

Title (en)

Flat-plate antenna for use in mobile communications.

Title (de)

Antenne mit einer flachen Platte für mobile Kommunikation.

Title (fr)

Antenne à plaque plane pour communication mobile.

Publication

EP 0376643 B1 19940216 (EN)

Application

EP 89313506 A 19891222

Priority

JP 33058988 A 19881227

Abstract (en)

[origin: EP0376643A2] A flat-plate antenna for mobile communications used in automobiles, etc. including a table form antenna element (10) made up of a conductive flat-plate section (10A) and a plurality of leg sections which connect to the flat-plate section to a ground plate (20), a strip line resonator (30) provided beneath the table form antenna with a space in between, and a capacitor electrode (40) provided on the strip line resonator directly under the center of the table form antenna element. A feeding line (60, 61) is connected to the strip line resonator.

IPC 1-7

H01Q 9/40; **H01Q 1/32**

IPC 8 full level

H01Q 13/08 (2006.01); **H01Q 1/32** (2006.01); **H01Q 9/40** (2006.01)

CPC (source: EP)

H01Q 1/3275 (2013.01); **H01Q 9/40** (2013.01)

Cited by

US5181044A; US5294938A; CN107134633A; DE10045634A1; DE10045634B4; US9917346B2; US6750826B2; US10074909B2; US10535926B2; US7903035B2; US9979078B2; US9906260B2; US9647338B2; US9680212B2; US7916086B2; US9973228B2; US9761951B2; US9673507B2; US10069209B2; WO0201674A1; WO9922418A1; US6750825B1; US7733274B2; EP0400872B1; US9634383B2; US9948002B2; US10079428B2; US7679565B2; US7973720B2; US9722308B2; US10211538B2; WO9507557A1; WO2009001351A1; EP3214697B1

Designated contracting state (EPC)

DE ES FR GB IT SE

DOCDB simple family (publication)

EP 0376643 A2 19900704; **EP 0376643 A3 19901128**; **EP 0376643 B1 19940216**; AU 598980 B1 19900705; DE 68913180 D1 19940324; DE 68913180 T2 19940526; ES 2051376 T3 19940616; JP H02174404 A 19900705; JP H0821812 B2 19960304

DOCDB simple family (application)

EP 89313506 A 19891222; AU 4728789 A 19891228; DE 68913180 T 19891222; ES 89313506 T 19891222; JP 33058988 A 19881227