

Title (en)

Antenna device having enhanced reception sensitivity in wide bands

Title (de)

Antenne mit verbesserter Empfangsempfindlichkeit im Breitband

Title (fr)

Antenne ayant une sensibilité de réception améliorée dans les bandes larges

Publication

EP 1826873 A1 20070829 (EN)

Application

EP 06003971 A 20060227

Priority

EP 06003971 A 20060227

Abstract (en)

An antenna device includes a rectangular parallelepiped base member made of a dielectric or magnetic material, a band-shaped first radiation conductor, including a plurality of divided first radiation conductor portions, spirally wound around the base member, a plurality of variable capacitance elements connected between pairs of adjacent portions and disposed on a upper surface of the base member, and a feeding conductor for supplying a tuning voltage to the variable capacitance elements. The first radiation conductor has first radiation conductor parts respectively formed on upper, lower, and rear side surfaces of the base member and first connecting through-holes passing through the upper and lower surfaces are provided in the base member, and the first radiation conductor part on the upper surface and the first radiation conductor part on the lower surface are connected to each another by the first through-holes, and the feeding conductor is disposed on the front surface of the base member.

IPC 8 full level

H01Q 23/00 (2006.01); **H01Q 1/36** (2006.01); **H01Q 1/38** (2006.01)

CPC (source: EP)

H01Q 1/2283 (2013.01); **H01Q 1/362** (2013.01); **H01Q 3/247** (2013.01)

Citation (applicant)

- JP S5183755 A 19760722 - MOTOROLA INC
- US 3946397 A 19760323 - IRWIN JAMES S
- EP 1580841 A1 20050928 - SONY CORP [JP]
- EP 0863571 A2 19980909 - MURATA MANUFACTURING CO [JP]
- EP 1557902 A1 20050727 - ALPS ELECTRIC CO LTD [JP]

Citation (search report)

- [XY] EP 1557902 A1 20050727 - ALPS ELECTRIC CO LTD [JP]
- [YA] EP 1580841 A1 20050928 - SONY CORP [JP]
- [A] EP 0863571 A2 19980909 - MURATA MANUFACTURING CO [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 08 6 August 2003 (2003-08-06)

Designated contracting state (EPC)

DE ES FR GB IT

Designated extension state (EPC)

AL BA HR MK YU

DOCDB simple family (publication)

EP 1826873 A1 20070829

DOCDB simple family (application)

EP 06003971 A 20060227