

Title (en)

DEVICE AND METHOD FOR EVALUATING AND OPTIMIZING SIGNALS ON THE BASIS OF ALGEBRAIC INVARIANTS

Title (de)

VORRICHTUNG UND VERFAHREN ZUR AUSWERTUNG UND OPTIMIERUNG VON SIGNALEN AUF DER BASIS ALGEBRAISCHER INVARIANTEN

Title (fr)

DISPOSITIF ET PROCÉDÉ D'ÉVALUATION ET D'OPTIMISATION DE SIGNAUX SUR LA BASE D'INVARIANTES ALGÈBRIQUES

Publication

**EP 2601593 A2 20130612 (DE)**

Application

**EP 11738252 A 20110802**

Priority

- CH 12642010 A 20100803
- EP 2011063322 W 20110802

Abstract (en)

[origin: WO2012016992A2] The invention relates to signals (for example audio signals) which seem to be completely random, yet for which universally valid statements should be made, for example in the form of parameterizations which, on average, are accurate and can be determined only based on short signal sections. Instead of simulating, for example, a Gaussian process, for example projections of algebraic operations - at the plane of real or complex numbers - of said signal sections are observed and proven for said astonishingly simple algebraic invariants. Said invariants are subsequently used as tags in order to perform, for example, a selection according to the frequency thereof. On average, the present system proves to be more efficient than known methods until now. The practical-commercial application of said system covers nearly the entire signal processing field. The present document addresses in particular the stochastic observation of audio signals, as known, for example, from the field of digital audio broadcasting.

IPC 8 full level

**G06F 17/10** (2006.01)

CPC (source: EP KR US)

**G06F 3/16** (2013.01 - US); **G06F 17/10** (2013.01 - EP KR US); **G06F 17/147** (2013.01 - US); **H04S 5/00** (2013.01 - KR); **H04S 5/00** (2013.01 - EP US); **H04S 5/005** (2013.01 - EP US); **H04S 2400/01** (2013.01 - EP US)

Citation (search report)

See references of WO 2012016992A2

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 2012016992 A2 20120209**; **WO 2012016992 A3 20130228**; AU 2011287639 A1 20130221; AU 2011287639 B2 20160707; CH 703501 A2 20120215; CN 103250146 A 20130814; EP 2601593 A2 20130612; JP 2013538395 A 20131010; KR 20130098318 A 20130904; RU 2013109282 A 20140910; RU 2577180 C2 20160310; SG 187706 A1 20130328; US 2013144922 A1 20130606

DOCDB simple family (application)

**EP 2011063322 W 20110802**; AU 2011287639 A 20110802; CH 12642010 A 20100803; CN 201180048313 A 20110802; EP 11738252 A 20110802; JP 2013522236 A 20110802; KR 20137005306 A 20110802; RU 2013109282 A 20110802; SG 2013008453 A 20110802; US 201313756884 A 20130201