Thermoacoustic Piezoelectric Power Generator

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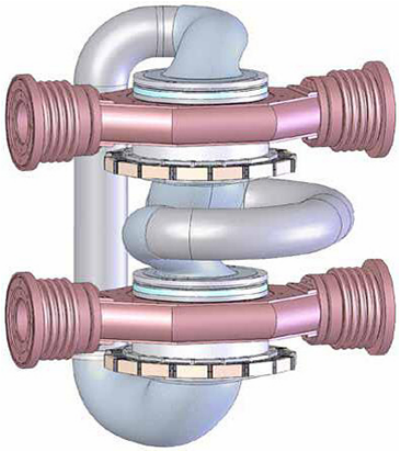

TECHNOLOGY READINESS LEVEL 4-7

Seeking

Investment | Licensing | Research

Keywords

- Thermoacoustics
- piezoelectricity
- power generation
- waste heat
- thermal power generation

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Technology Summary

This invention describes a thermoacoustic engine that operates using an input stream of heat to generate an acoustic field which excites a piezoelectric generator to produce useful electric power. The device can be configured to accept a waste, or rejected heat stream in order to produce and recover useful electrical power. A prototype has been constructed that demonstrates the feasibility of the invention by producing electric power from a rejected heat source. The device can be made to be portable for field deployment, or could be used integrated with a rejected heat source.

Application & Market Utility

Utilizes rejected heat streams to generate electrical power. Portable or integrated into existing systems to recover heat and generate power. Relies on inert gases for operation, no ozone depleted gases used. Good source of alternative energy production.

Next Steps

Seeking research collaboration and licensing opportunities.