

Title (en)

ELECTRON CYCLOTRON RESONANCE ION GENERATOR

Title (de)

ELEKTRONENZYKLOTRONRESONANZIONENGGENERATOR

Title (fr)

DISPOSITIF GÉNÉRATEUR D'IONS À RÉSONANCE CYCLOTRONIQUE ÉLECTRONIQUE

Publication

EP 2311061 A2 20110420 (FR)

Application

EP 09772718 A 20090611

Priority

- FR 2009051104 W 20090611
- FR 0854502 A 20080702

Abstract (en)

[origin: WO2010001036A2] The invention relates to an ECR ion generator (1) comprising a vacuum-tight chamber (2) of axial symmetry along a longitudinal axis (AA'), means (3, 4, 5, 6) for generating a magnetic field having a symmetry of revolution with respect to the axis (AA') and means for propagating a high-frequency wave. The chamber (2) has an ionization first stage (7) at one end of the chamber (2) having an ionization zone (10) in which ions are generated, the magnetic field being approximately parallel to the axis (AA') in the zone (10), and a second stage (8) for magnetically confining the ions generated that uses a first high-frequency wave coming from the propagation means. The magnetic field is approximately parallel to the axis (AA') between the zone (10) and the second stage (8) so that the ions generated in the zone (10) migrate towards the second stage (8), and the first and second stages (7, 8) contain the same DC plasma.

IPC 8 full level

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CPC (source: EP US)

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Citation (search report)

See references of WO 2010001036A2

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