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(57) Abstract :
The invention discloses a device for heat recovery from automobile exhaust systems comprising an exhaust pipe (1), heat exchanger (2), thermoelectric modules (3), cooling system (4), and energy management unit (5). The device efficiently transfers heat from exhaust gases to thermoelectric modules, converting waste heat into electricity. The generated power is regulated and stored for onboard applications, reducing alternator load and improving fuel efficiency. Compact, modular, and durable, the invention ensures enhanced energy utilization, reduced emissions, and environmental sustainability for modern automotive systems.

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