

RADIO FREQUENCY ACOUSTIC DEVICE WITH LATERALLY DISTRIBUTED REFLECTORS

ABSTRACT

5 A bulk acoustic wave resonator comprises a piezoelectric material layer, a first metal layer disposed on the upper surface of the piezoelectric material layer, a second metal layer disposed on the lower surface of the piezoelectric material layer, and a laterally distributed raised frame including a first raised frame disposed on the upper surface of the first metal layer and having an inner raised frame section with a tapered portion and a non-tapered portion and an
10 outer raised frame section, and a second raised frame disposed beneath the first metal layer and the outer raised frame section, but not beneath the inner raised frame section, the inner raised frame section being laterally disposed from a central active region of the bulk acoustic wave resonator by a first distance, the outer raised frame section being laterally disposed from the central active region by a second distance greater than the first distance.

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[FIG. 1A]