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(57) Abstract :

In day-to-day life the utilization of power turns to be necessary for each work. The power delivered will not contaminate the surroundings and it is also will not to rely upon the climate conditions. This idea proposes a novel technique for the creation of power utilizing piezoelectric sensors kept along the footpaths which can ready to charge the battery and ready to supply the force at whatever time of our prerequisite. The technique through piezoelectric sensors produces electrical force by changing mechanical energy of the development of individuals on the floor to electrical energy. The benefits of piezoelectric force generation framework are that it is sheltered and secure to utilize, it doesn't make any issue or distress for the general population strolling through footpath, and it is absolutely chance free strategy. Footstep power generation technique has mechanical part and in addition electrical part, however the electrical and mechanical losses are negligible. This framework additionally has the ability to store the electrical force away battery. At long last the force which will be abandoned can be given to national grid for power reason. The electrical power consumption is increasing exponentially. Therefore, the need of a fool-proof and economically viable power generation and distribution system demands a certain interest. This idea proposes utilization of human locomotion energy which, although extractable goes mainly to waste. This idea proposes a model that uses human walking, jumping and running as a source of energy and store it for essential use.. This idea illustrates a method for harvesting this human locomotion energy with the use of piezoelectric sensor and demonstrates an application with the stored energy i.e., to charge a mobile phone securely . The ground reaction force (GRF) exerted from the foot, when converted to voltage by piezoelectric sensors is capable enough to power up a device. Successive exertion leads to aperiodic voltage build up which with proper circuitry can be used to charge a storage battery. The power produced by this technique can also be employed in basic application such as street lighting, notice boards, gyms and other areas of public domain. It also promotes green energy and environment friendly approach towards energy generation.

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