

Title (en)

Klystrode frequency multiplier.

Title (de)

Klystrode-Frequenzvervielfacher.

Title (fr)

Klystrode multiplicateur de fréquence.

Publication

EP 0352961 A1 19900131 (EN)

Application

EP 89307345 A 19890720

Priority

US 22349088 A 19880725

Abstract (en)

An electron tube frequency multiplier has a control grid (18) producing a density-modulated beam (14) which is further bunched by a velocity-modulating cavity (30) resonant near the signal frequency. Energy at a multiplied frequency is extracted by a second cavity resonant at a harmonic of the signal frequency. The frequency limit of grid-controlled tubes is thereby increased several fold.

IPC 1-7

H01J 25/10

IPC 8 full level

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

CPC (source: EP)

H01J 25/04 (2013.01)

Citation (search report)

- [A] US 4527091 A 19850702 - PREIST DONALD H [US]
- [A] US 4209755 A 19800624 - BURRASCANO ROBERTO [IT], et al
- [A] PROCEEDINGS OF THE IEEE, vol. 70, no. 11, November 1982, The Institute of electrical and electronics engineers D.H.PREIST "The klystrode - an unusual transmitting tube with potential for UHF-TV" pages 1318-1325

Cited by

FR2704093A1; US6465958B1; US10145215B2; WO9928943A1; WO9424690A3

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

EP 0352961 A1 19900131; **EP 0352961 B1 19940907**; DE 68918021 D1 19941013; DE 68918021 T2 19950112; JP H0279330 A 19900319

DOCDB simple family (application)

EP 89307345 A 19890720; DE 68918021 T 19890720; JP 18761989 A 19890721