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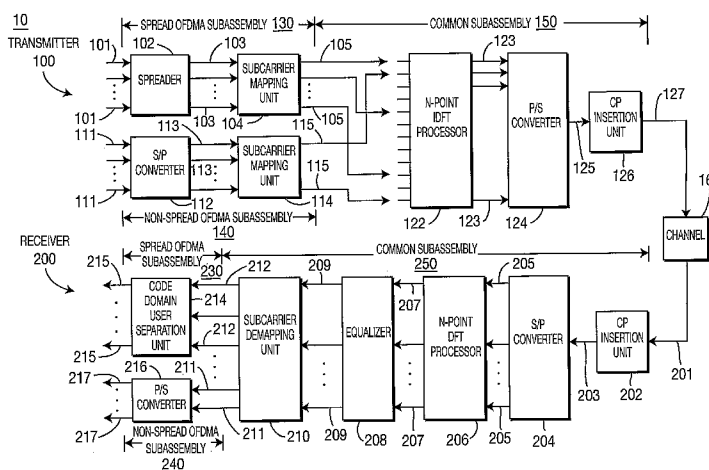
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(54) Title: HYBRID ORTHOGONAL FREQUENCY DIVISION MULTIPLE ACCESS SYSTEM AND METHOD



(57) Abstract: A hybrid orthogonal frequency division multiple access (OFDMA) system including a transmitter 100 and a receiver 200 is disclosed. The transmitter 100 includes a first spread OFDMA subassembly 130, a first non-spread OFDMA subassembly 140 and a first common subassembly 150. The first spread OFDMA subassembly 130 spreads input data 101 and maps the spread data 103 to a first group of subcarriers 105. The first non-spread OFDMA subassembly 140 maps input data 111 to a second group of subcarriers 115. The first common subassembly 150 transmits the input data mapped to the first and second group of subcarriers using OFDMA. The receiver includes a second spread OFDMA subassembly 230, a second non-spread OFDMA subassembly 240 and a second common subassembly 250. The second common subassembly 250 processes received data to recover data mapped to the subcarriers using OFDMA. The second spread OFDMA subassembly 230 recovers the first input data by separating user data in a code domain and the second non-spread OFDMA subassembly 240 recovers the second input data.



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