

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2024/0178863 A1 Lim et al.

May 30, 2024 (43) **Pub. Date:**

(54) ERROR CORRECTION DEVICE AND ERROR CORRECTION METHOD

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(21) Appl. No.: 18/511,740

(22)Filed: Nov. 16, 2023

(30)Foreign Application Priority Data

Nov. 28, 2022 (KR) 10-2022-0162035

Publication Classification

(51) **Int. Cl.**

(2006.01)H03M 13/15 H03M 13/27 (2006.01)H03M 13/29

(2006.01)

(52) U.S. Cl.

CPC ... H03M 13/1595 (2013.01); H03M 13/2778 (2013.01); **H03M 13/2927** (2013.01)

(57)ABSTRACT

A device includes a receiver configured to receive a plurality of Error Correction Code (ECC) codewords transmitted from an external device through a channel including one or more lanes; an ECC decoder configured to generate a plurality of post ECC codewords by performing error correction with respect to the plurality of ECC codewords and generating a first cyclic redundancy check (CRC) codeword based on the plurality of post ECC codewords; a CRC checker configured to determine whether an error exists in the first CRC codeword; and a post ECC decoder configured to, when it is determined that the error exists in the first CRC codeword, generate a second CRC codeword by estimating a remaining error position based on error correction result information received from the ECC decoder and performing remaining error correction with respect to the plurality of post ECC codewords based on the remaining error position.

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