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(54) **SEMICONDUCTOR DEVICE AND A METHOD FOR MANUFACTURING THE SAME**

(71) Applicant: **MACRONIX INTERNATIONAL CO., LTD.**, Hsinchu (TW)

(72) Inventors: **Yu-Yu LIN**, New Taipei City (TW);  
**Feng-Min LEE**, Hsinchu City (TW)

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**ABSTRACT**

A semiconductor device includes a resistor. The resistor includes two bottom electrodes adjacent to each other, a resistive layer, a top electrode and a conductive sidewall. The resistive layer is disposed on the two bottom electrodes. The top electrode is disposed on the resistive layer. The conductive sidewall surrounds the top electrode and is electrically connected to the top electrode and a bottom electrode of the two bottom electrodes. The top electrode overlaps the two bottom electrodes in the first direction, and extends above the two bottom electrodes along a second direction different from the first direction.

