WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US14/34125

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Previous Supplemental Box-***-

Claim 2 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest: if the confirmation is not received, the vehicle control system determining if the gesture should be completed; and if the gesture should be completed, the vehicle control system controlling the function associated with the gesture. In the closest prior art found, US 2010/0125811 A1 to MOORE et al. (hereinafter 'Moore') discloses, if the user types the characters "goo," the device may recommend going to the Google search engine as an action completion. Thereafter, activating hybrid purpose key 5063, by a finger tap gesture on key 5063, will cause the device to open a browsing module 147 and display a Web page for the Google search engine; Figure 5G; paragraph [0187]. However, the prior art fails to disclose the limitations as discussed above, since it waits for user's tap before opening Google.

Claims 3-9 also meet the criteria set out in PCT Article 33(2)-(3), because they depend upon Claim 2.

Claim 12 meets the criteria set out in PCT Article 33(2)-(3), because the prior art does not teach or fairly suggest: the conveyance of claim 11, wherein the verification module further operable to, if the confirmation is not received, determine if the gesture should be completed. In the closest prior art found, Moore, discloses if the user types the characters "goo," the device may recommend going to the Google search engine as an action completion. Thereafter, activating hybrid purpose key 5063, by a finger tap gesture on key 5063, will cause the device to open a browsing module 147 and display a Web page for the Google search engine; paragraph [0187]. However, the prior art fails to disclose the limitations as discussed above, since it waits for user's tap before opening Google.

Claim 13 also meets the criteria set out in PCT Article 33(2)-(3), because it depends upon Claim 12.

Claims 1-15 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: Tadd F. Wilson
Sheridan Ross P.C.
1560 Broadway, Suite 1200
Denver, CO 80202
United States of America

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

Applicant's or agent's file reference 6583-574-PCT	Date of mailing *(day/month/year)* 15 SEP 2014 **FOR FURTHER ACTION** See paragraphs 1 and 4 below
International application No. PCT/US14/34254	International filing date *(day/month/year)* 15 April 2014 (15.04.2014)
Applicant FLEXTRONICS AP, LLC	

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

Filing of amendments and statement under Article 19:
The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

How? Directly to the International Bureau of WIPO preferably through ePCT or on paper to, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: +41 22 338 82 70

For more detailed instructions, see *PCT Applicant's Guide*, International Phase, paragraphs 9.004 – 9.011.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ **With regard to any protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with any request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

The applicant may **submit comments on an informal basis on the written opinion of the International Searching Authority** to the International Bureau. These comments will be made available to the public after international publication. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established.

Shortly after the expiration of **18 months from the priority date, the international application will be published** by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau before the completion of the technical preparations for international publication (Rules 90*bis*.1 and 90*bis*.3).

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for **entry into the national phase** before those designated Offices. In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months. For details about the applicable time limits, Office by Office, see www.wipo.int/pct/en/texts/time_limits.html and the *PCT Applicant's Guide*, National Chapters.

Within **19 months from the priority date, the applicant may request that a supplementary international search be carried out** by a different International Searching Authority that offers this service (Rule 45*bis*.1). The procedure for requesting supplementary international search is described in the *PCT Applicant's Guide*, International Phase, paragraphs 8.006-8.032.

Name and mailing address of the ISA/ Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer Shane Thomas PCT Helpdesk: 571-272-4300 Telephone No. PCT OSP: 571-272-7774

Form PCT/ISA/220 (July 2014)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6583-574-PCT	**FOR FURTHER ACTION**	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US14/34254	International filing date *(day/month/year)* 15 April 2014 (15.04.2014)	(Earliest) Priority Date *(day/month/year)* 15 April 2013 (15.04.2013)
Applicant FLEXTRONICS AP, LLC		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 3 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

☒ the international application in the language in which it was filed.

☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).

c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (see Box No. II).

3. ☐ **Unity of invention is lacking** (see Box No. III).

4. With regard to the **title**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established by this Authority to read as follows:

CENTRAL NETWORK FOR AUTOMATED CONTROL OF VEHICULAR TRAFFIC

5. With regard to the **abstract**,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 20A

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☒ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

Form PCT/ISA/210 (first sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US14/34254

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

Methods and systems for a traffic control system provide arrangements and processes for managing automated vehicles. The traffic control system can register vehicles and then control the operation of the vehicles through a section of roadway. The automated control includes the communication of directions and other messages that ensure the proper function of the vehicle while under the guidance of the traffic control system.

Form PCT/ISA/210 (continuation of first sheet (3)) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US14/34254

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G08G 1/0968; G01C 21/20; G05D 1/02 (2014.01)
CPC - G08G 1/0125, 1/164; G05D 1/0088
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) Classification(s): G06F 3/0484; G01C 21/26, 21/20; G08G 1/0968, 1/133, 1/09; G05D 1/02 (2014.01)
CPC Classification(s): G08G 1/0125, 1/164; G05D 1/0088

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 practicable, search terms used)
MicroPatent (US-G, US-A, EP-A, EP-B, WO, JP-bib, DE-C, B, DE-A, DE-T, DE-U, GB-A, FR-A); ProQuest; IEEE/IEEEXplore; Google/Google Scholar; KEYWORDS: automate, control, vehicular, traffic, server, message

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2008/0161986 A1 (BREED, D) 03 July 2008; Figures 5, 27; Paragraphs [0032], [0334], [0355], [0375], [0407], [0418], [0435], [0487], [0492], [0593].	1-15
A	US 2010/0125387 A1 (SEHYUN, P et al.) 20 May 2010; entire document.	1-15
A	US 2009/0125174 A1 (DELEAN, B) 14 May 2009; entire document.	1-15

☐ 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
12 August 2014 (12.08.2014)	15 SEP 2014
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: Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (July 2009)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: Tadd F. Wilson
Sheridan Ross P.C.
1560 Broadway, Suite 1200
Denver, CO 80202
United States of America

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	15 SEP 2014

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-574-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US14/34254	15 April 2014 (15.04.2014)	15 April 2013 (15.04.2013)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G08G 1/0968; G01C 21/20; G05D 1/02 (2014.01)
CPC - G08G 1/0125, 1/164; G05D 1/0088

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the international application
- ☒ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1 *bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to th IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Fom PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	12 August 2014 (12.08.2014)	Shane Thomas PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US14/34254

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:
   - ☒ the international application in the language in which it was filed.
   - ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:
   a. (means)
      - ☐ on paper
      - ☐ in electronic form
   b. (time)
      - ☐ in the international application as filed
      - ☐ together with the international application in electronic form
      - ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US14/34254

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	NONE	YES
	Claims	1-15	NO
Inventive step (IS)	Claims	NONE	YES
	Claims	1-15	NO
Industrial applicability (IA)	Claims	1-15	YES
	Claims	NONE	NO

2. Citations and explanations:

Claims 1-15 lack novelty under PCT Article 33(2) as being anticipated by US 2008/0161986 A1 (BREED).

