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(54) NON-VOLATILE MEMORY DEVICE HAVING SCHOTTKY DIODE

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(57) ABSTRACT

A non-volatile memory device includes: an insulation layer; a Schottky diode, which is formed on the insulation layer; a writing wire which is conductive and is electrically connected to a first end of the Schottky diode: a memory unit on the Schottky diode, the memory unit being electrically connected to a second end of the Schottky diode: and a selection wire on the memory unit, the selection wire being electrically connected to the memory unit; wherein when the non-volatile memory device is selected for a data to be written into, a first current flows through the Schottky diode to write the data into the memory unit.



