

Title (en)

A dielectric substrate single layer planar dipole antenna

Title (de)

Planare Dipolantenne auf einem einschichtigen dielektrischen Substrat

Title (fr)

Antenne dipôle plane imprimée sur un substrat diélectrique à couche unique

Publication

EP 1498982 A1 20050119 (EN)

Application

EP 04011740 A 20040518

Priority

IT RE20030073 A 20030718

Abstract (en)

A dielectric substrate single layer planar dipole antenna comprises at least a radiant dipolar element made of two strips (1) having any shape such as linear, spiral, meander or like, printed on the front side of a thin dielectric substrate. On the back side of the said substrate a planar balanced feeding structure (balun) is implemented using a slot (4) etched on a thin metallic patch locally performing as ground plane (2). <??>Two metallized via-holes or rivets (3) very near to the edges of said slot (4) connect the radiating strips (1) to the ground plane. The two via-holes are disposed symmetrically with respect to the slot centre. A third feeding strip (5), etched on the same side of the said radiating strips, bridges over the centre of said slot and is connected to the ground through a via-hole (3) very near the slot edge. This third strip (5) constitutes the unbalanced input port of the balanced antenna, suitable for connecting the inner conductor of a coaxial cable whose outer conductor can be directly or indirectly connected to the ground plane. <IMAGE>

IPC 1-7

H01Q 1/38; **H01Q 9/28**; **H01Q 9/04**; **H01P 5/10**; **H01P 5/12**; **H01Q 9/06**

IPC 8 full level

H01P 5/10 (2006.01); **H01Q 1/38** (2006.01); **H01Q 9/06** (2006.01); **H01Q 9/28** (2006.01)

CPC (source: EP)

H01P 5/10 (2013.01); **H01Q 1/38** (2013.01); **H01Q 9/065** (2013.01); **H01Q 9/285** (2013.01)

Citation (search report)

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