

Title (en)

DEVICE FOR PRODUCING HIGH FREQUENCY MICROWAVES

Title (de)

VORRICHTUNG ZUR ERZEUGUNG VON MIKROWELLEN HOHER FREQUENZ

Title (fr)

DISPOSITIF POUR PRODUIRE DES MICRO-ONDES A FREQUENCE ELEVEE

Publication

**EP 1364382 A1 20031126 (DE)**

Application

**EP 02726132 A 20020304**

Priority

- DE 10111817 A 20010302
- EP 0202332 W 20020304

Abstract (en)

[origin: WO02071435A1] The invention relates to a device (1) for producing high frequency microwaves comprising a cathode arrangement with heatable cathodes (15) for emitting electrons, two grid arrangements for controlling and focusing fluxes of electrons and an anode (3) for receiving the electrons flowing through the grid arrangements. The cathode arrangement and the first grid arrangement, in addition to a locking element or a throttle element (16), define an input cavity (12) forming a resonant cavity. The anode (3) and the second grid arrangement define an output cavity also forming a resonant cavity. Said cathode arrangement comprises a mounting for the cathode (15) such that a deformation of the cathode (15) is avoided by reducing the distance between the heatable cathode (15) and the grids(18).

IPC 1-7

**H01J 25/04**; **H01J 23/04**; **H01J 23/06**; **H01J 23/20**

IPC 8 full level

**H01J 23/04** (2006.01); **H01J 23/06** (2006.01); **H01J 23/20** (2006.01); **H01J 25/04** (2006.01)

CPC (source: EP US)

**H01J 23/04** (2013.01 - EP US); **H01J 23/06** (2013.01 - EP US); **H01J 23/20** (2013.01 - EP US); **H01J 25/04** (2013.01 - EP US)

Citation (search report)

See references of WO 02071435A1

Designated contracting state (EPC)

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

DOCDB simple family (publication)

**WO 02071435 A1 20020912**; AT E302994 T1 20050915; DE 10111817 A1 20020919; DE 50204024 D1 20050929; EP 1364382 A1 20031126; EP 1364382 B1 20050824; US 2004118840 A1 20040624; US 7365493 B2 20080429

DOCDB simple family (application)

**EP 0202332 W 20020304**; AT 02726132 T 20020304; DE 10111817 A 20010302; DE 50204024 T 20020304; EP 02726132 A 20020304; US 46972804 A 20040114