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(54) Title: SCRAMBLING SEQUENCE GENERATION IN A COMMUNICATION SYSTEM

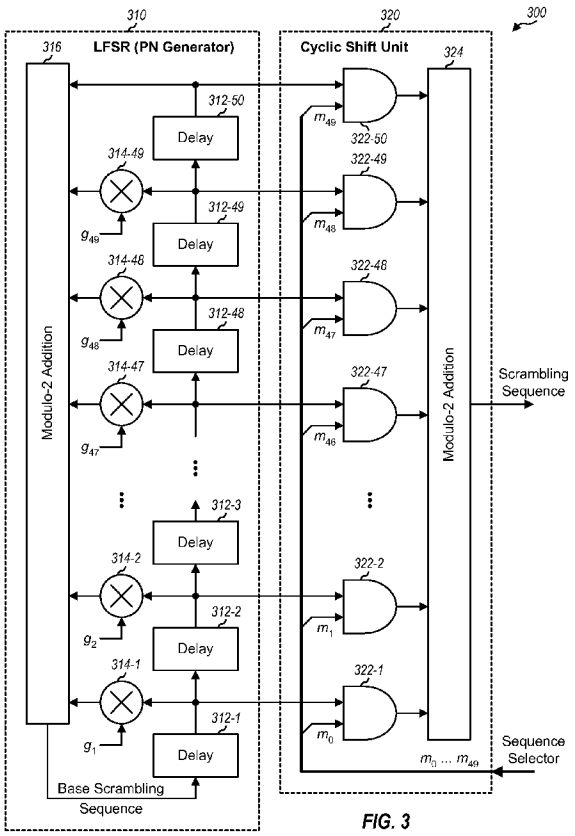


FIG. 3

(57) Abstract: Techniques for performing scrambling and descrambling in a communication system are described. In an aspect, different scrambling sequences for different channels and signals may be generated based on different cyclic shifts of a base scrambling sequence generated by a linear feedback shift register (LFSR), which may be a maximal-length sequence. A scrambling sequence for a given channel may be generated by (i) determining a sequence selector value based on a channel type value and at least one parameter value for the channel and (ii) cyclically shifting the base scrambling sequence based on the sequence selector value. In another aspect, a reference signal sent on variable system bandwidth may be generated with two scrambling sequences, which may be different cyclic shifts of a base scrambling sequence. Scrambling/descrambling for positive and negative frequencies for the reference signal may be performed with the first and second scrambling sequences, respectively.

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