

Title (en)
Fluorescent lamp

Title (de)
Leuchtstofflampe

Title (fr)
Lampe fluorescente

Publication
EP 1615255 A2 20060111 (EN)

Application
EP 05106230 A 20050707

Priority
• CN 200420073880 U 20040708
• CN 200410078388 A 20040927

Abstract (en)
The present invention relates to a fluorescent lamp using new cold-end technology or an enveloped fluorescent lamp with high surface load. The present invention is comprised of a lamp tube, cathode, stem cap and wire, such that one end of the wire connected to the cathode is fixed on the stem cap and the other end of the wire is led out from the lamp tube. At least one cavity tube connecting through the lamp tube is disposed on side of at least one lamp tube. Advantages of the fluorescent lamp includes: (1) the temperature of cavity tube is not influenced directly with electrical arc since there is no discharge through appended cavity tube, thus mercury-vapor pressure adjustment with cold-end is made possible; furthermore, mercury-vapor pressure is decreased significantly on energy saving lamps with high power or lamps in high environmental temperature; (2) by adjusting the length and/or position of cavity tube, mercury-vapor pressure in the lamp tube can be adjusted efficiently; (3) if amalgam is required for the lamp tube, the adjustment work becomes easy and efficient by positioning the amalgam at the coldest point; with adding auxiliary cathode selectively, good luminous flux is formed rapidly when the lamp is turned on initially; (4) the effective service life of the lamp tube is lengthened since the harmful materials to luminous flux output produced during lamp operation are collected at the cold-end of cavity tube.

IPC 8 full level
H01J 61/24 (2006.01); **H01J 61/28** (2006.01); **H01J 61/30** (2006.01); **H01J 61/32** (2006.01); **H01J 61/33** (2006.01); **H01J 61/36** (2006.01); **H01J 61/72** (2006.01)

CPC (source: EP KR)
H01J 61/24 (2013.01 - KR); **H01J 61/327** (2013.01 - EP KR); **H01J 61/33** (2013.01 - EP KR); **H01J 61/72** (2013.01 - EP KR)

Citation (examination)
• EP 1056119 A2 20001129 - MASS TECHNOLOGY HK LTD [CN]
• DE 1133824 B 19620726 - PATENT TREUHAND GES FUER ELEKTRISCHE GLUEHLAMPEN MBH
• WO 02056331 A1 20020718 - KONINKL PHILIPS ELECTRONICS NV [NL]

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 1615255 A2 20060111; **EP 1615255 A3 20060712**; CN 100423174 C 20081001; CN 1610053 A 20050427; JP 2006024571 A 20060126; KR 100749585 B1 20070814; KR 20060050002 A 20060519

DOCDB simple family (application)
EP 05106230 A 20050707; CN 200410078388 A 20040927; JP 2005200326 A 20050708; KR 20050061810 A 20050708