

Title (en)

METHOD FOR THE HIGHER ORDER BLIND DEMODULATION OF A LINEAR WAVE-SHAPE EMITTER

Title (de)

VERFAHREN ZUR BLINDDEMODULATION HÖHERER ORDNUNG EINES LINEAR-WELLENFORM-EMITTERS

Title (fr)

PROCEDE DE DEMODULATION AVEUGLE AUX ORDRES SUPERIEURS D' UNE METTEUR DE FORME D ONDE LINEAIRE

Publication

EP 1685686 A1 20060802 (FR)

Application

EP 04804508 A 20041029

Priority

- EP 2004052734 W 20041029
- FR 0313125 A 20031107

Abstract (en)

[origin: WO2005046150A1] The invention relates to a method for the blind demodulation of a linear wave-shape source or emitter in a system comprising at least one source, a network of sensors, and a propagation channel. Said method comprises at least the following steps: the time symbol T is determined and sampled to T_e samples per symbol such as $T = lT_e$ (l whole); a spatio-temporal observation $z(t)$ having mixed sources which are symbol trains of the emitter is constructed from the observations $x(kT_e)$; an ICA-type method is applied to the observation vector $z(t)$ in order to estimate the LC symbol trains $\{a_{m-i}\}$ associated with the channel vectors $H_{zj} = H_z(kj)$; the LC outputs $(A_{m,j}, H_{zj})$ are classed in the same order as the inputs $(a_{m-i}, h_{z(i)})$ in order to obtain the propagation channel vectors $H_{z,j} = H_z(kj)$; and the alphamax phase associated with the outputs is determined.

IPC 8 full level

H04L 25/02 (2006.01)

CPC (source: EP US)

H04L 25/0238 (2013.01 - EP US); **H04L 25/0248** (2013.01 - EP US); **H04L 25/0204** (2013.01 - EP US)

Citation (search report)

See references of WO 2005046150A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2862173 A1 20050513; **FR 2862173 B1 20060106**; EP 1685686 A1 20060802; US 2007140380 A1 20070621; US 7787571 B2 20100831; WO 2005046150 A1 20050519

DOCDB simple family (application)

FR 0313125 A 20031107; EP 04804508 A 20041029; EP 2004052734 W 20041029; US 57860704 A 20041029