

Title (en)

FIELD EMISSION DEVICE USING A REDUCING GAS AND METHOD FOR MAKING SAME

Title (de)

FELDEMISSIONSVORRICHTUNG MIT EINEM REDUKTIONSGAS UND VERFAHREN ZUR HERSTELLUNG

Title (fr)

DISPOSITIF A EMISSION DE CHAMP UTILISANT UN GAZ REDUCTEUR ET FABRICATION D'UN TEL DISPOSITIF

Publication

EP 1173877 B1 20050622 (FR)

Application

EP 00922750 A 20000426

Priority

- FR 0001101 W 20000426
- FR 9905361 A 19990428

Abstract (en)

[origin: FR2793068A1] The invention concerns a device comprising at least an electron source with field effect in a closed structure defining an internal space which contains a reducing gas for oxidising the material emitting the electron source. The invention is characterised in that the reducing gas comprises a gas of formula N_xH_y with $x = 1$ or 2 and $y = 3$ or 4 , advantageously under pressure ranging between 10^{-8} mbar and 10^{-1} mbar. The invention also concerns methods for making such a device and appliances therefor.

IPC 1-7

H01J 29/94

IPC 8 full level

H01J 9/385 (2006.01); **H01J 9/395** (2006.01); **H01J 29/94** (2006.01); **H01J 31/12** (2006.01)

CPC (source: EP US)

H01J 9/395 (2013.01 - EP US); **H01J 29/94** (2013.01 - EP US); **H01J 2329/00** (2013.01 - EP US)

Designated contracting state (EPC)

DE GB IT

DOCDB simple family (publication)

FR 2793068 A1 20001103; **FR 2793068 B1 20010525**; DE 60020959 D1 20050728; DE 60020959 T2 20060518; EP 1173877 A1 20020123; EP 1173877 B1 20050622; JP 2003500792 A 20030107; US 6888294 B1 20050503; WO 0067285 A1 20001109

DOCDB simple family (application)

FR 9905361 A 19990428; DE 60020959 T 20000426; EP 00922750 A 20000426; FR 0001101 W 20000426; JP 2000616037 A 20000426; US 95939101 A 20011024