

Title (en)

System for tuning high-frequency dielectric resonators and resonators obtained in this manner.

Title (de)

Abstimmvorrichtung für hochfrequente dielektrische Resonatoren und auf diese Weise erhaltene Resonatoren.

Title (fr)

Dispositif d'accord des résonateurs diélectriques à haute fréquence et résonateurs ainsi obtenus.

Publication

EP 0492304 A1 19920701 (EN)

Application

EP 91121338 A 19911212

Priority

IT 2255790 A 19901228

Abstract (en)

In a system for tuning a high-frequency dielectric resonator pair, resonating in the mode TE₀₁ in frequency bands e.g. from 400 MHz to 20 GHz, preferably from 900 to 4000 MHz, a male dielectric resonator DM, having an external diameter d penetrates into a female dielectric resonator DF, having an external diameter D and a height H; for getting the variations e.g. from 4 to 5% of the tuning frequency within the band from 925 to 970 MHz, the ratio d/D is included between 0.4 and 0.8 and the axial coupling or penetration p/H is included between 0.3 and 0.7 where h is the part of DM engaged axially in DF. <IMAGE>

IPC 1-7

H01P 7/10

IPC 8 full level

H01P 7/10 (2006.01)

CPC (source: EP)

H01P 7/10 (2013.01)

Citation (search report)

- [A] FR 2534088 A1 19840406 - MURATA MANUFACTURING CO [JP]
- [A] IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES. vol. 17, no. 7, July 1969, NEW YORK US pages 354 - 359; M.A.GERDINE: 'A frequency-stabilized microwave band-rejection filter using high dielectric constant resonators'
- [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 248 (E-347)(1971) 4 October 1985 & JP-A-60 098 703 (MITSUBISHI DENKI K.K.) 1 June 1985
- [A] FREQUENZ. vol. 39, no. 1/2, February 1985, BERLIN DE pages 45 - 49; U.CROMBACH ET AL.: 'Abstimmbare dielektrische Ringresonatoren'
- [A] SOVIET PATENTS ABSTRACTS Section EI, Week 8502, 20 February 1985 Derwent Publications Ltd., London, GB; Class W, AN 85-010541/02 & SU-A-1 092 621 (PISARENKO) 15 May 1984

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