Title (en)

HIGH-PRESSURE DISCHARGE LAMP

Publication

EP 0220673 B1 19920304 (DE)

Application

EP 86114648 A 19861022

Priority

DE 3537872 A 19851024

Abstract (en)

[origin: US4782266A] To provide for a long electrode shaft, which insures rapid and reliable starting of the lamp, the electrodes are formed with a straight shaft portion extending from a pinch or press seal (8) and then twisted into a loop (20, 21) which terminates in discharge tips (18, 19), facing each other across the center line of the lamp. The loops, preferably, include a circular portion of about 270 DEG, with a radius of greater than the radius of the diameter of the wires-typically of tungsten-and offset with respect to the electrode shaft so that, at cross-over points (24, 25) the looped portion (20, 21) of the respective electrode and the straight or shaft portion (22, 23) of the electrode do not touch each other; a very small spacing, for example 0.05 mm, with electrode wires of 0.2 mm diameter, is sufficient. The electrodes can be identical, so that, in facing positions, the loops will be on opposite sides with respect to a plane passing through the center of the lamp, and the electrodes, then, can be twisted by an angle in the order of about 30 DEG, or somewhat less, e.g. 27 DEG, so that the electrode wire tips will be in-line (L) with respect to each other to reliably and continuously throughout the lift of the lamp define the discharge zone in a predetermined relation or position with respect to the remainder of the lamp so that, upon inclusion in an optical system (e.g. a reflector) (R), the light emitting zone will, reliably, remain constant in relation to the optical system.

IPC 1-7

H01J 61/073

IPC 8 full level

H01J 61/073 (2006.01); H01J 61/32 (2006.01)

CPC (source: EP US)

H01J 61/0732 (2013.01 - EP US)

Cited by

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Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

**EP 0220673 A2 19870506**; **EP 0220673 A3 19890510**; **EP 0220673 B1 19920304**; DE 3537872 A1 19870430; DE 3684091 D1 19920409; JP H0522332 B2 19930329; JP S62100937 A 19870511; US 4782266 A 19881101

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