(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 May 2013 (23.05.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/074901 A3

(51) International Patent Classification:
G08G 1/123 (2006.01)

(21) International Application Number:
PCT/US2012/065477

(22) International Filing Date:
16 November 2012 (16.11.2012)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

61/560,509	16 November 2011 (16.11.2011)	US
61/637,164	23 April 2012 (23.04.2012)	US
61/646,747	14 May 2012 (14.05.2012)	US
61/653,275	30 May 2012 (30.05.2012)	US
61/653,264	30 May 2012 (30.05.2012)	US
61/653,563	31 May 2012 (31.05.2012)	US
61/663,335	22 June 2012 (22.06.2012)	US
61/672,483	17 July 2012 (17.07.2012)	US
61/714,016	15 October 2012 (15.10.2012)	US
61/715,699	18 October 2012 (18.10.2012)	US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))*

[Continued on next page]

(54) Title: CONTROL OF DEVICE FEATURES BASED ON VEHICLE INDICATIONS AND STATE

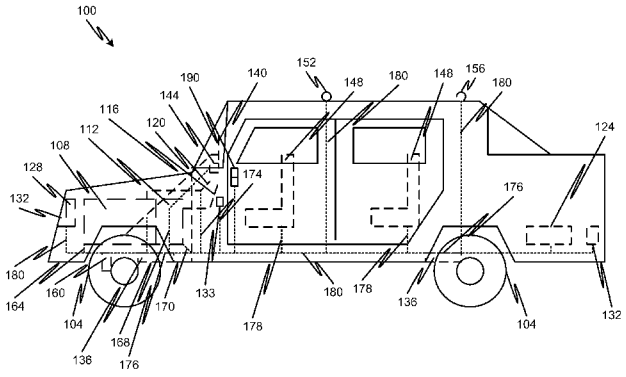

Fig. 1

(57) Abstract: Methods and systems for communicating vehicle conditions based on vehicle component diagnostics and indications are provided. Specifically, various components of a vehicle may provide diagnostic information that can be collected and interpreted by a diagnostics module. The diagnostics module may determine to present the diagnostic information to a third party and/or vehicle occupant according to predetermined settings. Such diagnostic information may be presented in a conversational manner. Moreover, diagnostic information may be automatically evaluated in determining to provide course of action advice and other communications via the diagnostic module. Methods and systems for a controlling device features based on vehicle state and device location are provided. Specifically, the device may be any type of electrical device capable of transmitting and/or receiving a signal (such as a phone, tablet, computer, music player, and/or other entertainment device). In some instances, the device may be associated with one or more vehicles.

WO 2013/074901 A3

(88) Date of publication of the international search report:
11 June 2015

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 12/65477

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G08G 1/123
USPC - 340/901
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)
IPC (8) - G08G 1/123
UPSC - 340/901

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC (8) - G07F 7/00; B60Q 1/00
USPC - 701/29.1, 29.2, 29.4, 31.4; 340/902, 903, 904, 425.5, 426.17, 438-441, 449-451, 453, 457, 459-461, 472

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PatBase, Google Patents/Scholar-terms: vehicle automobile car diagnostic performance condition state status information sense detect monitor code warning indication interpret explain determine conversational verbal voice sound text message display show meaning occupant operator driver transmit communicate send receiving party client node repair sho

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2005/0131595 A1 (Luskin et al.) 16 June 2005 (16.06.2005), para [0025]-[0100] and Figs. 1-9.	1-7, 11-14, 16-20 --- 8-10, 15
Y	US 6,668,219 B2 (Hwang et al.) 23 December 2003 (23.12.2003), col. 6, ln 34 to col. 7, ln 65; Figs. 1-4.	8-10, 15
A	US 6,289,332 B2 (Menig et al.) 11 September 2001 (11.09.2001), entire document.	1-20
A	US 6,278,919 B1 (Hwang et al.) 21 August 2001 (21.08.2001), entire document.	1-20
A	US 2006/0030981 A1 (Robb et al.) 09 February 2006 (09.02.2006), entire document.	1-20

☐ Further documents are listed in the continuation of Box C. ☐

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"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)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"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	Date of mailing of the international search report
09 April 2013 (09.04.2013)	26 APR 2013
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 12/65477

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:
Group I: Claims 1-20
Group II: Claims 21-40

---see extra sheet---

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.

3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-20

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/US 12/65477

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1. In order for all inventions to be examined, the appropriate additional examination fees must be paid.

Group I: Claims 1-20, drawn to a method, system, and computer medium of providing conversational vehicle diagnostic information to a receiving party, comprising: receiving a signal from one or more components of a vehicle (where at least one sensor operatively connected to the one or more components, per claim 18), interpreting the signal; determining a conversational meaning based on one or more rules to represent the meaning associated with the signal; and providing the conversational meaning to an occupant of the vehicle.

Group II: Claims 21-40, drawn to a method, system, and computer medium of controlling access to one or more features of a communication device associated with a vehicle, comprising: establishing a connection with the communication device, wherein the feature control module is configured to receive input from at least one sensor; determining a location of the communication device relative to the vehicle; and controlling user access to one or more features of the communication device.

The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group II does not require determining a conversational meaning based on one or more rules to represent the meaning associated with the signal; and providing the conversational meaning to an occupant of the vehicle., as required by group I.

Group I does not require determining, by the feature control module, a location of the communication device relative to the vehicle, as required by group II.

The only feature shared by Groups I and II, that would otherwise unify the groups, is receiving a signal from at least one sensor (common to claim 18 of group I and all claims of group II). However, this shared technical feature does not represent a contribution over prior art, because the shared technical feature is anticipated by US 7,239,946 B2 (Sawa), published 03 July 2007 (03.07.2007), where Sawa discloses receiving a signal from at least one of the one or more sensors (abstract, col. 7, ln. 38-59, col. 8, ln. 15-37). As the common technical feature was known in the art at the time of the invention, this cannot be considered a special technical feature that would otherwise unify the groups.

Groups I and II therefore lack unity under PCT Rule 13 because they do not share a same or corresponding special technical feature.