



US 20240179909A1

(19) **United States**

(12) **Patent Application Publication**
TOBIOKA et al.

(10) **Pub. No.: US 2024/0179909 A1**

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

(54) **STAIRLESS THREE-DIMENSIONAL
MEMORY DEVICE AND METHOD OF
MAKING THE SAME BY FORMING
REPLACEMENT WORD LINES**

(52) **U.S. Cl.**
CPC **H10B 43/27** (2023.02)

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(57) **ABSTRACT**

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(21) Appl. No.: **18/354,246**

(22) Filed: **Jul. 18, 2023**

Related U.S. Application Data

(60) Provisional application No. 63/479,242, filed on Jan.
10, 2023, provisional application No. 63/385,328,
filed on Nov. 29, 2022.

Publication Classification

(51) **Int. Cl.**
H10B 43/27 (2006.01)

An alternating stack of insulating layers and sacrificial material layers is formed over a substrate, memory openings are formed through the alternating stack, and memory opening fill structures including a respective vertical stack of memory elements are formed in the memory openings. The sacrificial material layers are replaced with electrically conductive layers. Electrical contacts to the electrically conductive layers may be provided by forming integrated layer-and-via structures that simultaneously forms metallic via portions as an integral portion of a continuous electrically conductive structure that includes a respective electrically conductive layer. Alternatively, electrical contacts to the electrically conductive layers may be provided by forming integrated line-and-via structures that includes a metallic plate portion contacting a respective electrically conductive layer and a metallic via portion.

