

Title (en)

METHOD AND SYSTEM FOR EVALUATING AN ELECTROCHEMICAL STORAGE UNIT

Title (de)

VERFAHREN UND SYSTEM ZUR BEWERTUNG EINER ELEKTROCHEMISCHEN SPEICHEREINHEIT

Title (fr)

PROCÉDÉ ET SYSTÈME POUR ÉVALUER UNE UNITÉ DE STOCKAGE ÉLECTROCHIMIQUE

Publication

EP 3414582 A1 20181219 (DE)

Application

EP 17720036 A 20170419

Priority

- DE 102016107528 A 20160422
- EP 2017059242 W 20170419

Abstract (en)

[origin: WO2017182497A1] The invention relates to a system and a method for evaluating a condition and/or a value (40) of an electrochemical storage unit (10), which is used in at least one storage-specific application (58). According to the invention, at least one parameter (30) of the ageing condition (32) of the storage unit (10) is detected at a first time (t1); the detected parameters (30) are aligned with a battery model (13) to deduce ageing factors (42), wherein the battery model (13) comprises an electrochemical model (14) and/or an empirical model (16); at least one electrical load profile (62) of one or more storage units (10) that is characteristic of the storage-specific application (58) is detected during operation in the application (58); the detected load profile (62) for the application (58) is weighted in order to analyse the mutual dependencies of the determinable parameters (30) of the storage unit (10); and the condition of the storage unit (10) for the application (58) is forecast based on the ageing factors (42) for a future time (t2), which ageing factors (42) are correlated with an operation (10) in the storage-specific application (58).

IPC 8 full level

G01R 31/36 (2006.01); **B60L 11/18** (2006.01); **G06Q 50/06** (2012.01)

CPC (source: EP)

B60L 3/12 (2013.01); **B60L 58/16** (2019.01); **G01R 31/367** (2018.12); **G01R 31/392** (2018.12); **Y02T 10/70** (2013.01)

Citation (search report)

See references of WO 2017182497A1

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)

WO 2017182497 A1 20171026; DE 102016107528 A1 20171026; EP 3414582 A1 20181219

DOCDB simple family (application)

EP 2017059242 W 20170419; DE 102016107528 A 20160422; EP 17720036 A 20170419