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(54) **SEMICONDUCTOR MEMORY DEVICE AND METHOD FOR FORMING THE SAME**

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(57) **ABSTRACT**

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A semiconductor memory device includes a substrate, a plurality of bottom electrodes arranged on the substrate along a row direction and a column direction to form an array. The row direction and the column direction are perpendicular. A supporting layer is disposed on the substrate and in direct contact with the bottom electrodes to support the bottom electrodes. At least a first slit, at least a second slit, and at least a third slit that extend along different directions are formed in the supporting layer and partially expose sidewalls of the bottom electrodes.

