

Title (en)  
Control vehicle for a road toll system

Title (de)  
Kontrollfahrzeug für ein Strassenmautsystem

Title (fr)  
Véhicule de contrôle pour un système de péage de routes

Publication  
**EP 2602768 A1 20130612 (DE)**

Application  
**EP 11450149 A 20111206**

Priority  
EP 11450149 A 20111206

Abstract (en)  
The vehicle (9) has a dedicated short range communication (DRSC) transceiver that is provided with two antenna systems (13,14). The antenna systems are distributed with a mutual distance over a longitudinal direction (15) of the control vehicle. The antenna systems are provided with omnidirectional characteristics or partially overlapping directional characteristics (16,17) to set up an uninterrupted radio communication for polling a passing on-board unit (7). The DRSC transceiver is configured to operate antenna systems by a sequentially controlled antenna switch.

Abstract (de)  
Kontrollfahrzeug (9) für ein Straßenmautsystem (1) auf Basis fahrzeuggestützter Onboard-Units (7), die über DSRC-Funkkommunikationen (8) funkabfragbar sind, wobei das Kontrollfahrzeug (9) zumindest einen DSRC-Sendeempfänger (12, 21, 22) mit zumindest zwei Antennenanlagen (13, 14, 19), die mit gegenseitigem Abstand (a) über die Längsrichtung des Kontrollfahrzeugs (9) verteilt sind, zur Funkabfrage ein und derselben passierenden Onboard-Unit (7) aufweist.

IPC 8 full level  
**G07B 15/06** (2011.01); **G08G 1/00** (2006.01); **H01Q 3/00** (2006.01); **H04B 7/00** (2006.01)

CPC (source: EP RU US)  
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**G07B 15/06** (2013.01 - RU); **G08G 1/017** (2013.01 - RU); **H01Q 1/32** (2013.01 - RU); **H01Q 3/24** (2013.01 - RU)

Citation (search report)  
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• [Y] DE 102008016311 A1 20081106 - CONTINENTAL TEVES AG & CO OHG [DE]  
• [A] WO 2004057541 A1 20040708 - EFKON AG [AT], et al  
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Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2602768 A1 20130612**; **EP 2602768 B1 20150415**; AU 2012244269 A1 20130620; AU 2012244269 B2 20140814; CA 2794361 A1 20130606;  
CA 2794361 C 20190423; CL 2012003411 A1 20131004; CN 103150767 A 20130612; DK 2602768 T3 20150720; ES 2540878 T3 20150714;  
HU E025247 T2 20160229; NZ 603341 A 20130328; PL 2602768 T3 20151030; PT 2602768 E 20150803; RU 2012152507 A 20140610;  
RU 2619530 C2 20170516; SI 2602768 T1 20150831; US 2013141281 A1 20130606; US 9070973 B2 20150630; ZA 201209189 B 20130828

DOCDB simple family (application)  
**EP 11450149 A 20111206**; AU 2012244269 A 20121030; CA 2794361 A 20121031; CL 2012003411 A 20121204;  
CN 201210519426 A 20121206; DK 11450149 T 20111206; ES 11450149 T 20111206; HU E11450149 A 20111206; NZ 60334112 A 20121031;  
PL 11450149 T 20111206; PT 11450149 T 20111206; RU 2012152507 A 20121205; SI 201130533 T 20111206; US 201213688804 A 20121129;  
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