

Title (en)

ANTENNA WITH DOUBLE-BAND ELECTRONIC SCANNING, WITH ACTIVE MICROWAVE REFLECTOR

Title (de)

ANTENNE MIT DOPPELBANDIGER ELEKTRONISCHERABTASTUNG MIT AKTIVEM MIKROWELLENREFLEKTOR

Title (fr)

ANTENNE A BALAYAGE ELECTRONIQUE BI-BANDE, A REFLECTEUR HYPERFREQUENCE ACTIF

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Application

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Abstract (en)

[origin: FR2789521A1] The invention concerns an antenna comprising at least two microwave sources (SD, SG) transmitting in different frequency bands and having opposite circular polarisations, an active reflector array (4) comprising elementary cells illuminated by the sources (SD, SG) and a polarisation rotator (21), interposed between the reflector array (4) and the sources (SD, SG) transforming the circular polarisations into two intersecting linear polarisations. An elementary cell comprises a conductor plane and two transverse phase-shifters, the first phase-shifter is substantially parallel to one linear polarisation and the second phase-shifter is substantially parallel to the other linear polarisation. The conductor plane is arranged substantially parallel to the phase shifters. The invention is useful in particular for microwave applications requiring two transmitting bands which, moreover, are subjected to very low-cost conditions of production.

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