

INTERDIGITAL RESONATOR AND FILTER

Abstract

Disclosed are an interdigital resonator and a filter. The interdigital resonator includes a piezoelectric layer and an interdigital transducer located on one side of the piezoelectric layer, wherein the electrode fingers include a double-layer electrode structure and at least one scattering structure provided in the double-layer electrode structure; the double-layer electrode structure includes at least two laminated electrode layers; and the scattering structure includes scattering holes and scattering media provided in the scattering holes, the scattering holes penetrate through at least a part of the double-layer electrode structure, and the acoustic impedance of the scattering medium is different from the acoustic impedance of an electrode layer where the scattering medium is located.

[Figure 1]