

Title (en)

Antenna sub-assembly for electronic device

Title (de)

Antennenbaugruppe für elektronisches Gerät

Title (fr)

Sous-ensemble d'antenne pour un dispositif électronique

Publication

**EP 1923951 A1 20080521 (EN)**

Application

**EP 06425786 A 20061120**

Priority

EP 06425786 A 20061120

Abstract (en)

A portable electronic device (100) having an antenna sub-assembly (204) including a conductor with a first portion (216) along a first surface of a circuit board, a second portion (218) connected to the first portion along an edge of the circuit board, and a third portion (220) connected to the second portion. The third portion is along a second surface of the circuit board. A feed leg (222) couples to the conductor to radio circuitry.

IPC 8 full level

**H01Q 1/24** (2006.01); **H01Q 1/38** (2006.01)

CPC (source: EP)

**H01Q 1/243** (2013.01); **H01Q 1/38** (2013.01)

Citation (applicant)

- US 5940041 A 19990817 - KOYAMA SHUNSUKE [JP], et al
- GB 2366916 A 20020320 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- US 4625212 A 19861125 - ODA TAKASHI [JP], et al
- US 4955044 A 19900904 - AMSTUTZ DOUGLAS D [US], et al
- US 4862181 A 19890829 - PONCE DE LEON LORENZO A [US], et al

Citation (search report)

- [X] US 5940041 A 19990817 - KOYAMA SHUNSUKE [JP], et al
- [A] GB 2366916 A 20020320 - MATSUSHITA ELECTRIC IND CO LTD [JP]
- [X] US 4625212 A 19861125 - ODA TAKASHI [JP], et al
- [X] US 4955084 A 19900904 - UMETSU SHINJIRO [JP], et al
- [A] US 4862181 A 19890829 - PONCE DE LEON LORENZO A [US], et al
- [A] US 5300937 A 19940405 - CAPP JOHN K [US], et al

Citation (examination)

- US 2004090372 A1 20040513 - NALLO CARLO DI [US], et al
- JP H06244755 A 19940902 - FUJITSU LTD
- WO 8910012 A1 19891019 - MOTOROLA INC [US]

Cited by

CN102484315A; CN102804487A; US9136594B2; US9819069B2; WO2016130678A1; WO2011022698A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR MK RS

DOCDB simple family (publication)

**EP 1923951 A1 20080521**; CN 101553954 A 20091007; CN 101553954 B 20130925; WO 2008063788 A2 20080529; WO 2008063788 A3 20080717

DOCDB simple family (application)

**EP 06425786 A 20061120**; CN 200780042956 A 20071015; US 2007081357 W 20071015