

Title (en)

METHOD AND APPARATUS FOR PROVIDING A REFERENCE SIGNAL FROM TIME DIVISION MULTIPLEXED PILOT DATA

Title (de)

VERFAHREN UND GERÄT ZUM BEREITSTELLEN EINES REFERENZSIGNALS AUS ZEITMULTIPLEXTEN PILOTENDATEN

Title (fr)

PROCEDE ET APPAREIL PERMETTANT DE FOURNIR UN SIGNAL DE REFERENCE DE DONNEES PILOTE MULTIPLEXEES PAR REPARTITION DANS LE TEMPS

Publication

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Application

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Priority

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Abstract (en)

[origin: WO0221716A2] Techniques for generating a reference signal based on time-multiplexed pilot data. A modulated signal is received (FIG. 7) and processed to provide received samples, which are then further processed to provide pilot symbols. A reference signal is generated based on the available pilot symbols (722a, 722b). The reference signal comprises a sequence of "predicted" pilot symbols representative of future estimates of one or more characteristics (e.g., the phase and amplitude) of one or more carrier signals used to generate the modulated signal (FIG's 5A-5E). The reference signal can be generated using a number of techniques. For example, the reference signal can be generated by (e.g., linearly) extrapolating pilot symbols from prior time intervals (FIG. 5B), curve fitting the pilot symbols (FIG. 5C), or (normal or ensemble) averaging (unweighted or weighted) pilot symbols (FIG's 5D, 5E). For the W-CDMA standard, the processing to generate the pilot symbols typically includes decoupling the received samples with a channelization code to provide channelized symbols (720a, 720b), and multiplying the channelized symbols with a particular pilot symbol pattern. The pilot symbols from each slot may also be filtered to generate one or more filtered pilot symbols.

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