

Title (en)

HYPERFREQUENCY WAVE GENERATOR DEVICE WITH VIRTUAL CATHODE.

Title (de)

MIKROWELLENGENERATOR MIT EINER VIRTUELLEN KATHODE.

Title (fr)

DISPOSITIF GENERATEUR D'ONDES HYPERFREQUENCES A CATHODE VIRTUELLE.

Publication

EP 0413018 B1 19950208 (FR)

Application

EP 90903856 A 19900216

Priority

- FR 9000112 W 19900216
- FR 8902081 A 19890217

Abstract (en)

[origin: WO9009674A1] The invention relates to a hyperfrequency wave generator which uses an electron beam and the phenomenon of oscillating virtual cathode, but which allows to obtain a spectral quality energy and a conversion yield which are improved with respect to conventional vircator generators. This is achieved by using separately the electrons issued from the virtual cathode (80), that is to say transmitted (82) or reflected (81), in order to transform their kinetic energy into hyperfrequency energy (4).

IPC 1-7

H01J 25/02

IPC 8 full level

H01J 25/00 (2006.01); **H01J 25/02** (2006.01)

CPC (source: EP US)

H01J 25/02 (2013.01 - EP US); **H01J 25/74** (2013.01 - EP US)

Citation (examination)

1983 IEEE International Conference on Plasma Science, 23-25 May 1983, San Diego, California, IEEE Conference Report - Abstracts, IEEE, (NEW YORK, US), T.J.T. Kwan et al.: "Microwave generation by virtual cathodes and reflexing systems", page 40, abstract 2D6

Designated contracting state (EPC)

CH DE GB IT LI NL

DOCDB simple family (publication)

WO 9009674 A1 19900823; CA 2027558 A1 19900818; CA 2027558 C 19970930; DE 69016712 D1 19950323; DE 69016712 T2 19950601; EP 0413018 A1 19910220; EP 0413018 B1 19950208; FR 2643506 A1 19900824; FR 2643506 B1 19960419; JP 2863310 B2 19990303; JP H03504181 A 19910912; US 5113154 A 19920512

DOCDB simple family (application)

FR 9000112 W 19900216; CA 2027558 A 19900216; DE 69016712 T 19900216; EP 90903856 A 19900216; FR 8902081 A 19890217; JP 50423190 A 19900216; US 58291390 A 19901017