

## **Device and Method For Tuning Mechanical and Electromagnetic Natural Frequencies of an Energy Harvester**

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**Abstract:** The present invention is an energy harvester having a mechanical natural frequency that can be mechanically tuned to the natural frequency of the vibrating environment without having to add or subtract mass to seismic/proof mass, change the mass of the mechanical spring or change the physical dimensions of the mechanical spring of the energy harvester. In another embodiment, the electromagnetic natural frequency of the energy harvester is electronically tuned by adding a tuning circuit comprising a variable dissipative element without changing the mechanical natural resonant frequencies of the energy harvester.

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