

Title (en)  
Microwave filters including a capacitive coupling element

Title (de)  
Mikrowellenfilter mit einem Kapazitivkopplungselement

Title (fr)  
Filtres de microondes avec un element de couplage capacitif

Publication  
**EP 1791212 A1 20070530 (EN)**

Application  
**EP 05025887 A 20051128**

Priority  
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Abstract (en)  
The invention relates to a microwave filter comprising a plurality of coaxial resonators, at least two adjacent coaxial resonators being electrically coupled by a capacitive coupling element (6) having an elongated portion (5) and, at each end thereof, an enlarged diameter end portion (4), the elongated portion being held by a dielectric mounting (7) which is placed in a coupling opening which is cut out from one end of the side wall separating the cavities. According to the invention the dielectric mounting (7) is a cylindrical body (7) formed in one piece of elastic material and having a bore (9) perpendicular to its cylinder axis for holding at least part of the elongated portion (5) of the coupling element (6), the cylindrical body having a cut (8) leading from one of its end faces to the bore and opening into the bore (9), wherein the cylindrical body (7), with the coupling element (6) inserted into the bore (9), is received in the coupling opening (10) which is of complementary shape to the cylindrical body to engage the latter along its length in a press-fitting manner between two opposing side walls of the coupling opening.

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

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

Citation (applicant)  
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• [A] PATENT ABSTRACTS OF JAPAN vol. 014, no. 102 (E - 0894) 23 February 1990 (1990-02-23)

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