

Title (en)

Wireless communication apparatus including antenna

Title (de)

Gerät zur drahtlosen Kommunikation mit Antenne

Title (fr)

Appareil de communication sans fils avec antenne

Publication

**EP 1432068 A2 20040623 (EN)**

Application

**EP 03029217 A 20031218**

Priority

- JP 2002367548 A 20021219
- JP 2003196034 A 20030711

Abstract (en)

A wireless communication apparatus which has a casing (1) having thickness and a first surface perpendicular to a direction of the thickness, the wireless communication apparatus characterized in that comprises a dipole antenna (3) including a first base portion, and an opposed element (4) formed of a conductor material and including a second base portion, the dipole antenna (3) and the opposed element (4) being disposed within the casing (1) such that the dipole antenna (3) and the opposed element (4) extend in an imaginary plane that is substantially parallel to the first surface, and the first base portion and the second base portion are opposed to each other.

IPC 1-7

**H01Q 1/24**; **H01Q 19/24**

IPC 8 full level

**H01Q 1/24** (2006.01); **H01Q 19/24** (2006.01)

CPC (source: EP)

**H01Q 1/243** (2013.01); **H01Q 1/245** (2013.01); **H01Q 9/16** (2013.01); **H01Q 19/24** (2013.01); **H01Q 19/30** (2013.01)

Cited by

EP1887649A4; EP1942553A1; EP1901395A4; US2011312393A1; US8483415B2; US2013273963A1; US8605922B2; US7616161B2; WO2007000461A1; WO2007118824A3

Designated contracting state (EPC)

DE FR GB

Designated extension state (EPC)

AL LT LV MK

DOCDB simple family (publication)

**EP 1432068 A2 20040623**; **EP 1432068 A3 20140326**

DOCDB simple family (application)

**EP 03029217 A 20031218**