

Title (en)

Multi-band antenna apparatus disposed on a three-dimensional substrate

Title (de)

Mehrbandantennenanordnung angeordnet auf einem dreidimensionalen Substrat

Title (fr)

Antenne multibande déposée sûr un substrat trois dimensionel

Publication

EP 2028717 B1 20111116 (EN)

Application

EP 07114887 A 20070823

Priority

EP 07114887 A 20070823

Abstract (en)

[origin: EP2028717A1] Antenna apparatus, and an associated methodology, for a multi-frequency-band-capable radio device, such as a quad-band mobile station. The antenna apparatus is formed from a three-dimensional rectilinear non-conductive dielectric antenna substrate, such as cube. An elongated radiation element is disposed over multiple surfaces of the antenna substrate. A T-shaped impedance matching element located at the end of the radiation element permits the antenna input impedance to be matched to a communications device. The length of the radiation element is selected to be substantially equal to a quarter wavelength of the lowest frequency band at which the antenna operates.

IPC 8 full level

H01Q 1/38 (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/357** (2015.01); **H01Q 9/40** (2006.01); **H01Q 9/42** (2006.01)

CPC (source: EP)

H01Q 1/38 (2013.01); **H01Q 5/357** (2015.01); **H01Q 9/40** (2013.01); **H01Q 9/42** (2013.01)

Cited by

CN105244597A; CN105406187A; WO2022006986A1; WO2024169336A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2028717 A1 20090225; EP 2028717 B1 20111116; AT E534164 T1 20111215

DOCDB simple family (application)

EP 07114887 A 20070823; AT 07114887 T 20070823