

Title (en)
OMNIDIRECTIONAL, BROADBAND COMPACT ANTENNA SYSTEM COMPRISING TWO HIGHLY DECOUPLED SEPARATE TRANSMISSION AND RECEPTION ACCESS LINES

Title (de)
OMNIDIREKTIONALES KOMPAKTES BREITBANDANTENNENSYSYSTEM MIT ZWEI WEITGEHEND ENTKOPPELTEN SEPARATEN ÜBERTRAGUNGS- UND EMPFANGSZUGANGSLEITUNGEN

Title (fr)
SYSTEME ANTENNAIRE COMPACTE OMNIDIRECTIONNEL ET LARGE BANDE COMPORTANT DEUX ACCES EMISSION ET RECEPTION SEPARES FORTEMENT DECOUPLES

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EP 2449629 B1 20130724 (FR)

Application
EP 10723616 A 20100616

Priority
• EP 2010058494 W 20100616
• FR 0903185 A 20090630

Abstract (en)
[origin: WO2011000703A1] The invention relates to a very broadband omnidirectional antenna system operating in a selected frequency range, to be positioned on a carrier and comprising: A first antenna element (1) operating in a transmission mode and comprising: a first conductive plate (6) with a length L1, a width l1, and a surface area S1, and a second conductive plate (5) with a length L2, a width l2, and a surface area S2, the two plates (5, 6) being separated by a gap E; a broadband excitation means (4) having an outer surface and a surface profile suitable for generating an electric field with linear vertical polarisation created between the two plates (5, 6), said broadband excitation means being pseudo-conical in shape; at least one conductive link (7) arranged between the first conductive plate (6) and the second conductive plate (5), said link or links (7) being connected to said plates via a matching circuit (8); and a second spiral antenna element (2) operating in a receiving mode, placed on a metal plane (12) covered with a ferrite material (11), the assembly being interlocked in said first antenna element (1). The antenna system is to be used for the frequency range of 30 MHz to 3000 MHz.

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