

Title (en)

Mercury vapour discharge lamp including an amalgam

Title (de)

Quecksilberdampf-Entladungslampe mit einem Amalgam

Title (fr)

Lampe à décharge à vapeur de mercure contenant un amalgame

Publication

EP 0867914 A1 19980930 (EN)

Application

EP 98302183 A 19980324

Priority

GB 9706399 A 19970327

Abstract (en)

A mercury discharge lamp includes an amalgam for controlling the mercury vapour pressure within the lamp, the amalgam being selected and positioned within the lamp to provide a substantially optimum vapour pressure of mercury at the temperature of the amalgam corresponding to the maximum rated operating power of the lamp. The optimum vapour pressure is close to a minimum (B) at the temperature corresponding to maximum operating power, and adjacent a region (D) of steeply rising mercury vapour pressure with falling temperature. By operating the lamp in this region, a reduction in the operating power of the lamp causes a fall in temperature and hence an increase in the vapour pressure of the mercury to effect dimming of the lamp. <IMAGE>

IPC 1-7

H01J 61/28; H01J 61/20; H01J 61/12; H01J 61/70; H01J 61/72; C22C 7/00; C22C 13/00

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [A] US 5598069 A 19970128 - VAN OS RON [US], et al
- [DPA] WO 9713000 A1 19970410 - GEN ELECTRIC [US], et al
- [DA] BLOEM J ET AL: "SOME NEW MERCURY ALLOYS FOR USE IN FLUORESCENT LAMPS", JOURNAL OF THE ILLUMINATING ENGINEERING SOCIETY, vol. 6, no. 3, April 1977 (1977-04-01), pages 141 - 147, XP000615021

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