

Title (en)
ELECTRON-CYCLOTRON RESONANCE ION SOURCE

Publication
EP 0127523 B1 19880810 (FR)

Application
EP 84401014 A 19840517

Priority
FR 8308401 A 19830520

Abstract (en)
[origin: US4638216A] An electron cyclotron resonance ion source in which a plasma is confined in a magnetic configuration having a first group of coils located in the plane defined by the tight window of an ultra-high frequency injector and surrounding the latter, supplying the magnetic field creating and confining a plasma as well as a second group of coils supplied in counter-field compared with the first group and surrounding an ion extraction system. Ion extraction takes place in a magnetic field well below that corresponding to the cyclotron resonance. This ion source has numerous applications in the field of thin layer sputtering, microetching, ion implantation, accelerators, etc.

IPC 1-7
H01J 27/18

IPC 8 full level
H01J 27/02 (2006.01); **H01J 27/18** (2006.01); **H01J 37/08** (2006.01); **H05H 7/08** (2006.01)

CPC (source: EP US)
H01J 27/18 (2013.01 - EP US)

Cited by
US5208512A; DE3903322A1; GB2261986A; GB2261986B; EP0199625A1; FR2580427A1; WO9116723A1; EP0184475B1

Designated contracting state (EPC)
BE DE GB NL SE

DOCDB simple family (publication)
EP 0127523 A1 19841205; EP 0127523 B1 19880810; CA 1232375 A 19880202; DE 3473377 D1 19880915; FR 2546358 A1 19841123; FR 2546358 B1 19850705; JP H046060 B2 19920204; JP S6041735 A 19850305; US 4638216 A 19870120

DOCDB simple family (application)
EP 84401014 A 19840517; CA 454349 A 19840515; DE 3473377 T 19840517; FR 8308401 A 19830520; JP 10034184 A 19840518; US 61162584 A 19840518