

Title (en)
RADIO FREQUENCY FILTER WITH FREQUENCY STABILISATION

Title (de)
HOCHFREQUENZFILTER MIT FREQUENZSTABILISIERUNG

Title (fr)
FILTRE HAUTE FRÉQUENCE AVEC STABILISATION DE FRÉQUENCE

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Application
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Abstract (en)
[origin: WO2014075801A1] The invention relates to an improved high frequency filter of coaxial construction, characterized by the following features: The high frequency filter comprises at least one resonator (1) having an inner conductor (10) and an outer conductor housing; the high frequency filter comprises a compensation device (30, 31, 34) made of a second material that has a second coefficient of thermal expansion; the compensation device (30, 31, 34) comprises a) a wall section (31), which extends in an axial direction and is variable in length in this direction in the event of a temperature change. Said wall section is part of the housing wall (24) configured in the manner of an intermediate layer or an uppermost layer located adjacent to the housing cover (22), and/or b) a wall section (31), which extends in an axial direction or in a direction transversely thereto and is variable in length in this direction in the event of a temperature change. The wall section is an integral part of the housing cover (22) or is connected to the housing cover (22), or forms the housing cover (22) having a convex outwardly directed curvature. The problem addressed by the invention is that of providing a temperature-compensated high frequency filter of coaxial construction, which can be produced in a simple and cost-efficient way.

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