

Title (en)  
COUPLER FOR ELECTROMAGNETIC WAVES

Title (de)  
KOPPLER FÜR ELEKTROMAGNETISCHE WELLEN

Title (fr)  
COUPLEUR POUR ONDES ELECTROMAGNETIQUES

Publication  
**EP 1224708 B1 20030423 (DE)**

Application  
**EP 00964275 A 20001005**

Priority  
• DE 19949069 A 19991012  
• EP 0009748 W 20001005

Abstract (en)  
[origin: WO0128030A1] The invention relates to a directional coupler for electromagnetic waves comprising an injection path (3) and three decoupling paths (4, 5, 11), which are linked to each other by means of coupling arms (6, 7a - 7e), whereby a first decoupling path (4) is connected to the injection path (3) by means of a first series arm (6), a second decoupling path (5) is connected to a third decoupling path (11) by means of a second series arm (16) and the first series arm (6) is connected with the second series arm (16) by means of shunt arms (7a - 7e). The shunt arms (7a - 7e) are arranged in five consecutive groups, each comprising at least one shunt arm, starting at the injection path (3) and are alternately high impedance groups (7a, 7c, 7e) and low impedance groups ( 7b, 7d) whereby the group (7a) adjacent to the injection path (3) is a high impedance group.

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

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

CPC (source: EP)  
**H01P 5/183** (2013.01)

Designated contracting state (EPC)  
DE ES FR GB IT SE

DOCDB simple family (publication)  
**WO 0128030 A1 20010419**; CA 2385900 A1 20010419; DE 19949069 A1 20010613; DE 50001918 D1 20030528; EP 1224708 A1 20020724; EP 1224708 B1 20030423; JP 2003511942 A 20030325

DOCDB simple family (application)  
**EP 0009748 W 20001005**; CA 2385900 A 20001005; DE 19949069 A 19991012; DE 50001918 T 20001005; EP 00964275 A 20001005; JP 2001530148 A 20001005