

Title (en)

RADIO FREQUENCY FILTER WITH FREQUENCY STABILISATION

Title (de)

HOCHFREQUENZFILTER MIT FREQUENZSTABILISIERUNG

Title (fr)

FILTRE HAUTE FRÉQUENCE AVEC STABILISATION DE FRÉQUENCE

Publication

**EP 2920839 B1 20190911 (DE)**

Application

**EP 13792595 A 20131114**

Priority

- DE 102012022411 A 20121115
- EP 2013003434 W 20131114

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.

IPC 8 full level

**H01P 1/205** (2006.01); **H01P 7/04** (2006.01)

CPC (source: EP US)

**H01P 1/202** (2013.01 - US); **H01P 1/2053** (2013.01 - EP US); **H01P 7/04** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**DE 102012022411 A1 20140515**; EP 2920839 A1 20150923; EP 2920839 B1 20190911; US 2015288044 A1 20151008; US 9673497 B2 20170606; WO 2014075801 A1 20140522

DOCDB simple family (application)

**DE 102012022411 A 20121115**; EP 13792595 A 20131114; EP 2013003434 W 20131114; US 201314442757 A 20131114