

Title (en)
Coaxial resonator filter

Title (de)
Filter mit koaxialen Resonatoren

Title (fr)
Filtre avec résonateurs coaxiales

Publication
EP 2894710 A1 20150715 (EN)

Application
EP 14305033 A 20140110

Priority
EP 14305033 A 20140110

Abstract (en)
A resonant assembly is disclosed. The resonator assembly comprises: a resonator having a first conductive resonance post surrounded by a conductive enclosure defining a cavity, the first conductive resonance post being operable to filter a signal within a first frequency band, and a second conductive resonance post located within the cavity and orientated transversely with respect to the first conductive resonance post, the second conductive resonance post being operable to filter a signal within a second frequency band concurrently with the first conductive resonance post filtering the signal within the first frequency band. Through this approach, it is possible to provide a single device which implements more than one independent resonance or filtering at the same time within the same cavity volume, allowing significantly smaller cavity filters to be built, which avoids the need to provide separate devices, one for each frequency. This is particularly convenient in resonant assemblies used in RF front ends which will often be required to receive signals at two or more different frequencies.

IPC 8 full level
H01P 1/205 (2006.01); **H01P 7/04** (2006.01)

CPC (source: EP)
H01P 1/2053 (2013.01); **H01P 7/04** (2013.01)

Citation (search report)
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• [Y] US 7327210 B2 20080205 - BLAIR BILL [US], et al
• [X] WO 2010033057 A1 20100325 - ERICSSON TELEFON AB L M [SE], et al
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CN107910619A; EP4010944A4; WO2023197257A1; WO2021027730A1; US12046813B2

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

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