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Abstract

Methods and Apparatus for Receiving OFDM Signals

A receiver for OFDM signals estimates the carrier frequency offset from a training sequence of symbols in the received signal, by minimising a cost function which includes terms generated from the received signal at pairs of symbols which are not just nearest-neighbours in the symbol sequence. For example, the cost function may include not just terms generated between nearest neighbour symbols, but between all pairs of symbols. Thus, the invention makes it possible to obtain much more statistics than in conventional methods from the same training sequence. This can increase signal-to-noise ratio (SNR) as compared to prior art systems. Accordingly, a more accurate estimate of carrier frequency offset can be achieved.

[Fig. 2]