ABSTRACT

SURFACE ACOUSTIC WAVE DEVICE WITH ELIMINATION OF PYROELECTRIC DISTURBANCE

The invention relates to a surface acoustic wave device comprising a substrate made of piezoelectric and pyroelectric material with electrical conductivity σ_0, comprising on one of its faces an electroacoustic transducer linked to an input (E), an output (S) and an earth (PM), the said material exhibiting electric polarization $\vec{P}$, characterized in that the faces of the planes perpendicular to the polarization $\vec{P}$ have an electrical conductivity σ greater than the electrical conductivity σ_0, and are linked to the earth (PM) in such a way as to allow the flow of pyroelectric charges which appear during the operation of the electroacoustic transducer.

Application: Filtering in telecommunications.

FIGURE 2