Title (en)

Method and apparatus for determining whether a specific watermark symbol out of one or more candidate watermark symbols is embedded in a current section of a received audio signal

Title (de)

Verfahren und Vorrichtung zur Bestimmung, ob ein bestimmtes Wasserzeichensymbol aus einem oder mehreren Kandidatenwasserzeichensymbolen in einem gegenwärtigen Abschnitt eines empfangenen Audiosignals eingebettet ist

Title (fr)

Procédé et appareil permettant de déterminer si un symbole en filigrane spécifique à partir d'un ou de plusieurs symboles de filigranes candidats est incorporé dans une section présente d'un signal audio reçu

Publication

EP 3001415 A1 20160330 (EN)

Application

EP 14306464 A 20140923

Priority

EP 14306464 A 20140923

Abstract (en)

From sets of correlation result values it is determined whether a specific watermark symbol out of one or more candidate watermark symbols is embedded in a received audio signal. For all candidate watermark symbols, from each corresponding set of correlation result values, a group (n p) of maximal values together form a peak vector (v i). From the normalised peak values (w i) a probability distribution function (pdf, g (w i)) and a false positive probability function (P fp (w i)) are calculated. If the values of the false positive probability function are smaller than a first threshold value (T min), the current candidate watermark symbol is taken as a true watermark symbol. If not yet all candidate watermark symbols have been processed, the next candidate watermark symbol is selected. Otherwise, a minimal value P f p * of the false positive probability functions for all candidate watermark symbols is determined (76) and is compared (77) with a second threshold value (T max). If it is smaller than the second threshold value, the current candidate watermark symbol is selected. Otherwise, it is determined (78) that no watermark symbol is present.

IPC 8 full level

G10L 19/018 (2013.01)

CPC (source: EP)

G10L 19/018 (2013.01)

Citation (applicant)

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CN109299313A

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3001415 A1 20160330; WO 2016045977 A1 20160331

DOCDB simple family (application)

EP 14306464 A 20140923; EP 2015070685 W 20150910