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### (54) STRETCHABLE SELF-HEALING RESISTIVE RANDOM ACCESS MEMORY AND MANUFACTURING METHOD THEREOF

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#### (57) ABSTRACT

An embodiment of the present invention provides a stretchable self-healing resistive random-access memory and a manufacturing method thereof, which implements the characteristics of a non-volatile resistive random-access memory by fabricating a composite film having a concentration gradient of a conductive metal formed therein in a way of mixing self-healing stretchable polymer and conductive metal powder, adjusting the concentration, and drying the mixture, so that one side has conductive properties and the other side has insulating properties, and then laminating the fabricated composite film.

