

Title (en)

RESONANT PIEZOELECTRIC ALERTING DEVICE

Title (de)

RESONANTE PIEZOELEKTRISCHE WARNVORRICHTUNG

Title (fr)

DISPOSITIF D'AVERTISSEMENT PIEZOELECTRIQUE RESONANT

Publication

EP 1088352 A1 20010404 (EN)

Application

EP 99924123 A 19990428

Priority

- US 9909241 W 19990428
- US 8730998 A 19980529
- US 8755898 A 19980529

Abstract (en)

[origin: WO9963604A1] A resonant piezoelectric alerting device (600) includes a motional mass (130) and a piezoelectric actuator (100) constrained to an actuator mount (132) at a first end and coupled to the motional mass (130) at a second end. The piezoelectric actuator (100) responds to a control signal (108, 110) to generate an alternating out-of-plane movement (812, 814) of the motional mass (130) having an amplitude (412, 414). The alternating out-of-plane movement (812, 814) of the motional mass (130) is transformed into tactile energy to provide a tactile alert about a resonant frequency (608). The resonant piezoelectric alerting device further includes a damping element (136, 156) magnetically coupled to the motional mass (130). The amplitude (412, 414) is controlled by the damping element (136, 156). The alternating out-of-plane movement (812, 814) of the motional mass (130) is also transformed into acoustic energy to provide an audible alert above the resonant frequency (608).

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H01L 41/08

IPC 8 full level

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CPC (source: EP KR)

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Citation (search report)

See references of WO 9963604A1

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