

Title (en)  
Microwave waveguide-coupler.

Title (de)  
Mikrowellen-Hohlleiterkoppler.

Title (fr)  
Coupleur hyperfréquence à guide d'onde.

Publication  
**EP 0041877 A1 19811216 (FR)**

Application  
**EP 81400789 A 19810519**

Priority  
FR 8012864 A 19800610

Abstract (en)  
1. A microwave coupler comprising two parallel wave guides (2, 5) having a common conducting wall (7) the thickness of which is approximately  $\lambda/4$ ,  $\lambda$  constituting the guided wavelength corresponding to the center of the desired frequency band, this wall being provided with slots (31, 32, 33, 34, 35) extending parallelly to the cross-section of the two wave guides (2, 5), characterized in that, the wave guides to which the coupler is connected having two ribs, the two wave guides (2, 5) of the coupler comprise each a rib (10, 15) extending parallelly to the direction of propagation in the wave guide, each rib (10, 15) being attached to that wave guide wall which is parallel to the common wall (7), this common wall being without rib.

Abstract (fr)  
L'utilisation d'une paroi (7) commune à deux guides d'onde à redans (2,5) que l'on désire coupler, cette paroi commune étant percée de fentes (31,32,33,34,35) transversales à la direction de propagation des ondes dans chacun des deux guides d'onde, permet d'obtenir une large bande passante en fréquence. Elle s'applique à tous les dispositifs hyperfréquences nécessitant des coupleurs de faible dimension à très large bande passante.

IPC 1-7  
**H01P 5/18**

IPC 8 full level  
**H01P 5/18** (2006.01)

CPC (source: EP)  
**H01P 5/182** (2013.01)

Citation (search report)  

- US 4060778 A 19771129 - HEFNI IBRAHIM EL, et al
- FR 2185866 A1 19740104 - JAPAN BROADCASTING CORP [JP]
- US 2519734 A 19500822 - BETHE HANS A
- US 2558385 A 19510626 - PURCELL EDWARD M
- US 2624802 A 19530106 - WOLF JAMES M

Cited by  
US5456813A; US5105170A; GB2233831A; GB2233831B; GB2237692A; GB2237692B; GB2206454A; FR2617646A1; GB2206454B

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DOCDB simple family (application)  
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