

Title (en)

DEVICE FOR PREVENTING A MAIN BEAM PARALLAX IN A CIRCULARLY POLARIZED ANTENNA COMPRISING A CURVED REFLECTOR AND AN OFF-SET PRIMARY RADIATING ELEMENT

Publication

EP 0141281 A3 19860730 (DE)

Application

EP 84111833 A 19841003

Priority

DE 3336452 A 19831006

Abstract (en)

[origin: EP0141281A2] In the feed waveguide (7) to the antenna-horn emitter (8) waves of a higher mode than the fundamental are coupled in by means of a mode coupler (6) having an external signal input (5). The said waves have the same amplitude, but are in anti-phase to waves of that mode which would result in the same interfering main beam deflection as is actually caused by the curved reflector. A correction signal is applied to the external signal input of the mode coupler, this correction signal being derived from the fundamental signal in the feed waveguide by means of a coupler (3) and being adjusted to match, in terms of its phase and amplitude, by means of a correction network (4) in a correction signal path, so that broadband excitation of the anti-phase compensation wave is possible. The device according to the invention is suitable for application to satellite and directional radio antennas. <IMAGE>

IPC 1-7

H01Q 19/13

IPC 8 full level

H01Q 19/13 (2006.01); **H01Q 25/04** (2006.01)

CPC (source: EP)

H01Q 19/132 (2013.01); **H01Q 25/04** (2013.01)

Citation (search report)

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