

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

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Application
EP 03766165 A 20030714

Priority
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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.

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