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(54) **STAIRLESS THREE-DIMENSIONAL
MEMORY DEVICE CONTAINING
MEANDERING DIELECTRIC ISOLATION
STRUCTURE AND METHODS OF FORMING
THE SAME**

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ABSTRACT

A method includes forming an in-process alternating stack of insulating layers and sacrificial material layers, forming a meandering dielectric isolation structure through the in-process alternating stack, forming memory stack structures through the alternating stack, where each of the memory stack structures includes a respective vertical stack of memory elements and a vertical semiconductor channel, forming sacrificial via fill structures on the respective sacrificial material layers, replacing first portions of the sacrificial material layers with electrically conductive layers, and forming layer contact via structures contacting a respective one of the electrically conductive layers by replacing at least the sacrificial via fill structures with a conductive material portion.

