Title (en)

ARRANGEMENT AND METHOD FOR THE GENERATION OF A COMPLEX SPECTRAL REPRESENTATION OF A TIME-DISCRETE SIGNAL

Title (de)

VORRICHTUNG UND VERFAHREN ZUM ERZEUGEN EINER KOMPLEXEN SPEKTRALDARSTELLUNG EINES ZEITDISKRETEN SIGNALS

Title (fr)

DISPOSITIF ET PROCEDE PERMETTANT DE GENERER UNE REPRESENTATION SPECTRALE COMPLEXE D'UN SIGNAL A VALEURS DISCRETES EN TEMPS

Publication

EP 1525576 B1 20090527 (DE)

Application

EP 03766165 A 20030714

Priority

- DE 10234130 A 20020726
- EP 0307608 W 20030714

Abstract (en)

[origin: US8155954B2] A filter bank device for generating a complex spectral representation of a discrete-time signal includes a generator for generating a block-wise real spectral representation, which, for example, implements an MDCT, to obtain temporally successive blocks of real spectral coefficients. The output values of this spectral conversion device are fed to a post-processor for post-processing the block-wise real spectral representation to obtain an approximated complex spectral representation having successive blocks, each block having a set of complex approximated spectral coefficients, wherein a complex approximated spectral coefficient can be represented by a first partial spectral coefficient and by a second partial spectral coefficient, wherein at least one of the first and second partial spectral coefficients is determined by combining at least two real spectral coefficients. A good approximation for a complex spectral representation of the discrete-time signal is obtained by combining two real spectral coefficients, preferably by a weighted linear combination, wherein additionally more degrees of freedom for optimizing the entire system are available.

IPC 8 full level

G10L 25/48 (2013.01); **H03M 7/30** (2006.01); G10L 25/18 (2013.01)

CPC (source: EP US)

G10L 19/00 (2013.01 - EP US); **G10L 25/48** (2013.01 - EP US); G10L 25/18 (2013.01 - EP US)

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WO 2004013839 A1 20040212; AT E432524 T1 20090615; AU 2003250945 A1 20040223; DE 10234130 B3 20040219; DE 50311552 D1 20090709; EP 1525576 A1 20050427; EP 1525576 B1 20090527; US 2005197831 A1 20050908; US 2010161319 A1 20100624; US 7707030 B2 20100427; US 8155954 B2 20120410

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