

Title (en)

ALTERNATING-CURRENT FLICKERING LED CHIP

Title (de)

WECHSELSTROMFLACKERNDER LED-CHIP

Title (fr)

PUCE À DEL CLIGNOTANTE À COURANT ALTERNATIF

Publication

EP 4207948 A4 20240515 (EN)

Application

EP 21949856 A 20210902

Priority

- CN 202121621215 U 20210716
- CN 2021116080 W 20210902

Abstract (en)

[origin: EP4207948A1] The present invention discloses an AC twinkling LED chip, comprises a chip substrate, a post-chip rectification negative terminal, a post-chip rectification positive terminal, a first AC input terminal, a second AC input terminal and an LED drive pin, at least one capacitor is parallelly connected with the post-chip rectification negative terminal and the post-chip rectification positive terminal, wherein an LED luminescent diode is connected in between the post-chip rectification positive terminal and the LED drive pin. Advantages of the present invention over the prior art are that: in the present invention, by conducting rectification in the ICs, chips can work in AC conditions and drive the LED lights to shine. As it involves high expenses to design capacitors and filters in the ICs, by using the capacitors and the filters outside the LED chips, the LED chips can work in absolute AC conditions.

IPC 8 full level

H05B 45/30 (2020.01); **H05B 45/37** (2020.01)

CPC (source: EP)

H05B 45/30 (2020.01)

Citation (search report)

- [IY] CN 203760470 U 20140806 - SICHUAN SUNFOR LIGHT CO LTD
- [A] CN 103237393 A 20130807 - LAN RUGEN
- [IY] US 2016105937 A1 20160414 - ALTAMURA STEVEN [US], et al
- [Y] EP 3001093 A1 20160330 - ZHAO YIJUN [CN]
- [Y] US 2018183429 A1 20180628 - CHEN WEN-PIN [TW], et al
- See also references of WO 2023284081A1

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)

EP 4207948 A1 20230705; EP 4207948 A4 20240515; CN 216017212 U 20220311; WO 2023284081 A1 20230119

DOCDB simple family (application)

EP 21949856 A 20210902; CN 2021116080 W 20210902; CN 202121621215 U 20210716