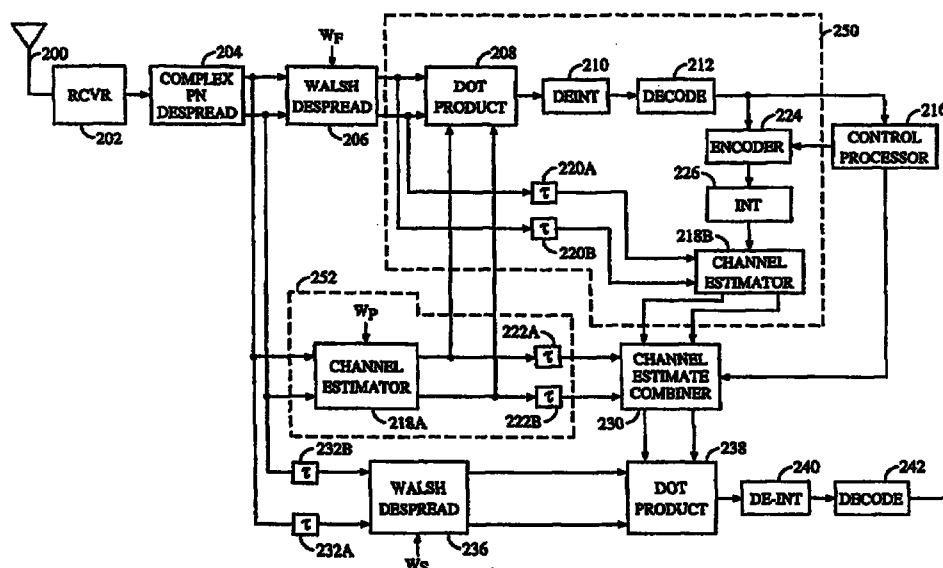




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(54) Title: AMPLITUDE AND PHASE ESTIMATION METHOD IN A WIRELESS COMMUNICATION SYSTEM



(57) Abstract

Apparatuses for a transmitter and a receiver (202) which enhance the performance of a system coherent demodulation by utilizing non-pilot sub-channels to enhance the accuracy of estimates of amplitude and phase noise inherent in the transmission channel. This enhancement is accomplished by utilizing the corrected received data on a fundamental channel to enhance a pilot channel estimate, which is subsequently utilized by a dot product module in demodulating a supplementary data channel.