

Title (en)

IMPROVED ALIGNMENT OF A THERMAL FIELD EMISSION ELECTRON SOURCE AND APPLICATION IN A MICROCOLUMN

Title (de)

VERBESSERTE JUSTIERUNG EINER THERMISCHEN FELDEMISSIONS-ELEKTRONENQUELLE UND ANWENDUNG IN EINEM MIKRO-ELEKTRONENSTRAHLAPPARAT

Title (fr)

REGLAGE AMELIORE DE L'EMISSION D'UN CHAMP THERMIQUE

Publication

EP 1145272 A2 20011017 (EN)

Application

EP 99954854 A 19991007

Priority

- US 9923704 W 19991007
- US 17661398 A 19981021

Abstract (en)

[origin: WO0024030A2] An electron-beam microcolumn alignment method and system in situ includes a split suppressor cap for a miniature Schottky electron or other field emission source. The split suppressor cap is segmented into four or more electrically separate electrode elements, which are independently driven and controlled by separate deflection voltages to scan the electron beam without requiring mechanical movement.
[origin: WO0024030A2] An electron-beam microcolumn alignment method and system in situ includes a split suppressor cap (124) for a miniature Schottky electron (16) or other field emission source. The split suppressor cap is segmented into four or more electrically separate electrode elements (124...130) which are independently driven and controlled by separate deflection voltages ($V_{s+/-V_x}$, $V_{s+/-V_y}$) to scan the electron beam without requiring mechanical movement.

IPC 1-7

H01J 37/00

IPC 8 full level

H01J 37/04 (2006.01); **H01J 37/073** (2006.01); **H01J 37/28** (2006.01)

CPC (source: EP KR)

H01J 37/00 (2013.01 - KR); **H01J 37/073** (2013.01 - EP); **H01J 37/28** (2013.01 - EP); **H01J 2237/06316** (2013.01 - EP);
H01J 2237/1501 (2013.01 - EP)

Cited by

US10388489B2

Designated contracting state (EPC)

DE GB NL

DOCDB simple family (publication)

WO 0024030 A2 20000427; WO 0024030 A3 20021010; EP 1145272 A2 20011017; EP 1145272 A3 20021127; JP 2003513407 A 20030408;
KR 20010080286 A 20010822

DOCDB simple family (application)

US 9923704 W 19991007; EP 99954854 A 19991007; JP 2000577692 A 19991007; KR 20017005019 A 20010421