

Title (en)  
DEVICE FOR GENERATING A MAGNETIC FIELD INSIDE A CHAMBER

Title (de)  
VORRICHTUNG ZUR ERZEUGUNG EINES MAGNETISCHEN FELDES INNERHALB EINES GEFÄSSES

Title (fr)  
DISPOSITIF DESTINE A CREER UN CHAMP MAGNETIQUE A L'INTERIEUR D'UNE ENCEINTE

Publication  
**EP 1080613 B1 20040303 (FR)**

Application  
**EP 99920915 A 19990526**

Priority  
• FR 9901223 W 19990526  
• FR 9806579 A 19980526

Abstract (en)  
[origin: FR2779315A1] The invention concerns a device for generating a magnetic field (B) inside a chamber (10) defined by a wall (11) and provided with at least an inlet (12) for a substance in atomic state, in vapour phase and at least an outlet for ions, electrons or electromagnetic radiation (14) derived from said substance ionisation. Said device conventionally comprises means generating a magnetic field (20, 21, 22, 24, 26, 28) capable of enclosing at least partially said chamber (10). The invention is characterised in that the means generating the magnetic field are placed at a distance (L, l) from said chamber (10) wall, ranging between a few millimetres and a distance as much as the chamber greatest dimension, and comprise at least a coil made of a material with supraconductive properties between 16 K and 273 K and a cryogenic system (40) for maintaining said magnetic field generating means at said temperature.

IPC 1-7  
**H05H 1/46**

IPC 8 full level  
**H05H 1/10** (2006.01); **H05H 1/46** (2006.01)

CPC (source: EP)  
**H05H 1/10** (2013.01); **H05H 1/46** (2013.01)

Designated contracting state (EPC)  
BE DE DK ES FI FR GB IT NL SE

DOCDB simple family (publication)  
**FR 2779315 A1 19991203; FR 2779315 B1 20000818**; AU 3831399 A 19991213; DE 69915282 D1 20040408; DE 69915282 T2 20050310; EP 1080613 A1 20010307; EP 1080613 B1 20040303; JP 2002517078 A 20020611; WO 9962307 A1 19991202

DOCDB simple family (application)  
**FR 9806579 A 19980526**; AU 3831399 A 19990526; DE 69915282 T 19990526; EP 99920915 A 19990526; FR 9901223 W 19990526; JP 2000551587 A 19990526