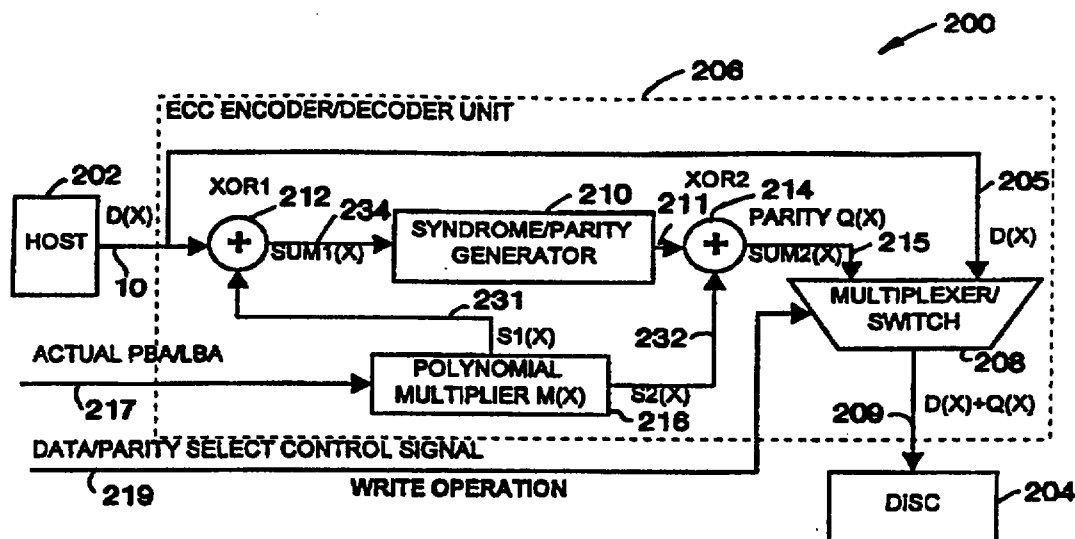




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(54) Title: A PHYSICAL BLOCK ADDRESS RECOVERY APPARATUS, SYSTEM AND METHOD FOR CYCLIC ERROR CORRECTION CODES



(57) Abstract

The invention relates to apparatus and method that provide an improved media codeword and which can distinguish an uncorrectable data error from a wrong block address error and permit the address to be recovered from readback data. In accordance with one embodiment of the invention, method for generating parity is provided in which a sequences representing address and data are received. The address sequence is multiplied by a set of multiplier symbols (216) to generate a first sequence of product symbols. A first portion is added to the data sequence prior to generating a first parity sequence (211) and second portion is added directly to the first parity sequence to generate the final parity sequence (215). A corresponding method of generating syndromes from readback data is provided. System and apparatus incorporating the inventive method are also provided.