

Title (en)

Electron-emitting element and field emission display using the same

Title (de)

Elektronenemitter und Feldemissionsdisplay mit selbigem

Title (fr)

Element d'émission d'électrons et affichage à émission par effet de champ l'utilisant

Publication

**EP 1329928 A3 20060208 (EN)**

Application

**EP 02258747 A 20021218**

Priority

- JP 2002049754 A 20020226
- JP 2002183481 A 20020624
- JP 2002319761 A 20021101
- US 2723201 A 20011220
- US 20640902 A 20020726

Abstract (en)

[origin: EP1329928A2] An electron-emitting element includes an electric field applying portion (1) composed of a dielectric, a first electrode (2) formed on one surface of the electric field applying portion, and a second electrode (3) being formed on the surface and forming a slit in cooperation with the first electrode, and is formed on a substrate (4).

IPC 8 full level

**H01J 1/304** (2006.01); **H01J 29/04** (2006.01); **G09G 3/22** (2006.01); **H01J 1/312** (2006.01); **H01J 1/316** (2006.01); **H01J 31/12** (2006.01)

CPC (source: EP)

**G09G 3/22** (2013.01); **H01J 1/304** (2013.01); **H01J 1/316** (2013.01); **H01J 2201/306** (2013.01); **H01J 2201/3165** (2013.01)

Citation (search report)

- [PX] EP 1265263 A1 20021211 - NGK INSULATORS LTD [JP]
- [X] FR 2789221 A1 20000804 - UNIV NANTES [FR]
- [X] EP 0767481 A1 19970409 - CANON KK [JP]
- [X] US 5831387 A 19981103 - KANEKO TETSUYA [JP], et al
- [Y] EP 1073090 A2 20010131 - ILJIN NANOTECH CO LTD [KR]
- [XY] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 06 30 June 1997 (1997-06-30)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 05 30 May 1997 (1997-05-30)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 02 28 February 1997 (1997-02-28)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 08 29 August 1997 (1997-08-29)
- [X] JUN-ICHI ASANO ET AL: "ELECTRON EMISSION INTO VACUUM FROM PZT FERROELECTRIC CERAMICS INDUCED BY POLARIZATION REVERSAL", EXTENDED ABSTRACTS OF THE INTERNATIONAL CONFERENCE ON SOLID STATE DEVICES AND MATERIALS, JAPAN SOCIETY OF APPLIED PHYSICS. TOKYO, JA, 1 August 1992 (1992-08-01), pages 466 - 468, XP000312255
- [X] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 02 29 February 2000 (2000-02-29)
- [X] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 06 30 April 1998 (1998-04-30)
- [DX] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 13 5 February 2001 (2001-02-05)
- [DX] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 09 31 October 1995 (1995-10-31)
- [DX] PATENT ABSTRACTS OF JAPAN vol. 014, no. 112 (E - 0897) 28 February 1990 (1990-02-28)

Cited by

CN107346720A; CN105097380A; WO2015176596A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SI SK TR

DOCDB simple family (publication)

**EP 1329928 A2 20030723**; **EP 1329928 A3 20060208**; JP 2004087450 A 20040318; JP 3848237 B2 20061122

DOCDB simple family (application)

**EP 02258747 A 20021218**; JP 2002319761 A 20021101