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(54) MEMORY DEVICE HAVING WORD LINE WITH IMPROVED ADHESION BETWEEN WORK FUNCTION MEMBER AND CONDUCTIVE LAYER

(71) Applicant: NANYA TECHNOLOGY **CORPORATION**, NEW TAIPEI CITY

(72) Inventors: YUEH HSU, NEW TAIPEI CITY (TW); WEI-TONG CHEN, NEW TAIPEI CITY (TW)

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(57)**ABSTRACT**

The present application provides a memory device having a word line with an improved adhesion between a work function member and a conductive layer. The memory device includes a semiconductor substrate defined with an active area and including a recess extending into the semiconductor substrate, and a word line disposed within the recess, wherein the word line includes a first insulating layer disposed within and conformal to the recess, a conductive layer surrounded by the first insulating layer, a conductive member enclosed by the conductive layer, and a second insulating layer disposed over the conductive layer and conformal to the first insulating layer. A method of manufacturing the memory device is also disclosed.

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