

Title (en)

BROAD-BAND POLARISER WITH LOW ELLIPTICITY-RATIO AND MICROWAVE EQUIPMENT WITH THE SAME

Publication

EP 0022401 B1 19840919 (FR)

Application

EP 80400970 A 19800627

Priority

FR 7917847 A 19790710

Abstract (en)

[origin: US4305051A] The polarizer with a circular waveguide in the inner wall of which are formed identical circular corrugations positioned in a plane perpendicular to the longitudinal axis XX of the guide. The corrugations have four quadrants: a first pair of quadrants opposed by the apex in which the depth of the corrugations is less than in the second pair. By positioning the waveguide in such a way that the incident field E is parallel to the limit between two adjacent quadrants, the phase velocity of the orthogonal components C1, C2 of field E is dependent respectively on the admittance of the quadrants of the first pair and the quadrants of the second pair. This leads to a phase difference at the polarizer outlet and the corrugations are defined so that this difference is substantially 90 DEG .

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H01P 1/17

IPC 8 full level

H01P 1/17 (2006.01)

CPC (source: EP US)

H01P 1/171 (2013.01 - EP US)

Citation (examination)

GB 1365484 A 19740904 - PLESSEY CO LTD

Cited by

EP0773597A1; US5852390A; EP1158594A4; WO0143219A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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EP 80400970 A 19800627; FR 7917847 A 19790710; JP 9257080 A 19800707; US 16668280 A 19800707