

Title (en)
LONG TERM EVOLUTION (LTE) RADIO LINK TIMING SYNCHRONIZATION

Title (de)
TAKTSYNCHRONISIERUNG VON LTE-FUNKVERBINDUNGEN

Title (fr)
SYNCHRONISATION DE BASES DE TEMPS DE LIAISONS RADIO EN « LONG TERM EVOLUTION » (LTE)

Publication
EP 2363005 A4 20110914 (EN)

Application
EP 09812585 A 20090914

Priority
• CA 2009001276 W 20090914
• EP 08164304 A 20080912
• EP 09812585 A 20090914

Abstract (en)
[origin: EP2164217A1] A method for performing a radio link timing estimation for synchronization to a wireless communications channel such as an uplink channel in a 3GPP Long Term Evolution (LTE) network in a mobile wireless device or wireless network base station is provided. A channel frequency response estimate from a received reference signal comprising multiple non-coherent Orthogonal Frequency Division Multiplexing (OFDM) symbols is obtained. A frequency response covariance matrix from the channel frequency response estimate is then generated. Timing offsets of the received reference signal using covariance matrix and timing offset estimation algorithms are then estimated.

IPC 8 full level
H04L 27/26 (2006.01)

CPC (source: EP)
H04L 27/2656 (2013.01); **H04L 27/2675** (2013.01); **H04L 27/2695** (2013.01)

Citation (search report)
• [X] OZIEWICZ M: "On Application of MUSIC Algorithm to Time Delay Estimation in OFDM Channels", IEEE TRANSACTIONS ON BROADCASTING, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 51, no. 2, 1 June 2005 (2005-06-01), pages 249 - 255, XP011132560, ISSN: 0018-9316
• See references of WO 2010028502A1

Designated contracting state (EPC)
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DOCDB simple family (publication)
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