

**TITLE OF INVENTION: SURFACE ACOUSTIC WAVE DEVICE
INCORPORATING A THIN LAYER OF METAL MATERIAL**

Abstract

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The invention relates to a surface wave device (200) comprising a substrate (210); a piezoelectric layer (240) above an upper face of the substrate; a pair of electrodes (250A, 250B) in contact with the piezoelectric layer, the two electrodes including fingers (252A, 252B) extending in the same direction so
10 as to form a periodic structure the fingers of the two electrodes alternate with each other, and having an interdigital distance (2p) separating the centers of two adjacent fingers of the same electrode; a metal layer (220) interposed between the substrate and the piezoelectric layer; and a dielectric layer (230) interposed between the metal layer and the piezoelectric layer, wherein the
15 metal layer has a thickness of 5 nm to 100 nm and the dielectric layer has a thickness of 25 nm to 600 nm.

Figs. 2A & 2B