Title (en)

FLANGE-TYPE CONNECTION FOR RECTANGULAR WAVE GUIDES

Publication

EP 0074478 B1 19851204 (DE)

Application

EP 82106558 A 19820721

Priority

DE 3133362 A 19810822

Abstract (en)

[origin: EP0074478A1] 1. Flange-type connection for rectangular waveguide, one flange-piece being provided with lambda/4-conductors, which are formed as slots which are on both sides of the waveguides broadsides imbeded in the front of the flange piece and running parallel to the waveguides broadsides, whose slot depth which reaches in axial direction is lambda/4, and the other lambda/4-conductors are being formed by slits between the fronts of the flange pieces, which develop respectively within the total range between the slot edge closest to the waveguide and the wide waveguide running edge, that reaches across the width of the flange, it the flange pieces are in the right position, thereby characterized that the planes (9) of the fronts of the flange piece (3) within the range of the slits (8) and the waveguide junction (T) enclose an acute angle in such a way, that the cross sectional dimension of the flange piece (3) increases constantly in direction of the waveguide narrow side with growing distance of the cross sectional planes from the waveguide junction (T) on both sides of the waveguide axis (A), so that a counter flange piece (4) formed correspondingly mirror symmetrical is provided and that the flanges (3, 4) don't touch when in operating position, but that there remains a slit of defined width (d) between the inner front piece arranged parallel to the waveguide junction (T) of both flange pieces (3, 4) and between the outer slot edges (11) and the counter flange (4).

IPC 1-7

H01P 1/04

IPC 8 full level

H01P 1/04 (2006.01)

CPC (source: EP)

H01P 1/042 (2013.01)

Citation (examination)

- Taschenbuch der Hochfrequenztechnik, H. Meinke, F.W. Grundlach, 1968,S.406-407
- G. Boudouris et P. Chenevier "Circuits pour ondes guidées" Dunod, Bruxelles 1975, S. 131, 132

Cited by

EP3596783A4; WO2018175392A1; US10985448B2

Designated contracting state (EPC)

FR SE

DOCDB simple family (publication)

EP 0074478 A1 19830323; **EP 0074478 B1 19851204**; DE 3133362 A1 19830310; DE 3133362 C2 19831201; ES 281693 U 19850416; ES 281693 Y 19851116

DOCDB simple family (application)

EP 82106558 A 19820721; DE 3133362 A 19810822; ES 281693 U 19820820