ABSTRACT

ENHANCEMENTS TO PHASE-NOISE COMPENSATION REFERENCE SIGNAL DESIGN AND SCRAMBLING

Methods, systems, and devices for wireless communication are described. In one example, phase-noise compensation tracking signals (PTRS) may be transmitted using sets of resource blocks (RBs), where a frequency for each PTRS within the sets RBs is different from a frequency corresponding to a direct current (DC) tone. In another example, a time-domain-based PTRS may be used, where a discrete Fourier transform (DFT)-spread-orthogonal frequency division multiplexing (DFT-s-OFDM) symbol may include a cyclic prefix and a PTRS inserted in the DFT-s-OFDM symbol. Additionally or alternatively, a guard-interval-based DFT-s-OFDM symbol may include a PTRS that replaces part or all of a guard interval. In some examples, subsets of tones used for PTRS across a system bandwidth may be transmitted using a scrambled modulation symbol, where at least one antenna port may be used for the transmission of PTRS.

Fig. 3