

Title (en)  
Second harmonic spurious mode suppression in half-wave resonators, with application to microwave filtering structures

Title (de)  
Unterdrückung von zweiten harmonischen Störmoden in Halbwellenresonatoren zur Anwendung in Mikrowellenstrukturen

Title (fr)  
Suppression en mode parasite de type seconde harmonique en résonateurs à demi-ondes appliquée à des structures de filtre à micro-ondes

Publication  
**EP 1296406 A1 20030326 (EN)**

Application  
**EP 01402437 A 20010921**

Priority  
EP 01402437 A 20010921

Abstract (en)  
The invention relates to an half-wave resonator providing reduced second armonic spurious mode, the resonator comprises a lambda /2-length microstrip conductor, where lambda is the line wavelength correspondent to the fundamental resonance frequency and is characterized in that it further comprises means for forcing a low voltage in the middle of the lambda /2-length microstrip conductor. Advantageously, such means for forcing a low voltage comprise a low impedance, wide-band resistor. The invention further includes a band filter and a method for providing reduced second armonic spurious mode in a half-wave resonator. <IMAGE>

IPC 1-7  
**H01P 1/203; H01P 1/212; H01P 7/08**

IPC 8 full level  
**H01P 1/203** (2006.01); **H01P 1/212** (2006.01); **H01P 7/08** (2006.01)

CPC (source: EP)  
**H01P 1/20363** (2013.01); **H01P 1/20372** (2013.01); **H01P 1/212** (2013.01); **H01P 7/082** (2013.01)

Citation (search report)  
• [XY] US 5066933 A 19911119 - KOMEDA YASUHIKO [JP]  
• [Y] PATENT ABSTRACTS OF JAPAN vol. 2000, no. 09 13 October 2000 (2000-10-13)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 015, no. 423 (E - 1127) 28 October 1991 (1991-10-28)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 012, no. 285 (E - 642) 4 August 1988 (1988-08-04)

Cited by  
US2021376436A1; CN109149027A; CN110931926A; CN112072238A; CN104091980A; EP3439110A4; WO2020057722A1

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1296406 A1 20030326**

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**EP 01402437 A 20010921**