Title (en)

DEVICE AND METHOD FOR ENCODING A TIME-DISCRETE AUDIO SIGNAL AND DEVICE AND METHOD FOR DECODING CODED AUDIO DATA

Title (de)

VORRICHTUNG UND VERFAHREN ZUM CODIEREN EINES ZEITDISKRETEN AUDIOSIGNALS UND VORRICHTUNG UND VERFAHREN ZUM DECODIEREN VON CODIERTEN AUDIODATEN

Title (fr)

DISPOSITIF ET PROCEDE POUR CODER UN SIGNAL AUDIO A TEMPS DISCRET ET DISPOSITIF ET PROCEDE POUR DECODER DES DONNEES AUDIO CODEES

Publication

EP 1495464 B1 20050928 (DE)

Application

EP 02792858 A 20021202

Priority

- DE 10217297 A 20020418
- EP 0213623 W 20021202

Abstract (en)

[origin: WO03088212A1] According to the invention, a time-discrete audio signal is processed (52) in order to provide a quantization block with quantized spectral values (52). In addition, a whole-number spectral representation is generated from a time-discrete audio signal, using a whole-number transformation algorithm (56). The quantization block, which has been generated using a psychoacoustic model (54), is inverse quantized and rounded (58) to form a differential between the whole-number spectral values and the inverse quantized rounded spectral values. The quantization block alone produces a psychoacoustic encoded/decoded audio signal affected by loss after the decoding process, whereas the quantization block together with the combination block provides a loss-free, or practically loss-free encoded and decoded audio signal during said decoding process. The generation of the differential signal in the frequency range allows a simpler encoder/decoder structure to be produced.

IPC 1-7

G10L 19/02

IPC 8 full level

G10L 19/02 (2013.01)

CPC (source: EP KR)

G10L 19/0017 (2013.01 - EP); **G10L 19/02** (2013.01 - KR); **G10L 19/0212** (2013.01 - EP); **G10L 19/032** (2013.01 - EP)

Cited by

EP2264699A3; NO341615B1; WO2008052627A1; EP2264699A2; US8321207B2

Designated contracting state (EPC)

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

DOCDB simple family (publication)

WO 03088212 A1 20031023; AT E305655 T1 20051015; AU 2002358578 A1 20031027; CA 2482427 A1 20031023; CA 2482427 C 20100119; CN 1258172 C 20060531; CN 1625768 A 20050608; DE 10217297 A1 20031106; DE 50204426 D1 20051103; EP 1495464 A1 20050112; EP 1495464 B1 20050928; HK 1077391 A1 20060210; JP 2005527851 A 20050915; JP 4081447 B2 20080423; KR 100892152 B1 20090410; KR 20050007312 A 20050117

DOCDB simple family (application)

EP 0213623 W 20021202; AT 02792858 T 20021202; AU 2002358578 A 20021202; CA 2482427 A 20021202; CN 02828974 A 20021202; DE 10217297 A 20020418; DE 50204426 T 20021202; EP 02792858 A 20021202; HK 05109316 A 20051020; JP 2003585070 A 20021202; KR 20047016744 A 20021202