

## Title (en)

Dielectric tube loaded metal cavity resonators and filters

## Title (de)

Metallische Hohlraumresonatoren und Filter mit dielektrischem Rohr

## Title (fr)

Résonateurs et filtres à cavité métallique chargée avec tube diélectrique

## Publication

**EP 1391963 A1 20040225 (EN)**

## Application

**EP 02255805 A 20020820**

## Priority

EP 02255805 A 20020820

## Abstract (en)

A dielectric tube loaded metal cavity resonator or filter (100) comprises a housing (102) a dielectric tube resonator cavity (106) extending substantially the full height of the device. The housing (102) and cover (104) may be formed of metal, or may be of metal coated plastics material. A high dielectric constant tube resonator (110) is positioned centrally within the cavity (106). The resonators and filters achieve low insertion loss in a size substantially smaller than conventional dielectric loaded resonators for equivalent quality factors. The dielectric tube resonators may be used with coaxial resonators to provide mixed resonator filter constructions. A securing mechanism (120A) is provided at one wall of the housing for locating the resonator, and a turning screw is provided at the opposing wall of the housing and extending within the dielectric tube. <IMAGE>

## IPC 1-7

**H01P 7/10**; **H01P 1/208**

## IPC 8 full level

**H01P 1/208** (2006.01); **H01P 7/10** (2006.01)

## CPC (source: EP)

**H01P 1/2084** (2013.01); **H01P 7/10** (2013.01)

## Citation (search report)

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## Designated contracting state (EPC)

DE DK FI GB

## DOCDB simple family (publication)

**EP 1391963 A1 20040225**

## DOCDB simple family (application)

**EP 02255805 A 20020820**