Abstract

The difference in temperature between the interior of the car and its exterior can rise up to 30°C which may have a threatening effect on humans and pets if they were left unattended inside the car, especially during summer, the reason behind such difference in temperature can be the result of the heat radiation and absorption.

This paper reviews a solar car ventilation system and its effectiveness in reducing the temperature of the car interior when it is parked under the direct sunlight. The commercially available ventilators won’t decrease the car cabin to the required temperature. The proposed new ventilation system can reduce the interior temperature of the car cabin up to 17°C; the proposed system uses solar power energy to lower fuel consumption, as well as carbon dioxide emission and engine load. So this paper explains the concept behind the proposed ventilation system and the method used for temperature reduction.

References

Index Terms

Computer Science  Power Electronics

Keywords
Solar Power, Car Ventilation, Temperature