

Title (en)
CONTROL METHOD OF LOCOMOTIVE DYNAMIC DEVICE, LOCOMOTIVE DYNAMIC DEVICE AND LOCOMOTIVE

Title (de)
STEUERUNGSVERFAHREN FÜR DYNAMISCHE LOKOMOTIVENVORRICHTUNG, DYNAMISCHE LOKOMOTIVENVORRICHTUNG UND LOKOMOTIVE

Title (fr)
PROCÉDÉ DE COMMANDE DE DISPOSITIF DYNAMIQUE DE LOCOMOTIVE, DISPOSITIF DYNAMIQUE DE LOCOMOTIVE ET LOCOMOTIVE

Publication
EP 4200155 A1 20230628 (EN)

Application
EP 21762130 A 20210820

Priority
• CN 202010841966 A 20200820
• IB 2021057664 W 20210820

Abstract (en)
[origin: WO2022038567A1] A control method of a locomotive dynamic device, a locomotive dynamic device and a locomotive are provided. The locomotive dynamic device includes a lithium-ion battery module and a hydrogen fuel cell module. The method includes: obtaining operating power value required for current operation of the locomotive; obtaining real-time charge value of the lithium-ion battery module; calculating output power value of the hydrogen fuel cell module according to the real-time charge value; obtaining output power value of the lithium-ion battery module according to the operating power value and the output power value of the hydrogen fuel cell module; controlling, according to the output power value of the hydrogen fuel cell module, the hydrogen fuel cell module to supply electric energy to a traction motor and the lithium-ion battery module, and controlling, according to the output power value of the lithium-ion battery module, the lithium-ion battery module to supply electric energy to the traction motor. The control method of the locomotive dynamic device can solve the problem of repeated charging and discharging of the lithium-ion battery module, and improve the overall energy utilization efficiency of the locomotive dynamic device.

IPC 8 full level
B60L 50/75 (2019.01); **B60L 58/12** (2019.01); **B60L 58/40** (2019.01)

CPC (source: CN EP)
B60L 50/75 (2019.01 - EP); **B60L 58/12** (2019.01 - CN EP); **B60L 58/40** (2019.01 - CN EP); **H01M 8/0494** (2013.01 - CN); **H01M 10/4207** (2013.01 - CN); **H01M 10/425** (2013.01 - CN); **H01M 2010/4271** (2013.01 - CN); **Y02E 60/10** (2013.01 - EP); **Y02E 60/50** (2013.01 - EP); **Y02T 10/70** (2013.01 - EP); **Y02T 90/40** (2013.01 - EP)

Citation (search report)
See references of WO 2022038567A1

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)
WO 2022038567 A1 20220224; CN 111942234 A 20201117; CN 111942234 B 20220304; EP 4200155 A1 20230628

DOCDB simple family (application)
IB 2021057664 W 20210820; CN 202010841966 A 20200820; EP 21762130 A 20210820