

Title (en)
Microwave filter with dielectric element

Title (de)
Hyperfrequenzfilter mit dielektrischem Element

Title (fr)
Filtre hyperfréquence avec élément diélectrique

Publication
EP 2797161 B1 20151209 (FR)

Application
EP 14164871 A 20140416

Priority
FR 1300974 A 20130426

Abstract (en)
[origin: CA2849854A1] The invention relates to a radiofrequency filter (10) exhibiting at least one resonant mode comprising: - at least one cavity (11) at least partially closed using conductive walls (12) and, - having a cylindrical outer surface defined by a directing curve (C) described by a generatrix and having a point of symmetry (Sy), an axis passing through a point of symmetry and parallel to said generatrix being called longitudinal axis (z) of said cavity (11) and, - at least one dielectric element (13) arranged in said cavity and comprising: - a first portion (131) having a thickness (e) according to said longitudinal axis (z) and a section according to a plane perpendicular to said longitudinal axis (z) whose vertices (s1, s2, s3, s4) are distributed according to a polygon, and of which at least two vertices are short-circuited between them by said conductive walls (12) of said cavity, via an electrical or radiofrequency contact between said vertices and said walls, - at least one pyramidal portion (132, 133) comprising an apex (Asup) and a base coinciding with an extreme section of said first portion (131).

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H01P 1/208 (2006.01)

CPC (source: EP US)
H01P 1/2086 (2013.01 - EP US); **H01P 1/219** (2013.01 - US); **H01P 7/10** (2013.01 - US)

Cited by
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