

Title (en)  
Polarization converter system.

Title (de)  
Gerät zur Polarisationswandlung.

Title (fr)  
Dispositif de conversion de polarisation.

Publication  
**EP 0276347 A1 19880803 (EN)**

Application  
**EP 87101166 A 19870128**

Priority  
EP 87101166 A 19870128

Abstract (en)  
A system for selectively converting electromagnetic waves from circular to linear polarization or vice versa is provided. The system comprises a polarization converter including a circular waveguide (22) and a rectangular waveguide (23) for receiving or transmitting a signal. The center line (23-1) of the rectangular waveguide (23) is at substantially a right angle to the axis (22-1) of the circular waveguide (22). The unit (26) is provided comprising a metal fin (26-1) and a shorting member (27) positioned in the circular waveguide (22) at the opening of the rectangular waveguide into the circular waveguide. The fin (26-1) is at a preset distance from the shorting member (27). The fin (26-1) is movable with respect to the center line (23-1) of the rectangular waveguide (23) about the axis (22-1) of the circular waveguide (22-1) with the face thereof substantially at right angles to the axis (22-1). The fin (26-1) has a front edge positioned between the rectangular waveguide center line (23-1) and the wall (23-5) of the rectangular waveguide (23) farthest from the circular waveguide opening. Means for providing circularly polarized microwave signals to the circular waveguide are provided.

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IPC 8 full level  
**H01P 1/165** (2006.01)

CPC (source: EP)  
**H01P 1/165** (2013.01)

Citation (search report)  
• [Y] EP 0189982 A1 19860806 - NAT RES DEV [GB]  
• [Y] GB 2130443 A 19840531 - KABELMETAL ELECTRO GMBH  
• [A] US 3622921 A 19711123 - HEEREN VERNON L

Cited by  
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