



(54) **ADAPTING FORWARD ERROR CORRECTION (FEC) OR LINK PARAMETERS FOR IMPROVED POST-FEC PERFORMANCE**

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(57) **ABSTRACT**

Technologies for optimizing post-FEC bit error rate performance of a Forward Error Correction (FEC) system are described. A controller is coupled to an FEC circuit and a receiver circuit. The controller receives FEC symbol error data from the receiver circuit and determines, using the FEC symbol error data, a post-FEC correlated performance metric indicative of an estimated post-FEC BER of the FEC circuit. The controller adjusts, based on the post-FEC correlated performance metric, at least one of a FEC parameter of the FEC circuit or a link parameter of the receiver circuit to decrease the estimated post-FEC BER. This improves the post-FEC BER performance of the FEC circuit.

