Title (en)

DEVICE FOR TESTING AND MAINTAINING A HIGH VOLTAGE BATTERY AND USES THEREOF

Title (de

VORRICHTUNG ZUM TESTEN UND WARTEN EINER HOCHVOLTBATTERIE UND VERWENDUNGEN DIESER VORRICHTUNG

Title (fr)

DISPOSITIF POUR LE TEST ET L'ENTRETIEN D'UNE BATTERIE HAUTE TENSION ET UTILISATION DUDIT DISPOSITIF

Publication

EP 2923429 A1 20150930 (DE)

Application

EP 13771138 A 20130930

Priority

- DE 102012221133 A 20121120
- EP 2013070340 W 20130930

Abstract (en)

[origin: WO2014079616A1] The invention relates to a device (10) for maintaining and servicing a high voltage battery (20) which can be connected to the device (10), wherein the high voltage battery (20) is designed as a group of single battery cells or as a group of battery modules (21) and a high voltage positive pole connection (22), a high voltage negative pole connection (24) and a battery management system (28) having a data transmission connection (26) for bidirectional transmission of battery management system data between the battery management system (28) and an external unit (75) which processes information in respect of the high voltage battery (20). The device (10) comprises two or three apparatuses, which are selected from a group comprising the following: a high voltage battery charging apparatus (40), a high voltage battery discharging apparatus (60) and a high voltage battery diagnostics apparatus (80). A high voltage battery charging apparatus (40) is designed to bring a high voltage battery (20) connected to the device into a higher charge state and comprises a high voltage positive connection (42), which is designed to be connected to a high voltage positive pole connection (22) of the high voltage battery (20), and a high voltage negative connection (44), which is designed to be connected to a high voltage negative pole connection (24) of the high voltage battery (20). A high voltage battery diagnostics device (80) is designed to examine a high voltage battery (20) connected to the device (10) and the device (10) for the presence of internal errors and to indicate identified internal errors and preferably to generate diagnostics data in respect of the state of the high voltage battery (20) and to trigger functions which are directed to bringing the device (10) and/or the high voltage battery (20) safely into an additional state, to operating the device (10) and/or the high voltage battery (20) and/or to testing the device (10) and/or the high voltage battery (20), and comprises an information-processing unit (75) having a data transmission connection (86) for bidirectional transmission of battery management system data between the information-processing unit (75) and the battery management system (28) of a connected high voltage battery (20). A high voltage battery discharging apparatus (60) is designed to bring a high voltage battery (20) connected to the device into a lower charge state and comprises a high voltage positive connection (62), which is designed to be connected to the high voltage positive pole connection (22) of the high voltage battery (20), and a high voltage negative connection (64), which is designed to be connected to the high voltage negative pole connection (24) of the high voltage battery (20).

IPC 8 full level

H02J 7/02 (2006.01)

CPC (source: EP US)

G01R 31/367 (2018.12 - US); H02J 7/00 (2013.01 - US); H02J 7/00306 (2020.01 - EP US); H02J 7/005 (2020.01 - EP US); H02J 7/02 (2013.01 - EP US); H02J 7/0034 (2020.01 - EP US)

Citation (search report)

See references of WO 2014079616A1

Citation (examination)

EP 0905855 A2 19990331 - TOYOTA MOTOR CO LTD [JP]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102012221133 A1 20140522; CN 104798283 A 20150722; CN 104798283 B 20180710; EP 2923429 A1 20150930; US 10014702 B2 20180703; US 2015318727 A1 20151105; WO 2014079616 A1 20140530

DOCDB simple family (application)

DE 102012221133 Å **20121120**; CN 201380060287 A 20130930; EP 13771138 A 20130930; EP 2013070340 W 20130930; US 201314443919 A 20130930