

Title (en)
DIRECTIONAL COUPLER WAVEGUIDE STRUCTURE AND METHOD

Title (de)
HOHLLEITERSTRUKTUR MIT RICHTKOPPLER UND VERFAHREN

Title (fr)
STRUCTURE DE GUIDE D'ONDE AVEC COUPLEUR DIRECTIF ET PROCÉDÉ

Publication
EP 2862230 A1 20150422 (EN)

Application
EP 12729949 A 20120618

Priority
EP 2012061577 W 20120618

Abstract (en)
[origin: WO2013189513A1] A directional coupler arrangement (100), comprising an air waveguide (101) and a dielectric waveguide (109) having a coupling slot (111), wherein the air waveguide (101) and the dielectric waveguide (109) are coupled by the coupling slot (111). A method for coupling a first waveguide to a second waveguide comprising forming a coupling slot in the first waveguide and arranging the coupling slot of the first waveguide inside the second waveguide is also disclosed. The directional coupler arrangement has improved insertion loss, directivity and operational bandwidth. It is robust against manufacturing tolerances.

IPC 8 full level
H01P 5/08 (2006.01); **H01P 5/18** (2006.01)

CPC (source: EP)
H01P 5/087 (2013.01); **H01P 5/18** (2013.01); **H01P 5/188** (2013.01)

Citation (search report)
See references of WO 2013189513A1

Cited by
CN111430871A; FR3105454A1; WO2021123224A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

DOCDB simple family (publication)
WO 2013189513 A1 20131227; EP 2862230 A1 20150422; EP 2862230 B1 20160810

DOCDB simple family (application)
EP 2012061577 W 20120618; EP 12729949 A 20120618