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KIM et al.(10) **Pub. No.: US 2024/0215250 A1**(43) **Pub. Date: Jun. 27, 2024**(54) **MEMORY DEVICES INCLUDING VERTICAL
STACK STRUCTURE, METHODS OF
MANUFACTURING AND OPERATING THE
SAME, AND ELECTRONIC APPARATUSES
INCLUDING MEMORY DEVICE**(30) **Foreign Application Priority Data**

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H10B 43/27 (2006.01)(72) Inventors: **Seyun KIM**, Suwon-si (KR); **Jooheon
Kang**, Hwaseong-si (KR); **Yumin Kim**,
Suwon-si (KR); **Garam Park**, Suwon-si
(KR); **Hyunjae Song**, Suwon-si (KR);
Dongho Ahn, Hwaseong-si (KR);
Seungyeul Yang, Suwon-si (KR);
Myunghun Woo, Hwaseong-si (KR);
Jinwoo Lee, Hwaseong-si (KR);
Seungdam Hyun, Suwon-si (KR)(52) **U.S. Cl.**
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43/27 (2023.02)(73) Assignee: **Samsung Electronics Co., Ltd.,**
Suwon-si (KR)(21) Appl. No.: **18/340,419**(22) Filed: **Jun. 23, 2023**(57) **ABSTRACT**

A memory device including the vertical stack structure includes a gate electrode, a resistance change layer, a channel between the gate electrode and the resistance change layer, and an island structure between the resistance change layer and the channel and in contact with the resistance change layer and the channel, and a gate insulating layer between the gate electrode and the channel.

