

Title (en)
LED LIGHTING APPARATUS DRIVEN DIRECTLY FROM THE PUBLIC AC GRID

Title (de)
DIREKT VOM ÖFFENTLICHEN WECHSELSTROMNETZ BETRIEBENE LED-BELEUCHTUNGSVORRICHTUNG

Title (fr)
APPAREIL D'ÉCLAIRAGE À LED ALIMENTÉ DIRECTEMENT PAR LE RÉSEAU PUBLIC AC

Publication
EP 3440892 B1 20220112 (EN)

Application
EP 16731678 A 20160405

Priority
RO 2016000014 W 20160405

Abstract (en)
[origin: WO2017176141A1] The invention relates to a method of reducing the harmonic content of the current sunk by at least one primary direct AC power supply integrated circuits (IC11, IC12,..., IC1n) driving a LED string circuit divided into several LED segments comprising the steps of : a) adding to the circuit at least one secondary direct AC power supply integrated circuits (IC21, IC22,..., IC2n) reshaping the shape of the current sunk by the primary together with the secondary direct AC power supply integrated circuits (IC11, IC12,..., IC1n; IC21, IC22,..., IC2n) by transforming the LED string from a LED string divided in an initial lower number of LED segments (S1, S2, S3, S4) into a LED string divided in a higher number of LED segments, through splitting the first initial LED segment (S1) into several additional LED segments (S1f1, S1f2, S1f3, S1f4) and separately driving the additional LED segments (S1f1, S1f2, S1f3, S1f4) by the at least one secondary direct AC power supply integrated circuits (IC21, IC22,..., IC2n).

IPC 8 full level
H05B 44/00 (2022.01); **H05B 45/48** (2020.01); **H05B 45/355** (2020.01); **H05B 45/36** (2020.01)

CPC (source: EP)
H05B 45/355 (2020.01); **H05B 45/36** (2020.01); **H05B 45/48** (2020.01)

Citation (examination)
• DE 112014002534 T5 20160331 - SILICON WORKS CO [KR]
• KR 101582450 B1 20160121 - SILICON WORKS CO LTD [KR]

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

DOCDB simple family (publication)
WO 2017176141 A1 20171012; CN 109156056 A 20190104; CN 109156056 B 20201030; EP 3440892 A1 20190213; EP 3440892 B1 20220112

DOCDB simple family (application)
RO 2016000014 W 20160405; CN 201680085920 A 20160405; EP 16731678 A 20160405