Title (en)

SYNCHRONIZATION IN A BROADCAST OFDM SYSTEM USING TIME DIVISION MULTIPLEXED PILOTS

Title (de)

SYNCHRONISATION IN EINEM BROADCAST-OFDM-SYSTEM MIT ZEITLICH GEMULTIPLEXTEN PILOTSIGNALEN

Title (fr)

SYNCHRONISATION DANS UN SYSTÈME OFDM DE RADIODIFFUSION UTILISANT DES PILOTES À MULTIPLEXAGE TEMPOREL

Publication

EP 2225844 A2 20100908 (EN)

Application

EP 08844052 A 20081031

Priority

• US 2008082155 W 20081031
• US 93321307 A 20071031

Abstract (en)

[origin: WO2009059250A2] In an OFDM system, a transmitter broadcasts a first TDM pilot on a first set of subbands followed by a second TDM pilot on a second set of subbands in each frame. The subbands in each set are selected from among N total subbands such that (1) an OFDM symbol for the first TDM pilot contains at least S_i identical pilot-1 sequences of length L_i and (2) an OFDM symbol for the second TDM pilot contains at least $S2$ identical pilot-2 sequences of length $L2$, where $L2 > L1$, $S1 L1 = N$, and $S2 L2 = N$. The transmitter may also broadcast an FDM pilot. A receiver processes the first TDM pilot to obtain frame timing (e.g., by performing correlation between different pilot-1 sequences) and further processes the second TDM pilot to obtain symbol timing (e.g., by detecting for the start of a channel impulse response estimate derived from the second TDM pilot).

IPC 8 full level

H04L 5/02 (2006.01); **H04L 27/26** (2006.01)

CPC (source: EP US)

H04L 5/0007 (2013.01 - EP); **H04L 27/2613** (2013.01 - EP US); **H04L 27/2662** (2013.01 - EP US); H04L 5/0048 (2013.01 - EP US); H04L 27/26134 (2021.01 - EP US); H04L 27/2656 (2013.01 - EP)

Citation (search report)

See references of WO 2009059250A2

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Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

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