Autocool

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Everybody loves his car, but imagine a person forgetting an innocent child in a car, which is closed and exposed to sunlight; moreover, the child will die due to the high temperature trapped in the car. A car can heat up to a fatal temperature within 10 to 15 minutes on a hot day. After several experiments, my invention, a simple yet important solar powered cooler, aims to maintain the car interior’s temperature at an acceptable condition when the car is parked in sunlight. My work is based on a peltier module, a small squared electrical component. When it’s connected to an electrical current, the peltier gets hot on one side and very cold on the other side, but heatsink1and fan1 must be placed on top of each other on the hot side to prevent overheating. Then, I put another aluminum heatsink2 above the cold side, and I placed fan2 in front of this heat sink. Making the necessary electrical wiring, I put a piece of plastic between the peltier and the heatsink1to prevent the mixing of cold and hot air. When fan2 blows air through heatsink2, the resulting air will be cold. Finally, I performed several experiments to check the temperature of the blown air and the temperature of the room when the system is working. The results were positive; the temperature of the air as well as the temperature of the room decreased.

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