Title (en)
LED CONSTANT CURRENT DRIVE SYSTEM AND METHOD

Title (de)
LED-KONSTANTSTROM-ANTRIEBSSYSTEM UND VERFAHREN DAFÜR

Title (fr)
SYSTÈME ET PROCÉDÉ D'ENTRAÎNEMENT À COURANT CONSTANT DE DEL

Publication
EP 3863379 A4 20210811 (EN)

Application
EP 20751466 A 20200604

Priority
- CN 201911339911 A 20191223
- CN 2020094377 W 20200604

Abstract (en)
[origin: EP3863379A1] The present disclosure provides an LED constant current drive system and method, including: a constant current control module, connected with a negative electrode of the LED load; a storage capacitor, which discharges to the LED load when the bus voltage is less than a voltage of the storage capacitor; a discharge voltage detection module, which obtains a control signal by determining a discharge voltage of the storage capacitor based on the negative electrode voltage of the LED load; a bus voltage detection module, which obtains a first detection voltage by detecting the bus voltage; a charge current control module, which adjusts charge voltage of the storage capacitor based on the control signal and the first detection voltage. when the bus voltage is less than the turn-on voltage of the LED, the storage capacitor discharges; when the bus voltage is greater than the turn-on voltage of the LED, the bus voltage supplies power to the LED load, and charges the storage capacitor; when the bus voltage is less than the voltage of the storage capacitor, the storage capacitor discharges. The present disclosure balances the power factor and system efficiency while ensuring that the output LED has no strobing.

IPC 8 full level
H05B 45/347 (2020.01); **H05B 45/355** (2020.01); H05B 45/14 (2020.01)

CPC (source: EP)
H05B 45/347 (2020.01); **H05B 45/355** (2020.01); H05B 45/14 (2020.01)

Citation (search report)
- [I] US 2017111965 A1 20170420 - SCHMITT HARALD [DE]
- [I] US 2014239810 A1 20140828 - MARTIN-LOPEZ FERNANDO RAMON [US], et al
- [XI] CN 108633126 A 20181009 - CR POWTECH SHANGHAI CO LTD

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)
EP 3863379 A1 20210811; **EP 3863379 A4 20210811**; **EP 3863379 A9 20210929**; **EP 3863379 A9 20211117**; CN 113099579 A 20210709; CN 113099579 B 20220705; WO 2021128743 A1 20210701

DOCDB simple family (application)
EP 20751466 A 20200604; CN 201911339911 A 20191223; CN 2020094377 W 20200604