

Title (en)

Manufacturing method for a micropoint-electron source

Title (de)

Herstellungsverfahren einer Mikrospitzen-Elektronenquelle

Title (fr)

Procédé de fabrication d'une source d'électrons à micropointes

Publication

EP 0697710 B1 19981111 (FR)

Application

EP 95401863 A 19950809

Priority

FR 9410041 A 19940816

Abstract (en)

[origin: EP0697710A1] A micro-tip electron source prodn. process involves: (a) producing a structure comprising an insulating substrate (10) bearing one or more cathode conductors (12) covered with an insulating layer (14) and then a conductive grid layer (16), holes (18) being formed through these layers (14,16) to each cathode conductor (12); and (b) forming a micro-tip of electron-emissive metal on the cathode conductor (12) in each hole (18), and an insulating protective layer (50) on the grid layer (16), depositing (pref. electrolytically) electron-emissive metal to overfill the holes, removing the protective layer and electrolytically etching the metal deposit (60) to form the micro-tips.

IPC 1-7

H01J 9/02

IPC 8 full level

H01J 1/30 (2006.01); **H01J 1/304** (2006.01); **H01J 9/02** (2006.01)

CPC (source: EP US)

H01J 9/025 (2013.01 - EP US)

Cited by

US6007695A; US5893967A; FR2770683A1; US6120674A; US5766446A; EP0851451A1; FR2757999A1; US5981304A; WO9733297A1; WO9923680A1

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