

Title (en)
Electron cyclotron resonance ion source.

Title (de)
Elektronzyklotronresonanz-Ionenquelle.

Title (fr)
Source d'ions à résonance cyclotronique électronique.

Publication
EP 0514255 A1 19921119 (FR)

Application
EP 92401292 A 19920512

Priority
FR 9105803 A 19910514

Abstract (en)
Device for optimising an electron cyclotron resonance (ECR) ion source. The invention consists in adding, to a conventional ECR source, means of shifting the point of resonance C which appears in the dielectric duct 23 when the source is working. The optimal adjustment of the position of the point C ensures optimal positioning of the points A and B of the equimagnetic surface 13, these points A and B being dependent on the point C. These means of shifting include a magnetic screw 47 threaded on its periphery so as to form a screw/nut system with the armour 11 of the ECR source. This device finds numerous applications especially in particle accelerator equipment used in the scientific and medical sectors. <IMAGE>

IPC 1-7
H01J 27/18; H05H 13/00

IPC 8 full level
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)

Citation (search report)
• [YD] EP 0238397 A1 19870923 - COMMISSARIAT ENERGIE ATOMIQUE [FR]
• [Y] JOURNAL OF VACUUM SCIENCE AND TECHNOLOGY: PART A. vol. 8, no. 3, Juin 1990, NEW YORK US pages 2900 - 2903; CC TSAI ET AL: 'POTENTIAL APPLICATIONS OF AN ELECTRON CYCLOTRON RESONANCE MULTICUSP PLASMA SOURCE'
• [A] PATENT ABSTRACTS OF JAPAN vol. 13, no. 196 (E-755)(3544) 10 Mai 1989 & JP-A-1 017 399 (TERU SAGAMI K. K.) 20 Janvier 1989

Cited by
FR2933532A1; FR2730858A1; US8760055B2; WO2010001036A3; WO9625755A1

Designated contracting state (EPC)
BE DE GB IT NL

DOCDB simple family (publication)
EP 0514255 A1 19921119; EP 0514255 B1 19960117; DE 69207641 D1 19960229; DE 69207641 T2 19960905; FR 2676593 A1 19921120; FR 2676593 B1 19970103; JP H06103943 A 19940415; US 5336961 A 19940809

DOCDB simple family (application)
EP 92401292 A 19920512; DE 69207641 T 19920512; FR 9105803 A 19910514; JP 14505692 A 19920512; US 87754492 A 19920501