

Title (en)

Microstrip slow wave transmission line and circuit including such a line.

Title (de)

Langsam-Wellen-Mikrostreifenübertragungsleitung und Anordnung mit einer solchen Leitung.

Title (fr)

Ligne de transmission en mode à ondes lentes, du type microruban et circuit incluant une telle ligne.

Publication

EP 0459571 B1 19950920 (FR)

Application

EP 91201234 A 19910524

Priority

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- FR 9008598 A 19900706
- FR 9102813 A 19910308

Abstract (en)

[origin: EP0459571A1] Wave transmission line, in slow wave mode, of the so-called microstrip type, including a first so-called lower conductive layer (11) acting as earth plane, a second so-called upper conductive layer (12) in the form of a strip with specific longitudinal and transverse dimensions, and a third non-conductive material (1, 2) arranged between these two conductive layers. This transmission lines has, longitudinally, a periodic structure, each period, of length l , being formed of a so-called bridge (4) followed by a so-called pillar (13). Each bridge consists of a segment of the upper conductive strip (12), of length $l_1 < l$, arranged at the surface of a so-called first part (1) of the third material, which part is dielectric in nature. Moreover each pillar (13) is a capacitance which can be an active or passive element. Furthermore, the first conductive layer (11) can be provided with recesses (5) beneath each bridge. A directional coupler (50) can be produced by means of such slow wave lines, and used to produce an integrated transceiver device with single antenna. Application: monolithic microwave integrated circuits. <IMAGE>

IPC 1-7

H01P 3/08; **H01P 5/08**; **H01P 1/185**; **H01P 9/00**; **H04B 1/52**

IPC 8 full level

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CPC (source: EP US)

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