

Title (en)

BACKLIGHT UNIT AND METHOD FOR CONTROLLING BACKLIGHTING

Title (de)

RÜCKBELEUCHTUNGSEINHEIT UND VERFAHREN ZUR STEUERUNG DER RÜCKBELEUCHTUNG

Title (fr)

UNITÉ DE RÉTROÉCLAIRAGE ET PROCÉDÉ DE COMMANDE DE RÉTROÉCLAIRAGE

Publication

**EP 3484248 A1 20190515 (EN)**

Application

**EP 17201435 A 20171113**

Priority

EP 17201435 A 20171113

Abstract (en)

A backlight unit (10) for a vehicle (60) comprises a backlight module (12) comprising at least a first string (18) of a plurality of serials LEDs (22, 24, 26), the plurality of serials LEDs (22, 24, 26) being ranked 1 to N from a first LED (22) to a last LED (26) in series; a power supply unit (14) configured to provide an operating output voltage (34) to the backlight module (12) from a battery voltage (36); the operating output voltage (34) being electrically connected to the first LED (22, 28) of each string (18, 20); a first dimming control unit (16) electrically connected to the last LED (26) of each string (18) of the plurality of serials LEDs (22, 24, 26) and configured to control the illumination of the plurality of serials LEDs (22, 24, 26) of each string (18) representative to received first dimming levels; a backlight controller (42) electrically connected to the first dimming control unit (16) and configured to provide first dimming levels between 0% of illumination and 100% of illumination to the first dimming control unit (16); and a second dimming control unit (52) electrically connected between the first LED (22) and the second LED (24) of each string (18) and configured to control the illumination of only the first LED (22) of each string (18) representative to received second dimming levels; the backlight controller (42) being electrically connected to the second dimming control unit (52) and configured to provide second dimming levels between 0% illumination and 100% illumination to the second dimming control unit (52).

IPC 8 full level

**H05B 44/00 (2022.01)**

CPC (source: EP US)

**H05B 45/10** (2020.01 - EP); **H05B 45/46** (2020.01 - EP US); **G09G 3/342** (2013.01 - EP); **G09G 2320/064** (2013.01 - EP);  
**G09G 2330/021** (2013.01 - EP); **G09G 2330/028** (2013.01 - EP); **G09G 2380/10** (2013.01 - EP); **H05B 45/54** (2020.01 - EP US)

Citation (search report)

- [I] US 2016021713 A1 20160121 - REED WILLIAM G [US]
- [I] US 2013049610 A1 20130228 - CHEN CHIA-TEH [TW]
- [A] US 9578701 B1 20170221 - LOGIUDICE ANDREA [IT], et al

Cited by

WO2022196371A1

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 3484248 A1 20190515**

DOCDB simple family (application)

**EP 17201435 A 20171113**