

Title (en)
MICROWAVE BANDPASS FILTER INCLUDING DIELECTRIC RESONATORS

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EP 0197653 A3 19880622 (EN)

Application
EP 86301617 A 19860306

Priority
CA 478332 A 19850403

Abstract (en)
[origin: EP0197653A2] A dielectric resonator microwave bandpass filter includes a printed circuit board (40) supported within a cut-off waveguide (10, 12), with dielectric resonators (44) and coupling loops on an upper surface of the board and a well (42) beneath the board so that the resonators are well spaced from ground planes. Tuning screws (66) beneath the resonators, and coupling adjustment screws above the board adjacent to the coupling loops and between adjacent resonators, provide for adjustments to provide desired filter characteristics within a wide range. Isolators (30) within the waveguide have ports coupled to the resonators via micro-strip transmission lines comprising conductive tracks on the board and ports coupled to coaxial connectors (28) in end walls of the waveguide. The waveguide is formed from a cast body (10) and a flat lid (12).

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IPC 8 full level
H01P 1/20 (2006.01); **H01P 1/00** (2006.01); **H01P 1/208** (2006.01); **H01P 1/212** (2006.01); **H01P 1/219** (2006.01); **H01P 7/10** (2006.01)

CPC (source: EP)
H01P 1/2084 (2013.01); **H01P 1/219** (2013.01)

Citation (search report)
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• [Y] 1977 IEEE MTT-S INTERNATIONAL MICROWAVE SYMPOSIUM DIGEST, San Diego, 21st-23rd June 1977, pages 290-293, IEEE, Piscataway, US; J.K. PLOURDE et al.: "Microwave dielectric resonator filters utilizing Ba₂Ti₉O₂₀ ceramics"
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• [A] 1982 IEEE MTT-S INTERNATIONAL MICROWAVE SYMPOSIUM DIGEST, Dallas, 15th-17th June 1982, pages 416-418, IEEE, Piscataway, US; M.L. MAJEWSKI et al.: "MIC directional filters using dielectric resonators"
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