

Title (en)

MICROWAVE GENERATOR WITH OSCILLATING VIRTUAL CATHODE AND OPEN REFLECTORS

Title (de)

MIKROWELLENGENERATOR MIT OSZILLIERENDER VIRTUELLER KATHODE UND OFFENEN REFLEKTOREN

Title (fr)

GÉNÉRATEUR DE MICROONDES À CATHODE VIRTUELLE OSCILLANTE ET À RÉFLECTEURS OUVERTS

Publication

**EP 2936537 B1 20180912 (FR)**

Application

**EP 13820835 A 20131219**

Priority

- FR 1262385 A 20121220
- FR 2013053204 W 20131219

Abstract (en)

[origin: WO2014096728A1] The present invention relates to a device for generating microwaves with an oscillating virtual cathode, comprising a cathode (2), a thin anode (4) positioned at an inlet of a cylindrical waveguide (5), at least one first open reflector (9) and one last open reflector (9) located in the waveguide (5), which are transparent to electrons and capable of reflecting a microwave created by at least one virtual cathode generated in the waveguide (5), and a plurality of open reflectors (9) between the first and last open reflector (9) such that one reflector from the plurality has a radius  $RR_{(i+1)}$  less than or equal to a radius  $RR_i$  of a reflector from the immediately preceding plurality and the last open reflector (9) having a radius  $RR_N$  less than a radius  $RR_1$  of the first open reflector.

IPC 8 full level

**H01J 25/02** (2006.01)

CPC (source: EP US)

**H01J 25/02** (2013.01 - EP US); **H01J 25/32** (2013.01 - US); **H01J 25/74** (2013.01 - EP US); **H01P 1/20** (2013.01 - US)

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**FR 3000289 A1 20140627**; **FR 3000289 B1 20170811**; EP 2936537 A1 20151028; EP 2936537 B1 20180912; US 2015348736 A1 20151203; US 9496114 B2 20161115; WO 2014096728 A1 20140626

DOCDB simple family (application)

**FR 1262385 A 20121220**; EP 13820835 A 20131219; FR 2013053204 W 20131219; US 201314652987 A 20131219