

Title (en)
METAL HALIDE HIGH-PRESSURE DISCHARGE LAMP

Publication
EP 0169510 B1 19900502 (DE)

Application
EP 85109049 A 19850719

Priority
DE 3427280 A 19840724

Abstract (en)
[origin: US4647814A] To increase the power output of a high-pressure metal halide discharge lamp having a fill of mercury and at least one noble gas, and rare-earth halides which include at least one of: holmium; dysprosium, preferably present, each, of from 0.01 to 2.4 mg/cm³ of the discharge vessel, a gadolinium halide, present of from 0.01 to 2.3 mg/cm³ of the discharge vessel is additionally included in the fill. The discharge vessel is made of quartz, the electrodes of tungsten, and, in an example, a lamp operating at 12 kW, with 380 V power supply at 65 A is obtainable, the light output being comparable to that of daylight based on CIE standard D 60, with a color temperature of 6000 DEG K. so that an overall color temperature of about 5600 DEG K. is obtainable when the lamp is installed in a customary fixture, for example used in theatrical, film or television illumination application. The preferred halogens are bromium and/or iodine, in which the halogen is present in excess over the rare-earth - halide stoichiometric relationship. The specific arc power obtainable is between 1000 to 5000 W/cm, with a wall loading of between 50 to 120 W/cm².

IPC 1-7
H01J 61/12; H01J 61/82

IPC 8 full level
H01J 61/12 (2006.01); **H01J 61/82** (2006.01)

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

Cited by
EP0391283A3; DE3731134A1; US5451838A; EP0453893A1; US5239232A; EP0762475A1; EP0670588A1

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