

Title (en)

Compact low-pressure mercury vapour discharge lamp incorporating a mercury condensation chamber.

Title (de)

Kompakte Niederdruckquecksilberdampfentladungslampe mit eingebautem Quecksilberkondensationsraum.

Title (fr)

Lampe à décharge compacte avec vapeur de mercure à basse pression avec chambre de condensation de mercure incorporée.

Publication

**EP 0203246 A1 19861203 (EN)**

Application

**EP 85850298 A 19850925**

Priority

SE 8502562 A 19850523

Abstract (en)

A compact low-pressure mercury vapour discharge lamp comprises two or more straight tubes which are connected together by arcuate connections (4), to form a discharge chamber between two electrodes (14). These electrodes are located in the outer ends (5, 6) of the lamp, these ends being gas-tight connected to a lamp socket (7) enclosing the necessary contact pins (9, 10) and conductors (15). The connection (4) is provided with a spine (18) which extends along the connection (4). The spine (18) exhibits in cross-section an acute angle, to form a condensation space for mercury vapour used in the lamp. Because of the shape of the spine (18), condensation of the mercury will take place externally of the circular cross-section of the connection (4); when the lamp is energized the discharge current passes through this circular cross-sectional area of the connection and the positive column is formed therein. The tubes (2, 3) are provided at a location downstream of the electrodes (14) in the discharge current direction with screening plates (13), in order to define around the electrodes (14) spaces in which ions released from the electrode emission substance are held concentrated, so as to fall back onto the electrode surface when the current changes phase.

IPC 1-7

**H01J 61/10**; **H01J 61/30**

IPC 8 full level

**H01J 61/10** (2006.01); **H01J 61/30** (2006.01); **H01J 61/33** (2006.01)

CPC (source: EP)

**H01J 61/33** (2013.01)

Citation (search report)

- US 4173730 A 19791106 - MORTON EDWARD W [US], et al
- DE 1539504 B2 19750403
- GB 398799 A 19330919 - BRITISH THOMSON HOUSTON CO LTD

Cited by

DE19601733A1; EP1814139A1; GB2234391A; US5138223A; US7965038B2

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