derived from multipath components of a received signal. The statistics may be based on the kurtosis, the mean excess delay spread, or the root mean square delay spread. The results are justified using IEEE 802.15.4a ultrawideband channel models. Amplitude and delay statistics based on the IEEE models are shown to be log-normal random variables. A joint likelihood ratio test is presented for the LOS and NLOS identification.

IPC 1-7

H04Q 7/20

IPC 8 full level

G01S 5/02 (2010.01); **G01S 5/14** (2006.01); **H04W 64/00** (2009.01); **H04W 84/02** (2009.01)

CPC (source: EP KR US)

G01S 5/0218 (2020.05 - EP KR US); **G01S 5/14** (2013.01 - EP KR); H04W 64/00 (2013.01 - EP)

Citation (search report)

See references of WO 2008017033A2

Designated contracting state (EPC)

DE FR GB

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

WO 2008017033 A2 20080207; **WO 2008017033 A3 20081204**; EP 2047694 A2 20090415; JP 2009545934 A 20091224; JP 4567093 B2 20101020; KR 101051906 B1 20110726; KR 20090009223 A 20090122

DOCDB simple family (application)

US 2007075084 W 20070802; EP 07813712 A 20070802; JP 2009523057 A 20070802; KR 20087026803 A 20070802