

Title (en)

High pressure discharge lamp lighting device and image display device

Title (de)

Beleuchtungsanordnung mit Hochdruckentladungslampe und Bildanzeigevorrichtung

Title (fr)

Dispositif d'éclairage d'une lampe de décharge haute pression et dispositif d'affichage d'images

Publication

EP 2180767 A2 20100428 (EN)

Application

EP 09013249 A 20091020

Priority

JP 2008271387 A 20081021

Abstract (en)

[Object] To provide a high pressure discharge lamp lighting device which can reduce flickering of a high-pressure discharge lamp with a relatively simple control. [Means for Settlement] Upon start of lighting of a high-pressure discharge lamp, after the high-pressure discharge lamp reaches a substantially stable state or reaches a predetermined lamp voltage, the high-pressure discharge lamp is lighted in at least three lighting modes with a predetermined average power put into the high-pressure discharge lamp, and in the lighting modes, a period of a positive polarity is nearly equal to a period of a negative polarity in a first mode, a period of a positive polarity is longer than a period of a negative polarity in a second mode, and a period of a positive polarity is shorter than a period of a negative polarity in a third mode. Lighting frequencies in the second mode and the third mode are equal to or less than a lighting frequency in the first mode, each of periods t₁, t₂, t₃ in the modes is at least one cycle, at least one first mode, and at least one second mode and at least one third mode are collectively defined as one set and the one set is repeated.

IPC 8 full level

H05B 41/38 (2006.01)

CPC (source: EP)

H05B 41/38 (2013.01)

Citation (applicant)

- JP H10501919 A 19980217
- JP 2001244088 A 20010907 - IWASAKI ELECTRIC CO LTD
- JP 2004281381 A 20041007 - MATSUSHITA ELECTRIC IND CO LTD
- JP 2006059790 A 20060302 - USHIO ELECTRIC INC
- JP 2008177002 A 20080731 - IWASAKI ELECTRIC CO LTD

Cited by

EP3062588A1; CN106937468A; EP2654384A4; EP3562274A1; US9602791B2

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

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DOCDB simple family (application)

EP 09013249 A 20091020; CN 200910205391 A 20091021; JP 2009185077 A 20090807