

Title (en)

Biassing system for reducing ion loss in lamps

Title (de)

Vorspannungssystem zur Verminderung des Ionenverlustes in Lampen

Title (fr)

Système de polarisation pour réduire la perte d'ions dans les lampes

Publication

EP 0449639 B1 19961113 (EN)

Application

EP 91302776 A 19910328

Priority

US 50088690 A 19900329

Abstract (en)

[origin: EP0449639A2] A high intensity discharge lamp system includes an AC supply for a chamber within which a plasma conductor is created to generate light. In order to confine charged particles within the chamber and to inhibit migration and loss thereof, a DC circuit taps power from the AC supply and produces a DC potential which is applied to relatively large-surface components in the vicinity of the plasma chamber. Properly polarized, the large-surface components, such as a reflector and a conductive housing, refractor or door, produces electric fields which inhibit migration of the charged particles. The result is improved color and light output as well as increased lamp life.

IPC 1-7

H01J 61/24

IPC 8 full level

F21V 3/04 (2006.01); **H01J 61/10** (2006.01); **H01J 61/24** (2006.01); **H01J 61/56** (2006.01); **H05B 41/19** (2006.01); **H05B 41/231** (2006.01)

CPC (source: EP)

H01J 61/10 (2013.01); **H01J 61/24** (2013.01); **H05B 41/19** (2013.01)

Citation (examination)

GB 2056760 A 19810318 - GEN ELECTRIC

Cited by

FR2705434A1; DE4400412A1; EP0732870A1; US5955846A; DE4224996A1; CN102017060A; US7950836B2; WO2009137198A3

Designated contracting state (EPC)

DE GB NL

DOCDB simple family (publication)

EP 0449639 A2 19911002; **EP 0449639 A3 19920506**; **EP 0449639 B1 19961113**; CA 2037886 A1 19910930; DE 69123071 D1 19961219; JP 2978268 B2 19991115; JP H04223095 A 19920812

DOCDB simple family (application)

EP 91302776 A 19910328; CA 2037886 A 19910308; DE 69123071 T 19910328; JP 9125891 A 19910329