

Title (en)

METHOD AND DEVICE FOR PRODUCING A PLASMA

Title (de)

VERFAHREN UND VORRICHTUNG ZUR ERZEUGUNG EINES PLASMAS

Title (fr)

PROCEDE ET DISPOSITIF DE GENERATION DE PLASMA

Publication

EP 1433192 A1 20040630 (DE)

Application

EP 02777222 A 20020926

Priority

- DE 10147998 A 20010928
- EP 0210811 W 20020926

Abstract (en)

[origin: WO03030207A1] The invention relates to a method for producing a plasma. Said plasma is produced in the vacuum chamber (1a) of a vacuum recipient (1) of a device which is suitable for plasma treatment, by means of at least one induction coil (2) which is acted upon by an alternating current. The gas used to produce the plasma is introduced into the vacuum chamber (1a) via at least one inlet (3), and the vacuum chamber (1a) is pumped by means of at least one pumping unit (4). In order to influence the density of the plasma, the induction coil (2) is additionally acted upon by an optionally pulsed direct current.

IPC 1-7

H01J 37/32

IPC 8 full level

H05H 1/46 (2006.01); **C23C 16/507** (2006.01); **H01J 27/16** (2006.01); **H01J 37/08** (2006.01); **H01J 37/32** (2006.01); **H01L 21/205** (2006.01); **H01L 21/3065** (2006.01)

CPC (source: EP KR US)

H01J 37/321 (2013.01 - EP US); **H01J 37/32174** (2013.01 - EP US); **H01J 37/3266** (2013.01 - EP US); **H01L 21/3065** (2013.01 - KR)

Citation (search report)

See references of WO 03030207A1

Citation (examination)

- JP H10284298 A 19981023 - MATSUSHITA ELECTRIC IND CO LTD
- WO 0137315 A1 20010525 - LAM RES CORP [US], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

WO 03030207 A1 20030410; CN 100364035 C 20080123; CN 1559077 A 20041229; DE 10147998 A1 20030410; EP 1433192 A1 20040630; HK 1069674 A1 20050527; JP 2005505130 A 20050217; JP 4610191 B2 20110112; KR 100960978 B1 20100603; KR 20040050898 A 20040617; TW I290809 B 20071201; US 2003075522 A1 20030424; US 2009145554 A1 20090611; US 7476301 B2 20090113; US 8613828 B2 20131224

DOCDB simple family (application)

EP 0210811 W 20020926; CN 02818918 A 20020926; DE 10147998 A 20010928; EP 02777222 A 20020926; HK 05101863 A 20050303; JP 2003533308 A 20020926; KR 20047004415 A 20020926; TW 91121849 A 20020924; US 25671802 A 20020927; US 31560808 A 20081204