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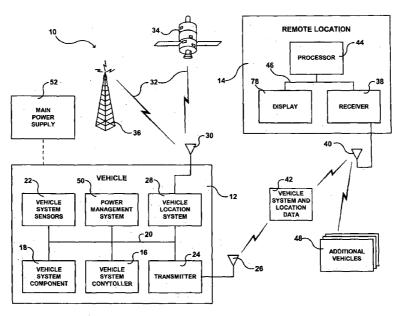
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(54) Title: VEHICLE TELEMATICS SYSTEM



(57) Abstract: Disclosed is a system providing tracking and wireless communications for remote diagnostics of a vehicle which transmits data communicated over a vehicle system's CAN bus to a remote location, which is adapted to use data received from a vehicle in order to compare the performance of the vehicle and/or of the operator of the vehicle with the performance of other vehicles and/or operators of other vehicles, which incorporates advanced power management functionality for conserving power, particularly when the system is disconnected from a main power supply, and which facilitates the identification of vehicles that have not reported back to the system or that have not moved within a specified time period.

## INTERNATIONAL SEARCH REPORT

Intern.....I Application No PCT/IB2005/002139

# A. CLASSIFICATION OF SUBJECT MATTER G07C5/00

According to International Patent Classification (IPC) or to both national classification and IPC

#### B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) G07C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT						
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.				
Х	EP 1 087 343 A (RENAULT) 28 March 2001 (2001-03-28) paragraph '0020! - paragraph '0043! figures	1-12,23				
X	EP 1 118 965 A (GENERAL TRAILERS FRANCE) 25 July 2001 (2001-07-25) paragraph '0043! - paragraph '0057! figures	1-6,11, 23				
X	US 6 339 736 B1 (MOSKOWITZ PAUL ANDREW ET AL) 15 January 2002 (2002-01-15) column 3, line 3 - column 5, line 19 figures	1-6				
	-/					

X Further documents are listed in the continuation of box C.	χ Patent family members are listed in annex.
<ul> <li>Special categories of cited documents:</li> <li>"A" document defining the general state of the art which is not considered to be of particular relevance</li> <li>"E" earlier document but published on or after the international filing date</li> <li>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</li> <li>"O" document referring to an oral disclosure, use, exhibition or other means</li> <li>"P" document published prior to the international filing date but later than the priority date claimed</li> </ul>	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  "&" document member of the same patent family
Date of the actual completion of the international search  8 December 2005	Date of mailing of the international search report $15/12/2005$
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL – 2280 HV Rijswijk  Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  Fax: (+31-70) 340-3016	Authorized officer  Miltgen, E

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		PC1/1B2005/002139						
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT  Category Citation of document, with indication, where appropriate, of the relevant passages  Relevant to claim No.								
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Helevani to claim No.						
X	US 2003/095038 A1 (DIX PETER J) 22 May 2003 (2003-05-22) paragraph '0045! - paragraph '0055! paragraph '0102! - paragraph '0108! figure 3	7–10						
X	US 5 999 091 A (WORTHAM ET AL) 7 December 1999 (1999-12-07) column 1, line 59 - column 3, line 3 column 3, line 43 - column 6, line 27 figures 1-4	11–18						
X	US 5 694 322 A (WESTERLAGE ET AL) 2 December 1997 (1997-12-02) column 6, line 1 - last line column 14, line 42 - line 55 column 18, line 32 - column 19, line 6 figures 1,2,9,10	19–22						
A	EP 1 197 396 A (ROBERT BOSCH GMBH) 17 April 2002 (2002-04-17) abstract; claims; figures	1,23						

## INTERNATIONAL SEARCH REPORT

Information on patent family members

Inter: Application No PCT/IB2005/002139

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 1087343	Α	28-03-2001	FR	2799034 A1	30-03-2001
EP 1118965	Α	25-07-2001	FR	2803677 A1	13-07-2001
US 6339736	B1	15-01-2002	NONE		
US 2003095038	A1	22-05-2003	NONE		
US 5999091	Α	07-12-1999	US	5905433 A	18-05-1999
US 5694322	A	02-12-1997	AU EP WO US	5488196 A 0824731 A1 9636018 A1 5970481 A	29-11-1996 25-02-1998 14-11-1996 19-10-1999
EP 1197396	Α	17-04-2002	NONE		