

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 A4 20081001 (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)

Citation (search report)

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Designated contracting state (EPC)

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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