

Title (en)
Dual-polarization antenna's radiating element

Title (de)
Strahlungselement einer Dualpolarisationsantenne

Title (fr)
Élément de rayonnement d'antenne à double polarisation

Publication
EP 2309596 B1 20120620 (EN)

Application
EP 10182687 A 20100929

Priority
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Abstract (en)
[origin: EP2309596A1] The invention pertains to a double polarization antenna's radiating element comprising a pair of half-wave dipoles (3, 4; 5, 6) for each polarization. The dipoles (3, 4; 5, 6) are disposed upon a first phase of a dielectric medium (12). Each dipole (3, 4; 5, 6) forms a conducting rectangular plane whose ends (7) are folded onto the central section (8), and a junction (10, 11) in the form of a conducting strip ensuring the connection between the two dipoles of the same polarization. Each pair of dipoles (3, 4) and (5, 6) is respectively supplied by a microband conducting line (13) disposed onto a second face opposite the dielectric medium (12). The conducting lines (13) respectively supplying each of the pairs of dipoles (3, 4) and (5, 6), are placed within the same plane, and a jumper cable (15) ensures that one line (13) overlaps the other at the crossing point. The junction (10, 11) is connected to the dipole at a point where the current is at a maximum and voltage is at a minimum, which enables each polarization's pair of dipoles (3, 4; 5, 6) to be supplied by a single coaxial cable (14) via a supply line (13).

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