

(54) Title of the invention : WEARABLE ARTICLE FOR GENERATING ELECTRICAL POWER BY MOVEMENT OF USER

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(57) Abstract :

The present invention relates to an electric power generation system employing movements of the different movable joints of a user's (120) body. The system (100) for a jacket (202) with a locking mechanism (204) comprises a plurality of piezoelectric discs (206-1, 206-2), a plurality of piezoelectric crystals to produce the piezoelectric effect. The motion of the piezoelectric discs (206-1, 206-2), due to the motion of limbs actuates the piezoelectric discs (206-1, 206-2) and the piezoelectric generator (306) to generate electrical power. A lithium-ion battery (308) electrically coupled with the piezoelectric generator (306) through a pair of electrical wires (310), is used for the storage of electrical power produced. The battery also comprises a LED (312) operatively coupled to the battery (308) to indicate its charging status and also operate as a light source for the user. The battery (308) is configured to enable the recharging of one or more mobile devices, upon electrical coupling of the mobile devices to the output charging port (314).

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