Abstract

Resonator and preparation method of a resonator, and filter

A resonator and a preparation method of a resonator, and a filter relate to the technical field of resonators. The preparation method includes: forming a piezoelectric layer, a first electrode layer, and a first bonding layer on a first substrate; patterning the first bonding layer to form a first bonding ring, a second bonding ring, and a third bonding ring, and etching an exposed part of the first electrode layer to form a first window; forming a first supporting layer and a second bonding layer on the second substrate; patterning the second bonding layer to form a fourth bonding ring and a fifth bonding ring, and etching an exposed part of the first supporting layer to form a second window and a third window to obtain a boundary ring located between the third window and the second window; bonding the third bonding ring and the fifth bonding ring, and bonding the second bonding ring and the fourth bonding ring to obtain a cavity structure of the resonator; and removing the first substrate, and forming a second electrode layer on the piezoelectric layer. According to the preparation method, preparation of the boundary ring is realized through a packaging and bonding process, and the preparation process of a resonator is simple.

Figure 1