

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

Publication
EP 2449629 A1 20120509 (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.

IPC 8 full level
H01Q 21/28 (2006.01); **H01Q 21/29** (2006.01)

CPC (source: EP)
H01Q 21/28 (2013.01); **H01Q 21/29** (2013.01)

Citation (search report)
See references of WO 2011000703A1

Cited by
CN109786931A

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)
FR 2947391 A1 20101231; FR 2947391 B1 20110617; EP 2449629 A1 20120509; EP 2449629 B1 20130724; WO 2011000703 A1 20110106

DOCDB simple family (application)
FR 0903185 A 20090630; EP 10723616 A 20100616; EP 2010058494 W 20100616