As per claim 1, Breed discloses a method for controlling a vehicle (enabling autonomous vehicle travel; Abstract), comprising: a control server, including a processor and associated with a traffic control system (a network server of a central data facility 300 (control server) including a microprocessor that communicates with traffic control devices controlled collectively to convey instructions for vehicular control (a traffic control system); Figures 5, 27; Paragraphs [0281], [0375], [0407], [0492]), receiving a registration of a vehicle (identifying the vehicle by a code based on the vehicle ID (a registration); Paragraph [0355]); the control server receiving travel information from the vehicle (information received by the network server (the control server) from the vehicle includes a picture to be interpreted for map updating (travel information); Paragraph [0375]); the control server determining a control arrangement for the vehicle (the central server checks a potential route and repeats the process based on GPS coordinates, road network sensors, and feedback from the driver; Paragraphs [0418], [0593]); and the control server sending a control message to control the vehicle in the traffic control system (the central server generates instructions to send to the vehicle for autonomous operation of the vehicle (a control message to control the vehicle) traveling in dedicated lanes with the surrounding traffic control devices (the traffic control system); Paragraphs [0435], [0487]).

As per claim 2, Breed discloses the method of claim 1. Breed additionally discloses, wherein the vehicle automatically, without driver input, follows instructions in the control message (the generated instructions sent to the vehicle allow the vehicle to be operated autonomously (without driver input) by converting the received instructions into operational commands (vehicle automatically follows instructions in the control message); Paragraph [0435]).

As per claim 3, Breed discloses the method of claim 2. Breed additionally discloses, wherein the travel information includes a current location and a destination (information transmitted from the vehicle (travel information) includes data about its location and destination of the vehicle; Figure 20; Paragraphs [0201], [0202]).

As per claim 4, Breed discloses the method of claim 3. Breed additionally discloses, wherein the control arrangement includes a speed and a position within traffic to which the vehicle must adhere (the information required for control of the vehicle (control arrangement) includes the local speed limit and restricted points of interest based on position of the vehicle and traffic information (a speed and a position within traffic to which the vehicle must adhere); Paragraph [0360]).

As per claim 5, Breed discloses the method of claim 4. Breed additionally discloses, wherein the vehicle generates a route based on the control arrangement (the vehicle resident system determines an alternate route the vehicle should take based on road conditions and traffic information (generates a route based on the control arrangement); Paragraph [0418]).

As per claim 6, Breed discloses the method of claim 5. Breed additionally discloses, wherein the vehicle follows the route automatically without driver input (the autonomous operation of the vehicle (without drive input) is arranged as the vehicle is controlled based on data about its travel lanes; Paragraph [0279]).

As per claim 7, Breed discloses the method of claim 6. Breed additionally discloses, wherein the control server sends a second control message to change a behavior of the vehicle (the central server (control server) informs vehicles of an emergency (a second control message) signaling to and controlling vehicles approaching an emergency to reduce vehicle speed (change a behavior of the vehicle); Paragraphs [0356], [0358]).

As per claim 8, Breed discloses the method of claim 7. Breed additionally discloses, wherein the second control message instructs the vehicle to exit from a roadway (while informing vehicles of an emergency (the second control message), the system guides the vehicle to leave the roadway when its speed is below a certain level (instructs the vehicle to exit from a roadway); Paragraph [0077]).

As per claim 9, Breed discloses the method of claim 8. Breed additionally discloses, wherein the control message includes a lane designation (the instructions generated (control message) optimize usage of dedicated lanes; Paragraph [0435]).

-***-Continued Within the Next Supplemental Box-***-

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US14/34254

Box No. VII Certain defects in the international application

The following defects in the form or contents of the international application have been noted:

Claims 8 and 13 are objected to under PCT Rule 66.2(a)(iii) as containing the following defects in the form or contents thereof: Claims 8 and 13, in line 1 and in lines 2-3, respectively, recite "message is instructs the vehicle". As best understood, this is considered to be a typographical error and will be interpreted as "message instructs the vehicle".

Claim 10 is objected to under PCT Rule 66.2(a)(iii) as containing the following defects in the form or contents thereof: Claim 10, in lines 1-2, recites "a second the control message". As best understood, this is considered to be a typographical error and will be interpreted as "a second control message".

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US14/34254

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

Claims 4 and 14 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claims 4 and 14 are indefinite for the following reason(s): Claims 4 and 14 refer to "the control information" in line 1. There is a lack of antecedent basis for these limitations in these claims. As best understood, the limitation is interpreted to read "the control arrangement".

Claims 8 and 13 are objected to under PCT Rule 66.2(a)(v) as lacking clarity under PCT Article 6 because claims 8 and 13 are indefinite for the following reason(s): Claims 8 and 13 refer to "the second message" in line 1 and line 2, respectively. There is a lack of antecedent basis for theses limitations in these claims. As best understood, the limitation is interpreted to read "the second control message".

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US14/34254

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:

-***-Continued from Previous Supplemental Box-***-

As per claim 10, Breed discloses the method of claim 9. Breed additionally discloses, wherein a second vehicle receives a second control message (the emergency data transfers signals to another vehicle approaching the emergency to reduce vehicle speed (a second vehicle receives a second control message); Paragraph [0358]), wherein the second control message is different from the control message sent to the vehicle (which differs from the control message sent to the vehicle during normal autonomous operation which includes acceleration (different from the control message sent to the vehicle); Paragraph [0435]).

As per claim 11, Breed discloses a control server associated with a traffic control system (a central data and storage facility 300 (a control server) that communicates with traffic control devices controlled collectively to convey instructions for vehicular control (a traffic control system); Figure 27; Paragraphs [0281], [0375], [0407]) comprising: a processor operable to execute one or more modules (a processor or controller performs various operations (execute one or more modules); Figure 5; Paragraphs [0032], [0492]), the modules comprising: a registration module operable to: receive a registration of a vehicle (a receiver that rectifies bits (a registration module) from a 64 bit code transmitted by the vehicle that includes the vehicle identification number (a registration of a vehicle); Paragraph [0334]); a traffic control module operable to: receive travel information from the vehicle (a communications entity, or network server (traffic control module), receives from the vehicle a picture to be interpreted for map updating (travel information from the vehicle); Paragraph [0375]); determine a control arrangement for the vehicle (the server determines a route based on GPS coordinates and checking road network sensors (a control arrangement for the vehicle); Paragraphs [0418], [0593]); and send a control message to control the vehicle in the traffic control system (the central data facility server generates instructions to send to the vehicle for autonomous operation of the vehicle (a control message to control the vehicle) traveling in dedicated lanes with surrounding traffic control devices (the traffic control system); Paragraphs [0435], [0487]).

