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Liu(10) **Pub. No.: US 2022/0416765 A1**(43) **Pub. Date: Dec. 29, 2022**(54) **BULK ACOUSTIC WAVE RESONANCE
DEVICE AND BULK ACOUSTIC WAVE
FILTER**(71) Applicant: **CHANGZHOU CHEMSEMI CO.,
LTD.**, Changzhou (CN)(72) Inventor: **Yuhao Liu**, Shanghai (CN)(21) Appl. No.: **17/640,352**(22) PCT Filed: **Sep. 5, 2019**(86) PCT No.: **PCT/CN2019/104601**

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ABSTRACT

The present disclosure provides a bulk acoustic wave resonance device, a bulk acoustic wave filter device and a radio frequency front end device. The bulk acoustic wave resonance device includes a first layer including a cavity disposed at a first side of the first layer; a first electrode layer disposed in the cavity; a second layer disposed at the first side and disposed on the first electrode layer, and the second layer is a flat layer and covers the first cavity; and a second electrode layer disposed at the first side and disposed on the second layer, and the first electrode layer includes at least two first electrode bars or the second electrode layer includes at least two second electrode bars. The present disclosure can increase the difference between acoustic impedance of a resonance region and a non-resonance region, thereby increasing Q value of the resonance device.

