

Title (en)

Diode phase shifter for microwaves and electronic scanning antenna comprising same.

Title (de)

Diodenphasenschieber für Mikrowellen und elektronisch abtastende Antenne mit einem solchen Schieber.

Title (fr)

Déphaseur hyperfréquence à diodes et antenne à balayage électronique comportant un tel déphaseur.

Publication

EP 0013222 A1 19800709 (FR)

Application

EP 79401032 A 19791218

Priority

FR 7836247 A 19781222

Abstract (en)

[origin: US4305052A] A four-state phase shifter for UHF waves comprises two O- pi phase-shifting elements of planar structure on a common substrate, these phase-shifting elements including a symmetrical and an asymmetrical transmission line which can be selectively coupled in one of two ways by the alternate blocking and unblocking of respective diodes for a relative phase reversal. The two phase-shifting elements are linked by two further transmission lines of different propagation constants which can be selectively activated, again with the aid of diodes, and which may be disposed on opposite faces of the substrate or may form part of a coplanar conductor array on the same substrate face.

Abstract (fr)

Déphaseur hyperfréquence à diodes (4,5,6,7,8,9) réalisé en structure plane sur substrat céramique (90), donnant plusieurs états de phase. Comporte deux déphaseurs élémentaires 0- π reliés 5 par deux lignes de transmission (1,2; 3) à structures de champ électrique différentes. Antenne à balayage électronique comportant un tel déphaseur.

IPC 1-7

H01P 1/185

IPC 8 full level

H01P 1/185 (2006.01); **H01Q 3/38** (2006.01)

CPC (source: EP US)

H01P 1/185 (2013.01 - EP US)

Citation (search report)

- US 3568097 A 19710302 - HYLITIN TOM M
- FR 2379196 A1 19780825 - THOMSON CSF [FR]

Cited by

EP0089483A1; EP0335788A1; FR2629641A1; US4967172A

Designated contracting state (EPC)

CH DE GB IT NL SE

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