

Title (en)

Microwave polariser

Title (de)

Mikrowellen-Polarisator

Title (fr)

Polariseur à micro-ondes

Publication

**EP 0757400 B1 20031029 (EN)**

Application

**EP 96111886 A 19960724**

Priority

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Abstract (en)

[origin: EP0757400A1] The invention relates to a microwave polariser and in particular to a microwave polariser used in a system for coupling energy between a waveguide (6) and a transmission line (3, 4) or vice versa. Conventional polarisers for circular polarised microwaves use two mutually orthogonal probes (1, 2), which penetrate into the waveguide. These probes are adjusted normally to an input impedance of 50 ohms, which is a function of the penetration depth. In order to improve the cross polarisation of such a polariser the probes are adjusted to an input impedance of less than 50 ohms, in particular to 20 ohms, which results in a smaller penetration depth. This smaller penetration depth increases the distance between the two probes and in turn reduces the cross polarisation. <IMAGE>

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