

Title (en)  
Planar antenna device

Title (de)  
Planare Antennenanordnung

Title (fr)  
Dispositif d'antenne plane

Publication  
**EP 1727237 A1 20061129 (EN)**

Application  
**EP 06112014 A 20060330**

Priority  
JP 2005149807 A 20050523

Abstract (en)

A planar antenna device includes a radiation conductor layer and a plurality of capacitor electrodes which are provided on an inner surface of a window glass of a vehicle, a ground conductor layer which is provided on one surface of a circuit board so as to face the radiation conductor layer with an air layer interposed therebetween, a bracket, formed of a metal plate, which has a brim closely facing the capacitor electrodes and is mounted on the widow glass with the circuit board housed and held therein, and a dielectric layer which is interposed between the capacitor electrodes and the brim. The capacitor electrodes extend outward from the edges of the radiation conductor layer and are capacitively coupled with the brim, thereby reducing the size of the planar antenna device.

IPC 8 full level  
**H01Q 9/04** (2006.01); **H01Q 1/52** (2006.01)

CPC (source: EP)  
**H01Q 1/526** (2013.01); **H01Q 9/0428** (2013.01); **H01Q 9/0442** (2013.01)

Citation (applicant)  
JP 2004088444 A 20040318 - ALPS ELECTRIC CO LTD

Citation (search report)  
• [A] WO 02063334 A2 20020815 - BOSCH GMBH ROBERT [DE], et al  
• [A] EP 1530254 A1 20050511 - ALPS ELECTRIC CO LTD [JP]

Cited by  
CN108711667A

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 YU

DOCDB simple family (publication)  
**EP 1727237 A1 20061129; EP 1727237 B1 20070725**; DE 602006000047 D1 20070906; DE 602006000047 T2 20080410;  
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