

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 753 877 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
29.01.1997 Bulletin 1997/05

(51) Int Cl.⁶: **H01J 23/15, H01J 25/04**

(43) Date of publication A2:
15.01.1997 Bulletin 1997/03

(21) Application number: **96304943.2**

(22) Date of filing: **04.07.1996**

(84) Designated Contracting States:
DE FR IT

(72) Inventor: **Pickering, Alan Hugh**
Chelmsford, Essex (GB)

(30) Priority: **12.07.1995 GB 9514172**
25.07.1995 GB 9515232

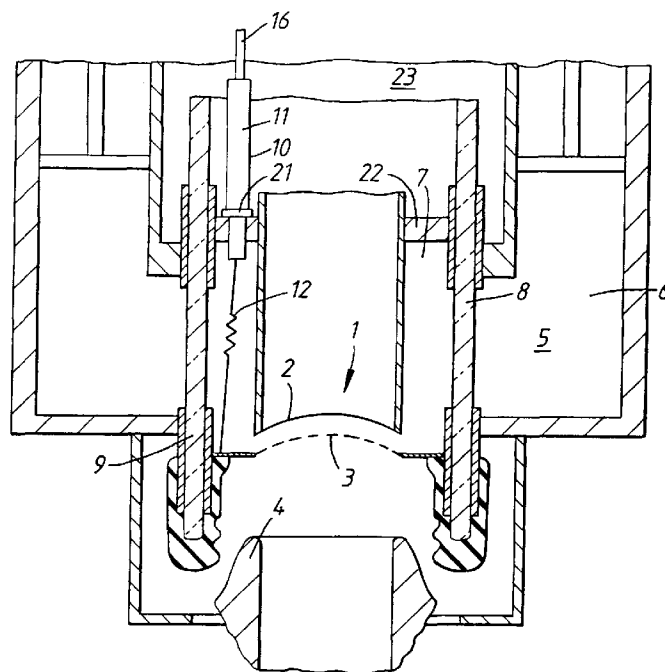
(74) Representative: **Cockayne, Gillian**
GEC Patent Department
Waterhouse Lane
Chelmsford, Essex CM1 2QX (GB)

(71) Applicant: **EEV LIMITED**
Chelmsford, Essex, CM1 2QU (GB)

(54) Linear electron beam tubes

(57) In a tube such as an IOT, an electron gun includes a cathode (2), grid (3) and an anode (4) surrounded by a resonant input cavity (5). A grid lead (10) supplies a voltage to the grid (3) and includes a filter comprising a capacitor (11) and inductor (12) which are both

approximately one quarter wavelength long at a selected frequency to reduce or prevent rf leakage along the grid lead (10). The grid lead (10) is arranged to extend through the cavity (5) and is located within the interior space (7) which is surrounded by the outer part (6) of the annular cavity (5).

*Fig.1***EP 0 753 877 A3**



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 96 30 4943

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	EP-A-0 627 757 (VARIAN ASSOCIATES) 7 December 1994	1,2	H01J23/15 H01J25/04
Y		1,2,6,7	
A	* abstract; claim 5 * * column 3, line 10 - line 31 * * column 7, line 24 - line 32 * * column 10, line 12 - line 17 * * column 10, last line - column 11, line 2 * * * column 12, line 45 - line 51 * ---	3,4,8	
Y	GB-A-2 277 194 (EEV LTD) 19 October 1994 * abstract; figure 2 *	1,2,6,7	
A	IEEE TRANSACTIONS ON ELECTRON DEVICES, vol. 38, no. 10, 1 October 1991, pages 2205-2211, XP000225943 PREIST D H ET AL: "A HIGH-POWER KLYSTRODE WITH POTENTIAL FOR SPACE APPLICATION" * figure 1 * -----	6,7	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			H01J
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 11 October 1996	Examiner Martín Vicente, M
CATEGORY OF CITED DOCUMENTS		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document			

EPO FORM 1503 01.82 (P04C01)