As per claim 12, Breed discloses the control server of claim 11. Breed additionally discloses, wherein the vehicle generates a route based on the control arrangement (the vehicle resident system determines an alternate route the vehicle should take based on road conditions and traffic information (generates a route based on the control arrangement); Paragraph [0418]), and wherein the vehicle follows the route automatically without driver input (the autonomous operation of the vehicle (without driver input) is arranged as the vehicle is controlled based on data about travel lanes (the vehicle follows the route automatically); Paragraph [0279]).

As per claim 13, Breed discloses the control server of claim 12. Breed additionally discloses, wherein the control server sends a second control message to change a behavior of the vehicle (the central server (control server) informs the vehicles of an emergency (a second control message) that signals to and controls vehicles approaching an emergency to reduce vehicle speed (change a behavior of the vehicle); Paragraphs [0356], [0358]), and wherein the second control message instructs the vehicle to exit from a roadway (a vehicle is guided to leave the roadway when its speed is below a certain level (the second control message instructs the vehicle to exit from a roadway); Paragraph [0077]).

As per claim 14, Breed discloses the control server of claim 13. Breed additionally discloses, wherein the control arrangement includes one or more of a lane, a speed, and a position within traffic to which the vehicle must adhere (the information required for control of the vehicle (control arrangement) includes the local speed limit (a speed within traffic to which the vehicle must adhere); Paragraph [0360]).

As per claim 15, Breed discloses the control server of claim 14. Breed additionally discloses, wherein the travel information includes a current location and a destination (information transmitted from the vehicle (travel information) includes data about its location and destination of the vehicle; Figure 20; Paragraphs [0201], [0202]).

Claims 1-15 have industrial applicability as defined by PCT Article 33(4) because the subject matter can be made or used in industry.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,729	04/15/2014	Christopher P. Ricci	6583-555	8377

111285 7590 11/19/2014

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
11/19/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,729	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

4. Claims 1 – 6, 11 – 13 and 16 – 18 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Link II, et al., (20130116882).

5. (Claims 1, 11 and 16): Link discloses a method for providing navigation information for a conveyance, comprising: a vehicle control system, including a processor, determining an origin location (figs. 1 and 9; [0024]); the vehicle control system determining two or more destination locations ([0057]); the vehicle control system determining a timeframe for the route (fig. 3; [0062]); and the vehicle control

system generating a best route to the two or more destinations in the timeframe (fig. 10; [0062]; [0096 – 0097]).

6. (Claims 2 – 4, 12 and 17): Link discloses a method for providing navigation information for a conveyance, wherein the timeframe is an amount of time available to a user to travel the route, wherein the best route includes a return to the origin location, and wherein the user provide the amount of time available (fig. 3; [0062]; [0096 – 0097]).

7. (Claims 5 – 6, 13 and 18): Link discloses a method for providing navigation information for a conveyance, wherein the route suggestion module accesses preference data in a user profile to determine preferred routes, wherein the best route is a preferred route (fig. 3; [0052]; [0055 - 0056]).

Claim Rejections - 35 USC § 103

8. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

9. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 7 – 8, 14 and 19 are rejected under 35 U.S.C. 103 as being unpatentable over Link II, et al., (20130116882) as applied to claims 1, 11 and 16 above, and further in view of Seltzer et al., (20090210143).

11. (Claims 7 – 8, 14 and 19): Link discloses a method for providing navigation information for a conveyance, comprising: a vehicle control system, including a processor, determining an origin location (figs. 1 and 9; [0024]); the vehicle control system determining two or more destination locations ([0057]). Link does not explicitly teach a user profile that avoids specific locations. However, in a related invention, Seltzer teaches a route based activity planner, wherein the user profile includes a first location that should be avoided, and wherein the best route avoids the first location ([0003]; [0027]; [0063]). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to modify Link to store in a user's profile, specific known trouble areas to avoid, as a very desirable feature in modern navigation systems.

12. **Claims 9 – 10, 15 and 20 are rejected under 35 U.S.C. 103 as being unpatentable over Link II, et al., (20130116882) as applied to claims 1, 11 and 16 above, and further in view of Seltzer et al., (20090210143) and in further view of Sumizawa (20110077855).**

13. (Claims 9 – 10, 15 and 20): Link discloses a method for providing navigation information for a conveyance, comprising: a vehicle control system, including a processor, determining an origin location (figs. 1, 3 and 9; [0024]); the vehicle control system determining two or more destination locations ([0057]). Seltzer teaches a route

based activity planner, wherein the user profile includes a first location that should be avoided, and wherein the best route avoids the first location ([0003]; [0027]; [0063]). Link and Seltzer do not explicitly teach a first location being an area between the original location and a destination. However, in a related inventions Sumizawa teaches a navigation system, wherein the first location is an area between the origin location and at least one destination (abstract; figs. 3 - 4; [0066]). (Note: The feature of an address in a user profile is taught in Link's fig. 3). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to modify Link to use an area instead of a single location, as a very desirable feature in modern navigation systems.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/
Supervisory Patent Examiner, Art Unit 3663n

Notice of References Cited	Application/Control No. 14/253,729	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0026278 A1	02-2002	Feldman et al.	701/117
*	B	US-6,356,838 B1	03-2002	Paul, Sunil	701/410
*	C	US-2009/0210143 A1	08-2009	Seltzer et al.	701/200
*	D	US-2009/0222200 A1	09-2009	LINK et al.	701/202
*	E	US-2011/0077855 A1	03-2011	SUMIZAWA, Akio	701/201
*	F	US-8,233,919 B2	07-2012	Haag et al.	455/456.3
*	G	US-2013/0116882 A1	05-2013	Link et al.	701/31.4
*	H	US-8,634,984 B2	01-2014	Sumizawa, Akio	701/31.4
*	I	US-8,793,065 B2	07-2014	Seltzer et al.	701/400
*	J	US-8,798,918 B2	08-2014	Onishi et al.	701/420
*	K	US-2014/0278071 A1	09-2014	SAN FILIPPO et al.	701/465
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

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www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,405	04/15/2014	Christopher P. Ricci	6583-567	8768

111285 7590 11/18/2014

Sheridan Ross P.C.
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Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
11/18/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,405	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

4. Claims 1 – 20 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Protopapas et al., (20120254763).

5. (Claims 1 - 2, 9 - 10 and 17 - 18): Protopapas discloses a vehicle system comprising: a vehicle (abstract; [0006]); a vehicle control system coupled to said vehicle and a communications unit coupled to said vehicle control system [0027]), wherein said vehicle control system synchronizes a calendar with said vehicle control system and generates a notice for a first user based on an event in said calendar and a supplemental factor (figs. 3A – 3C, 9; [0044]).

6. (Claims 3, 11 and 19): Protopapas discloses a vehicle system, wherein said supplemental factor is based on an amount of traffic from a departure point to an arrival point (figs 3A – 3B; [0003]; [0094]).

7. (Claims 4, 12 and 20): Protopapas discloses a vehicle system, wherein said supplemental factor is based on an amount of time required for said first user to arrive at said vehicle from a departure site (fig. 3C; [0003]; [0005]).

