

Title (en)

CONTROL OF A PLURALITY OF PLUG COILS VIA A SINGLE POWER STAGE

Title (de)

STEUERUNG MEHRERER STECKERSPULEN ÜBER EINE EINZELNE LEISTUNGSSTUFE

Title (fr)

PILOTAGE D'UNE PLURALITE DE BOBINES BOUGIES VIA UN UNIQUE ETAGE DE PUISSANCE

Publication

**EP 2115296 B1 20170906 (FR)**

Application

**EP 08762151 A 20080225**

Priority

- FR 2008050310 W 20080225
- FR 0701499 A 20070301

Abstract (en)

[origin: FR2913298A1] The device has ignition plug coil type plasma generating circuits (BB1-BB4) connected in parallel on an outlet of a class E power amplifier type supply circuit (2). Each generating circuit presents a resonant frequency and generates plasma when a high voltage level is applied on the outlet at a frequency equal to the resonant frequency. A control device (5) controls the supply circuit and determines the frequency of a control signal among one of a set of resonant frequencies of the generating circuits to selectively control each generating circuit along the utilized frequency. An independent claim is also included for a method for controlling the supply of a radio frequency plasma generating device.

IPC 8 full level

**F02P 9/00** (2006.01); **F02P 17/12** (2006.01); **F02P 23/04** (2006.01)

CPC (source: EP KR US)

**F02P 7/02** (2013.01 - EP US); **F02P 9/00** (2013.01 - KR); **F02P 9/007** (2013.01 - EP US); **F02P 17/12** (2013.01 - KR); **F02P 23/04** (2013.01 - KR);  
**F02P 3/01** (2013.01 - EP US); **F02P 23/045** (2013.01 - EP US)

Citation (examination)

- US 5655210 A 19970805 - GREGOIRE DANIEL J [US], et al
- US 2006132360 A1 20060622 - CAIMI FRANK M [US], et al

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

**FR 2913298 A1 20080905; FR 2913298 B1 20090417;** BR PI0807707 A2 20140527; CN 101622442 A 20100106; CN 101622442 B 20111228;  
EP 2115296 A1 20091111; EP 2115296 B1 20170906; JP 2010520399 A 20100610; JP 5036830 B2 20120926; KR 20090115947 A 20091110;  
RU 2009136346 A 20110410; US 2010194279 A1 20100805; US 8547020 B2 20131001; WO 2008113955 A1 20080925

DOCDB simple family (application)

**FR 0701499 A 20070301;** BR PI0807707 A 20080225; CN 200880006697 A 20080225; EP 08762151 A 20080225; FR 2008050310 W 20080225;  
JP 2009551244 A 20080225; KR 20097018199 A 20080225; RU 2009136346 A 20080225; US 52941708 A 20080225