

Title (en)
Antenne apparatus and associated methodology for a multi-band radio device

Title (de)
Antennenvorrichtung und entsprechendes Verfahren für ein Multiband-Radiogerät

Title (fr)
Appareil d'antenne, méthodologie associée pour un dispositif radio multibande

Publication
EP 1973192 B1 20170614 (EN)

Application
EP 07104836 A 20070323

Priority
EP 07104836 A 20070323

Abstract (en)
[origin: EP1973192A1] Antenna apparatus, and an associated methodology, for a multi-frequency-band-capable radio device, such as a quad-band mobile station. The antenna apparatus forms a hybrid strip antenna having a pair of resonant elements. A first resonant element forms a peripheral loop extending about the periphery of a substrate. A meander line extends along a portion of the peripheral loop. And, second resonant element is formed of an L-shaped strip. The peripheral loop is resonant at a set of frequencies, and the L-shaped strip is resonant at a single frequency. Through appropriate selection of the lengths of the resonant elements, the frequencies at which the elements are resonant are controlled.

IPC 8 full level
H01Q 1/24 (2006.01); **H01Q 1/36** (2006.01); **H01Q 1/38** (2006.01); **H01Q 5/00** (2015.01); **H01Q 5/10** (2015.01); **H01Q 5/357** (2015.01); **H01Q 5/371** (2015.01)

CPC (source: EP KR)
H01Q 1/24 (2013.01 - KR); **H01Q 1/243** (2013.01 - EP); **H01Q 1/36** (2013.01 - EP); **H01Q 1/38** (2013.01 - EP KR); **H01Q 5/371** (2013.01 - EP); **H01Q 13/08** (2013.01 - KR)

Cited by
EP4007068A1; CN105789902A; US8144065B2; US8786298B2; US8164528B2; US8462061B2; WO2013064910A3; WO2011100618A1; US9431708B2; US8164532B1; US9252487B2; US8514132B2; US9502770B2

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 1973192 A1 20080924; EP 1973192 B1 20170614; CA 2626819 A1 20080923; CA 2626819 C 20130611; CN 101276955 A 20081001; CN 101276955 B 20130306; JP 2008245282 A 20081009; JP 4906765 B2 20120328; KR 101188465 B1 20121005; KR 20080086843 A 20080926; TW 200901556 A 20090101; TW I350029 B 20111001

DOCDB simple family (application)
EP 07104836 A 20070323; CA 2626819 A 20080320; CN 200810096341 A 20080321; JP 2008074658 A 20080321; KR 20080026401 A 20080321; TW 97110212 A 20080321