Portable Electric Generator "Follow Me"

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Electromagnetic induction says that when magnetic flux changes through a closed contour, an electric field will be inducted. The magnetic flux changes if the contour and the magnet move relatively to each other. We're using this phenomenon to create a portable electric generator. Offered device uses the useless involuntary movements of a hand, which we perform while walking. For this purpose we attached a row of serially connected contours on a belt, oriented along the path of a human wrist movement. If a bracelet on our wrist, has a series of neodymium magnets attached to it, at hands moving, a variable magnetic flux will flow. As a result we will get impulses of electric energy as a result of the electromagnetic induction. Those impulses are collected in a capacitor and then via charging controller chip will charge the battery. Energy accumulated in the battery may be used for a variety of purposes, for example: we'll charge a mobile phone, or we will light red LEDs which are placed on the back of the same belt (to warn a driver). Also when a watch is attached on the bracelet (for example a smart watch), it is supplied by our device. The permanent magnets which are placed on the bracelet adjust the pressure and the blood flow of a human body. With this movement, of course we use the negligible part of the amount which is wasted during the movement. Offered device guarantees the customer that he will never run out of battery, in a place with no energy. Specifications of our device: Average produced power is 30 micro watt. It can generate 0.108 joule energy after one hour walk daily. Thus it can charge a mobile phone battery, up to 50 % of its capacity after a 40 hour walk totally. Battery specifications of this device: 2300 mah. 4,35v voltage limit.