

Safety System Preventing Hyperthermia in Idle Vehicles

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Abstract:

Every year children and pets are left alone in hot vehicles and become victims of heatstroke. Due to the potential danger, a vehicle safety system is being developed to identify harmful situations, involving high temperatures and carbon monoxide. This system will be able to identify if there is a presence in an idle vehicle, determine if the conditions are dangerous, and alert the appropriate caregivers about the situation.

Professionals in the nursing and veterinarian fields were contacted and a survey from potential users was conducted to determine the design criteria. The designed system has two components. The first component is positioned on the dashboard of the vehicle and the second component attaches to the back of one of the front seats. If the vehicle is idle and a presence is detected, the back seat component sends a RF signal to the dashboard component. The dashboard component will survey the environment via temperature and carbon monoxide sensors for dangers. If the environment is dangerous while there is a presence detected, this component will alert the appropriate individual. The current state of the system will be presented.