8. (Claims 5 - 6 and 13 - 14): Protopapas discloses a vehicle system, wherein said notice is provided to a second user (figs. 4A – 4C and 9; [0003]; [0030]).

9. (Claims 7 and 15): Protopapas discloses a vehicle system, wherein at least one of said set of conditions is based on said second user being one or more of a colleague of said first user, another meeting attendee, a meeting moderator, and a meeting invitee (fig. 9.; [0050]).

10. (Claims 8 and 16): Protopapas discloses a vehicle system, wherein said communications unit is one or more of a sensor, transceiver, or transmitter (fig. 1; [0029]).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/
Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,405	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2006/0058948 A1	03-2006	Blass et al.	701/207
*	B	US-2008/0086455 A1	04-2008	Meisels et al.	707/3
*	C	US-2010/0136944 A1	06-2010	Taylor et al.	455/404.1
*	D	US-2010/0306309 A1	12-2010	Santori et al.	709/203
*	E	US-2011/0257973 A1	10-2011	Chutorash et al.	704/235
*	F	US-2012/0197523 A1	08-2012	Kirsch, David M.	701/426
*	G	US-2012/0254763 A1	10-2012	Protopapas et al.	715/738
*	H	US-8,442,758 B1	05-2013	Rovik et al.	701/424
*	I	US-2013/0218445 A1	08-2013	Basir, Otman A.	701/117
*	J	US-2013/0295913 A1	11-2013	Matthews et al.	455/420
*	K	US-8,825,362 B2	09-2014	Kirsch, David M.	701/430
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	WO 2012102879 A1	08-2012	World Intellect	KIRSCH D M	
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,838	04/15/2014	Christopher P. Ricci	6583-574	3352

111285 7590 11/20/2014

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
ISMAIL, MAHMOUD S

ART UNIT	PAPER NUMBER
3662	

NOTIFICATION DATE	DELIVERY MODE
11/20/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,838	Applicant(s) RICCI ET AL.	
	Examiner MAHMOUD ISMAIL	Art Unit 3662	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.
2. Claims 1-20 are pending in Instant Application.

Priority

3. Examiner acknowledges Applicant's claim to priority benefits of 61/811,981, 61/865,954, 61/870,698, 61/891,217, 61/904,205, 61/924,572, and 61/926,749 filed 04/15/2013, 08/14/2013, 08/27/2013, 10/15/2013, 11/14/2013, 01/07/2014, and 01/13/2014.

Claim Objections

4. Claim 10 is objected to because of the following informalities: The claim recites "a second the control message". Examiner believes this is a typographical error. Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 17-20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.
6. As per claims 17-20, the claims are being rejected in view of the **OG Notice on Subject Matter Eligibility of Computer Readable Media** posted on USPTO's

website on 1/28/2010. It is being reproduced partially below to maintain a clear record:

> "The broadest reasonable interpretation of a claim drawn to a **computer readable medium** (also called machine readable medium and other such variations) typically **covers forms of non-transitory tangible media and transitory propagating signals** *per se* in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. *See* MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. *[[]]*
> In an effort to assist the patent community in overcoming a rejection or potential rejection under 35 U.S.C. § 101 in this situation, the USPTO suggests the following approach. A claim drawn to such a computer readable medium that covers both transitory and non-transitory embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation "non-transitory" to the claim."

The claimed invention in claims 17-20 recite in line 1 "…computer readable medium…" and given that the specification is silent on not containing a transitory propagating signal as explained above in the OG Notice clearly medium by definition incorporates a transitory propagating signal and makes claims 17-20 non-statutory under USC 101.

Claim Rejections - 35 USC § 112

7. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.
>
> The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
>
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 4-15, and 17-20 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.
9. Claim 4 recites the limitation "the control information" in line 1. There is insufficient antecedent basis for this limitation in the claim.

10. Claim 8 recites the limitation "the second message" in line 1. There is insufficient antecedent basis for this limitation in the claim.

11. Claim 13 recites the limitation "the second message" in line 1. There is insufficient antecedent basis for this limitation in the claim.

12. Claim 14 recites the limitation "the control information" in line 1. There is insufficient antecedent basis for this limitation in the claim.

13. Claim 17 recites the limitation "the computer readable medium" in line 1. There is insufficient antecedent basis for this limitation in the claim.

14. Claim 18 recites the limitation "the computer readable medium" in line 1 and "the second message" in lines 2-3. There are insufficient antecedent basis for these limitations in the claim.

15. Claim 19 recites the limitation "the computer readable medium" in line 1 and "the control information" in lines 1-2. There are insufficient antecedent basis for these limitations in the claim.

16. Claim 20 recites the limitation "the computer readable medium" in line 1. There is insufficient antecedent basis for this limitation in the claim.

17. Regarding claim 11, claim element “a registration module operable to...” and “a traffic control module operable to…" are limitations that invoke 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph. However, the written description fails to disclose the corresponding structure, material, or acts for the claimed function. However the specification does not show how these units are implemented in terms of hardware and detailed algorithm. The specification does not clearly associate

circuits and corresponding detailed algorithm with corresponding hardware for claim element reciting element “a registration module operable to...” and “a traffic control module operable to…" in claim 11.

Applicant may:

(a) Amend the claim so that the claim limitation will no longer be interpreted as a limitation under 35 U.S.C. 112(f) or 35 U.S.C. 112 (pre-AIA), sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what structure, material, or acts perform the claimed function, without introducing any new matter (35 U.S.C. 132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art would recognize what structure, material, or acts perform the claimed function, applicant should clarify the record by either:

(a) Amending the written description of the specification such that it expressly recites the corresponding structure, material, or acts for performing the claimed function and clearly links or associates the structure, material, or acts to the claimed function, without introducing any new matter (35 U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are implicitly or inherently set forth in the written description of the specification, perform the claimed function. For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

The above cited rejections are merely exemplary.

The Applicant(s) are respectfully requested to correct all similar errors.

Claims not specifically mentioned are rejected by virtue of their dependency.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

19. Claims 1-20 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Breed (USPGPub 2008/0161986).

As per claim 1, Breed discloses a method for controlling a vehicle, comprising:

a control server, including a processor and associated with a traffic control system **(see at least paragraph 0032; wherein there are disclosed several processors or controllers)**, that perform various control operations, receiving a registration of a vehicle **(see at least paragraph 0333-0334; wherein the particular code transmitted by a particular vehicle should be unique. Generally, the vehicle will transmit its code repetitively with a variable or fixed spacing between transmissions. The information which the vehicle wishes to transmit is encoded using the vehicle's code by any of a number of different techniques including phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the**

individual code segments, or bandwidth modulation of the code sequence. Other coding technologies would also applicable and this invention is not limited to any particular coding method…For example, a vehicle can have a 64 bit code which can be a combination of a vehicle identification number and the GPS coordinates of the vehicle location. The vehicle would continuously transmit this 64 bit code using frequencies within the selected band);

the control server receiving travel information from the vehicle **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence.**

The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar);

the control server determining a control arrangement for the vehicle **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes)**; and

the control server sending a control message to control the vehicle in the traffic control system **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to**

communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

As per claim 2, Breed further discloses wherein the vehicle automatically, without driver input, follows instructions in the control message **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes,**

prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

As per claim 3, Breed further discloses wherein the travel information includes a current location and a destination **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar)**.

