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(54) 1.5T OTP MEMORY DEVICE AND METHOD FOR FABRICATING SAME

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(57) **ABSTRACT**

A 1.5T one-time programmable memory device and a method for fabricating it re disclosed. The 1.5T OTP memory device includes at least one 1.5T memory cell formed in an active area of a semiconductor substrate. The 1.5T memory cell includes one select transistor and one half of a grounding transistor. This structure is simple. Moreover, in the grounding transistor, a portion of a thin gate dielectric layer is sandwiched between a doped junction region coupled to a source region in the select transistor and a grounding gate. During programming of the 1.5T memory cell, a voltage on the drain region in the select transistor can be coupled to the doped junction region to cause the thin gate dielectric layer portion sandwiched between the doped junction region and the grounding gate to rupture at a low programming voltage.

