

Title (en)

Apparatus and methods for tuning of emitter with multiple leds to a single color bin

Title (de)

Vorrichtung und Verfahren zur Abstimmung eines Senders mit mehreren LEDs zu einer Einzelfarbklassifizierung

Title (fr)

Appareil et procédés de réglage d'émetteur avec plusieurs DEL pour corbeille à couleur unique

Publication

**EP 2523534 A3 20130821 (EN)**

Application

**EP 12166091 A 20120428**

Priority

- US 201113106808 A 20110512
- US 201113106810 A 20110512

Abstract (en)

[origin: EP2523534A2] Apparatus and methods are provided for tuning the color of an LED-based lamp (100) to a desired color or color temperature. The lamp (100) can include two or more independently addressable groups of LEDs associated with different colors or color temperatures. The color (or color temperature) of the output light is tuned by controllably dividing an input current among the groups of LEDs. An optimal division of the input current is determined based on a linear interpolation between measured values of color or color temperature produced by at least two different divisions of the input current. Tuning can be performed once, e.g., during manufacture, and the lamp (100) does not require active feedback components for maintaining color temperature.

IPC 8 full level

**H05B 44/00** (2022.01)

CPC (source: CN EP US)

**F21K 9/00** (2013.01 - EP); **F21K 9/62** (2016.07 - EP); **H05B 45/20** (2020.01 - CN EP US); **F21K 9/60** (2016.07 - EP); **F21Y 2113/17** (2016.07 - EP)

Citation (search report)

- [A] EP 0734009 A2 19960925 - SIEMENS AG [DE]
- [I] WO 2009073394 A2 20090611 - CREE LED LIGHTING SOLUTIONS [US], et al
- [I] WO 2008152922 A1 20081218 - SHARP KK [JP], et al
- [I] WO 2008061560 A1 20080529 - PATENT TREUHAND GES FUER ELEKTRISCHE GLUEHLAMPEN MBH [DE], et al
- [I] WO 2005009085 A1 20050127 - TIR SYSTEMS LTD [CA], et al
- [I] US 2008088244 A1 20080417 - MORISHITA MASAZUMI [JP]
- [A] WO 2006071628 A2 20060706 - COLOR KINETICS INC [US], et al
- [I] US 2007235639 A1 20071011 - RAINS JACK C JR [US]
- [I] EP 1152642 A2 20011107 - AGILENT TECHNOLOGIES INC [US]
- [I] US 2002047624 A1 20020425 - STAM JOSEPH S [US], et al

Cited by

CN111107690A; GB2602763B; US10575374B2; USD1011573S; US11172558B2; WO2017189791A1; EP2992734A1; US10034346B2; US10257904B2; US10874008B2; US11140758B2; US11240895B2

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 2523534 A2 20121114; EP 2523534 A3 20130821; EP 2523534 B1 20190807**; CN 102781140 A 20121114; CN 102781140 B 20160203; CN 105657893 A 20160608; CN 105657893 B 20190607; JP 2012238596 A 20121206; JP 6244082 B2 20171206

DOCDB simple family (application)

**EP 12166091 A 20120428**; CN 201210152355 A 20120514; CN 201610006714 A 20120514; JP 2012109292 A 20120511