

Title (en)

CHARACTERISATION OF RECHARGEABLE BATTERIES USING MACHINE-LEARNED ALGORITHMS

Title (de)

CHARAKTERISIERUNG VON WIEDERAUFLADBAREN BATTERIEN MIT MASCHINEN-GELERNTEN ALGORITHMEN

Title (fr)

CARACTÉRISATION DE BATTERIES RECHARGEABLES AU MOYEN D'ALGORITHMES D'APPRENTISSAGE AUTOMATIQUE

Publication

EP 4090986 A1 20221123 (DE)

Application

EP 21701652 A 20210114

Priority

- DE 102020100668 A 20200114
- DE 2021100042 W 20210114

Abstract (en)

[origin: WO2021143983A1] Various examples relate to techniques for carrying out a characterisation of a rechargeable battery in a two-stage process. To this end, a pre-stored algorithm is used in order to determine one or more derived state variables of the battery. These are then used as input values for a machine-learned algorithm. An ageing value of the battery is obtained therefrom.

IPC 8 full level

G01R 31/392 (2019.01)

CPC (source: EP US)

G01R 31/367 (2018.12 - US); **G01R 31/392** (2018.12 - EP US); **G01R 31/367** (2018.12 - EP); **G06N 3/044** (2023.01 - EP); **G06N 3/045** (2023.01 - EP); **G06N 3/084** (2013.01 - EP); **G06N 20/10** (2018.12 - EP); **Y02E 60/10** (2013.01 - EP)

Citation (search report)

See references of WO 2021143983A1

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

Designated validation state (EPC)

KH MA MD TN

DOCDB simple family (publication)

DE 102020100668 A1 20210715; **DE 102020100668 B4 20210722**; EP 4090986 A1 20221123; US 2023059529 A1 20230223; WO 2021143983 A1 20210722

DOCDB simple family (application)

DE 102020100668 A 20200114; DE 2021100042 W 20210114; EP 21701652 A 20210114; US 202117792483 A 20210114