

Title (en)  
WIDE BAND ANTENNA HAVING UNITARY RADIATOR/GROUND PLANE

Title (de)  
BREITBANDIGE ANTENNE MIT EINER STRAHLER/GRUNDFLÄCHENEINHEIT

Title (fr)  
ANTENNE A LARGE BANDE POSSEDANT UN ENSEMBLE ELEMENT RAYONNANT/PLAN DE SOL

Publication  
**EP 1149431 A4 20040721 (EN)**

Application  
**EP 99965829 A 19991117**

Priority  

- US 9927296 W 19991117
- US 19378198 A 19981117
- US 44152999 A 19991116

Abstract (en)  
[origin: WO0030211A1] An antenna is formed from a single sheet of generally planar metal that is cut to provide four geometric antenna shapes that comprise a ground plane element (15), a two-section shorting element that is defined by two generally parallel fold lines (16, 17), a radiating element (14), and an arm (18) that has one end fixed to a generally central portion of the radiating element and has a free end that extends toward a fold line. Folding the metal sheet on the two fold lines positions the radiating element above the ground plane element. A transmit/receive coaxial cable (30) is aligned with a gap (115) that is formed between the two sections of the shorting element. The cable's outer metal sheath (32) is connected to a metal tab (48), and the metal tab is secured to a surface of the ground plane element. The cable's center conductor (31) is secured to a surface of the radiating element. A radome and its mounting tab complete the antenna assembly.

IPC 1-7  
**H01Q 9/04; H01Q 1/38**

IPC 8 full level  
**H01P 11/00** (2006.01); **H01Q 1/00** (2006.01); **H01Q 9/04** (2006.01); **H01Q 13/08** (2006.01)

CPC (source: EP)  
**H01Q 9/0421** (2013.01); **H01Q 9/0471** (2013.01)

Citation (search report)  

- [Y] US 4835541 A 19890530 - JOHNSON RUSSELL W [US], et al
- [A] WO 9604691 A1 19960215 - WIRELESS ACCESS INC [US]
- [Y] LIEBENDORFER M ET AL: "Wireless LAN diversity antenna system for PCMCIA card integration", VEHICULAR TECHNOLOGY CONFERENCE, 1997, IEEE 47TH PHOENIX, AZ, USA 4-7 MAY 1997, NEW YORK, NY, USA, IEEE, US, 4 May 1997 (1997-05-04), pages 2022 - 2026, XP010229152, ISBN: 0-7803-3659-3
- [A] ORMISTON T D ET AL: "MICROSTRIP SHORT-CIRCUIT PATCH DESIGN EQUATIONS", MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, JOHN WILEY, NEW YORK, NY, US, vol. 16, no. 1, 1 September 1997 (1997-09-01), pages 12 - 14, XP000198277, ISSN: 0895-2477
- See references of WO 0030211A1

Designated contracting state (EPC)  
DE FI FR GB SE

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DOCDB simple family (application)  
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