

(11) **EP 4 424 549 A8**

(12) CORRECTED EUROPEAN PATENT APPLICATION

(15) Correction information:

Corrected version no 1 (W1 A2) Corrections, see Bibliography INID code(s) 54

(48) Corrigendum issued on: 23.10.2024 Bulletin 2024/43

(43) Date of publication: **04.09.2024 Bulletin 2024/36**

(21) Application number: 24190218.8

(22) Date of filing: 24.03.2021

(51) International Patent Classification (IPC): **B60L** 53/68^(2019.01)

(52) Cooperative Patent Classification (CPC):

B60L 58/16; B60L 53/62; B60L 53/65; B60L 53/66; B60L 53/68; B60L 58/12; G01R 31/392; G06Q 10/06; G06Q 40/08; G06Q 50/06;

G06Q 50/40; B60L 2240/12; B60L 2240/545;

B60L 2240/547; B60L 2240/549; (Cont.)

(84) Designated Contracting States:

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

(30) Priority: **24.03.2020** KR **20200035892 23.03.2021** KR **20210037625**

(62) Document number(s) of the earlier application(s) in accordance with Art. 76 EPC: 21776702.9 / 4 064 174

(71) Applicant: LG Energy Solution, Ltd. Seoul 07335 (KR)

(72) Inventors:

- KIM, Dong-Myung 34122 Daejeon (KR)
- KIM, Hyung-Sik
 34122 Daejeon (KR)
- AHN, Hyoung Jun 34122 Daejeon (KR)

(74) Representative: BCKIP Part mbB Siegfriedstraße 8 80803 München (DE)

Remarks:

This application was filed on 23.07.2024 as a divisional application to the application mentioned under INID code 62.

(54) BATTERY PERFORMANCE MANAGEMENT METHOD AND ELECTRIC VEHICLE CHARGING STATION FORMING PART OF BATTERY PERFORMANCE MANAGEMENT SYSTEM

(57) Disclosed is a battery performance management system and method using an electric vehicle charging station. The battery performance management server collects battery performance evaluation information including identification information and operation characteristic accumulative information of a battery, identification information and driving characteristic accumulative information of the electric vehicle, and latest charging characteristic information of the battery from a plurality of charging stations through a network. Also, the server

determines a current SOH corresponding to the collected battery performance evaluation information by using an artificial intelligence model that is trained in advance to receive the battery performance evaluation information and output a SOH of the battery. Also, the server determines a latest control factor corresponding to the current SOH, and transmits the latest control factor to the charging station through the network so that the charging station may transmit the latest control factor to a control system of the electric vehicle to update the control factor.

EP 4 424 549 A8

(52) Cooperative Patent Classification (CPC): (Cont.) B60L 2240/622; B60L 2240/662; B60L 2240/70; B60L 2260/46; Y02T 90/167; Y04S 30/14