

Title (en)
LIGHTING AND SENSOR SYSTEM

Title (de)
BELEUCHTUNGS- UND SENSORSYSTEM

Title (fr)
SYSTÈME D'ÉCLAIRAGE ET DE CAPTEUR

Publication
EP 3993566 A1 20220504 (EN)

Application
EP 21205249 A 20211028

Priority
EP 20204634 A 20201029

Abstract (en)
A lighting system (10), in particular for marking carriageways and/or tunnel walls but not only, comprises an electrical feeder (30, 20), a plurality of inductive lighting devices (100) having a local coupler (110; 111, 112) adapted to be coupled to the electrical feeder (30, 20), a transceiver (120) and a light source or sensor (140), a control unit (60) which is connected to the electrical feeder (30, 20) and is configured to transmit control signals (61, 115) via the electrical feeder (30, 20) to the transceiver (120) of each inductive lighting device (100) via the local coupler (110; 111, 112) of the respective inductive lighting device (100), wherein the transceiver (120) is configured to transmit control signals (61, 115) to the control unit (60). The electrical feeder (30, 20) comprises an AC power source at a first frequency, in that the control unit (60) is connected to a modem (65) modulating and demodulating said control signals at a second frequency being different to the first frequency, in that a matching network (50) and a termination network (40) are provided at the beginning and at the end of the electrical feeder line (20) with a predetermined impedance, and in that each inductive lighting device (100) comprises a variable AC resonant circuit and or variable voltage limitation (131, 132) and or a variable voltage limitation circuit adjusting AC line currents of varying levels to a continuous level.

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Citation (applicant)
• WO 9602970 A1 19960201 - AUCKLAND UNISERVICIES LTD [NZ], et al
• US 2014008991 A1 20140109 - MAUD CHARLES DARRELL [NZ], et al
• WO 2011116404 A1 20110929 - SWAROVSKI D KG [AT], et al
• WO 2010093997 A1 20100819 - WITRICITY CORP [US], et al
• WO 2010093997 A1 20100819 - WITRICITY CORP [US], et al
• US 5559377 A 19960924 - ABRAHAM CHARLES [US]

Citation (search report)
• [XDI] WO 2010093997 A1 20100819 - WITRICITY CORP [US], et al
• [AD] US 5559377 A 19960924 - ABRAHAM CHARLES [US]
• [AD] US 2014008991 A1 20140109 - MAUD CHARLES DARRELL [NZ], et al
• [AD] H WU: "AC Processing Controllers for IPT Systems", A THESIS SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY IN ELECTRICAL AND COMPUTER ENGINEERING, 1 January 2009 (2009-01-01), Auckland, pages 1 - 245, XP055454643, Retrieved from the Internet <URL:https://researchspace.auckland.ac.nz/handle/2292/6127> [retrieved on 20180227]

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