

Title (en)  
Microwave directional coupler

Title (de)  
Mikrowellenrichtkoppler

Title (fr)  
Coupleur directionnel à micro-ondes

Publication  
**EP 2360776 B1 20170712 (EN)**

Application  
**EP 10153670 A 20100216**

Priority  
EP 10153670 A 20100216

Abstract (en)  
[origin: EP2360776A1] The present invention discloses a directional coupler comprising a main transmission line (110) comprising an input port (111) and an output port (112) for transmitting a first electromagnetic wave from the input port to the output port and a second electromagnetic wave in the opposite direction, a coupler line (120) arranged proximate to the main transmission line for electromagnetic coupling between the two lines, and a linear electronic means (130). The coupler line comprises a first port (121) at a first one of its ends and a second port (122) at its opposite end (or second end) between which the electronic means is arranged. The electronic means is configured to reduce the output signal induced by the first electromagnetic wave at the second port and the output signal induced by the second electromagnetic wave at the first port. For this purpose, the electronic means is configured to reduce the difference between the oppositely directed signals induced at the second port by the magnetic and the electric components, respectively, of an electromagnetic field coupled to the coupler line and originating from the first electromagnetic wave and also configured to reduce the difference between the oppositely directed signals induced at the first port by the magnetic and the electric components, respectively, of an electromagnetic field coupled to the coupler line and originating from the second electromagnetic wave.

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

CPC (source: EP)  
**H01P 5/185** (2013.01)

Citation (examination)  
US 2004113716 A1 20040617 - HILAL EZZEDDINE [FR], et al

Cited by  
CN107681243A; CN107634300A; CN115986356A; CN108091971A; US11223118B2; US9312592B2; WO2018217424A1; WO2017192935A1; US9318788B2; US10547350B2; US11128345B2

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DOCDB simple family (publication)  
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