

Title (en)

BATTERY BALANCING WITH REDUCED CIRCUIT COMPLEXITY

Title (de)

BATTERIE-BALANCING MIT REDUZIERTEM SCHALTUNGSAUFWAND

Title (fr)

ÉQUILIBRAGE DE BATTERIE À FAIBLE COMPLEXITÉ DE MONTAGE

Publication

EP 2572429 A2 20130327 (DE)

Application

EP 11721015 A 20110511

Priority

- DE 102010029013 A 20100517
- EP 2011057580 W 20110511

Abstract (en)

[origin: WO2011144508A2] The invention relates to a circuit for a battery which has a number n of battery cells (10-1,..., 10-n) which are connected in series between a positive battery terminal (12) and a negative battery terminal (13). The number n is a natural number greater than 1. Due to the mounting in series of the n battery cells (10-1,..., 10-n), a number (n-1) of connection points (11 -1,..., 11 -n-1) are obtained between the n battery cells (10-1,..., 10-n). Said circuit comprises a discharge element (30) comprising a first terminal which is connected or can be connected to a first discharge line (14-1) and a second terminal which is connected or can be connected to a second discharge line (14-2). According to the invention, the circuit comprises a number (n+1) of switches (20-1,..., 20-n+1) which can be connected at a first terminal to a respective (n-1) connection point (11-1,..., 11-n-1) or to one of the positive or negative battery terminals (12; 13) and are connected at a second terminal to the first or second discharge line (14-1; 14-2). A positive pole of a respective battery cell (10-1,..., 10-n) can thus be selectively connected by one of the switches (20-1,..., 20-n+1) to the first or second discharge line (14-1; 14-2) and a negative pole of the respective battery cell (10-1,..., 10-n) can be connected by one of the switches (20-1,..., 20-n+1) to the remaining first or second discharge lines (14-1; 14-2). The invention also relates to a battery with said type of circuit.

IPC 8 full level

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Citation (search report)

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