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## ABSTRACT

# ACOUSTIC WAVE DEVICE COMPRISING DOMAINS OF ALTERNATING POLARIZATION

The invention relates to an acoustic wave device comprising a layer of ferroelectric material (C) and a substrate (S), characterized in that the layer of ferroelectric material lies between a first electrode ($E_1$) which is deposited on the surface of the substrate or is a constituent part of the substrate and a second electrode ($E_2$) and in that the layer of ferromagnetic material comprises positive first polarization domains ($D_1$) and negative second polarization domains ($D_2$).

For applications in the field of surface wave transducers, it may be advantageous to produce structures with domain inversion with a pitch of the order of a few hundred nanometers, said structures being suitable for applications at high frequencies (of the order of 1 gigahertz).

Figure 2

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