

Title (en)
Multiple stacked patch antenna

Title (de)
Mehrfach-Scheibenstrahler-Antenne

Title (fr)
Antenne à plaques empilées multiples

Publication
EP 1071161 B1 20031008 (EN)

Application
EP 99114034 A 19990719

Priority
EP 99114034 A 19990719

Abstract (en)
[origin: EP1071161A1] A planar, low-profile, very wide frequency bandwidth, wide-scan, dual-linear or circular-polarized phased array antenna (90) using integrated stacked-disc radiator tiles (10). The stacked-disc radiator configuration comprises a lower active radiator (64) fed by a pair of probes (63) for each polarization state, and a parasitic radiator (66) separated from the active radiator by dielectric material (61). The stacked-disc radiator is integrated with its multi-layer feed circuits (41, 50) in a very compact package. The feed circuits include 90 DEG hybrid coupler circuits (32, 33) and 180 DEG hybrid coupler circuits (53) that couple dual linear or dual circular polarized energy to and from the disk radiators. <IMAGE>

IPC 1-7
H01Q 21/28; H01Q 5/00; H01Q 9/04

IPC 8 full level
H01Q 5/00 (2006.01); **H01Q 5/378** (2015.01); **H01Q 9/04** (2006.01); **H01Q 21/06** (2006.01)

CPC (source: EP)
H01Q 5/378 (2015.01); **H01Q 9/0414** (2013.01); **H01Q 21/065** (2013.01)

Cited by
CN113381177A; KR20190085818A; EP1368854A4; NL1026104C2; EP3512040A1; CN110034394A; US10615496B1; US11355862B1; US7310065B2; CN109599667A; CN109980365A; EP3910735A1; US2022077594A1; AU2021341537B2; US11929556B2; WO03034545A1; WO2019058378A1; WO2009042065A1; WO2005107014A1; WO2006028534A1; WO2021113639A1; US7868843B2; US10355346B2; US7427967B2; US11177550B2; US9761934B2; US10056682B2; US7262744B2; US9755314B2; US11695218B2; TWI809027B; US9899727B2; US10644380B2; US11031677B2; US11349200B2; US11735810B2; WO2022055544A1; US8497814B2; US8754824B2; US9450305B2; US9905940B2; US10211519B2; US10910699B2

Designated contracting state (EPC)
DE ES GB

DOCDB simple family (publication)
EP 1071161 A1 20010124; **EP 1071161 B1 20031008**; DE 69911938 D1 20031113; DE 69911938 T2 20040729; ES 2204035 T3 20040416

DOCDB simple family (application)
EP 99114034 A 19990719; DE 69911938 T 19990719; ES 99114034 T 19990719