Claims

1. A self-powered remote control device comprising:

a power generator unit, wherein said generator unit comprises a casing and a movable body confined within said casing, said movable body configured to move relative to said casing upon said casing being driven by motion of a user, a first piezoelectric energy transducer comprising piezoelectric material being attached to said casing and configured to be impacted by said movable body, whereby impact of said movable body with said first piezoelectric energy transducer generates electrical energy from kinetic energy of said movable body;

an electric power storage device for receiving energy from said generator unit;

an input device for receiving a user operated manual input;

a control unit for performing an encoding operation according to said manual input to generate an output; and

a wireless signal transmitter powered by said storage device and for transmitting a signal based on said output;

wherein relative movement between the movable body and the casing is caused by the user shaking the remote control device.

2. The device according to claim 1, wherein said movable body is connected to an end of said casing by an elastic material for urging said movable body towards said first piezoelectric energy transducer; whereby upon said movable body being initially pressed against said first piezoelectric energy transducer, shaking of said remote control device causes said elastic material to deform and store elastic energy, and upon said movable body moving towards said first piezoelectric energy transducer the elastic energy is converted into kinetic energy of said movable body for generating electrical energy upon striking said first piezoelectric energy transducer.

3. The device according to claim 2 in which the elastic material is a spring.

4. The device according to claim 1, wherein a second piezoelectric energy transducer is attached to said casing.

5. The device according to any one of the preceding claims, wherein said first piezoelectric energy transducer has a convex top surface which is to be impacted by said movable body and a concave bottom surface.