

Title (en)

LITHIUM-POLYMER TYPE BATTERY AND CONTROL SYSTEM

Title (de)

LITHIUM-POLYMER BATTERIE UND STEUERSYSTEM

Title (fr)

BATTERIE POLYMERIQUE AU LITHIUM ET SYSTEME DE COMMANDE

Publication

**EP 1038331 A1 20000927 (EN)**

Application

**EP 98960956 A 19981214**

Priority

- CA 9801144 W 19981214
- CA 2225585 A 19971212

Abstract (en)

[origin: WO9931752A1] A battery controller system for a metal and solid electrolyte battery, such as a lithium-polymer battery has temperature sensors arranged to detect a temperature of cells in the battery, heating elements arranged to heat the cells, a heating element controller receiving signals from the temperature sensors and controlling a current supplied to the heating elements so as to maintain each one of the cells at a predetermined temperature, and a power mode controller detecting a demand for power from the battery and setting the predetermined temperature in response to a level of power to be supplied from or to the battery. The power mode controller sets at least a floating temperature, a charging temperature, and a power supply temperature. The controller also has voltage sensor detecting a voltage of each one of the cells during use, and determines whether any one of the cells is susceptible to damage by continued use. The battery is disconnected from the power connection in response to determination that one of the cells may be damaged.

IPC 1-7

**H01M 10/50; H01M 10/48; G01R 31/36; H02J 7/00**

IPC 8 full level

**G01R 31/378** (2019.01); **G01R 31/382** (2019.01); **H01M 10/48** (2006.01); **H02J 7/00** (2006.01); **H05B 1/02** (2006.01)

CPC (source: EP US)

**G01R 31/3648** (2013.01 - EP US); **G01R 31/3842** (2018.12 - EP); **G01R 31/396** (2018.12 - EP); **H01M 10/425** (2013.01 - EP);  
**H01M 10/482** (2013.01 - EP US); **H01M 10/486** (2013.01 - EP US); **H01M 10/615** (2015.04 - EP); **H01M 10/627** (2015.04 - EP);  
**H01M 10/633** (2015.04 - EP); **H01M 10/6571** (2015.04 - EP); **H01M 50/581** (2021.01 - EP); **H02J 7/0013** (2013.01 - EP US);  
**H02J 7/00302** (2020.01 - EP US); **H02J 7/00304** (2020.01 - EP US); **H02J 7/00306** (2020.01 - EP US); **H02J 7/00309** (2020.01 - EP US);  
**H02J 7/0063** (2013.01 - EP US); **H02J 7/00714** (2020.01 - EP US); **H02J 7/007182** (2020.01 - EP US); **H02J 7/007194** (2020.01 - EP US);  
**G01R 31/374** (2018.12 - EP); **H01M 6/181** (2013.01 - EP); **H01M 10/052** (2013.01 - EP); **H01M 10/0565** (2013.01 - EP);  
**H01M 2200/10** (2013.01 - EP); **Y02E 60/10** (2013.01 - EP)

Citation (search report)

See references of WO 9931752A1

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**WO 9931752 A1 19990624**; AU 1655799 A 19990705; CA 2225585 A1 19990612; EP 1038331 A1 20000927; JP 2002509342 A 20020326;  
JP 4965763 B2 20120704

DOCDB simple family (application)

**CA 9801144 W 19981214**; AU 1655799 A 19981214; CA 2225585 A 19971212; EP 98960956 A 19981214; JP 2000539543 A 19981214