

Title (en)

Coplanar differential bi-strip delay line, higher-order differential filter and filtering antenna furnished with such a line

Title (de)

Coplanare Differenzial-Zweiband-Verzögerungsleitung, Differenzialfilter höherer Ordnung und Filterantenne mit einer solchen Leitung

Title (fr)

Ligne à retard bi-ruban différentielle coplanaire, filtre différentiel d'ordre supérieur et antenne filtrante munis d'une telle ligne

Publication

**EP 2184803 B1 20160106 (FR)**

Application

**EP 09175194 A 20091106**

Priority

FR 0806220 A 20081107

Abstract (en)

[origin: EP2184803A1] The line (30) has conducting strips (32, 34) arranged on same surface (36) of a dielectric substrate, where the line is configured in the form of printed circuit board. The board presents structural discontinuities formed by portions (32B, 32C, 34B, 34C) of the strips. The discontinuities generate impedance jump and capacitive coupling between the strips for reproducing predetermined quarter-wave phase difference. An interdigitated capacitor for capacitive coupling is formed by conductive fingers (32D, 34D). The fingers are respectively connected to the strip through their ends. An independent claim is also included for a differential dipole filtering antenna comprising a higher-order differential filter.

IPC 8 full level

**H01P 9/04** (2006.01); **H01P 1/203** (2006.01); **H01P 3/02** (2006.01); **H01P 9/00** (2006.01)

CPC (source: EP US)

**H01P 1/20336** (2013.01 - EP US); **H01P 1/20381** (2013.01 - EP US); **H01P 3/026** (2013.01 - EP US); **H01P 9/006** (2013.01 - EP US); **H01P 9/04** (2013.01 - EP US); **H01Q 5/335** (2015.01 - EP US); **H01Q 9/285** (2013.01 - EP US)

Cited by

CN112332048A; CN107658553A; CN111696959A

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DOCDB simple family (publication)

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