Title (en)

DEVICE FOR CONVERTING MECHANICAL ENERGY INTO ELECTRIC ENERGY USING AT LEAST ONE PIEZOELECTRIC TRANSDUCER

Title (de)

VORRICHTUNG ZUR UMWANDLUNG VON MECHANISCHER ENERGIE IN ELEKTRISCHE ENERGIE MIT MINDESTENS EINEM PIEZOELEKTRISCHEN WANDLER

Title (fr)

DISPOSITIF DE CONVERSION D'ENERGIE MECANIQUE EN ENERGIE ELECTRIQUE A L'AIDE D'AU MOINS UN TRANSDUCTEUR PIEZOELECTRIQUE

Publication

EP 2374169 A1 20111012 (FR)

Application

EP 10700004 A 20100104

Priority

• EP 2010050012 W 20100104
• FR 0950029 A 20090106

Abstract (en)

[origin: WO2010079151A1] The invention relates to a device for converting mechanical energy into electric energy, comprising at least one conversion cell (C) comprising at least one percussion mechanism (6) including one deformable member (7), having at least two opposite anchoring points, rigidly connected in a central area of a percussion member (8), and one or more piezoelectric transducers (10) coupled to an acoustic resonator (9). The deformable member (7) includes at least one stable position in which the percussion member (8) is remote from the acoustic resonator (9), the percussion mechanism (6) and the acoustic resonator (9) being arranged so that when a force exceeding a threshold is applied onto the deformable member (7), the latter leaves the stable position by deformation so that the percussion member (8) hits the acoustic resonator (9) so that it resonates and excites the piezoelectric transducers (10) and so that the energy generated by the force is converted by the piezoelectric transducers.

IPC 8 full level

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CPC (source: EP)

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