Title (en)

Door handle device

Title (de)

Türgriffvorrichtung

Title (fr)

Dispositif de poignée de porte

Publication

EP 1840845 A3 20100106 (EN)

Application

EP 06125411 A 20061205

Priority

- JP 2006097568 A 20060331
- JP 2006097571 A 20060331

Abstract (en)

[origin: EP1840845A2] Provided is a door handle device incorporated with an antenna that can prevent the magnetic flux produced from the electro-conductive members from impairing the performance of the antenna. The door handle device comprises an antenna coil 11 for external communication formed by winding copper wire and a circuit board 10 including a ground pattern 32 and detection electrode patterns 33 and 34 that are received in a door handle 5, and the ground pattern 32 and detection electrode patterns 33 and 34 are each provided with a plurality of slits 32S, 33S and 34S extending in parallel with an axial line A around which the antenna coil 11 is wound. The provision of the slits prevents generation of eddy current in each electro-conductive pattern which otherwise would interfere with the performance of the antenna.

IPC 8 full level

G07C 9/00 (2006.01); **H01Q 1/32** (2006.01)

CPC (source: EP)

E05B 81/78 (2013.01); **G07C 9/00309** (2013.01); **G07C 9/00944** (2013.01); **H01Q 1/3241** (2013.01); **H01Q 1/3291** (2013.01); **H01Q 7/08** (2013.01); E05B 81/77 (2013.01); G07C 2209/65 (2013.01)

Citation (search report)

- [A] EP 1400931 A2 20040324 - ALPHA CORP [JP]
- [A] EP 1617509 A1 20060118 - AISIN SEIKI [JP]
- [AP] EP 1689029 A1 20060809 - HITACHI METALS LTD [JP]

Cited by

EP2711488A3; FR3082361A1; US2014367975A1; US9353557B2; US10253530B2; US11414901B2; US11773629B2; US2011254291A1; US2021238897A1; US12000181B2; WO2011061281A3; WO2012048770A1; WO2010069579A1

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 1840845 A2 20071003; **EP 1840845 A3 20100106**; **EP 1840845 B1 20120215**

DOCDB simple family (application)

EP 06125411 A 20061205