Title (en)

Waveguide twist.

Title (de)

Hohlleiter-Twist.

Title (fr)

Guide d'ondes à torsade.

Publication

EP 0351514 B1 19941109 (DE)

Application

EP 89108556 A 19890512

Priority

DE 3824150 A 19880716

Abstract (en)

[origin: EP0351514A2] A waveguide twist for rotating the polarisation plane consists of rectangular hollow conductors wound constantly about its axis, but which require a not inconsiderable constructional length. In a conventional polarisation filter, although it is possible for the propagation direction to be positioned mutually parallel using an elbow, the polarisation planes are however rotated by 90 DEG in the two waveguide branches. In order to provide a waveguide twist, especially for use in a polarisation filter having a small space requirement, with simple means, it is provided that two parallel adjacent waveguides are connected to one another via a common coupling window which is arranged centrally in the one waveguide in the longitudinal direction and off-centre in the other waveguide. When two rectangular waveguides are employed, the coupling window is arranged on the one hand centrally on the narrow side and off-centre on the wide side on the other waveguide. The waveguide twist is also especially suitable for polarisation filters. <IMAGE>

IPC 1-7

H01P 1/02; H01P 1/161

IPC 8 full level

H01P 1/02 (2006.01); **H01P 1/161** (2006.01)

CPC (source: EP)

H01P 1/02 (2013.01); **H01P 1/161** (2013.01)

Citation (examination)

- DE 976910 C 19640723 - SIEMENS AG, et al
- DE 2748956 A1 19790503 - LICENTIA GMBH

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JP2013207391A; CN105140610A; DE4009288A1; CN105071006A; US7750762B2; WO2005099026A1; WO2010056609A3

Designated contracting state (EPC)

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EP 0351514 A2 19900124; **EP 0351514 A3 19900905**; **EP 0351514 B1 19941109**; AT E114077 T1 19941115; DE 3824150 A1 19890706; DE 3824150 C2 19891123; DE 58908620 D1 19941215

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