

Title (en)

METHOD AND APPARATUS FOR HORTICULTURAL LIGHTING WITH CURRENT SHARING

Title (de)

VERFAHREN UND VORRICHTUNG ZUR GARTENBAULICHEN BELEUCHTUNG MIT STROMTEILUNG

Title (fr)

PROCÉDÉ ET APPAREIL D'ÉCLAIRAGE HORTICOLE AVEC PARTAGE DE COURANT

Publication

**EP 3700307 A1 20200826 (EN)**

Application

**EP 20158745 A 20200221**

Priority

US 201916281990 A 20190221

Abstract (en)

A method and apparatus for a light fixture that uses current sharing across any one or more LED strings within the light fixture. A processor may determine the current requirements of the one or more LED strings that are needed to produce a given intensity level. The processor may then apportion the current generation capability of a power supply across all active LED strings using time division multiple access (TDMA) whereby each LED string may conduct its apportioned current within its allocated time slot to the mutual exclusion of the remaining active LED strings in any given time period. The processor may transition from a TDMA mode of operation to a direct drive mode of operation when the time duration of each of the mutually exclusive time slots are substantially equal to each other or within a percentage range of each other.

IPC 8 full level

**H05B 45/46** (2020.01); **H05B 47/17** (2020.01)

CPC (source: EP)

**H05B 45/46** (2020.01); **H05B 47/17** (2020.01)

Citation (search report)

- [XAI] US 10178730 B2 20190108 - ADAMS STEPHEN P [US], et al
- [A] WO 2012164511 A1 20121206 - OSRAM AG [DE], et al

Cited by

WO2022063894A1

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 3700307 A1 20200826**; **EP 3700307 B1 20231122**; **EP 3700307 C0 20231122**; CA 3073158 A1 20200821; EP 4181630 A1 20230517

DOCDB simple family (application)

**EP 20158745 A 20200221**; CA 3073158 A 20200219; EP 22184349 A 20200221