

Title (en)  
Microwavefilter

Title (de)  
Mikrowellenfilter

Title (fr)  
Filtre hyperfréquence

Publication  
**EP 0751579 A1 19970102 (DE)**

Application  
**EP 96106894 A 19960502**

Priority  
DE 19523220 A 19950627

Abstract (en)  
The microwave filter includes at least two resonators (R1,R2,R3). The first of these resonators (R1) allows at least two degenerative wave types to resonate. The resonators are in an operative connection such that energy is transferred from a first wave type, capable of resonating in the first resonator, to a further wave type resonating outside this resonator. The possible couplings of the wave types are overcouplings amongst each other. The first resonator preferably operates in a dual mode. The resonator electrically adjacent the first preferably operates in a single mode. Alternatively, both may operate in a dual mode. In other embodiments, the first resonator may operate in a triple mode, and the other may operate in a dual mode. The wave types in the resonators may not be coupled together by the main couplings.

Abstract (de)  
Bei einem Mikrowellenfilter sind mindestens zwei Resonatoren (R1, R2, R3) vorgesehen, wobei in einem Resonator (R1) mindestens zwei entartete Wellentypen resonanzfähig sind. Die Resonatoren (R1, R2, R3) stehen derart in Wirkverbindung, daß die möglichen Kopplungen entarteter Wellentypen nur Überkopplungen sind, wobei diese Überkopplungen außerhalb jenes Resonators stattfinden, in welchem die zwei entarteten Wellentypen resonanzfähig sind. Durch diese Maßnahmen lassen sich Mikrowellenfilter aufbauen, die beispielsweise eine höhere Güte, bessere Selektionseigenschaften oder eine optimale Polarisationsanpassung ermöglichen. <IMAGE>

IPC 1-7  
**H01P 1/208**

IPC 8 full level  
**H01P 1/208** (2006.01)

CPC (source: EP US)  
**H01P 1/2082** (2013.01 - EP US)

Citation (search report)  
[A] US 2795763 A 19570611 - TILLOTSON LE ROY C

Cited by  
EP2432070A1; US8665039B2; US9843083B2; US9614264B2; US9325046B2

Designated contracting state (EPC)  
DE FR GB IT

DOCDB simple family (publication)  
**EP 0751579 A1 19970102; EP 0751579 B1 20021127**; CA 2178702 A1 19961228; CA 2178702 C 20000718; DE 19523220 A1 19970102; DE 59609902 D1 20030109; US 6066996 A 20000523

DOCDB simple family (application)  
**EP 96106894 A 19960502**; CA 2178702 A 19960610; DE 19523220 A 19950627; DE 59609902 T 19960502; US 65403296 A 19960528