

Title (en)

Polarization converter having two converting devices therein.

Title (de)

Polarisationswandler mit zwei umwandelnden Einrichtungen.

Title (fr)

Convertisseur de polarisation avec deux dispositifs de conversion.

Publication

EP 0433092 A2 19910619 (EN)

Application

EP 90313700 A 19901214

Priority

JP 32422889 A 19891214

Abstract (en)

Disclosed is a polarization converter (9) allowing one down converter to receive four types of polarizations of a horizontal polarization, a vertical polarization, a right-handed circular polarization and a left-handed circular polarization without deteriorating a pass loss characteristic and a return loss characteristic (VSWR characteristic) of an antenna apparatus as a whole. The polarization converter (9) includes a circular waveguide (20) having dielectric plate (8) for converting a circular polarization to a linear polarization, a ferrite pole (10) for changing the direction of the electric field of the linear polarization and a coil (11), all of which are integrally provided therein. As a result, the design is easily obtained which optimizes the return loss characteristic (VSWR characteristic) of the entire antenna apparatus, which allows one converter to receive said four types of polarizations without deteriorating the pass loss characteristic and the return loss characteristic (VSWR characteristic) of the entire antenna apparatus. <IMAGE>

IPC 1-7

H01P 1/161; H01P 1/175; H01Q 21/24

IPC 8 full level

H01P 1/10 (2006.01); **H01P 1/161** (2006.01); **H01P 1/17** (2006.01); **H01P 1/175** (2006.01); **H01Q 21/24** (2006.01)

CPC (source: EP KR)

H01P 1/161 (2013.01 - EP); **H01P 1/175** (2013.01 - EP); **H01Q 15/00** (2013.01 - KR); **H01Q 21/245** (2013.01 - EP)

Cited by

EP1154510A3; CN110085981A; CN116247394A; WO9307653A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0433092 A2 19910619; EP 0433092 A3 19911113; JP H03185901 A 19910813; KR 910013615 A 19910808; KR 930008836 B1 19930915

DOCDB simple family (application)

EP 90313700 A 19901214; JP 32422889 A 19891214; KR 900020277 A 19901211