

Title (en)  
DIM-TO-WARM LED CIRCUIT

Title (de)  
DIM-TO-WARM-LED-SCHALTUNG

Title (fr)  
CIRCUIT À DEL À RÉGLAGE D'ÉCLAIRAGE SUR TON CHAUD

Publication  
**EP 3991521 A1 20220504 (EN)**

Application  
**EP 20739814 A 20200623**

Priority  

- US 201916454730 A 20190627
- EP 19204908 A 20191023
- US 2020039137 W 20200623

Abstract (en)  
[origin: WO2020263826A1] Various embodiments include apparatuses and methods enabling a dim-to-warm circuit operation of an LED multi-colored array. In one example, an apparatus includes a hybrid driving-circuit coupled to the LED array and to a single control- device to receive an indication of a luminous flux desired from the LED array. A color temperature for the LED array is determined based on the desired luminous flux of the LED array. In various embodiments, the hybrid driving-circuit includes an analog current - division circuit to produce current for at least two LED current -driving sources and a multiplexer array coupled between the analog current - division circuit and the LED to provide periodically, for a predetermined amount of time, current from at least one of the at least two LED current-driving sources to at least two colors of the LED array. Other apparatuses and methods are described.

IPC 8 full level  
**H05B 45/20** (2020.01); **H05B 45/325** (2020.01); **H05B 45/3577** (2020.01)

CPC (source: EP KR)  
**H05B 45/20** (2020.01 - EP KR); **H05B 45/325** (2020.01 - EP KR); **H05B 45/3577** (2020.01 - EP 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

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020263826 A1 20201230**; CN 114271028 A 20220401; CN 114271028 B 20230411; EP 3991521 A1 20220504; JP 2022530708 A 20220630; JP 7106023 B2 20220725; KR 102488473 B1 20230113; KR 20220019836 A 20220217; TW 202107941 A 20210216; TW I756721 B 20220301

DOCDB simple family (application)  
**US 2020039137 W 20200623**; CN 202080060942 A 20200623; EP 20739814 A 20200623; JP 2021576925 A 20200623; KR 20227002983 A 20200623; TW 109121726 A 20200624