

Title (en)

MEMORY MANAGEMENT AND ERASURE DECODING FOR A MEMORY DEVICE

Title (de)

SPEICHERVERWALTUNG UND LÖSCHUNGSDECODIERUNG FÜR EINE SPEICHERVORRICHTUNG

Title (fr)

GESTION DE MÉMOIRE ET DÉCODAGE D'EFFACEMENT POUR DISPOSITIF DE MÉMOIRE

Publication

EP 3984035 A4 20230628 (EN)

Application

EP 20822879 A 20200508

Priority

- US 201916441722 A 20190614
- US 202016840286 A 20200403
- US 2020032100 W 20200508

Abstract (en)

[origin: WO2020251708A1] Memory management and erasure decoding for a memory device are described. A memory device may identify charge leakage associated with one or more memory cells, and may determine whether to invert a logic state stored by one or more memory cells to improve the likelihood that the memory cells are read properly. In some examples, the memory device may store an indication that the complement of the detected logic state was written, which may correspond to one memory cell or a set of memory cells. In some examples, a memory device may be configured to identify conditions associated with an erasure, or an otherwise indeterminate logic state, which may be used to enhance aspects of error handling operations, including those that may be performed at the memory device or a host device (e.g., error handling operations performed at a memory controller external to the memory device).

IPC 8 full level

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Citation (search report)

- [IA] US 2012297115 A1 20121122 - LIANG MING-JEN [TW]
- [I] US 2014233314 A1 20140821 - SHEN ZHENLEI [US], et al
- See references of WO 2020251708A1

Designated contracting state (EPC)

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WO 2020251708 A1 20201217; CN 114144834 A 20220304; EP 3984035 A1 20220420; EP 3984035 A4 20230628; TW 202105402 A 20210201; TW 202230388 A 20220801; TW I762932 B 20220501

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