

Title (en)

AMORPHIC DIAMOND FILM FLAT FIELD EMISSION CATHODE

Title (de)

FLACHFELDEMISSIONSKATHODE AUS AMORPHEN DIAMANT

Title (fr)

CATHODE PLATE A EMISSION DE CHAMP POURVUE D'UNE PELLICULE DE DIAMANT AMORPHE

Publication

**EP 0730780 A1 19960911 (EN)**

Application

**EP 94905336 A 19931206**

Priority

- US 9311845 W 19931206
- US 7115793 A 19930602

Abstract (en)

[origin: WO9428571A1] A field emission cathode includes a layer of conductive material (14) and a layer of amorphous diamond film (12), functioning as a low effective work-function material, deposited over the conductive material to form emission sites. The emission sites each contain at least two sub-regions having differing electron affinities.

IPC 1-7

**H01J 19/24**; **H01J 1/30**; **H01J 61/067**

IPC 8 full level

**H01J 1/304** (2006.01); **H01J 31/12** (2006.01); **H01J 61/067** (2006.01); **H01J 63/06** (2006.01)

CPC (source: EP KR)

**H01J 1/304** (2013.01 - EP); **H01J 19/24** (2013.01 - KR); **H01J 31/127** (2013.01 - EP); **H01J 61/0677** (2013.01 - EP); **H01J 63/06** (2013.01 - EP); **H01J 2201/304** (2013.01 - EP); **H01J 2201/30426** (2013.01 - EP); **H01J 2201/30457** (2013.01 - EP); **H01J 2329/8625** (2013.01 - EP)

Designated contracting state (EPC)

AT BE CH DE DK ES FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**WO 9428571 A1 19941208**; AU 5897594 A 19941220; CA 2164294 A1 19941208; EP 0730780 A1 19960911; EP 0730780 A4 19960722; JP H08510858 A 19961112; KR 100307042 B1 20011217; KR 960702937 A 19960523

DOCDB simple family (application)

**US 9311845 W 19931206**; AU 5897594 A 19931206; CA 2164294 A 19931206; EP 94905336 A 19931206; JP 50058895 A 19931206; KR 19950705490 A 19951202