

Title (en)

POLARISING DEVICE FOR CONVERSION OF LINEARLY POLARISED INTO CIRCULARLY POLARISED ELECTROMAGNETIC WAVES,
MOUNTED IN FRONT OF A PARABOLIC REFLECTOR ANTENNA

Publication

EP 0044502 B1 19851016 (DE)

Application

EP 81105473 A 19810713

Priority

DE 3027094 A 19800717

Abstract (en)

[origin: US4479128A] A re-polarization means for generating circular polarized electro-magnetic waves using single or multi-layer lattice structure mounted in front of a radiation aperture with the lattice structure comprising a plurality of conductors which extend parallel to each other and/or meander shaped and wherein the lattice structure has one or more additional layers which are closer to the radiation aperture and which has a plurality of parallel conductors but that are inclined by an angle of 45 DEG relative to the direction of the conductors mounted on the other layers which meander. Additionally, orthogonal polarization suppression is achieved with the apparatus of the invention. The invention can be applied to a radom of a target tracking radar antenna, for example.

IPC 1-7

H01Q 15/24; **H01Q 1/42**

IPC 8 full level

H01Q 1/42 (2006.01); **H01Q 15/12** (2006.01); **H01Q 15/24** (2006.01)

CPC (source: EP US)

H01Q 1/425 (2013.01 - EP US); **H01Q 15/12** (2013.01 - EP US); **H01Q 15/244** (2013.01 - EP US)

Citation (examination)

- EP 0042611 A1 19811230 - SIEMENS AG [DE]
- Taschenbuch Elektrotechnik Band 3, Bausteine der Informationstechnik, C. HANSER Verlag, München 1978, Seiten 571-573

Cited by

EP0478852A1; EP0310414A3; US4786914A; EP3182505A1; GB2185355A; FR2592993A1; GB2185355B; WO2017102741A1; EP3301755B1

Designated contracting state (EPC)

BE CH FR GB IT LI NL

DOCDB simple family (publication)

EP 0044502 A1 19820127; **EP 0044502 B1 19851016**; DE 3027094 A1 19820204; DE 3027094 C2 19870319; US 4479128 A 19841023

DOCDB simple family (application)

EP 81105473 A 19810713; DE 3027094 A 19800717; US 28132381 A 19810708