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(54) High-frequency component

(57) A high-frequency component is provided that can easily realize a higher characteristic impedance of a transmission line which constitutes an inductance element, that can be formed into a smaller size, and that has excellent frequency characteristics. In the high-frequency component, a high-pass filter (F1) formed of a transmission line (L1) and three capacitors (C1 - C3) is connected between a first port (P1) and a second port (P2), and a low-pass filter (F2) formed of another transmission line (L2), which is an inductance element, and two capacitors (C4, C5), which are capacitance elements, is connected between the first port (P1) and the third port (P3).

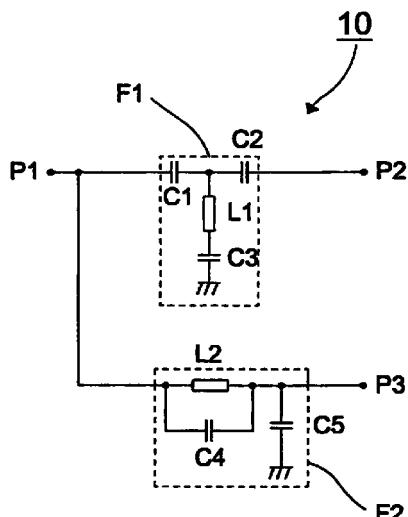


FIG.1



DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.CI6)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
X	PATENT ABSTRACTS OF JAPAN vol. 18, no. 38 (E-1495), 20 January 1994 (1994-01-20) -& JP 05 267909 A (TAIYO YUDEN CO LTD), 15 October 1993 (1993-10-15) * abstract; figure 7 *	1,2	H01P1/12 H01P1/213
A	PATENT ABSTRACTS OF JAPAN vol. 18, no. 340 (E-1569), 27 June 1994 (1994-06-27) -& JP 06 085506 A (MURATA MFG CO LTD), 25 March 1994 (1994-03-25) * abstract *	1,2	
A	EP 0 793 289 A (HITACHI METALS, LTD.) 3 September 1997 (1997-09-03) * column 4, line 29 – column 6, line 10; figures 3,4 *	1,2	
A	US 5 404 118 A (OKAMURA ET AL.) 4 April 1995 (1995-04-04) * column 2, line 46 – column 3, line 2 * * column 7, line 4 – column 9, line 60; figures 9,10 *	1	TECHNICAL FIELDS SEARCHED (Int.CI6) H01P
The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	1 March 2000	Den Otter, A	
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			

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 98 11 7767

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

01-03-2000

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
JP 05267909	A	15-10-1993	NONE		
JP 06085506	A	25-03-1994	NONE		
EP 793289	A	03-09-1997	JP 9294042 A JP 10098348 A US 5880649 A	11-11-1997 14-04-1997 09-03-1999	
US 5404118	A	04-04-1995	JP 2830638 B JP 6053716 A JP 2988500 B JP 6053704 A	02-12-1998 25-02-1994 13-12-1999 25-02-1994	