

Title (en)

An antenna device, an antenna system and a portable radio communication device comprising such an antenna device

Title (de)

Antennenvorrichtung, Antennensystem und tragbare Funkkommunikationsvorrichtung mit solch einer Antennenvorrichtung

Title (fr)

Dispositif d'antenne, système d'antenne et dispositif de communication radio portable comportant un tel dispositif d'antenne

Publication

EP 2182577 A1 20100505 (EN)

Application

EP 08167944 A 20081030

Priority

EP 08167944 A 20081030

Abstract (en)

The present invention relates to an antenna device for a portable radio communication device configured for simultaneous multi frequency band operation. The antenna device comprises a first elongated radiating element (1,41), a second elongated radiating element (4,44), and first filtering means (8,47) arranged between the first and second elongated radiating elements, wherein the antenna device is configured for connection to a first receiver (10,49), a second receiver (11,50) and a third receiver (12,48) at a first end thereof and is configured for connection to grounding at a second end thereof, opposite the first end of the antenna device, the first filtering means (8,47) is configured to block operating frequencies of the first and second receivers and to pass operating frequencies of the third receiver, and the antenna device is configured to effectively work as an IFA type antenna for the first and second receiver and to effectively work as a loop type antenna for the third receiver.

IPC 8 full level

H01Q 1/24 (2006.01); **H01Q 5/00** (2006.01); **H01Q 5/321** (2015.01); **H01Q 5/35** (2015.01); **H01Q 7/00** (2006.01); **H01Q 9/04** (2006.01);
H01Q 9/42 (2006.01)

CPC (source: EP)

H01Q 1/243 (2013.01); **H01Q 5/321** (2015.01); **H01Q 5/35** (2015.01); **H01Q 7/00** (2013.01); **H01Q 9/0421** (2013.01); **H01Q 9/42** (2013.01)

Citation (applicant)

- US 6204819 B1 20010320 - HAYES GERARD JAMES [US], et al
- US 2006097918 A1 20060511 - OSHIYAMA TADASHI [JP], et al
- JP H11251825 A 19990917 - KENWOOD CORP
- US 2004041734 A1 20040304 - SHIOTSU SHINICHI [JP], et al

Citation (search report)

- [Y] US 6204819 B1 20010320 - HAYES GERARD JAMES [US], et al
- [Y] US 2006097918 A1 20060511 - OSHIYAMA TADASHI [JP], et al
- [Y] JP H11251825 A 19990917 - KENWOOD CORP
- [Y] US 2004041734 A1 20040304 - SHIOTSU SHINICHI [JP], et al
- [A] US 2007069956 A1 20070329 - OZKAR METE [US]

Cited by

CN105322295A; CN102893452A; EP2846402A4; CN104638349A; CN106299597A; CN106340706A; US9293828B2; US10476284B2;
US8942761B2; US10355339B2; US9660343B2; WO2012025787A1; WO2017000655A1; WO2012037977A1; WO2011158057A1; US9705206B2;
US9781496B2; WO2014098024A1; WO2014149172A1; JP2014239539A; EP2940787B1

Designated contracting state (EPC)

DE FI FR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

EP 2182577 A1 20100505; WO 2010050876 A1 20100506

DOCDB simple family (application)

EP 08167944 A 20081030; SE 2009051106 W 20091006