RAVERS
Research Center for Advanced Hybrid Electric Vehicle Energy Recovery System

A Thermoelectric generator with an inter mediate heat exchanger for automotive w asted heat recovery system

Poster Location P-20

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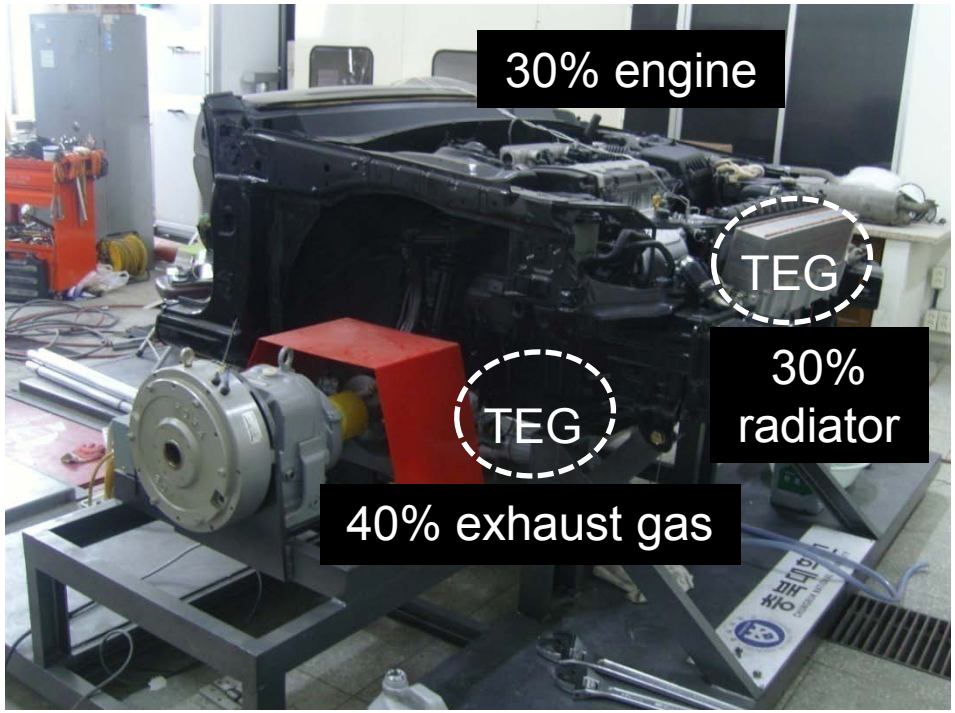

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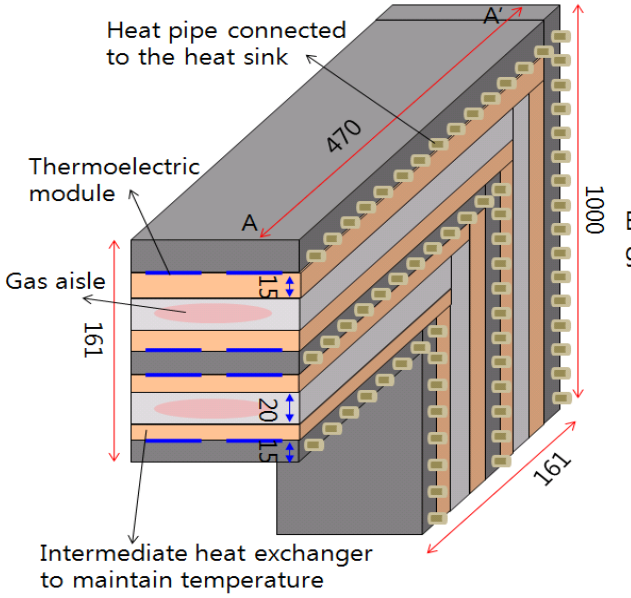
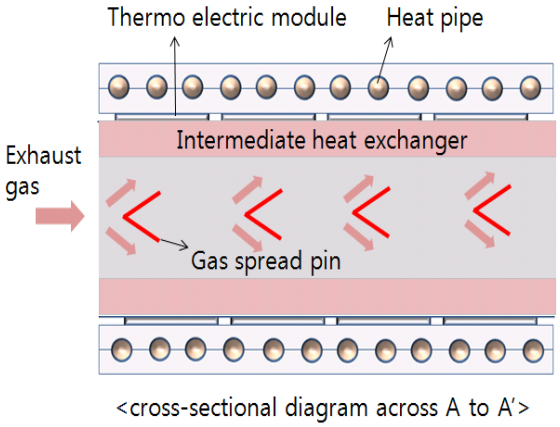
Objective

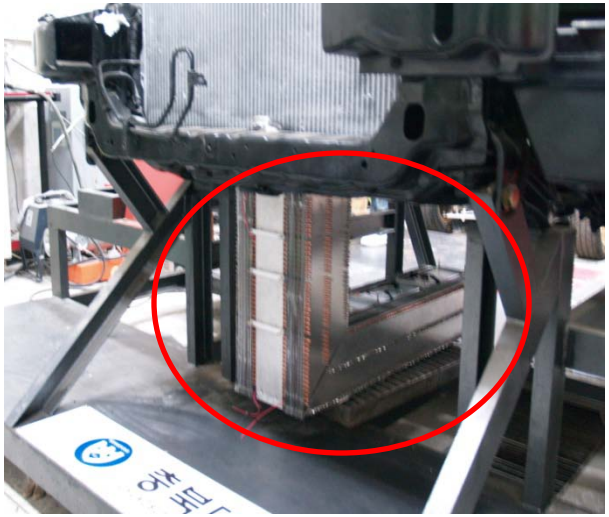
- Developing 1kW TEG using an wasted heat from exhaust gas
  - Design Optimization & Performance Analyses for Integrated TE System
- The TEG replacing the alternator of conventional ICEV's.

Proposed TEG





<cross-sectional diagram across A to A'>



<Proposed design of TEG>

<Manufactured TEG>

- The number of thermoelectric module attached on TEG is 232
- Each module will generate about 5W at vehicle driving condition.