(11) Publication number:

0 117 676

**A3** 

 $^{(2)}$ 

## **EUROPEAN PATENT APPLICATION**

(21) Application number: 84300873.1

(51) Int. Cl.4: H 01 P 1/20 H 01 P 3/08

(22) Date of filing: 13.02.84

30 Priority: 26.02.83 GB 8305411

(43) Date of publication of application: 05.09.84 Bulletin 84/36

88) Date of deferred publication of search report: 31.07.85

(84) Designated Contracting States: DE FR GB

(71) Applicant: LUCAS INDUSTRIES public limited company **Great King Street** Birmingham, B19 2XF(GB)

(72) Inventor: Griffiths, Michael Anthony 349 Harlesden Road Harlesden London NW10(GB)

(74) Representative: Evershed, Michael et al, Marks & Clerk Alpha Tower Suffolk Street Queensway Birmingham B1 ITT(GB)

(54) Microwave filter.

(57) An electrical assembly comprises a board (13) mounted on the bottom wall of a aluminium box (10) and having an insulating layer (16) mounted on a conductive layer (17), a microstrip circuit (18, 19, 20) formed on the insulating layer (16), and a comb-line microwave filter which includes a set of resonant elements (22 to 25) extending from the conductive layer into a cavity (27). The element (22) is insulated from the conductive layer (17) and is connected to a point in the microstrip circuit. By providing the microstrip circuit and filter on a common board, no connected leads are needed. Other filters may be combined with a microstrip circuit in a similar manner.

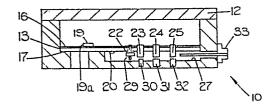


FIG.3.



## **EUROPEAN SEARCH REPORT**

EP 84 30 0873

Category	Citation of document with	DERED TO BE RELEVAN indication, where appropriate, ant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 3)
х	US-A-4 100 504 * Column 3, li figures 3-5 *	(W.E. McGANN) nes 11-16, 50-60;	1,4	H 01 P 1/20 H 01 P 3/08
Y			2,3	
Y	US-A-4 037 182 al.) * Figures *	(G.L. BURNETT et	2,3	
А	PATENTS ABSTRACTS OF JAPAN, vol. 4, no. 32 (E-2)[514], 19th March 1980, page 114E2; & JP - A - 55 5541 (NIPPON DENKI K.K.) 16-01-1980			
A	US-A-3 793 539	(A.S. CLORFEINE)		TECHNICAL FIELDS SEARCHED (Int. Cl. <sup>3</sup> )
A	US-A-4 254 383	(A.R. WOLFE)		H 01 P
A	US-A-4 342 972 al.)	 (T. NISHIKAWA et		
A	EP-A-0 008 790	(MATSUSHITA)		
A	US-A-3 818 389	(R.E. FISHER)		
			_	
	The present search report has be	Date of completion of the search		Examiner
	THE HAGUE 26-03-1985			EL R.M.L.
Y:p d A:te O:n	CATEGORY OF CITED DOCL articularly relevant if taken alone articularly relevant if combined wo ocument of the same category schnological background on-written disclosure ttermediate document	E : earlier pa after the vith another D : documer L : documer	atent document filing date nt cited in the a nt cited for othe of the same pat	rlying the invention , but published on, or pplication ir reasons tent family, corresponding