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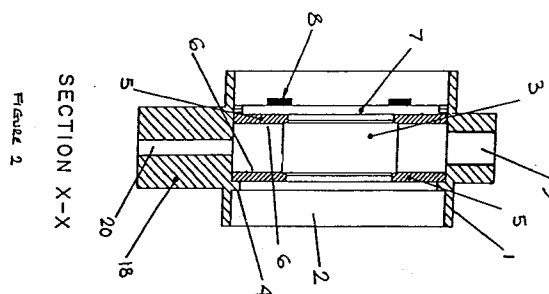
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A dielectric resonator filter.

A dielectric resonator filter is provided which includes at least one microwave resonator having a body member with a cylindrical conductive cavity of uniform diameter formed therein, symmetrically disposed about a longitudinal axis, the cavity being divided into two sections, of unequal lengths, by an integral inwardly projecting flange; a cylindrical dielectric resonator having a coefficient of thermal expansion to match that of the body member, the longitudinal axis of the resonator being co-axial with the longitudinal axis of the cavity; two cylindrical support members for supporting the dielectric resonator within the longer section of the cavity, the support members being of quartz and located one on each side of the dielectric resonator; and securing means for securing the two support members, with the dielectric resonator therebetween, within the cavity, one of the support members being in an abutting relationship with a surface of the inwardly projecting flange.



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EUROPEAN SEARCH REPORT

Application Number
EP 95 30 2703

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-0 392 417 (ALCATEL ESPACE) * column 3, line 27 - column 4, line 11; figure 1 *	1,15	H01P7/10
Y	---	2-4,13, 14, 16-18, 23,24	
Y	EP-A-0 352 628 (MURATA MANUFACTURING CO. LTD.) * column 1, line 41 - line 44 * * column 5, line 11 - line 31 * * column 6, line 24 - line 37; figures 1,2 *	2,16	
D,Y	EP-A-0 351 840 (CSELT) * column 1, line 1 - line 13 * * column 2, line 51 - column 4, line 40; figure 1 *	3,4,13, 18,23,24	
Y	6ES JOURNÉES NATIONALES MICROONDES, 21 - 23 June 1989 MONTPELLIER, pages 329-330, XP 000170339 M. LABEYRIE 'Nouveaux matériaux pour résonateurs diélectriques' * page 329, line 26 *	14	TECHNICAL FIELDS SEARCHED (Int.Cl.6) H01P H03B
Y	EP-A-0 104 735 (FORD AEROSPACE & COMMUNICATIONS CORP.) * column 10, line 8 - column 11, line 8; figure 2 *	17	
A	US-A-4 706 052 (HATTORI ET AL.) * column 3, line 16 - line 53; figures 4,5 *	2	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 4 October 1995	Examiner Den Otter, A
CATEGORY OF CITED DOCUMENTS 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 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			

EPO FORM 1503 03.92 (P04C01)



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CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ All claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claims:
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions,

namely:

see sheet -B-

- ☒ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:
- ☐ None of the further search fees has been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



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EUROPEAN SEARCH REPORT

Application Number
EP 95 30 2703

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)
A	US-A-4 667 172 (LONGSHORE ET AL.) * column 2, line 44 - column 4, line 27; figure 1 *	4	
A	US-A-3 327 257 (WEISS) * column 2, line 52 - column 3, line 30; figure *	9,11,12	
A	DE-U-85 10 588 (RICHARD HIRSCHMANN RADIOTECHNISCHES WERK) * page 4, line 10 - page 5, line 11; figure 1 *	9,11,12	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 4 October 1995	Examiner Den Otter, A
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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</p>			

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LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirement of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims 1-8,13-24 : Annular disc connected at four positions to a cavity wall, for securing a support member of a dielectric resonator.
2. Claims 9-12 : Tubular body with a flange, for securing a support member of a dielectric resonator.