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(54) **HETEROJUNCTION SEMICONDUCTOR SUBSTRATE WITH EXCELLENT DIELECTRIC PROPERTIES, METHOD OF MANUFACTURING THE SAME AND ELECTRONIC DEVICE USING THE SAME**

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(57) **ABSTRACT**

The present invention relates to a heterojunction semiconductor substrate having excellent dielectric properties, a method of manufacturing the same, and an electronic device using the same. The present invention provides a heterojunction semiconductor substrate with improved interlayer adhesion, low leakage current, and excellent dielectric properties that maintain strength in a ferroelectric fatigue experiment by interposing a metal layer and a conductive metal oxide layer on a semiconductor substrate to form an epitaxial oxide thin film layer composed of perovskite piezoelectric oxide. The heterojunction semiconductor substrate can be applied to sensors, actuators, transducers, or MEMS devices that use the high functionality of the high-quality epitaxial oxide thin film layer, including applications in electronic and optical devices.