

Title (en)

HIGH-FREQUENCY FILTER HAVING A COAXIAL STRUCTURE

Title (de)

HOCHFREQUENZFILTER IN KOAXIALER BAUWEISE

Title (fr)

FILTRE HAUTE FRÉQUENCE À STRUCTURE COAXIALE

Publication

**EP 3105814 A1 20161221 (DE)**

Application

**EP 15703873 A 20150205**

Priority

- DE 102014001917 A 20140213
- EP 2015000226 W 20150205

Abstract (en)

[origin: WO2015120964A1] The invention relates to an improved high-frequency filter having at least one coaxial resonator characterized by, among other things, the following features: the coaxial resonator comprises an outer conductor housing (1), an outer conductor (1) thus being formed; an inner conductor (3) is arranged in the outer conductor housing (1), which inner conductor is mechanically and galvanically connected to the outer conductor housing at one end of the inner conductor and ends in the direction of the outer conductor housing (1) or a housing cover (7) provided there that belongs to the outer conductor housing (1) at the opposite end of the inner conductor; the outer conductor housing (1) and the inner conductor (3) are made of electrically conductive material or are covered with an electrically conductive material; the end face (3a) of the inner conductor (3) and/or the additional surface (23) of the inner conductor (3) adjacent thereto is completely or partially covered with an encasing material (21), which encasing material (21) is made of a dielectric material; and the dielectric material has a relative permittivity  $\epsilon_r$  that is greater than 1.2.

IPC 8 full level

**H01P 7/04** (2006.01)

CPC (source: EP KR US)

**H01B 3/441** (2013.01 - EP US); **H01P 1/202** (2013.01 - US); **H01P 1/2084** (2013.01 - KR); **H01P 7/04** (2013.01 - EP KR US);  
**H01P 7/10** (2013.01 - KR)

Citation (search report)

See references of WO 2015120964A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**DE 102014001917 A1 20150813**; CN 105993096 A 20161005; CN 105993096 B 20210409; EP 3105814 A1 20161221;  
EP 3105814 B1 20180613; KR 101938345 B1 20190114; KR 20160120737 A 20161018; US 10644376 B2 20200505;  
US 2019036195 A1 20190131; WO 2015120964 A1 20150820

DOCDB simple family (application)

**DE 102014001917 A 20140213**; CN 201580008320 A 20150205; EP 15703873 A 20150205; EP 2015000226 W 20150205;  
KR 20167023392 A 20150205; US 201515116697 A 20150205