

Title (en)

BAND-PASS FILTER WITH DIELECTRIC RESONATORS PRESENTING NEGATIVE COUPLING BETWEEN RESONATORS

Publication

**EP 0101369 B1 19880518 (FR)**

Application

**EP 83401602 A 19830802**

Priority

FR 8213927 A 19820810

Abstract (en)

[origin: EP0101369A1] 1. A resonator filter comprising a rectangular waveguide (1-3) and n dielectric resonators (R1-R6) disposed inside the waveguide (with n being not less than 4), in which negative coupling is provided between two of the n resonators (R2, R5), the waveguide operating below its cutoff frequency, the filter being characterized in that the waveguide is folded back on itself with a wall (2) that is common between its two folded portions, the two negatively coupled resonators being situated on either side of the common wall, the dimensions of the cross-section of the waveguide being about 2 to 2.5 times the transverse dimensions of the resonators, and in that the filter includes a coupling rod (20) for providing the negative coupling, said rod passing through the common wall via a hole and being electrically separate from the common wall, at least apart from its ends.

IPC 1-7

**H01P 1/219**

IPC 8 full level

**H01P 1/219** (2006.01)

CPC (source: EP)

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Cited by

DE3530676A1; US5781085A; DE19916605C1; EP1045470A3; US5841330A; US6094113A; US5777534A; US5739733A; US5410284A; US5153541A; GB2257308A; GB2257308B; EP1321997A3; GB2555407A; CN111370818A; GB2555407B; US6836198B2; US6239673B1

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