

Title (en)

High frequency generator for ion and electron sources

Title (de)

Hochfrequenzgenerator für Ionen- und Elektronenquellen

Title (fr)

Générateur haute fréquence pour sources d'ions et d'électrons

Publication

EP 2020672 A3 20101110 (DE)

Application

EP 08013495 A 20080726

Priority

DE 102007036592 A 20070802

Abstract (en)

[origin: EP2020672A2] The device has a coupling coil (5) that supplies high frequency energy for performing plasma excitation. A coupling capacitor (22) is electrically coupled with the coil. A high frequency generator (16) i.e. radio frequency generator, is electrically coupled with the coil. The generator with the capacitor forms a resonant circuit e.g. series resonant circuit. The generator has a phase locked loop control device that automatically performs impedance matching of the circuit, so that the circuit is operated by using resonance frequency.

IPC 8 full level

H01J 27/16 (2006.01); **F03H 1/00** (2006.01)

CPC (source: EP US)

F03H 1/0018 (2013.01 - EP US); **H01J 27/16** (2013.01 - EP US)

Citation (search report)

- [X] DE 19948229 C1 20010503 - DAIMLER CHRYSLER AG [DE]
- [X] US 2007114945 A1 20070524 - MATTABONI PAUL J [US], et al
- [A] US 2003215373 A1 20031120 - REYZELMAN LEONID E [US], et al
- [A] US 4507588 A 19850326 - ASMUSSEN JES [US], et al

Cited by

EP3933884A1; US12022603B2

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

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2020672 A2 20090204; EP 2020672 A3 20101110; EP 2020672 B1 20200506; DE 102007036592 A1 20090219;
DE 102007036592 B4 20140710; RU 2008131500 A 20100210; RU 2461908 C2 20120920; US 2009058303 A1 20090305;
US 8294370 B2 20121023

DOCDB simple family (application)

EP 08013495 A 20080726; DE 102007036592 A 20070802; RU 2008131500 A 20080731; US 18264508 A 20080730