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(54) **LATERALLY EXCITED BULK WAVE RESONATOR AND FABRICATING METHOD THEREOF**

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(57) **ABSTRACT**

A laterally excited bulk wave resonator includes a supporting plate; a piezoelectric base having a back side attached to the supporting plate, in which a cavity is defined on a side of the supporting plate facing toward the piezoelectric base; a lower interdigital transducer provided at a back side of the piezoelectric base and located in the cavity; and an upper interdigital transducer provided at a front side of the piezoelectric base corresponding to the lower interdigital transducer. A first interdigital electrode of the lower interdigital transducer has a same polarity as a second interdigital electrode of the upper interdigital transducer at a position corresponding to the first interdigital electrode.