

ABSTRACT**RECEIVING DEVICE FOR ACOUSTIC WAVES**

Disclosed is a device for receiving acoustic waves, comprising:

- an acoustic antenna able to function as a condenser microphone distributed
5 along a line (L) of the acoustic antenna comprising a conductor (A) and a dielectric (D), the line (L) being a transmission line or being configured to function as a transmission line when the dielectric makes direct physical contact with another conductor,
- an exciter (EX) configured to apply, in a receiving step, an input voltage to a
10 first longitudinal end (E1) of the line (L) so as to generate an input electromagnetic wave that moves toward a second longitudinal end (E2) of the line (L) and so as to generate an output electromagnetic wave that moves in the opposite direction to the input electromagnetic wave, the input voltage simultaneously comprising a set of
15 sinusoidal voltages comprising a fundamental sinusoidal voltage and a set of harmonics of the fundamental sinusoidal voltage, the frequency of the fundamental sinusoidal voltage being defined so that stationary waves are established in the line (L) such that the output electromagnetic wave comprises directional acoustic-antenna channels.

20 Figure for the abstract: Fig. 2