

Title (en)

HF filter assembly and method for varying an electromagnetic coupling strength between two cavity resonators

Title (de)

HF-Filteranordnung sowie Verfahren zur Variation einer elektromagnetischen Koppelstärke zwischen zwei Topfkreis-Resonatoren

Title (fr)

Agencement de filtre HF et procédé de variation d'une force de couplage électromagnétique entre deux résonateurs à cavité

Publication

**EP 2509152 A3 20130403 (DE)**

Application

**EP 12002363 A 20120330**

Priority

DE 102011016487 A 20110408

Abstract (en)

[origin: EP2509152A2] The arrangement has two cavity resonators coupled by a common pot wall (4). A coupling window (5) is completely enclosed by an electrically conductive material (6). A coupling unit (7) with a variably adjustable capacitance is inserted in the window. An electrically conductive bar element (8) is electrically conductively connected with the material by bar element ends (10, 11) on both sides. Finger elements (12, 13) are fastened at the bar element for electrically insulating the bar element so that the finger elements are rotatably mounted around a rotational axis coinciding a bar axis (9). An independent claim is also included for a method for varying an electromagnetic coupling strength between the two cavity resonators.

IPC 8 full level

**H01P 1/205** (2006.01); **H01P 5/04** (2006.01)

CPC (source: EP)

**H01P 1/2053** (2013.01)

Citation (search report)

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- [A] DE 2325401 A1 19741205 - SPINNER GEORG
- [A] US 2003090336 A1 20030515 - RADZIKOWSKI PIOTR OLGIERD [US], et al
- [A] WO 02054527 A2 20020711 - ALLGON AB [SE], et al
- [A] THOMAS J B: "CROSS-COUPPLING IN COAXIAL CAVITY FILTERS-A TUTORIAL OVERVIEW", IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 51, no. 4, PART 02, 1 April 2003 (2003-04-01), pages 1368 - 1376, XP001145341, ISSN: 0018-9480, DOI: 10.1109/TMTT.2003.809180

Cited by

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Designated contracting state (EPC)

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BA ME

DOCDB simple family (publication)

**EP 2509152 A2 20121010**; **EP 2509152 A3 20130403**; **EP 2509152 B1 20160921**; CN 102738542 A 20121017; DE 102011016487 A1 20121011; ES 2608580 T3 20170412

DOCDB simple family (application)

**EP 12002363 A 20120330**; CN 201210182403 A 20120406; DE 102011016487 A 20110408; ES 12002363 T 20120330