

Title (en)

A RADIO BASE STATION AND A METHOD THEREIN FOR ESTIMATING A DOPPLER SPREAD

Title (de)

FUNKBASISSTATION UND VERFAHREN DAFÜR ZUR KALKULATION EINER DOPPLER-SPREIZUNG

Title (fr)

STATION DE BASE RADIO ET PROCÉDÉ ASSOCIÉ PERMETTANT D'ESTIMER UN ÉTALEMENT DOPPLER

Publication

EP 2636158 A1 20130911 (EN)

Application

EP 10859336 A 20101104

Priority

SE 2010051203 W 20101104

Abstract (en)

[origin: WO2012060751A1] Embodiments herein relate to a method in a radio base station (12) for estimating Doppler spread of a signal transmitted by a user equipment (10) over a channel in a radio communications network. The radio base station (12) and user equipment (10) are comprised in the radio communications network. The radio base station (12) receives a first signal and a second signal from the user equipment (10), which first signal and second signal are based on the signal transmitted by the user equipment (10). The first and second signals are separated in space, time and/or polarisation. The radio base station (12) estimates a first channel estimate of the received first signal by comparing the received first signal to a known signal, and a second channel estimate of the received second signal by comparing the received second signal to the known signal. The radio base station (12) determines a ratio of the first channel estimate to the second channel estimate, and estimates an autocorrelation function of a function of the determined ratio. The radio base station (12) then estimates the Doppler spread based on the estimated autocorrelation function.

IPC 8 full level

H04L 25/02 (2006.01); **H04B 7/04** (2006.01)

CPC (source: EP)

H04L 25/0222 (2013.01); **H04B 7/04** (2013.01); **H04B 7/0667** (2013.01); **H04B 7/10** (2013.01)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2012060751 A1 20120510; CN 103181094 A 20130626; CN 103181094 B 20160504; EP 2636158 A1 20130911; EP 2636158 A4 20160217

DOCDB simple family (application)

SE 2010051203 W 20101104; CN 201080069929 A 20101104; EP 10859336 A 20101104