



## Solar Thermoelectric Generator

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**Summary:** A novel design for solar thermoelectric generators with improved efficiencies

**Description:** Solar thermoelectric generators are solid state heat engines that generate electricity from concentrated sunlight. Concentrated sunlight can be used to achieve extremely high temperatures, which improves the generator efficiency. However, a complication is that the solar absorber also emits a significant amount of black body radiation, and this emitted light is the dominant loss mechanism in these generators. In this invention we propose a solution to this problem that eliminates virtually all of the loss due to black body radiation. This enables solar thermoelectric generators to operate at higher efficiencies and with lower levels of optical concentration. The solution is suitable for both single and dual axis solar thermoelectric generators.

### Main Advantages of this Invention

- Reduces losses due to black body radiation
- Can operate using lower levels of optical concentration

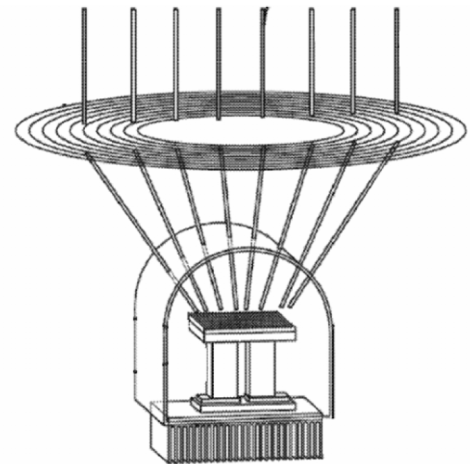
### Potential Areas of Application

- Solar-electric companies
- Green energy

**ID number:** 8004

**Intellectual Property Status:** US patent pending  
(application # 14/190,064)

**Opportunity:** We are seeking an exclusive or non-exclusive licensee for marketing, manufacturing, and sale of this technology.



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