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(54) **SURFACE ACOUSTIC WAVE DEVICE
HAVING A THIN METAL OXIDE FILM
FULLY COVERING AT LEAST THE
ELECTRODES AND METHOD OF
FABRICATING SAME**

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310/364

(58) **Field of Search** 310/313 R, 313 A,
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(57) **ABSTRACT**

A surface acoustic wave device includes a piezoelectric substrate having Al or Al alloy electrodes formed on a surface of the substrate, a metal oxide film provided on the substrate and the electrodes. The metal oxide film is formed by a process including depositing a metal thin film having a thickness sufficiently thin so that the deposited metal thin film is discontinuous including voids, and oxidizing the discontinuous metal thin film, and the metal oxide film includes a continuous portion without voids covering the electrodes.

25 Claims, 7 Drawing Sheets

