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ID-INTELLIGENT DEFIBRILLATOR METHOD AND CONTROL FOR OPERATING A DEFIBRILLATOR WITH AN ELECTRIC VEHICLE

Verena Blunder
Bertrandt Ingenieurbüro GmbH

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ID-INTELLIGENT DEFIBRILLATOR METHOD AND CONTROL FOR OPERATING A DEFIBRILLATOR WITH AN ELECTRIC VEHICLE

Technical task:

The ID-Intelligent Defibrillator enables the availability and use of a defibrillator via an electric vehicle.

Initial situation:

The problem of the lack of availability of a defibrillator, or defibrillator for short, in everyday traffic is not uncommon. In case of a cardiac arrhythmia (HRS) or cardiac dysrhythmia, with the forms (cardiac) arrhythmia and cardiac dysrhythmia, everything revolves around the rapid availability of a defibrillator. The use of a defibrillator improves the chances of successful cardiopulmonary resuscitation. The primary concern is to protect oneself as a user or fellow travellers - especially risk patients - in one's own electric vehicle or in road traffic for other road users who are involved in an accident or need help quickly in road traffic. Currently, defibrillators are only provided in publicly accessible buildings such as train stations, airports and by first-aiders of an emergency medical service.



Figure 1

Solution:

Put simply, this idea is about an interface to an electric vehicle with a view to creating a better network density with regard to the current availability of defibrillators. The aim is to reduce the problem of the lack of availability of a rescue function of persons by using the electric energy of an electric vehicle. The focus of the idea is the use or provision of electrical energy, e.g. that of a power storage device, in a preferred design the energy of a lithium-ion battery or a rechargeable battery for the operation of a defibrillator on and in a motor vehicle. The defibrillator can draw its electrical energy directly from the motor vehicle through a connection on the motor vehicle, be charged and/or the electrodes for the interface to the patient can also be connected directly via an interface of the ID control from the motor vehicle to the defibrillator. In simple terms, the defibrillator works with the power supply from the motor vehicle or the motor vehicle provides a connection point from the ID-Defi module to the electrodes, which can be connected for a rescue operation.

In a special version, the availability of such a device can be queried by other road users via a connect function and a request can be started from the emergency point. I.e. the location of a mobile electric vehicle defibrillator component in road traffic and especially in the immediate vicinity in case of an emergency. With regard to saving lives, every second until the arrival of the rescue services is at stake.

An interface between an electric vehicle with ID component and a mobile terminal of the user can also explain the procedure, i.e. the individual work steps when using a defibrillator and/or the direct electrode connection of the two pads on the electric vehicle assisting with picture and sound to avoid first aid errors.

In a further advantageous design of the displayed ID procedure - for example by means of an AED (automatic electrical defibrillator) - the defibrillation equipment of the motor vehicle, for example a electric vehicle, is displayed on the motor vehicle in the form of a symbol on the vehicle if the user so wishes.

Exemplary forms of representation on an electric vehicle:

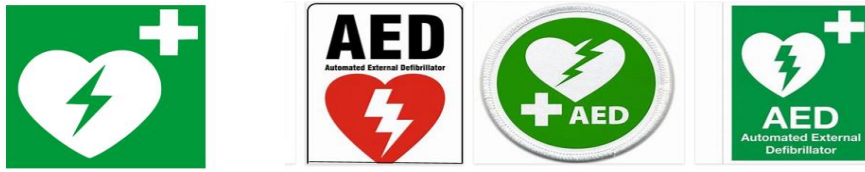


Figure 2

The task is solved with :

- an electric vehicle
- an ID defibr module in an electric/hybrid vehicle with ...
- an interface to an energy output from the electric vehicle inversely to a connection analogous to a power charging socket
- a standardised interface to an electrode connection of the two pads on the electric vehicle
- an interface of the ID Defibr module to a mobile terminal
- a tracking system of the electric vehicle with user-specific data of the individual equipment of the vehicle with ID components
- an interface of a pad connection in the passenger compartment and to the outside for other road users
- an electronic display module for identification of the ID-defibr equipment of the electric vehicle / inkpaper ect.



Figure 3

Possible application:

- Increase of individual road safety for users of motor vehicles with handicaps regarding cardiac rhythm disorders
- Increased road safety for other road users due to the very fast availability of a defibrillator
- Increase of network density in road traffic for a defibr availability between public areas
- Increased transparency regarding availability for first responders and rescue workers who want to access a defibr
- Increased safety when handling the defibr
- Identification and use of an extended electrical module function on or in a motor vehicle that increases road safety