

Title (en)

CATHODE STRUCTURE FOR A FLAT SCREEN WITH REFOCUSING GRID

Title (de)

KATODENSTRUKTUR FÜR EINEN FLACHBILDSCHIRM MIT REFOKUSIERUNGSGITTER

Title (fr)

STRUCTURE DE CATHODE POUR ECRAN PLAT AVEC GRILLE DE REFOCALISATION

Publication

EP 2104944 A1 20090930 (FR)

Application

EP 07857818 A 20071219

Priority

- EP 2007064195 W 20071219
- FR 0655622 A 20061219

Abstract (en)

[origin: WO2008074825A1] The invention relates to a cathode structure of the triode type, comprising, superposed on a support (41), a cathode electrode (42), an electrical insulation layer (44) and a gate electrode (45), the electrical insulation layer (44) and the gate electrode (45) having emission openings (46) revealing at least one electron-emitting element (48) electrically connected to the cathode electrode (42), the structure further including a refocusing electrode placed so as to refocus the electrons extracted by the gate electrode (45). The refocusing electrode (50) is placed on said electrical insulation layer (44) and is connected to electrical connection means for applying a refocusing voltage to it via electrically conducting nanotubes (58). The invention also relates to a matrix-controlled field-emission device.

IPC 8 full level

H01J 29/46 (2006.01); **H01J 3/02** (2006.01); **H01J 29/48** (2006.01); **H01J 31/12** (2006.01)

CPC (source: EP US)

H01J 3/021 (2013.01 - EP US); **H01J 29/467** (2013.01 - EP US); **H01J 29/481** (2013.01 - EP US); **H01J 31/127** (2013.01 - EP US)

Citation (search report)

See references of WO 2008074825A1

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 MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

FR 2910175 A1 20080620; **FR 2910175 B1 20090731**; EP 2104944 A1 20090930; JP 2010514119 A 20100430; US 2010013365 A1 20100121; WO 2008074825 A1 20080626

DOCDB simple family (application)

FR 0655622 A 20061219; EP 07857818 A 20071219; EP 2007064195 W 20071219; JP 2009542047 A 20071219; US 51866107 A 20071219