

Title (en)  
Grid electron tube with improved performance

Title (de)  
Gitterelektronenröhre mit verbesserter Leistung

Title (fr)  
Tube électronique à grille à performances améliorées

Publication  
**EP 0718867 B1 19980128 (FR)**

Application  
**EP 95402832 A 19951215**

Priority  
FR 9415319 A 19941220

Abstract (en)  
[origin: EP0718867A1] The tube includes electrodes (K, G1) which are mostly cylindrical, mounted coaxially about an axis (XX'). The electrodes, with a cathode (K) surrounded by a grid (G1), partly define an input resonant cavity (34) having an active zone (30). The input cavity is tuned so that the central part (C') of the active zone corresponds to a voltage antinode. The cavity extends on both sides of the active zone. The input cavity is folded back on itself, towards the electrode axis, on one side of the active zone (B'-A'). Pref. the cavity terminates at two ends (A', E') which form part of the tube stem, at different radial distances from the axis. At least one end of the cavity is pref. terminated by a short-circuit tuning stub (36). The two cavity ends may be short circuits for operation at the lower end of the tube frequency range; for operation at the frequency range upper end, one cavity end is an open circuit.

IPC 1-7  
**H01J 21/10; H01J 21/12; H01J 23/38; H01J 19/10**

IPC 8 full level  
**H01J 21/10** (2006.01); **H01J 23/38** (2006.01); **H01J 25/04** (2006.01)

CPC (source: EP US)  
**H01J 21/10** (2013.01 - EP US); **H01J 23/38** (2013.01 - EP US); **H01J 25/04** (2013.01 - EP US)

Designated contracting state (EPC)  
DE FR GB

DOCDB simple family (publication)  
**EP 0718867 A1 19960626; EP 0718867 B1 19980128**; CN 1067798 C 20010627; CN 1129847 A 19960828; DE 69501549 D1 19980305;  
DE 69501549 T2 19980514; FR 2728386 A1 19960621; FR 2728386 B1 19970124; US 5682084 A 19971028

DOCDB simple family (application)  
**EP 95402832 A 19951215**; CN 95120498 A 19951220; DE 69501549 T 19951215; FR 9415319 A 19941220; US 40659895 A 19950320