

Title (en)
Antenna device

Title (de)
Antenne

Title (fr)
Antenne

Publication
EP 0707355 A1 19960417 (EN)

Application
EP 95115886 A 19951009

Priority
JP 24558794 A 19941011

Abstract (en)

An antenna device (51a; 51b; 51c; 51d) designed to increase the volume that it occupies in a mobile communication apparatus as well as to achieve a large gain and a wide frequency band width without occupying a large area on a main circuit board (53a; 53b) and without changing the overall size of the mobile communication apparatus. The antenna device (51a; 51b; 51c; 51d) is also designed so that its impedance can be set or finely adjusted in a simple manner. The antenna device has a current supply element (52) and a radiating element (56a; 56b), and is mounted on a main circuit board (53a; 53b), with the current supply element (52) placed on a major surface of the main circuit board (53a; 53b), and with the radiating element (56a; 56b) accommodated in a gap formed between the main circuit board (53a; 53b) and an outer case (55). One major surface of the radiating element (56a; 56b) is opposed to the current supply element (52) and is maintained in contact with the same. <IMAGE>

IPC 1-7
H01Q 9/04; H01Q 1/24

IPC 8 full level
H05K 9/00 (2006.01); **H01Q 1/24** (2006.01); **H01Q 9/04** (2006.01); **H01Q 13/08** (2006.01)

CPC (source: EP)
H01Q 1/243 (2013.01); **H01Q 9/0421** (2013.01)

Citation (search report)

- [Y] EP 0526643 A1 19930210 - MITSUBISHI ELECTRIC CORP [JP], et al
- [Y] EP 0246026 A2 19871119 - UNIDEN KK [JP]
- [A] EP 0400872 A1 19901205 - HARADA IND CO LTD [JP]
- [A] US 4724443 A 19880209 - NYSN PAUL A [US]
- [PA] EP 0621653 A2 19941026 - MURATA MANUFACTURING CO [JP]

Cited by
CN111031667A; US5999146A; EP0828310A3; GB2367189A; GB2367189B; US6392603B1; US7483728B2; US6963308B2; WO9854784A1

Designated contracting state (EPC)
DE FR GB

DOCDB simple family (publication)
EP 0707355 A1 19960417; EP 0707355 B1 20020703; DE 69527244 D1 20020808; DE 69527244 T2 20021031; JP H08111609 A 19960430

DOCDB simple family (application)
EP 95115886 A 19951009; DE 69527244 T 19951009; JP 24558794 A 19941011