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(54) **THERMOELECTRIC POWER GENERATION SYSTEM**

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(57) **ABSTRACT**

A thermoelectric power generation system includes a shell-and-tube heat exchanger configured such that a tube including double tubes of an inner tube and an outer tube is inserted into a shell, and a thermoelectric power generation module inserted into between the inner tube and the outer tube. The thermoelectric power generation module generates thermoelectric power using a temperature difference between a first medium flowing in the inner tube, such as coolant, and a second medium flowing outside the outer tube in the shell, such as excess water vapor.

