Title (en)
METHOD AND APPARATUS TO ESTIMATE FREQUENCY OFFSET IN A RECEIVER

Title (de)
VERFAHREN UND VORRICHTUNG ZUR SCHÄTZUNG DER FREQUENZVERSCHIEBUNG IN EINEM EMPFÄNGER

Title (fr)
PROCEDE ET APPAREIL D'ESTIMATION DE DECALAGE DE FREQUENCE DANS UN RECEPTEUR

Publication
EP 1279266 A1 20030129 (EN)

Application
EP 01940374 A 20010427

Priority
• EP 0104782 W 20010427
• US 56538200 A 20000505

Abstract (en)
[origin: WO0186904A1] A method and apparatus for estimate a frequency offset between a carrier frequency of a transmitter and a local frequency reference of a receiver in a communication system. Successive samples of a frequency synchronization signal transmitted by the transmitter and detected by the receiver are collected, and a phase difference is computed between the successively collected samples. The frequency synchronization signal can be a non-sinusoidal signal, e.g., a pilot symbol and/or data employed as a pilot symbol. Phase differences of successively collected samples are computed until $N-1$ phase differences have been computed. The $N-1$ phase differences are added to produce the estimated frequency offset. Adding may be performed using linear regression or by computing a weighted average.
[origin: WO0186904A1] A method and apparatus for estimate a frequency offset between a carrier frequency of a transmitter and a local frequency reference of a receiver in a communication system. Successive samples of a frequency synchronization signal transmitted by the transmitter and detected by the receiver are collected, and a phase difference is computed between the successively collected samples. The frequency synchronization signal can be a non-sinusoidal signal, e.g., a pilot symbol and/or data employed as a pilot symbol. Phase differences of successively collected samples are computed until $N-1$ phase differences have been computed. The $N-1$ phase differences are added to produce the estimated frequency offset. Adding may be performed using linear regression or by computing a weighted average.

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Citation (search report)
See references of WO 0186904A1

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