

Title (en)

Antenna tuning method based on an variable shorting means and planar antenna with variable shorting means

Title (de)

Abstimmungsverfahren für eine Antenne mit einem variablen Kurzschlussmittel und Flachantenne mit einem variablen Kurzschlussmittel

Title (fr)

Méthode d'accord d'une antenne utilisant un court circuit variable, et antenne plane utilisant un court circuit variable

Publication

**EP 1933418 A1 20080618 (EN)**

Application

**EP 06077256 A 20061215**

Priority

EP 06077256 A 20061215

Abstract (en)

Method of tuning an IC compatible planar antenna (1), said antenna comprising a lower ground plane, an upper active layer and feeding means (20), the method comprising: - providing shorting means (30) from the active plane to the ground plane at one of the end walls of said antenna characterised in that the method further comprises: - providing means for varying the length of the shorting means from a first length L1 to a second length L2; and - when the shorting means are at its first length L1 the antenna matching frequency seen at the feeding means has a first value f1 and when the shorting means are at its second length L2 the antenna matching frequency seen at the feeding means has a second value f2. The invention also relates to an IC compatible planar antenna with length-variable shorting means.

IPC 8 full level

**H01Q 9/04** (2006.01)

CPC (source: EP)

**H01Q 9/0421** (2013.01)

Citation (search report)

- [X] EP 1689023 A1 20060809 - SONY ERICSSON MOBILE COMM JP [JP]
- [X] US 6946999 B1 20050920 - RYKEN MARVIN L [US], et al
- [A] US 4379296 A 19830405 - FARRAR FREDERICK G, et al
- [X] SATPATHY S K ET AL: "Compact microstrip antennas for personal mobile communication", TENCON '98. 1998 IEEE REGION 10 INTERNATIONAL CONFERENCE ON GLOBAL CONNECTIVITY IN ENERGY, COMPUTER, COMMUNICATION AND CONTROL NEW DELHI, INDIA 17-19 DEC. 1998, PISCATAWAY, NJ, USA,IEEE, US, vol. 2, 17 December 1998 (1998-12-17), pages 245 - 248, XP010355571, ISBN: 0-7803-4886-9
- [X] LEE K F ET AL: "Theory and experiment on microstrip patch antennas with shorting walls", IEE PROCEEDINGS H. MICROWAVES, ANTENNAS & PROPAGATION, INSTITUTION OF ELECTRICAL ENGINEERS. STEVENAGE, GB, vol. 147, no. 6, 8 December 2000 (2000-12-08), pages 521 - 525, XP006014310, ISSN: 0950-107X

Cited by

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