

Title (en)
MODE COUPLER FOR MONOPULSE APPLICATIONS

Publication
EP 0371494 A3 19910612 (DE)

Application
EP 89122043 A 19891129

Priority
DE 3840450 A 19881201

Abstract (en)
[origin: EP0371494A2] Mode coupler for monopulse applications in an antenna feed system, for obtaining amounts of angular deviations in azimuth and elevation, comprising a main waveguide in which several modes can be propagated and to which mode-selective input/output ports are attached. All of the input/output ports are simple standard waveguides attached to the main waveguide, in which only the H10-type of fundamental wave is capable of propagation. The (H11 + E11) mode is changed into two waveguide waves of opposite phase by a splitting plate in the main waveguide and coupled via a coupling bow into a second waveguide attached to the side. The front edge of the splitting block is constructed as reflector for the H01 mode so that this mode is coupled out into two first waveguides attached symmetrically to the main waveguide and via a H-plane branch into a common output waveguide.

IPC 1-7
H01P 1/16; **H01Q 25/04**

IPC 8 full level
H01P 1/16 (2006.01); **H01Q 25/04** (2006.01)

CPC (source: EP US)
H01P 1/16 (2013.01 - EP US); **H01Q 25/04** (2013.01 - EP US)

Citation (search report)
• [AD] DE 3604432 A1 19870820 - LICENTIA GMBH [DE]
• [AD] EP 0061576 A1 19821006 - ANT NACHRICHTENTECH [DE]
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• [A] US 4511438 A 19850416 - DISTEFANO RALPH D [US], et al

Cited by
US6100841A; US6498582B1; WO9966596A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0371494 A2 19900606; **EP 0371494 A3 19910612**; DE 3840450 A1 19900607; US 5066959 A 19911119

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