



## ⚙️ Title

### DEVICE FOR NOISE CONVERSION IN ELECTRIC ENERGY

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## ⚙️ Short presentation

The device for converting noise into electricity, according to the invention, is composed of a panel containing several electromagnetic and piezoelectric transducers, each transducer being provided with a convergence guide, conical in shape, which has the role of transforming the spherical waves captured in flat waves, having the effect of increasing the power of the mechanical vibrations that are discharged on the transducers and producing electrical signals that are collected by a multichannel system with rectifier circuits with double alternation to an accumulator or to a consumer, the broad spectrum of absorption and conversion of the noise obtaining -se is differentiated by the conical elements and the translators used in a painting.

When recovering noise and obtaining electricity, the following sequence of phenomena is detailed: the conversion of the acoustic signal into mechanical vibration and the conversion of mechanical vibration into electrical signal.

## ⚙️ Applicability

Alternative energies, by recovering an energy waste and transforming it into green energy; reducing the noise pollution of the environment; development of autonomous systems for traffic information,

## ⚙️ Images

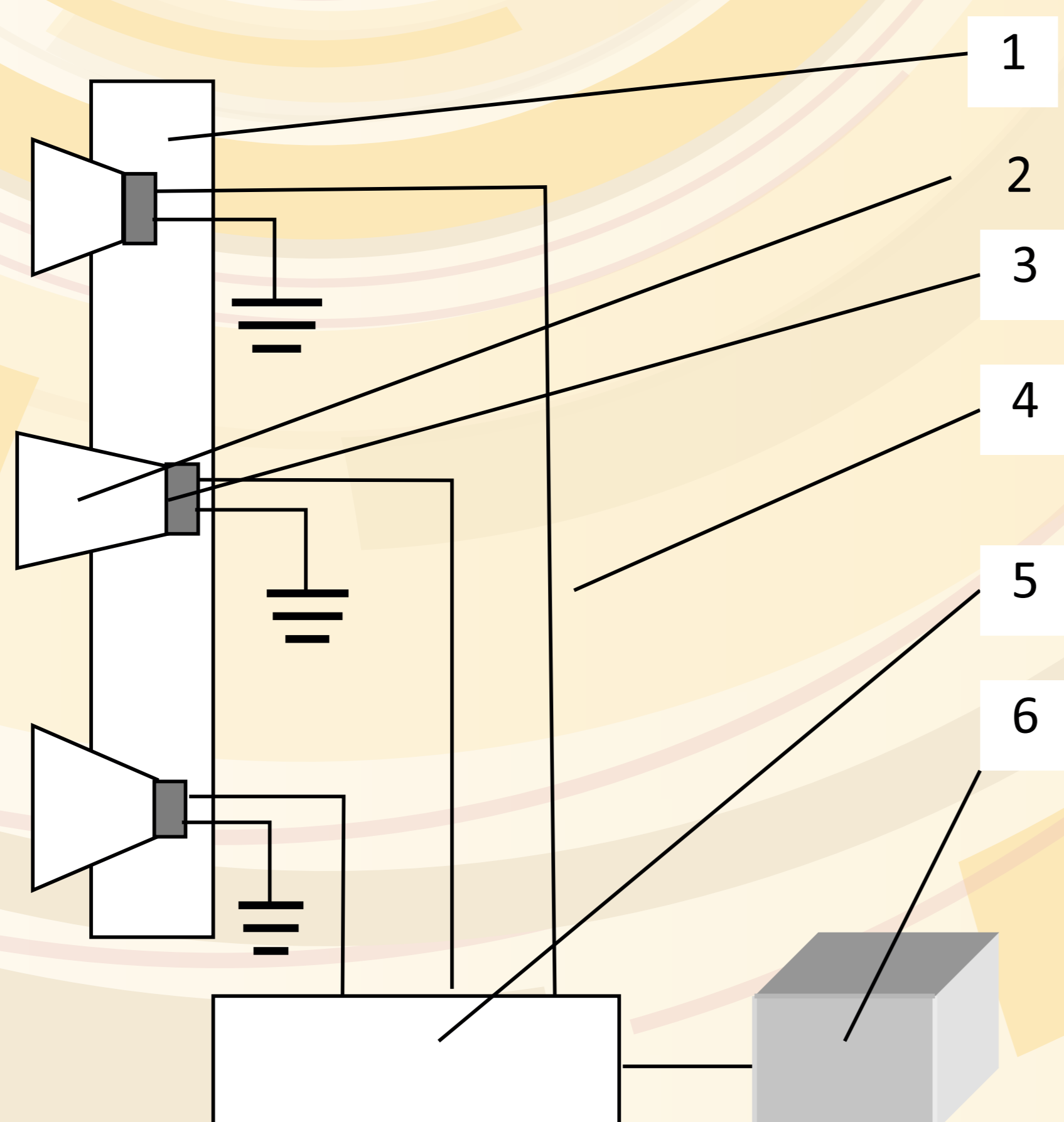


Fig. 1. Schița dispozitivului pentru recuperarea și conversia zgomotului:

- 1 - suport matrice senzori;
- 2 - ghid de convergență;
- 3 - traductor semnal;
- 4 - conexiune placă de achiziție,
- 5 - placa de achiziție semnal electric cu 11 canale de intrare,
- 6 - acumulator - consumator curent.