

Title (en)
COLD CATHODE FLUORESCENT LAMP AND DISPLAY

Title (de)
KALTKATHODEN-FLUORESZENZLAMPE UND ANZEIGE

Title (fr)
LAMPE FLUORESCENTE A CATHODE FROIDE, ET AFFICHEUR

Publication
EP 1076912 A2 20010221 (EN)

Application
EP 99921700 A 19990505

Priority

- CN 99101997 A 19990405
- US 9909856 W 19990505
- US 7373898 A 19980506
- US 18776698 A 19981106
- US 18803598 A 19981106

Abstract (en)

[origin: WO9957749A2] A light transmitting container is used to house a cold cathode fluorescent lamp (CCFL) to reduce heat loss and to increase the luminous efficiency of the lamp. An electrical connector configuration is connected to an electrode of the lamp and adapted to be electrically and mechanically connected to a conventional electrical socket. A driver circuit in the container converts 50 or 60 Hz power to the high frequency power suitable for operating the CCFL. At least one of the electrodes of the CCFL is outside of the container to facilitate heat dissipation. A two-dimensional array of CCFLs may be held by a module housing to form a display for displaying still or moving images and characters. The above-described CCFL configurations may also be used for displaying traffic information. A monochromic, multi-color and full-color cold cathode fluorescent display (CFD), comprises: some shaped white or multi-color or red, green, blue three primary color CCFLs, reflector, base plate, temperature control means, luminance and contrast enhancement face plate, shades and its driving electronics. CFD is a large screen display device which has high luminance, high efficiency, long lifetime, high contrast and excellent color. CFD can be used for applications both of outdoor and indoor even at direct sunlight, to display character, graphic and video image.

[origin: WO9957749A2] A light transmitting container filled with gas is used to house a cold cathode fluorescent illumination apparatus (101) to reduce heat loss due to ambient temperature and to increase the luminous efficiency of the lamp (102). A display array comprising a plurality of illumination devices (102) arranged adjacent to one another can be used as a large screen display device which has high luminance, high efficiency, long lifetime, high contrast and excellent color.

IPC 1-7
H01J 61/92; H01J 61/52; H01J 61/34; H01J 61/78; H01J 65/04; H01J 61/32; H05B 41/24; H01J 5/48; F21V 7/00

IPC 8 full level
F21S 2/00 (2006.01); **H01J 61/30** (2006.01); **H01J 61/34** (2006.01); **H01J 61/52** (2006.01); **H01J 61/78** (2006.01); **H01J 65/04** (2006.01); **H05B 41/24** (2006.01)

CPC (source: EP)
H01J 61/30 (2013.01); **H01J 61/78** (2013.01); **H01J 65/046** (2013.01)

Citation (search report)
See references of WO 9957749A2

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9957749 A2 19991111; **WO 9957749 A3 20001130**; AU 3883799 A 19991123; CN 1161819 C 20040811; CN 1287683 A 20010314; CN 1477675 A 20040225; EP 1076912 A2 20010221; JP 2003520387 A 20030702

DOCDB simple family (application)
US 9909856 W 19990505; AU 3883799 A 19990505; CN 03100260 A 19990505; CN 99800953 A 19990505; EP 99921700 A 19990505; JP 2000547643 A 19990505