

Title (en)

MERCURY-FREE HIGH-PRESSURE DISCHARGE LAMP WITH A REDUCED AMOUNT OF ZINC HALIDE

Title (de)

QUECKSILBERFREIE HOCHDRUCKENTLADUNGSLAMPE MIT REDUZIERTEM ZINKHALOGENIDANTEIL

Title (fr)

LAMPE À DÉCHARGE HAUTE PRESSION SANS MERCURE ET À TENEUR RÉDUITE EN HALOGÉNURES DE ZINC

Publication

**EP 2499657 B1 20141203 (DE)**

Application

**EP 10775785 A 20101029**

Priority

- DE 102009052999 A 20091112
- EP 2010066472 W 20101029

Abstract (en)

[origin: WO2011057903A1] The invention relates to a high-pressure discharge lamp for vehicle headlights, comprising a discharge vessel (10) which is sealed in a gas-tight manner and which has a discharge chamber (106). Electrodes (11, 12) and a filling for producing a gas discharge are enclosed in the discharge chamber, wherein the filling is designed as a mercury-free filling that contains at least xenon and halides of sodium, scandium, and zinc. The filling has an amount of zinc halide ranging from 0 mg to 1 mg per 1 cm<sup>3</sup> of the discharge chamber volume; the amount of halides that is present in the discharge chamber (106) of the discharge vessel (10) ranges from 8 mg to 15 mg per 1 cm<sup>3</sup> of the discharge chamber volume; the cold fill pressure of the xenon ranges from 1.0 megapascal to 1.8 megapascal; and the volume of the discharge chamber (106) of the discharge vessel (10) has a value ranging from 0.015 cm<sup>3</sup> to 0.022 cm<sup>3</sup>.

IPC 8 full level

**H01J 61/82** (2006.01)

CPC (source: EP)

**H01J 61/827** (2013.01)

Citation (examination)

EP 2086001 A1 20090805 - HARISON TOSHIBA LIGHTING CORP [JP]

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 102009052999 A1 20110519**; CN 102687235 A 20120919; CN 102687235 B 20150708; EP 2499657 A1 20120919; EP 2499657 B1 20141203; JP 2013511117 A 20130328; WO 2011057903 A1 20110519

DOCDB simple family (application)

**DE 102009052999 A 20091112**; CN 201080051543 A 20101029; EP 10775785 A 20101029; EP 2010066472 W 20101029; JP 2012538272 A 20101029