

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 A1 19960626 (FR)**

Application  
**EP 95402832 A 19951215**

Priority  
FR 9415319 A 19941220

Abstract (en)  
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.

Abstract (fr)  
La présente invention concerne un tube électronique comportant des électrodes globalement cylindriques montées coaxialement autour d'un axe XX' parmi lesquelles une cathode (K) entourée d'une grille (G1). La cathode (K) et la grille (G1) contribuent à délimiter une cavité résonante d'entrée (34) comportant une zone active (30). La cavité (34) s'étend de part et d'autre de la zone active (30) et la partie centrale de la zone active est soumise à un ventre de tension. La cavité résonante (34) est repliée sur elle-même vers l'axe (XX') d'un côté de la zone active (30). Applications aux tubes à grille utilisés notamment en tant qu'amplificateurs de télévision. <IMAGE>

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

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Citation (search report)  
• [A] EP 0587481 A1 19940316 - THOMSON TUBES ELECTRONIQUES [FR]  
• [A] FR 2255698 A1 19750718 - THOMSON CSF [FR]  
• [A] US 4877996 A 19891031 - VAN HOUWELINGEN DIRK [NL], et al

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