# A combined system for cooling a high voltage battery and recharging a low voltage service battery on board of an electric or hybrid vehicle





► Cooling

- Low voltage services
  - ► Battery management system
- Combined system

Recharging

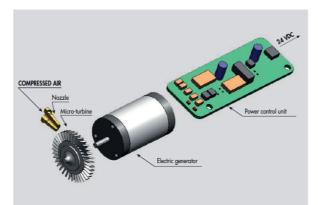
#### Innovations/advantages

Charging low voltage service batteries (12/24 Volt); Cooling of electric vehicle power batteries; Combined system incorporated in electric or hybrid vehicles; Accessory subsystem for energy generation using compressed air turbines.

### **Application field**

Vehicle engineering.

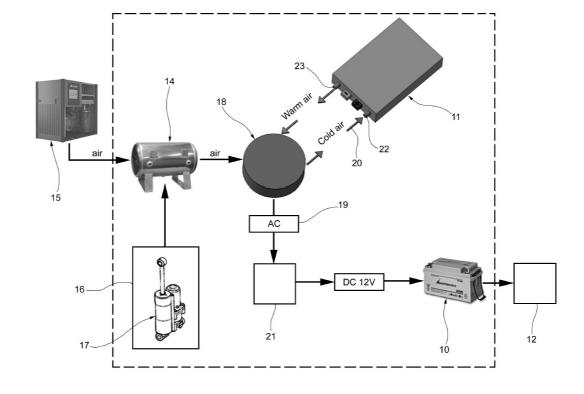




## **Product insight**

• Italdesign has been operating in the electric vehicle sector for many years, so much so that it has created a system, as an add-on to the traditional main charging system with alternator, for charging low voltage service batteries and cooling high voltage batteries in electric or hybrid vehicles.

The system is based on the principle of heat exchange, using the energy generated by compressed air turbines.



#### **Patent Information**

Priority Date - 28 June 2019

Application Number PCT/IB2020/054880

Publication Number WO 2020/260975 A1

IPR Dossier n.A18

Contact:

italdesigntoipr@italdesign.it