As per claim 4, Breed further discloses wherein the control information includes a speed and a position within traffic to which the vehicle must adhere **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes)**.

As per claim 5, Breed further discloses wherein the vehicle generates a route based on the control arrangement **(see at least paragraph 0418; wherein the determination of a route that a vehicle should take to go from its present location to its destination can be accomplished using a vehicle-resident system. A central server can be used to derive the GPS coordinates of the destination if it is not known based on its address, phone number or other**

identifying information. Once the route has been selected, the network can be checked to see if there is any congestion, tie-ups or other problems along the route and if so, then the driver can be asked as to whether the system should choose an alternate route and the process repeated).

As per claim 6, Breed further discloses wherein the vehicle follows the route automatically without driver input **(see at least paragraph 0588; wherein since the road conditions will now be known to the system, an enhanced RtZF.RTM. system will be able to advise an operator not to travel or, alternately, it can pick an alternate route if certain roads have accidents or have iced over, for example. Some people may decide not drive if there is bad weather or congestion. The important point here is that sensors will be available to sense the road condition as to both traffic and weather, this information will be available automatically and not require reporting from weather stations which usually have only late and inaccurate information. Additionally, pricing for the use of certain roads can be based on weather, congestion, time of day, etc. That is, pricing can by dynamically controlled)**.

As per claim 7, Breed further discloses wherein the control server sends a second control message to change a behavior of the vehicle **(see at least paragraph 0583; wherein once the system determines that the vehicle is in danger or a rollover situation, the operator can be notified with an audible or visual warning (via a display or light) so that he or she can take corrective action. Additionally or alternately, the system can take control of the situation**

and prevent the rollover through appropriate application of brakes (either on all wheels or selectively on particular wheels), throttle or steering).

As per claim 8, Breed further discloses wherein the second message is instructs the vehicle to exit from a roadway **(see at least paragraph 0556; wherein FIG. 12a is a flow chart of the method in accordance with the invention. The absolute position of the vehicle is determined at 130, e.g., using a GPS, DGPS, PPS system, and compared to the edges of the roadway at 134, which is obtained from a memory unit 132. Based on the comparison at 134, it is determined whether the absolute position of the vehicle is approaching close to or intersects an edge of the roadway at 136. If not, then the position of the vehicle is again obtained, e.g., at a set time interval thereafter, and the process continues. If yes, an alarm and/or warning system will be activated and/or the system will take control of the vehicle (at 140) to guide it to a shoulder of the roadway or other safe location)**.

As per claim 9, Breed further discloses wherein the control message includes a lane designation **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the**

vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

As per claim 10, Breed further discloses wherein a second vehicle receives a second the control message, wherein the second control message is different from the control message sent to the vehicle **(see at least paragraph 0562-0563; wherein another common accident is where vehicle 18 does in fact stop but then proceeds forward without noticing vehicle 25 thereby causing an accident. Since in the fully deployed RtZF.RTM. system, vehicle 18 will know through the vehicle-to-vehicle communication, and possibly infrastructure-to-vehicle communications, the existence and location of vehicle 25 and can calculate its velocity, the system can once again take control of vehicle 18 if a warning is not heeded and prevent vehicle 18 from proceeding into the intersection and thereby prevent the accident…In the event that the vehicle 25 is not equipped with the RtZF.RTM. system, vehicle 18 will still sense the presence of vehicle 25 through the laser radar, radar and camera systems, or be notified of the presence of vehicle 25 via a communication from an infrastructure-based scanning system. Once again, when the position and**

speed of vehicle 25 is known, appropriate action can be taken by the system in vehicle 18 to prevent the accident. The infrastructure-based scanning system 27 can be situated in the vicinity of the intersection and determine the presence of vehicles approaching the intersection and their position and speed. It could also determine which vehicle has the right-of-way and if one of the vehicles violates the right-of-way, it could notify any vehicle equipped with the RtZF.RTM. system about the violation so that the vehicle 25 or driver thereof could undertake action to prevent a collision with the vehicle violating the right-of-way).

As per claim 11, Breed discloses a control server associated with a traffic control system comprising:

a processor operable to execute one or more modules **(see at least paragraph 0032; wherein there are disclosed several processors or controllers)**, the modules comprising:

a registration module operable to:

receive a registration of a vehicle **(see at least paragraph 0333-0334; wherein the particular code transmitted by a particular vehicle should be unique. Generally, the vehicle will transmit its code repetitively with a variable or fixed spacing between transmissions. The information which the vehicle wishes to transmit is encoded using the vehicle's code by any of a number of different techniques including phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences**

themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. Other coding technologies would also applicable and this invention is not limited to any particular coding method…For example, a vehicle can have a 64 bit code which can be a combination of a vehicle identification number and the GPS coordinates of the vehicle location. The vehicle would continuously transmit this 64 bit code using frequencies within the selected band);

a traffic control module operable to:

receive travel information from the vehicle **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the**

polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar);

determine a control arrangement for the vehicle **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes)**; and

send a control message to control the vehicle in the traffic control system **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information**

available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

As per claim 12, Breed further discloses wherein the vehicle generates a route based on the control arrangement **(see at least paragraph 0418; wherein the determination of a route that a vehicle should take to go from its present location to its destination can be accomplished using a vehicle-resident system. A central server can be used to derive the GPS coordinates of the destination if it is not known based on its address, phone number or other identifying information. Once the route has been selected, the network can be checked to see if there is any congestion, tie-ups or other problems along the route and if so, then the driver can be asked as to whether the system should choose an alternate route and the process repeated)**, and wherein the vehicle follows the route automatically without driver input **(see at least paragraph 0588;**

wherein since the road conditions will now be known to the system, an enhanced RtZF.RTM. system will be able to advise an operator not to travel or, alternately, it can pick an alternate route if certain roads have accidents or have iced over, for example. Some people may decide not drive if there is bad weather or congestion. The important point here is that sensors will be available to sense the road condition as to both traffic and weather, this information will be available automatically and not require reporting from weather stations which usually have only late and inaccurate information. Additionally, pricing for the use of certain roads can be based on weather, congestion, time of day, etc. That is, pricing can by dynamically controlled).

