

Title (en)

Apparatus and method for data communication between a vehicle and a remote terminal

Title (de)

Vorrichtung und Verfahren zur Datenkommunikation zwischen einem Fahrzeug und einer davon entfernt befindlichen Datenstation

Title (fr)

Appareil et méthode de transmission des données à distance entre un véhicule et un appareil terminal

Publication

**EP 1419935 A1 20040519 (EN)**

Application

**EP 03018185 A 19991117**

Priority

EP 99973794 A 19991117

Abstract (en)

This invention provides an apparatus for data communications associated with a vehicle (10,20), the apparatus including a plurality of electrical conductors (38) associated with the vehicle and being characterised by having: vehicle data communications protocol converting means (37,39) connected to said plurality of electrical conductors (38) for converting a first local data communications protocol associated with data communications along the plurality of electrical conductors (38) of the vehicle to a second local data communications protocol; and a transceiver (35) connected to said vehicle data communications protocol converting means (37,39) for transmitting the second local data communications protocol from the vehicle and receiving the second local data communications protocol from a remote data communications terminal (63) either connected to or not associated with the vehicle. <??>Also provided is a method of data communications. <IMAGE>

IPC 1-7

**B60R 16/02**; H04L 12/28; H04L 12/56; G07C 5/00

IPC 8 full level

**G07C 5/00** (2006.01); **G07C 5/08** (2006.01)

CPC (source: EP)

**G07C 5/008** (2013.01); **G07C 5/085** (2013.01)

Citation (search report)

- [XY] US 5732074 A 19980324 - SPAUR CHARLES W [US], et al
- [XAY] WO 9728988 A1 19970814 - CARMODY CHARLES SCOTT [US]
- [XAY] US 5081667 A 19920114 - DRORI ZE EV [US], et al
- [YA] WO 9935009 A1 19990715 - MICROSOFT CORP [US]
- [YA] US 5790536 A 19980804 - MAHANY RONALD L [US], et al
- [YA] US 5794164 A 19980811 - BECKERT RICHARD D [US], et al
- [YA] EP 0802082 A2 19971022 - BOSCH GMBH ROBERT [DE]
- [YA] US 4996719 A 19910226 - OKAZAKI KUNIO [JP], et al
- [YA] WO 9834812 A2 19980813 - CALCAR ADVERTISING INC [US], et al
- [YA] WO 9906987 A2 19990211 - CALCAR ADVERTISING INC [US]
- [Y] WO 9717232 A1 19970515 - VEHICLE ENHANCEMENT SYS INC [US], et al
- [Y] US 5802545 A 19980901 - COVERDILL CARY N [US]
- [Y] US 5783993 A 19980721 - BRISKI TONY [US], et al

Cited by

US9633486B2; US10127556B2; US10157384B2; US10885528B2; US10891623B2; US11074589B2; US11216819B1; US11386431B1; US11587091B1; US11836734B1

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

**EP 1419935 A1 20040519**

DOCDB simple family (application)

**EP 03018185 A 19991117**