Title (en)

Double-end type metal halide bulb with low power consumption

Title (de)

Zweiseitig gesockelte Metallhalogenidlampe niedriger Leistung

Title (fr)

Lampe à halogénure métallique à double culot à basse puissance

Publication

EP 0978864 B1 20071212 (EN)

Application

EP 99115050 A 19990804

Priority

JP 22047098 A 19980804

Abstract (en)

[origin: EP0978864A2] The double end type Scl3-Nal metal halide lamp with rated power consumption smaller than 35 W, more specifically 20-30 W, of the present invention comprises a pair of electrodes (20) whose diameter DIAMETER n is equal to or smaller than 0.25mm (DIAMETER n ≤ 0.25 mm), and the diameter DIAMETER P of the electrode tip portion (5) is equal to or larger than the diameter DIAMETER S of the remaining electrode portion (DIAMETER P ≥ DIAMETER S). The electrode tip portion (5) is spherical or cylindrical, and the cross section area of the electrode (20) increases as a cross section moves toward the tip portion (5) for mitigating thermal emission from the electrode tip portion (5) and preventing low light emission efficiency due to small input power. The arc chamber (6) is substantially a sphere, elliptic, or any similar shape to them, and comprises the pair of electrodes (20), mercury, rare gas, and at least one kind of metal halide sealed therein. Since rare gas, more specifically Xenon gas, is sealed within an arc chamber (6) in high pressure, when applied excessive current, instant lumen output is achieved. <IMAGE>

IPC 8 full level

H01J 61/073 (2006.01); **H01J 61/20** (2006.01); **H01J 61/82** (2006.01); **H01J 61/86** (2006.01)

CPC (source: EP)

H01J 61/0732 (2013.01); **H01J 61/827** (2013.01)

Cited by

US6879101B2; EP1296356A3; EP2405464A4; EP1339090A1; WO2007077504A3; US7893619B2; US8410698B2

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DE FR GB

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