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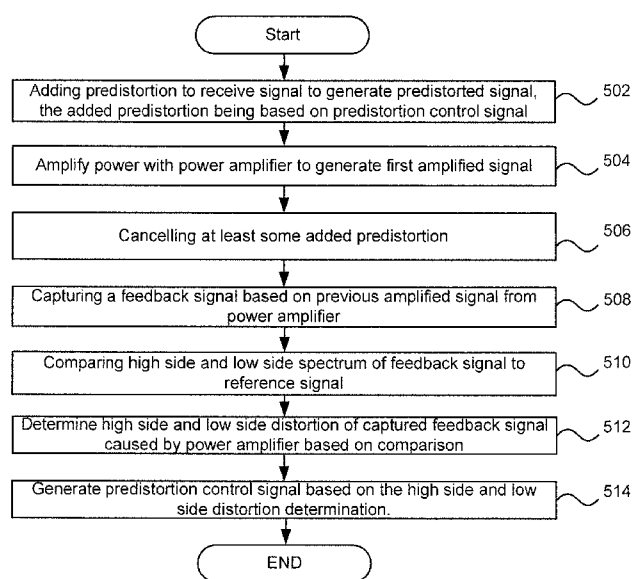
(54) **Title:** SYSTEMS AND METHODS FOR ADAPTIVE POWER AMPLIFIER LINEARIZATION

FIG. 5

(57) **Abstract:** An exemplary system comprises a linearizer, a power amplifier, and a feedback block. The linearizer may be configured to use a predistortion control signal to add predistortion to a receive signal to generate a predistorted signal. The power amplifier may be configured to amplify power of the predistorted signal to generate a first amplified signal. The power amplifier may also add high side and low side amplifier distortion to the predistorted signal. The high side and low side amplifier distortion may cancel at least a portion of the predistortion. The feedback block may be configured to capture a feedback signal based on a previous amplified signal from the power amplifier, to determine high side and low side distortion of the captured feedback signal, and to generate the predistortion control signal based on the determined high side and low side distortion.