

Title (en)
Metal halide lamp

Title (de)
Metallhalogenidlampe

Title (fr)
Lampe à halogénures métalliques

Publication
EP 0784334 B1 20000503 (EN)

Application
EP 96120431 A 19961218

Priority
US 58486996 A 19960111

Abstract (en)
[origin: EP0784334A1] A highly efficient discharge lamp (10) has a color rendering index greater than 75, a lumens per watt rating greater than 90, a correlated color temperature of between 3500 and 4040 DEG K, and a wall loading greater than 17 W/cm<2>. The lamp (10) comprises an outer glass envelope (12) and a pair of electrical conductors (26,28) extending thereinto. A quartz discharge tube (14) is disposed within the outer envelope (12) and includes a pair of spaced electrodes which are electrically connected to the electrical conductors (26,28) for creating an electrical discharge during operation of the lamp. The discharge tube (14) has an arc chamber or arc cavity with the configuration of a prolate spheroid having a major diameter and a given arc distance as measured by the linear distance between the interior terminations of the electrodes, the ratio of the major diameter to the arc distance being less than 1 and greater than 0.9. An arc generating and sustaining medium within the arc chamber comprises the halides of sodium, scandium, lithium, thulium, in a ratio of 48:1:10:16, and a thallium amalgam. A fill gas selected from argon and xenon, and a given quantity of mercury to achieve a desired lamp voltage completes the chemical dose. <IMAGE>

IPC 1-7
H01J 61/82; **H01J 61/30**

IPC 8 full level
H01J 61/073 (2006.01); **H01J 61/20** (2006.01); **H01J 61/28** (2006.01); **H01J 61/30** (2006.01); **H01J 61/34** (2006.01); **H01J 61/82** (2006.01)

CPC (source: EP)
H01J 61/30 (2013.01); **H01J 61/827** (2013.01)

Cited by
US6157131A; US9406498B2; WO0011704A1; US6329742B1; US8497633B2; EP1455382A2

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