

Title (en)
Microwave receiving arrangement.

Title (de)
Mikrowellen-Empfangseinrichtung.

Title (fr)
Dispositif de réception à micro-ondes.

Publication
EP 0059927 A1 19820915 (DE)

Application
EP 82101608 A 19820303

Priority
DE 3108758 A 19810307

Abstract (en)
[origin: ES8302974A1] A receiver for counterclockwise and clockwise circularly polarized microwave signals of the type comprising a receiving antenna with a feeder system, a polarization converter, a polarization filter and a circuit for converting the microwave signals of both polarization directions from the high frequency to the intermediate frequency plane. A portion of the feeder waveguide belonging to the feeder system of the receiving antenna is designed as a bandpass filter which is effective for both polarization directions. A microstripline substrate, which carries the frequency converting circuit, is connected with the output of the feeder waveguide and is provided with an arrangement for coupling in the energies of the waveguide modes of both polarization directions. The polarization converter is either directly integrated in the feeder waveguide or the polarization conversion is effected by coupling the waveguide modes into the microstripline circuit.

Abstract (de)
Die Erfindung betrifft eine Empfangseinrichtung für links- und rechtsdrehend zirkular polarisierte Mikrowellensignale. Dabei ist der zur Antenne gehörende Speisehohlleiter (H) als Bandpaßfilter (BP) ausgebildet und an den Speisehohlleiter ein die Umsetzerschaltung tragendes Mikrostreifenleitersubstrat (MS) angekoppelt. Weiterhin ist die Ankopplung (K1, K2, K3, K4) so gestaltet, daß sie die Funktion eines Polarisationswandlers übernimmt, oder es ist direkt in den Speisehohlleiter ein Polarisationswandler (T1, T2, A1, A1', A2, A2') integriert. Auf diese Weise ist eine sehr einfache, kompakt aufgebaute Empfangseinrichtung realisiert.

IPC 1-7
H01P 1/17; **H01Q 13/02**; **H01Q 19/19**

IPC 8 full level
H01P 1/17 (2006.01); **H01Q 13/02** (2006.01); **H01Q 19/19** (2006.01)

CPC (source: EP US)
H01P 1/172 (2013.01 - EP US); **H01Q 13/0208** (2013.01 - EP US); **H01Q 19/193** (2013.01 - EP US)

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