

Title (en)

Electron-emitting source and field emission display using the same

Title (de)

Elektronenemissionsquelle und diese verwendende Feldemissionsanzeige

Title (fr)

Source d'émission d'électrons et dispositif d'affichage d'émission de champ l'utilisant

Publication

**EP 1942515 A1 20080709 (EN)**

Application

**EP 07250006 A 20070103**

Priority

EP 07250006 A 20070103

Abstract (en)

An electron emission source and a field emission device using the same. The diamond-like carbon (DLC) film used as the electron emission source is featured by its film structures formed on the substrate surface arranged in a petal pattern. The height of the DLC flake is in micro scale and the thickness of the flake is in nano scale. The disclosed DLC flake film has a high aspect ratio. Hence, the DLC film has a good enhancing factor favourable for field emission, acting as a good electron-emitting source. In addition, the electron-emitting source material disclosed can be applied in a field emission display to act as a stable electron-emitting source.

IPC 8 full level

**H01J 1/304** (2006.01); **H01J 29/04** (2006.01); **H01J 31/12** (2006.01)

CPC (source: EP)

**H01J 1/304** (2013.01); **H01J 29/04** (2013.01); **H01J 31/123** (2013.01); **H01J 2201/30457** (2013.01); **H01J 2209/0223** (2013.01); **H01J 2329/00** (2013.01)

Citation (search report)

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- [A] JP 2001283715 A 20011012 - HIRAKI AKIO
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Designated extension state (EPC)

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DOCDB simple family (publication)

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