Title (en)

OPTIMIZATION OF LED LIGHTING SYSTEM OPERATING AT LOW CURRENT LEVELS

Title (de)

OPTIMIERUNG EINES LED-BELEUCHTUNGSSYSTEMS MIT BETRIEB AUF NIEDRIGEN STROMPEGELN

Title (fr)

OPTIMISATION DE SYSTÈME D'ÉCLAIRAGE À DEL FONCTIONNANT À DE FAIBLES NIVEAUX DE COURANT

Publication

EP 3224539 A2 20171004 (EN)

Application

EP 15870479 A 20151125

Priority

- US 201462123810 P 20141125
- US 2015000140 W 20151125

Abstract (en)

[origin: WO2016099579A2] A high efficiency LED light fixture and power supply designed to maximize system life while doubling electrical efficiency relative to existing LED light systems. The LED efficiency is addressed by operating near the lower end of the LED power rating. At these values the LED chip efficiency is maximum. The longevity is addressed by using a high efficiency cross flow heat sink to significantly lower the LED temperature to within 10 degrees C above ambient conditions. The system uses a 1200 watt power supply to improve the AC to DC efficiency of the system allowing multiple LED troffers to be powered from a single power supply.

IPC 8 full level

F21S 8/04 (2006.01); **F21V 23/00** (2015.01); **H05B 37/02** (2006.01); **H05B 44/00** (2022.01)

CPC (source: EP US)

F21S 8/04 (2013.01 - EP); **F21V 29/70** (2015.01 - EP US); **H05B 45/00** (2020.01 - EP US); **H05B 45/56** (2020.01 - EP US); F21V 23/006 (2013.01 - EP US); F21Y 2115/10 (2016.07 - EP US); H05B 45/355 (2020.01 - EP US)

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 2016099579 A2 20160623; **WO 2016099579 A3 20161103**; EP 3224539 A2 20171004; EP 3224539 A4 20180815

DOCDB simple family (application)

US 2015000140 W 20151125; EP 15870479 A 20151125