

Title (en)
Dielectric filter

Title (de)
Dielektrisches Filter

Title (fr)
Filtre diélectrique

Publication
EP 0704924 B1 20000126 (EN)

Application
EP 95306254 A 19950907

Priority
• JP 23182994 A 19940927
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• JP 10140095 A 19950425
• US 46944395 A 19950606

Abstract (en)
[origin: EP0704924A1] A single-stage dielectric band elimination filter has a dielectric block (101) with its outer surfaces mostly covered by an outer conductor and two mutually coupled resonant lines (102, 103) formed therein. Each resonant line has an open end insulated from the outer conductor and a shorted end connected thereto, the open and shorted ends of the two resonant lines (102, 103) being oppositely orientated. A multi-stage dielectric filter has a plurality of such single-stage band elimination filters formed inside a dielectric block, each mutually adjacent pair of the single-stage band elimination filters being interdigitally coupled or combine-coupled to each other with phase shift of $\pi/2$ therebetween. The open end of a resonant line may be formed at one of the end surfaces of the dielectric block, being connected to an electrode insulated from the outer conductor, or at an annular conductor-free area formed on the inner surface of the corresponding throughhole. The resonant lines for forming the plurality of single-stage band elimination filters may be arranged horizontally or vertically with respect to each other. Screening electrodes may be inserted between mutually adjacent resonant lines. <IMAGE>

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CPC (source: EP KR)
H01P 1/20 (2013.01 - KR); **H01P 1/2056** (2013.01 - EP)

Cited by
CN1096718C; AT410868B; EP0840390A1; US5986521A; EP1336219A4; EP3716395A1; CN111755793A; US11276907B2

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