As per claim 13, Breed further discloses wherein the control server sends a second control message to change a behavior of the vehicle **(see at least paragraph 0583; wherein once the system determines that the vehicle is in danger or a rollover situation, the operator can be notified with an audible or visual warning (via a display or light) so that he or she can take corrective action. Additionally or alternately, the system can take control of the situation and prevent the rollover through appropriate application of brakes (either on all wheels or selectively on particular wheels), throttle or steering)**, and wherein the second message is instructs the vehicle to exit from a roadway **(see at least paragraph 0556; wherein FIG. 12a is a flow chart of the method in accordance with the invention. The absolute position of the vehicle is determined at 130, e.g., using a GPS, DGPS, PPS system, and compared to the edges of the**

roadway at 134, which is obtained from a memory unit 132. Based on the comparison at 134, it is determined whether the absolute position of the vehicle is approaching close to or intersects an edge of the roadway at 136. If not, then the position of the vehicle is again obtained, e.g., at a set time interval thereafter, and the process continues. If yes, an alarm and/or warning system will be activated and/or the system will take control of the vehicle (at 140) to guide it to a shoulder of the roadway or other safe location).

As per claim 14, Breed further discloses wherein the control information includes one or more of a lane, a speed, and a position within traffic to which the vehicle must adhere **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the**

dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

As per claim 15, Breed further discloses wherein the travel information includes a current location and a destination **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar)**.

As per claim 16, Breed discloses a non-transitory computer readable medium stored on a storage medium and having instructions that when executed by a

processor cause the processor to perform a method **(see at least paragraph 0032; wherein there are disclosed several processors or controllers)**, the instructions comprising:

instructions to receive a registration of a vehicle **(see at least paragraph 0333-0334; wherein the particular code transmitted by a particular vehicle should be unique. Generally, the vehicle will transmit its code repetitively with a variable or fixed spacing between transmissions. The information which the vehicle wishes to transmit is encoded using the vehicle's code by any of a number of different techniques including phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. Other coding technologies would also applicable and this invention is not limited to any particular coding method…For example, a vehicle can have a 64 bit code which can be a combination of a vehicle identification number and the GPS coordinates of the vehicle location. The vehicle would continuously transmit this 64 bit code using frequencies within the selected band)**;

instructions to receive travel information from the vehicle **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each**

transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar);

instructions to determine a control arrangement for the vehicle **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands,**

acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes); and

instructions to send a control message to control the vehicle in the traffic control system **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes)**.

As per claim 17, Breed further discloses wherein the vehicle generates a route based on the control arrangement **(see at least paragraph 0418; wherein the**

determination of a route that a vehicle should take to go from its present location to its destination can be accomplished using a vehicle-resident system. A central server can be used to derive the GPS coordinates of the destination if it is not known based on its address, phone number or other identifying information. Once the route has been selected, the network can be checked to see if there is any congestion, tie-ups or other problems along the route and if so, then the driver can be asked as to whether the system should choose an alternate route and the process repeated), and wherein the vehicle follows the route automatically without driver input **(see at least paragraph 0588; wherein since the road conditions will now be known to the system, an enhanced RtZF.RTM. system will be able to advise an operator not to travel or, alternately, it can pick an alternate route if certain roads have accidents or have iced over, for example. Some people may decide not drive if there is bad weather or congestion. The important point here is that sensors will be available to sense the road condition as to both traffic and weather, this information will be available automatically and not require reporting from weather stations which usually have only late and inaccurate information. Additionally, pricing for the use of certain roads can be based on weather, congestion, time of day, etc. That is, pricing can by dynamically controlled)**.

As per claim 18, Breed further discloses wherein the control server sends a second control message to change a behavior of the vehicle **(see at least paragraph 0583; wherein once the system determines that the vehicle is in**

danger or a rollover situation, the operator can be notified with an audible or visual warning (via a display or light) so that he or she can take corrective action. Additionally or alternately, the system can take control of the situation and prevent the rollover through appropriate application of brakes (either on all wheels or selectively on particular wheels), throttle or steering), and wherein the second message is instructs the vehicle to exit from a roadway **(see at least paragraph 0556; wherein FIG. 12a is a flow chart of the method in accordance with the invention. The absolute position of the vehicle is determined at 130, e.g., using a GPS, DGPS, PPS system, and compared to the edges of the roadway at 134, which is obtained from a memory unit 132. Based on the comparison at 134, it is determined whether the absolute position of the vehicle is approaching close to or intersects an edge of the roadway at 136. If not, then the position of the vehicle is again obtained, e.g., at a set time interval thereafter, and the process continues. If yes, an alarm and/or warning system will be activated and/or the system will take control of the vehicle (at 140) to guide it to a shoulder of the roadway or other safe location)**.

As per claim 19, Breed further discloses wherein the control information includes one or more of a lane, a speed, and a position within traffic to which the vehicle must adhere **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on**

dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

As per claim 20, Breed further discloses wherein the travel information includes a current location and a destination **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is**

encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHMOUD ISMAIL whose telephone number is (571)272-1326. The examiner can normally be reached on Monday - Friday from 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Helal Algahaim can be reached on (571) 270-5227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the

Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MAHMOUD ISMAIL/
Examiner, Art Unit 3662

/HELAL A ALGAHAIM/
Supervisory Patent Examiner, Art Unit 3662

Notice of References Cited	Application/Control No. 14/253,838	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner MAHMOUD ISMAIL	Art Unit 3662	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2008/0161986	07-2008	Breed, David S.	701/23
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,506	04/15/2014	Christopher P. Ricci	6583-637	5446

111285 7590 11/14/2014

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
11/14/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,506	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-23* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-5,7-12,14-19 and 21-23* is/are rejected.

8)☒ Claim(s) *6,13 and 20* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

4. Claims 1 – 2, 5, 8 – 9, 12, 15 – 16 and 19 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Obradovich et al., (20080033635).

5. (Claims 1, 8 and 15): Obradovich discloses a method, comprising: maintaining, by a microprocessor executable profile identification module (abstract), a persona of a vehicle occupant (figs. 5 and 18; [0008]); and based on the persona of the vehicle occupant and vehicle-related information, performing, by a microprocessor executable vehicle control system, an action assisting the vehicle occupant (fig. 21; [0103 - 0104]).

6. (Claims 2, 9 and 16): Obradovich discloses a method, wherein the vehicle-related information comprises at least one of a current and/or future vehicle location and path of vehicle travel ([0040 - 0042]).

7. (Claims 5, 12 and 19): Obradovich discloses a method, further comprising: determining, by the vehicle control system, relevant information other than the persona of the vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a persona of a selected person not currently in the vehicle (fig. 5; [0048]), a message from a friend or family member of the vehicle occupant ([0103]), a current activity of the friend and/or family member, a location, hours of operation, and/or descriptive information about a point and/or location of interest near the vehicle and/or the vehicle's path of travel ([0044]), a location, hours of operation, and/or descriptive information about a vehicle service facility near the vehicle and/or the vehicle's path of travel, a location, hours of operation, and/or descriptive information about a hotel and/or motel near the vehicle and/or the vehicle's path of travel, a current location of the friend or family member near the vehicle and/or the vehicle's path of travel, and a road condition along a path of travel of the vehicle ([0009]; [0043]; [0061 - 0067]).

