

Title (en)  
HIGH-PRESSURE DISCHARGE LAMP HAVING A SINGLE PINCH

Publication  
**EP 0269957 B1 19930303 (DE)**

Application  
**EP 87117106 A 19871119**

Priority  
DE 3641045 A 19861201

Abstract (en)  
[origin: US4851735A] To improve the heat distribution of single-ended metal-halide high-pressure discharge lamps, and particularly lamps in which the fill is apt to attack a helically wound electrode (4) facing a similar electrode (5) within a discharge vessel (2), the end portions of the electrodes have a mandrel or pin element (17) located within a plurality of coiled windings (16), such that the coiled windings of the electrodes surround the mandrel or pin elements (17). Preferably, the mandrel is made of thorium dioxide-doped tungsten, and the electrodes includes an electrode shaft portion (15) pinch-sealed through the quartz-glass vessel. The shaft portions are unitary with the coiled windings (16) and are made of undoped, essentially pure tungsten. The mandrel (17) may be retained within the coiled filament portion (16) by clamping or by being end-melted thereto, and preferably projects beyond the helical windings at the side remote from the discharge to improve the overall temperature distribution within the discharge vessel (2).

IPC 1-7  
**H01J 61/073**

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

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Cited by  
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**EP 0269957 A2 19880608; EP 0269957 A3 19891018; EP 0269957 B1 19930303**; DE 3641045 A1 19880609; DE 3784454 D1 19930408; JP H0587936 B2 19931220; JP S63148529 A 19880621; US 4851735 A 19890725

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