

Title (en)
POLARISATION DUPLEXER

Publication
EP 0192186 B1 19901024 (FR)

Application
EP 86101801 A 19860213

Priority
FR 8502209 A 19850215

Abstract (en)
[origin: EP0192186A1] 1. A device for extracting or exciting the two orthogonal components of the fundamental mode that may propagate in a waveguide having a given frequency or frequency band, the device being of the type comprising a main waveguide (1) corresponding to said fundamental mode, which waveguide is extended via a transition (2) that is equivalent at the fundamental mode of the main waveguide to a short circuit in a notional short circuit plane (4) by another circular waveguide (3) of smaller transverse dimensions and having a fundamental mode corresponding to a higher frequency than that of the main waveguide (1), and two access waveguides (5, 6) orthogonal to the main waveguide and orthogonal to each other, each of these access waveguides (5, 6) being coupled to the main waveguide (1) via a single resonant slot (7, 8) and being connected to the corresponding resonant slot (7, 8) via a filter (9, 10) for selecting said frequency or frequency band, the device being characterized in that each filter is a corrugated filter (9, 10) constructed in such a manner as to cause the corresponding resonant slot (7, 8) to appear substantially as a short circuit at frequencies outside said frequency or band frequencies.

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IPC 8 full level
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