

Title (en)

Metal halogen lamp

Title (de)

Metallhalogenidlampe

Title (fr)

Lampe aux halogénures métalliques

Publication

**EP 1011126 A3 20060823 (DE)**

Application

**EP 99124410 A 19991207**

Priority

DE 19857585 A 19981214

Abstract (en)

[origin: US6483241B1] A mercury-free metal halide lamp with a light efficiency of at least 70 lm/W and a color rendering index of at least 80 has a ceramic discharge vessel, into which electrodes are introduced in a vacuum-tight manner. The fill comprises the following components: an inert gas which acts as buffer gas, a compound of a halogen X with at least one of the metals hafnium and/or zirconium (referred to below as metal halide HZM), this halide being referred to below as HZH for short, HZH simultaneously performing tasks of voltage gradient formation and of promoting the cycle, a light generator comprising at least a further metal halide, at least one further metal halide MY<sub>n</sub> which vaporizes readily and is used as voltage gradient generator, the specific molar content of HZH being greater than or equal to 3 mmol/cm<sup>3</sup>. In addition, the following relationship applies:  $5 \leq (X+Y)/HZM \leq 15$ , resulting in a lamp service life of more than 5000 hours.

IPC 8 full level

**H01J 61/16** (2006.01); **H01J 61/12** (2006.01); **H01J 61/82** (2006.01); **H01J 61/20** (2006.01)

CPC (source: EP US)

**H01J 61/125** (2013.01 - EP US); **H01J 61/827** (2013.01 - EP US)

Citation (search report)

- [XP] EP 0903770 A2 19990324 - PATENT TREUHAND GES FUER ELEKTRISCHE GLUEHLAMPEN MBH [DE]
- [DA] EP 0627759 A1 19941207 - PHILIPS ELECTRONICS NV [NL]
- [DA] EP 0587238 A1 19940316 - KONINKL PHILIPS ELECTRONICS NV [NL]

Cited by

EP1037257A3; EP1398823A3; EP1465237A3; EP1158567A3; US6608444B2; WO03067622A3; EP1139387A1

Designated contracting state (EPC)

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DOCDB simple family (application)

**US 45519399 A 19991206**; CA 2292142 A 19991208; DE 19857585 A 19981214; EP 99124410 A 19991207; HU P9904194 A 19991110; JP 35205999 A 19991210