

Title (en)
LIGHTING DEVICE FOR A MOTOR VEHICLE

Title (de)
BELEUCHTUNGSVORRICHTUNG FÜR EIN KRAFTFAHRZEUG

Title (fr)
DISPOSITIF D'ÉCLAIRAGE POUR UN VÉHICULE AUTOMOBILE

Publication
EP 3378281 B1 20190626 (DE)

Application
EP 16790614 A 20161103

Priority
• DE 102015222504 A 20151116
• EP 2016076549 W 20161103

Abstract (en)
[origin: WO2017084881A1] The invention relates to a lighting device for a motor vehicle, comprising at least one processing module (1) and an internal data bus (2) and a plurality of LED units (3). The internal data bus (2) is an SPI bus or a differential data bus; a differential data bus encodes digital data on the basis of a voltage difference between two lines. Each processing module (1) has a number of LED units (3) from among the plurality of LED units (3), and each processing module (1) is coupled to its LED units (3) via the internal data bus (2). The LED units (3) each comprise at least one LED (301, 302, 303) and an integrated circuit (4) and are connected to a current supply (5) for the at least one LED (301, 302, 303). Each processing module (1) is set up so as to be coupled to a motor vehicle data bus (6) in order to receive first digital control commands from the motor vehicle data bus (6) for the operation of the lighting device, and to transmit them as second digital control commands to the internal data bus (2). The LED units (3) are set up so as to provide their LEDs (3) with current from the power supply (5) based on the second digital control commands on the internal data bus (2), by means of the integrated circuits (4).

IPC 8 full level
H05B 33/08 (2006.01); **H05B 37/02** (2006.01); **H05B 44/00** (2022.01)

CPC (source: EP US)
H05B 45/325 (2020.01 - EP US); **H05B 47/18** (2020.01 - EP US)

Citation (opposition)
Opponent : Stefan M. Zech
• WO 2009011898 A2 20090122 - I O CONTROLS CORP [US], et al
• US 9161411 B1 20151013 - DUNN THOMAS GREGORY [US], et al
• DE 102008030365 A1 20090820 - CONTINENTAL AUTOMOTIVE GMBH [DE]
• US 2007247305 A1 20071025 - FLANDRE LOIC [FR], et al
• DE 102008054349 A1 20100506 - WABCO GMBH [DE]
• DE 102009008084 A1 20100930 - AIRBUS GMBH [DE]
• DE 102010018127 A1 20111027 - WABCO GMBH [DE]
• US 2005063194 A1 20050324 - LYS IHOR [US], et al
• US 6982648 B2 20060103 - CROS CHRISTOPHE [FR], et al
• US 2003067220 A1 20030410 - CROS CHRISTOPHE [FR], et al
• EP 2016076549 W 20161103
• DE 102015222504 A1 20170518 - BAYERISCHE MOTOREN WERKE AG [DE]
• ANONYMOUS: "Serielle Datenübertragung", WIKIPEDIA, 20 November 2019 (2019-11-20), XP055757093, Retrieved from the Internet <URL:https://de.wikipedia.org/wiki/Serielle_Daten%C3%BCbertragung>

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

DOCDB simple family (publication)
DE 102015222504 A1 20170518; EP 3378281 A1 20180926; EP 3378281 B1 20190626; WO 2017084881 A1 20170526

DOCDB simple family (application)
DE 102015222504 A 20151116; EP 16790614 A 20161103; EP 2016076549 W 20161103