Title (en)
　　Encryption of information signals

Title (de)
　　Verschlüsselung von Informationssignalen

Title (fr)
　　Cryptage de signaux d'information

Publication
　　EP 2178235 A1 20100421 (EN)

Application
　　EP 08390001 A 20081017

Priority
　　EP 08390001 A 20081017

Abstract (en)
　　The invention relates to techniques for encrypting and decrypting information signals, for example digital voice signals in mobile communications, based on polyphase filter banks. A method embodiment of the invention for encrypting information signals comprises the steps of splitting, based on multiple analysis subband filters, an input information signal into a set of signal subbands; performing an encryption operation on one or more subbands of the set of subbands; and synthesizing, based on multiple synthesis subband filters, the encrypted set of subbands into an output information signal, wherein a particular synthesis filter is the product of all analysis filters except the analysis filter corresponding in subband to the particular synthesis filter.

IPC 8 full level
　　H04K 1/04 (2006.01)

CPC (source: EP)
　　H04K 1/04 (2013.01)

Citation (search report)
- [Y] US 4829378 A 19890509 - LEGALL DIDIER J [US]
- [XAY] GB 1465923 A 19770302 - SIEMENS AG
- [XA] US 4959863 A 19900925 - AZUMA MITSUHIRO [JP], et al
- [Y] WADA S ET AL: "SPECTRUM SCRAMBLING BY MEANS OF QMF BANKS FOR SECURE COMMUNICATION", IEICE TRANSACTIONS ON FUNDAMENTALS OF ELECTRONICS,COMMUNICATIONS AND COMPUTER SCIENCES, ENGINEERING SCIENCES SOCIETY, TOKYO, JP, vol. E78-A, no. 8, 1 August 1995 (1995-08-01), pages 1042 - 1045, XP000536063, ISSN: 0916-8508
- [A] SMITH M J T ET AL: "EXACT RECONSTRUCTION TECHNIQUES FOR TREE-STRUCTURED SUBBAND CODERS", IEEE TRANSACTIONS ON ACOUSTICS, SPEECH AND SIGNAL PROCESSING, IEEE INC. NEW YORK, USA, vol. ASSP-34, no. 3, 1 June 1986 (1986-06-01), pages 434 - 441, XP000828453, ISSN: 0096-3518

Cited by
　　US2021288807A1; US11799657B2; KR20180026533A; JP2018524930A

Designated contracting state (EPC)
　　AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
　　AL BA MK RS

DOCDB simple family (publication)
　　EP 2178235 A1 20100421; **EP 2178235 B1 20111005**; AT E527768 T1 20111015; CY 1112183 T1 20151209

DOCDB simple family (application)
　　EP 08390001 A 20081017; AT 08390001 T 20081017; CY 111101254 T 20111216