8. Claims 1, 3 – 4, 7 – 8, 10 – 11, 14 – 15, 17 – 18, and 21 - 23 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Shuman et al., (6675081).

9. (Claims 1, 8 and 15): Shuman discloses a method, comprising: maintaining, by a microprocessor executable profile identification module (abstract), a persona of a vehicle occupant (fig. 2); and based on the persona of the vehicle occupant and vehicle-

related information, performing, by a microprocessor executable vehicle control system, an action assisting the vehicle occupant (figs. 1 and 9; col 2, lns 39 - 62).

10. (Claims 3, 7, 10, 14, 17 and 21): Shuman discloses a method, wherein the action performed depends on a seating position of the vehicle occupant (col 2, lns 39 – 62).

11. (Claims 4, 11 and 18): Shuman discloses a method, wherein the persona comprises one or more of bioinformatics, medical information, driving history (fig. 5), personal information, private information, travel information, and Internet browsing history and/or browsed content, wherein vehicle related information comprises one or more of vehicle context, state, external surroundings (fig. 5), location, past, current, and/or intended path of travel, waypoint, and destination, and wherein the action is one or more of making an appointment, making a reservation, purchasing an item on line (col 24, ln 48), adding a waypoint (fig. 15) or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the occupant, notifying the occupant, and sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time (fig. 11; col 28, lns 14 - 35).

12. (Claim 22): Shuman discloses a method, wherein the maintaining of the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source and wherein a type of information collected depends on one or more of an identity of the occupant, an age of the occupant, and an association of the occupant with the vehicle (col 11, ln 2; col 17, ln 51).

13. (Claim 23): Shuman discloses a method, wherein the persona is defined in a format that can be processed by vehicles of different manufacturers (figs. 1 and 26; col 5, lns 7 – 16).

Allowable Subject Matter

14. Claims 6, 13 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/
Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,506	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,529,138 A	06-1996	Shaw et al.	180/169
*	B	US-5,825,283 A	10-1998	Camhi, Elie	340/438
*	C	US-2002/0103622 A1	08-2002	Burge, John R.	702/183
*	D	US-2003/0065432 A1	04-2003	Shuman et al.	701/48
*	E	US-6,563,910 B2	05-2003	Menard et al.	379/45
*	F	US-6,675,081 B2	01-2004	Shuman et al.	701/48
*	G	US-2004/0093155 A1	05-2004	Simonds et al.	701/200
*	H	US-2004/0204837 A1	10-2004	Singleton, Timothy	701/209
*	I	US-2008/0033635 A1	02-2008	Obradovich et al.	701/201
*	J	US-2008/0306996 A1	12-2008	McClellan et al.	707/104.1
*	K	US-2010/0235891 A1	09-2010	Oglesbee et al.	726/5
*	L	US-2010/0274410 A1	10-2010	TSIEN et al.	701/1
*	M	US-2013/0099915 A1	04-2013	Prasad et al.	340/461

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
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	P					
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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited	Application/Control No. 14/253,506	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-8,521,410 B2	08-2013	Mizuno et al.	701/123
*	B	US-8,543,330 B2	09-2013	Taylor et al.	701/408
*	C	US-2013/0338914 A1	12-2013	Weiss, Andrew	701/465
*	D	US-2014/0220966 A1	08-2014	Muetzel et al.	455/426.1
*	E	US-8,825,277 B2	09-2014	McClellan et al.	701/32.2
*	F	US-8,825,382 B2	09-2014	Liu, Winston Yonglong	701/426
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	)	Group Art Unit: 3663
Christopher P. Ricci	)	Confirmation No.: 7690
Serial No.: 14/253,204	)	Examiner: DUNN, ALEX C
Filed: April 15, 2014	)	INFORMATION DISCLOSURE STATEMENT
Atty. File No.: 6583-561	)	*Electronically Submitted*
Entitled: "Customization of Vehicle Controls and Settings Based on User Profile Data"	)	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

The references cited on attached Form PTO/SB08 are being called to the attention of the Examiner.

☒ Copies of the cited non-patent and/or foreign references are enclosed herewith.

☐ Copies of the cited U.S. patents and/or patent applications are enclosed herewith.

☒ Copies of the cited U.S. patents/unpublished patent applications/patent application publications are not enclosed in accordance with 37 C.F.R. § 1.98(a).

☐ Copies of the cited references are not enclosed, in accordance with 37 C.F.R. § 1.98(d), because the references were cited by or submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____ filed _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

☐ To the best of applicants' belief, the pertinence of the foreign-language references is believed to be summarized in the attached English abstracts and/or in the figures, although applicants do not necessarily vouch for the accuracy of the translation.

☒ Examiner's attention is drawn to the following related applications:

- Serial No. 14/253,843 filed 04/15/2014 (Attorney's Ref. No. 6583-530)
- Serial No. 14/253,836 filed 04/15/2014 (Attorney's Ref. No. 6583-537)
- Serial No. 14/253,840 filed 04/15/2014 (Attorney's Ref. No. 6583-538)
- Serial No. 14/253,213 filed 04/15/2014 (Attorney's Ref. No. 6583-543)
- Serial No. 14/252,863 filed 04/15/2014 (Attorney's Ref. No. 6583-544)
- Serial No. 14/253,216 filed 04/15/2014 (Attorney's Ref. No. 6583-545)
- Serial No. 14/252,865 filed 04/15/2014 (Attorney's Ref. No. 6583-546)

