Title (en)

Keyless entry system for a motor vehicle with a magnetic field sensor

Title (de)

Schlüsselloses Zugangssystem für ein Kraftfahrzeug mit einem Magnetfeldsensor

Title (fr)

Système pour un accès sans clef pour un véhicule automobile avec un détecteur à champ magnétique

Publication

EP 0867971 B1 20040602 (DE)

Application

EP 98105303 A 19980324

Priority

DE 19712911 A 19970327

Abstract (en)

[origin: EP0867971A2] The magnetic field sensor includes at least a first and a second conductor loop, whereby the first conductor loop is formed oblong and the second conductor loop is arranged concentrically to the first, and is set up symmetrically to the center. The second conductor loop comprises preferably a constant distance to the center. The first conductor loop comprises preferably a central section, in which the conductor loop proceeds crosswise. The first conductor loop is preferably composed of two spatially adjacent sections which are connected with an evaluation unit which determines the phase difference between the induced voltages.

IPC 1-7

H01Q 7/00; H01Q 1/32; E05B 49/00; G01R 33/02

IPC 8 full level

E05B 49/00 (2006.01); **G01B 7/00** (2006.01); **G01R 33/02** (2006.01); **G07C 9/00** (2006.01); **H01Q 1/32** (2006.01); **H01Q 7/00** (2006.01)

CPC (source: EP US)

G07C 9/00182 (2013.01 - EP US); **H01Q 1/3233** (2013.01 - EP US); **H01Q 7/00** (2013.01 - EP US); G07C 2009/0019 (2013.01 - EP US); G07C 2009/00777 (2013.01 - EP US)

Citation (examination)

"DUAL-LOOP ANTENNA FOR VEHICLE ELECTRONIC KEY SYSTEM.", RESEARCH DISCLOSURE., MASON PUBLICATIONS, HAMPSHIRE., GB, no. 329., 1 September 1991 (1991-09-01), GB, pages 679., XP000226241, ISSN: 0374-4353

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FR2786030A1; DE10192529B4; US10703334B2; US10614643B2; US10640085B2; WO2017162317A1; WO2017102104A1; WO2017102106A1; WO2017102105A1; US6721611B2; US10543810B2; US10611340B2; US10538219B2; US10836351B2; WO2017162318A1; WO2017162315A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 0867971 A2 19980930; **EP 0867971 A3 19981007**; **EP 0867971 B1 20040602**; DE 19712911 A1 19981008; DE 19712911 C2 20010913; DE 59811489 D1 20040708; JP H1123682 A 19990129; US 5940003 A 19990817

DOCDB simple family (application)

EP 98105303 A 19980324; DE 19712911 A 19970327; DE 59811489 T 19980324; JP 10009398 A 19980327; US 4848398 A 19980326