

AbstractA self-powered remote control device

5

A self-powered remote control device is proposed. The user shakes the remote control device in order to generate electrical power for the device to function. The remote control device has a movable body, such as a steel ball, that is free to move within a larger casing. When the user shakes the remote control device, the steel ball impacts against the side of the casing, striking the piezoelectric transducer mounted therein. The electricity generated is then passed through a step-down transformer, rectified by diodes, and then used to charge an electrical storage medium, such as a capacitor. The capacitor utilizes this energy to power an encoder and a wireless signal transmitter. When the user hits a button on the remote control device, the encoder performs an encoding operation according to the button pushed, sends the encoded signal to the wireless signal transmitter, and the wireless signal transmitter radiates the encoded signal away from the remote control device.

10

15

[Figure to print with the abstract: Fig. 1(a)]

20



162162



G00002