Title (en)

WIRELESS COMMUNICATIONS DEVICE INCLUDING A JOINT SPACE-TIME OPTIMUM FILTER (JSTOF) USING CHOLESKY AND EIGENVALUE DECOMPOSITIONS

Title (de)

DRAHTLOSES KOMMUNIKATIONSGERÄT MIT EINEM VERBUND-RAUM-ZEIT-OPTIMALFILTER (JSTOF) MIT CHOLESKY- UND EIGENWERTZERLEGUNGEN

Title (fr)

APPAREIL DE RADIOCOMMUNICATION A FILTRE JSTOF UTILISANT LES DECOMPOSITIONS DE CHOLESKY ET DES VALEURS PROPRES

Publication

EP 1922816 A2 20080521 (EN)

Application

EP 06790540 A 20060814

Priority

• CA 2006001322 W 20060814
• CA 2515932 A 20050815

Abstract (en)

[origin: WO2007019679A2] A wireless communications device may include a wireless transmitter and a wireless receiver. The wireless receiver may include a filter for reducing co-channel interference and may include a multi-channel, space-time filter circuit that filters n signal parts that have been split from a communications signal by jointly estimating space-time filter weights and multi-channel impulse responses (CIRs) based upon Cholesky and eigenvalue decompositions. The filter may further include a multi-channel, matched filter circuit that receives multi-channel signals from the multi-channel, space-time filter circuit and has a filter response that is provided by a channel impulse response estimation from the space-time filter circuit.

IPC 8 full level

H04B 1/10 (2006.01); H04L 1/06 (2006.01); H04L 25/02 (2006.01); H04B 7/02 (2018.01)

CPC (source: EP KR)

H04B 1/10 (2013.01 - KR); H04B 1/16 (2013.01 - KR); H04B 7/02 (2013.01 - KR); H04L 25/0212 (2013.01 - EP); H04L 25/0248 (2013.01 - EP); H04B 1/109 (2013.01 - EP)

Cited by

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

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

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DOCDB simple family (application)

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