

Title (en)

Dual-polarized, multiple strip-loop antenna and associated methodology, for radio device

Title (de)

Dualpolarisierte multiple Band-Schleifenantenne und entsprechendes Verfahren für ein Funkgerät

Title (fr)

Antenne à bande-boucle multiple, à polarisation double, et méthodologie associée, pour dispositif radio

Publication

EP 2299537 A3 20110629 (EN)

Application

EP 10194345 A 20070416

Priority

- EP 10194345 A 20070416
- EP 07106265 A 20070416

Abstract (en)

[origin: EP1983606A1] A dual-polarized antenna, and an associated methodology, is provided for a radio device, such as a mobile station. The antenna is formed of a plurality of loop strips disposed upon a substrate. The loop strips are configured into a pair of L-cornered loops, with the loops sharing a shared set of loop strips. A loop strip of the shared set provides a single feed connection, positioned to permit symmetrical excitation of the antenna.

IPC 8 full level

H01Q 1/24 (2006.01); **H01Q 1/38** (2006.01); **H01Q 7/00** (2006.01); **H01Q 9/26** (2006.01)

CPC (source: EP KR)

H01Q 1/243 (2013.01 - EP KR); **H01Q 1/38** (2013.01 - EP KR); **H01Q 7/00** (2013.01 - EP KR); **H01Q 7/04** (2013.01 - KR);
H01Q 9/26 (2013.01 - EP KR)

Citation (search report)

- [A] EP 1679763 A2 20060712 - DX ANTENNA [JP]
- [A] EP 1434300 A2 20040630 - HUBER+SUHNER AG [CH]
- [A] WO 2006011008 A1 20060202 - NOKIA CORP [FI], et al
- [X] NAKANO H ET AL: "Mesh Antennas for Dual Polarization", IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, IEEE SERVICE CENTER, PISCATAWAY, NJ, US, vol. 49, no. 3, March 2001 (2001-03-01), XP011004036, ISSN: 0018-926X
- [A] ROTHAMMEL K: "Antennenbuch, PASSAGE", ANTENNENBUCH, XX, XX, 1991, pages 70 - 71,423,452, XP002388127
- [A] NAKANO H ET AL: "Loop and spiral line antennas at microstrip substrate surface", SIXTH INTERNATIONAL CONFERENCE ON ANTENNAS AND PROPAGATION (ICAP 89), 4 April 1989 (1989-04-04) - 7 April 1989 (1989-04-07), Coventry, UK, pages 196 - 200, XP006517779

Cited by

US10389034B2

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

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

EP 1983606 A1 20081022; EP 1983606 B1 20160316; BR PI0803648 A2 20090422; BR PI0803648 B1 20210908; CA 2629178 A1 20081016;
CA 2629178 C 20130319; CN 101388493 A 20090318; CN 101388493 B 20140416; EP 2299537 A2 20110323; EP 2299537 A3 20110629;
EP 2299537 B1 20200101; KR 101087418 B1 20111125; KR 20080093384 A 20081021; MX 2008004911 A 20090302;
TW 200901565 A 20090101; TW I362785 B 20120421

DOCDB simple family (application)

EP 07106265 A 20070416; BR PI0803648 A 20080415; CA 2629178 A 20080415; CN 200810109282 A 20080414; EP 10194345 A 20070416;
KR 20080034840 A 20080415; MX 2008004911 A 20080414; TW 97113691 A 20080415