

Title (en)

Microwave bandpass filter including dielectric resonators.

Title (de)

Mikrowellen-Bandpassfilter mit dielektrischen Resonatoren.

Title (fr)

Filtre passe-bande à micro-ondes comportant des résonateurs diélectriques.

Publication

EP 0197653 A2 19861015 (EN)

Application

EP 86301617 A 19860306

Priority

CA 478332 A 19850403

Abstract (en)

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).

IPC 1-7

H01P 1/208; **H01P 1/219**

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)

Cited by

DE10348909A1; EP1079457A3; EP2919317A4; EP0235123A4; US6005452A; GB2263363A; GB2263363B; US6529094B1; US9941564B2; US7453336B2; US7271679B2; WO9828813A3; WO2007005580A1; WO2023138088A1

Designated contracting state (EPC)

AT CH DE FR GB LI NL SE

DOCDB simple family (publication)

EP 0197653 A2 19861015; **EP 0197653 A3 19880622**; **EP 0197653 B1 19911121**; AT E69671 T1 19911215; AU 5484886 A 19861009; AU 575469 B2 19880728; CA 1229389 A 19871117; DE 3682523 D1 19920102; JP H0733001 U 19950616; JP S61230501 A 19861014

DOCDB simple family (application)

EP 86301617 A 19860306; AT 86301617 T 19860306; AU 5484886 A 19860314; CA 478332 A 19850403; DE 3682523 T 19860306; JP 652794 U 19940516; JP 7262886 A 19860401