

Title (en)
Electromagnetically coupled microstrip antenna

Title (de)
Elektromagnetisch gekoppelte Mikrostreifenleiterantenne

Title (fr)
Antenne microruban à couplage électromagnétique

Publication
EP 0957535 A1 19991117 (EN)

Application
EP 98108927 A 19980515

Priority
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Abstract (en)

For increased bandwidth an electromagnetically coupled microstrip antenna device comprises a first substrate 1; an antenna element 2 provided on a first surface 1a of the first substrate 1; a second substrate 2; and a feeding element 4 provided between a second surface 1b of the first substrate 1 and a first surface 3a of the second substrate 3; wherein an end portion 4a of the feeding element 4 is positioned within a range of -0,3L and +0,3L from an edge portion 2a of the antenna element 2, wherein L is the extension of the antenna element 2 in the of overlap between the antenna element 2 and the feeding element 4. <IMAGE>

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H01Q 9/04; H01Q 1/24; H01Q 21/24

IPC 8 full level
H01Q 1/24 (2006.01); H01Q 9/04 (2006.01); H01Q 21/24 (2006.01)

CPC (source: EP)
H01Q 1/247 (2013.01); H01Q 9/0414 (2013.01); H01Q 9/0435 (2013.01); H01Q 9/0457 (2013.01); H01Q 21/245 (2013.01)

Citation (search report)

- [XY] US 5471664 A 19951128 - KIM HYO C [KR]
- [XY] US 5165109 A 19921117 - HAN CHING C [US], et al
- [XY] EP 0271458 A2 19880615 - COMMUNICATIONS SATELLITE CORP [US]
- [Y] EP 0627783 A1 19941207 - ALCATEL NV [NL], et al
- [Y] EP 0707357 A1 19960417 - WANG PIERRE [FR]
- [A] POZAR ET VODA: "A Rigorous Analysis of a Microstripline Fed Patch Antenna", IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION., vol. ap-35, no. 12, December 1987 (1987-12-01), NEW YORK US, pages 1343 - 1350, XP002080469
- [A] BACON P ET AL: "A DUAL-CHANNEL KU-BAND DBS DOWNCONVERTER", PROCEEDINGS OF THE GALLIUM ARSENIDE INTEGRATED CIRCUITS SYMPOSIUM (GAAS IC), SAN JOSE, OCT. 10 - 13, 1993, no. SYMP. 15, 10 October 1993 (1993-10-10), INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, pages 233 - 236, XP000462979

Cited by
FR2828015A1; ITRM20100511A1; NO20170411A1; JPWO2018198349A1; NO345389B1; US10283866B2; US11018428B2; WO2016029631A1

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