

Title (en)

Microstrip fashion microwave rejection filter.

Title (de)

Mikrowellensperrfilter in Mikrostreifenausführung.

Title (fr)

Filtre coupe-bande hyperfréquence en technologie micro-bande.

Publication

EP 0337825 A1 19891018 (FR)

Application

EP 89400632 A 19890307

Priority

FR 8803187 A 19880311

Abstract (en)

This microband technology microwave band-rejection filter is of the type with coupled lines, that is to say containing a transmission line in the form of a microstrip (1) associated with at least one filtering cell comprising a microstrip segment (4) arranged parallel to the transmission line and remote from it, this microstrip segment having one of its ends open-circuited and the other connected to the earth potential. Connection to the earth potential is effected for each cell with interposition of a tunable LC resonant circuit (5, 6). Advantageously, the capacitive element of the tunable LC resonant circuit comprises a varactor (6) whose anode is brought to an adjustable DC potential (-V), so that control of this DC potential allows variation in the central rejection frequency of the band-rejection filter, and the inductive element of the tunable LC resonant circuit is produced in the form of a wire (5) connecting the microstrip segment (4) to the varactor (6), the latter being arranged on the same dielectric substrate (7) as this microstrip segment. <IMAGE>

IPC 1-7

H01P 1/203

IPC 8 full level

H01P 1/203 (2006.01)

CPC (source: EP)

H01P 1/203 (2013.01)

Citation (search report)

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- [A] IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol. MTT-30, no. 9, septembre 1982, pages 1361-1367, IEEE, New York, US; I.C. HUNTER et al.: "Electronically tunable microwave bandstop filters"
- [A] 1985 IEEE - MTT-S INTERNATIONAL MICROWAVE SYMPOSIUM DIGEST, 4-6 juin 1985, St. Louis, Missouri, pages 531-534, IEEE, New York, US; M. MEHDIZADEH et al.: "High speed varactor tuned notch filter"

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