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(54) Title: SCRAMBLING CODES FOR SECONDARY SYNCHRONIZATION CODES IN WIRELESS COMMUNICATION SYSTEMS

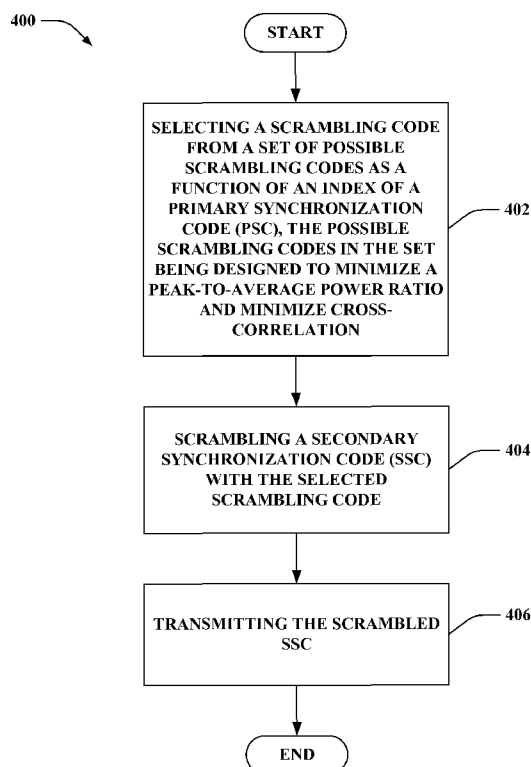


FIG. 4

(57) Abstract: Systems and methodologies are described that facilitate employing a scrambling code from a set of scrambling codes, which is indexed by primary synchronization codes (PSCs), to scramble or descramble a secondary synchronization code (SSC). The scrambling codes in the set can be designed to optimize peak-to-average power ratios and/or mitigate cross correlation. For example, the scrambling codes can be based on different M-sequences generated from disparate polynomials. In accordance with another example, the scrambling codes can be based on different cyclic shifts of the same M-sequence. According to another example, the scrambling codes can be based upon binary approximations of possible primary synchronization codes utilized in a wireless communication environment. Pursuant to a further example, the scrambling codes can be based on different Golay complementary sequences.



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