

Title (en)
COMPACT LOW-PRESSURE DISCHARGE LAMP

Publication
EP 0173962 A3 19880928 (DE)

Application
EP 85110874 A 19850829

Priority
DE 3432675 A 19840905

Abstract (en)
[origin: US4694215A] To improve the stability of operation of a compact, single-ended fluorescent lamp under "base down" operation, and provide for a predetermined temperature "cold spot" defining the vapor pressure within the fluorescent lamp, and particularly for a lamp having four parallel tubular portions which are interconnected to form a continuous discharge vessel, one of the tubular portions which does not carry an electrode has a small tube or stub element (16) connected into a pinch seal terminating the particular tubular element, the stub element extending below the pinch seal and into the base of the lamp. The lamp is formed with two vertically arranged openings to provide for passage of cooling air, by thermal convection, from a lower opening (17), past the cooling tube or stub (16) and to an upper outlet vent opening (19). A socket, in which the lamp may be inserted, is preferably likewise formed with openings to permit passage of air thereinto, from a lower side to an upper opening which matches the alignment of the opening in the lamp base. Combination of such a lamp, with a lamp base with lamp operating circuit components, is readily possible, in which case the lamp operating circuit components are preferably located within an adapter of a housing element which includes an opening with a guide tube to guide cool air leading to the cooling tube. Under "base down" operation, mercury within the fill of the fluorescent lamp may condense and flow down, to collect as a mercury droplet in the cooling tube or stub, to thereby establish the vapor pressure within the discharge vessel.

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H01J 61/52; **H01J 61/32**

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H01J 61/32 (2006.01); **H01J 61/52** (2006.01)

CPC (source: EP KR US)
H01J 61/32 (2013.01 - KR); **H01J 61/327** (2013.01 - EP US); **H01J 61/52** (2013.01 - KR); **H01J 61/523** (2013.01 - EP US)

Citation (search report)
• [A] EP 0026428 A2 19810408 - TOKYO SHIBAURA ELECTRIC CO [JP]
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• [A] EP 0066855 A2 19821215 - TOKYO SHIBAURA ELECTRIC CO [JP]

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