- Serial No. 14/253,240 filed 04/15/2014 (Attorney's Ref. No. 6583-547)
- Serial No. 14/253,220 filed 04/15/2014 (Attorney's Ref. No. 6583-548)
- Serial No. 14/253,315 filed 04/15/2014 (Attorney's Ref. No. 6583-549)
- Serial No. 14/253,706 filed 04/15/2014 (Attorney's Ref. No. 6583-550)
- Serial No. 14/252,868 filed 04/15/2014 (Attorney's Ref. No. 6583-551)
- Serial No. 14/253,745 filed 04/15/2014 (Attorney's Ref. No. 6583-553)
- Serial No. 14/253,752 filed 04/15/2014 (Attorney's Ref. No. 6583-554)
- Serial No. 14/253,729 filed 04/15/2014 (Attorney's Ref. No. 6583-555)
- Serial No. 14/252,934 filed 04/15/2014 (Attorney's Ref. No. 6583-556)
- Serial No. 14/253,243 filed 04/15/2014 (Attorney's Ref. No. 6583-557)
- Serial No. 14/252,978 filed 04/15/2014 (Attorney's Ref. No. 6583-558)
- Serial No. 14/253,023 filed 04/15/2014 (Attorney's Ref. No. 6583-559)
- Serial No. 14/252,871 filed 04/15/2014 (Attorney's Ref. No. 6583-560)
- Serial No. 14/253,099 filed 04/15/2014 (Attorney's Ref. No. 6583-562)
- Serial No. 14/253,330 filed 04/15/2014 (Attorney's Ref. No. 6583-563)
- Serial No. 14/253,351 filed 04/15/2014 (Attorney's Ref. No. 6583-564)
- Serial No. 14/252,858 filed 04/15/2014 (Attorney's Ref. No. 6583-565)
- Serial No. 14/253,034 filed 04/15/2014 (Attorney's Ref. No. 6583-566)
- Serial No. 14/253,405 filed 04/15/2014 (Attorney's Ref. No. 6583-567)
- Serial No. 14/252,876 filed 04/15/2014 (Attorney's Ref. No. 6583-568)
- Serial No. 14/253,321 filed 04/15/2014 (Attorney's Ref. No. 6583-569)
- Serial No. 14/253,226 filed 04/15/2014 (Attorney's Ref. No. 6583-570)
- Serial No. 14/253,492 filed 04/15/2014 (Attorney's Ref. No. 6583-571)
- Serial No. 14/253,838 filed 04/15/2014 (Attorney's Ref. No. 6583-574)
- Serial No. 14/253,312 filed 04/15/2014 (Attorney's Ref. No. 6583-585)
- Serial No. 14/253,334 filed 04/15/2014 (Attorney's Ref. No. 6583-586)
- Serial No. 14/253,476 filed 04/15/2014 (Attorney's Ref. No. 6583-587)
- Serial No. 14/253,371 filed 04/15/2014 (Attorney's Ref. No. 6583-588)
- Serial No. 14/253,393 filed 04/15/2014 (Attorney's Ref. No. 6583-589)
- Serial No. 14/253,233 filed 04/15/2014 (Attorney's Ref. No. 6583-590)
- Serial No. 14/253,376 filed 04/15/2014 (Attorney's Ref. No. 6583-591)
- Serial No. 14/253,396 filed 04/15/2014 (Attorney's Ref. No. 6583-594)
- Serial No. 14/253,416 filed 04/15/2014 (Attorney's Ref. No. 6583-595)
- Serial No. 14/253,435 filed 04/15/2014 (Attorney's Ref. No. 6583-596)
- Serial No. 14/253,446 filed 04/15/2014 (Attorney's Ref. No. 6583-597)

- Serial No. 14/253,048 filed 04/15/2014 (Attorney's Ref. No. 6583-598)
- Serial No. 14/253,424 filed 04/15/2014 (Attorney's Ref. No. 6583-599)
- Serial No. 14/253,058 filed 04/15/2014 (Attorney's Ref. No. 6583-600)
- Serial No. 14/253,006 filed 04/15/2014 (Attorney's Ref. No. 6583-601)
- Serial No. 14/253,022 filed 04/15/2014 (Attorney's Ref. No. 6583-602)
- Serial No. 14/253,060 filed 04/15/2014 (Attorney's Ref. No. 6583-603)
- Serial No. 14/253,135 filed 04/15/2014 (Attorney's Ref. No. 6583-604)
- Serial No. 14/253,486 filed 04/15/2014 (Attorney's Ref. No. 6583-605)
- Serial No. 14/253,251 filed 04/15/2014 (Attorney's Ref. No. 6583-607)
- Serial No. 14/253,426 filed 04/15/2014 (Attorney's Ref. No. 6583-608)
- Serial No. 14/253,388 filed 04/15/2014 (Attorney's Ref. No. 6583-609)
- Serial No. 14/253,406 filed 04/15/2014 (Attorney's Ref. No. 6583-610)
- Serial No. 14/253,464 filed 04/15/2014 (Attorney's Ref. No. 6583-611)
- Serial No. 14/253,755 filed 04/15/2014 (Attorney's Ref. No. 6583-614)
- Serial No. 14/253,015 filed 04/15/2014 (Attorney's Ref. No. 6583-615)
- Serial No. 14/253,727 filed 04/15/2014 (Attorney's Ref. No. 6583-619)
- Serial No. 14/253,199 filed 04/15/2014 (Attorney's Ref. No. 6583-620)
- Serial No. 14/253,067 filed 04/15/2014 (Attorney's Ref. No. 6583-621)
- Serial No. 14/253,144 filed 04/15/2014 (Attorney's Ref. No. 6583-622)
- Serial No. 14/253,078 filed 04/15/2014 (Attorney's Ref. No. 6583-623)
- Serial No. 14/543,535 filed 11/17/2014 (Attorney's Ref. No. 6583-623-CIP)
- Serial No. 14/253,423 filed 04/15/2014 (Attorney's Ref. No. 6583-624)
- Serial No. 14/253,091 filed 04/15/2014 (Attorney's Ref. No. 6583-625)
- Serial No. 14/253,743 filed 04/15/2014 (Attorney's Ref. No. 6583-626)
- Serial No. 14/253,766 filed 04/15/2014 (Attorney's Ref. No. 6583-627)
- Serial No. 14/253,470 filed 04/15/2014 (Attorney's Ref. No. 6583-628)
- Serial No. 14/253,341 filed 04/15/2014 (Attorney's Ref. No. 6583-629)
- Serial No. 14/253,506 filed 04/15/2014 (Attorney's Ref. No. 6583-637)
- Serial No. 14/253,526 filed 04/15/2014 (Attorney's Ref. No. 6583-638)

☐ Other:_____

Submission of the above information is not intended as an admission that any item is citable under the statutes or rules to support a rejection, that any item disclosed represents analogous art, or that those skilled in the art would refer to or recognize the pertinence of any reference without the benefit of hindsight, nor should an inference be drawn as to the pertinence

of the references based on the order in which they are presented. Submission of this statement should not be taken as an indication that a search has been conducted, or that no better art exists.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references made of record therein.

FEES

☒	**37 CFR 1.97(b)**: No fee is believed due in connection with this submission, because the information disclosure statement submitted herewith is satisfied by one of the following conditions ("X" indicates satisfaction): ☐ Within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d), or ☐ Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application, or ☒ Before the mailing date of a first Office Action on the merits, or ☐ Before the mailing of a first Office action after the filing of a request for continued examination under 37 CFR 1.114. Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970.
☐	**37 CFR 1.97(c)**: The information disclosure statement transmitted herewith is being filed after all the above conditions (37 CFR 1.97(b)), but before the mailing date of any one of the following conditions: (1) a final action under 37 C.F.R. 1.113, or (2) a notice of allowance under 37 C.F.R. 1.311, or (3) an action that otherwise closes prosecution in the application. This Information Disclosure Statement is accompanied by: ☐ A Certification (below) as specified by 37 C.F.R. 1.97(e). Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970. OR ☐ Please charge Deposit Account 19-1970 in the amount of $180.00 for the fee set forth in 37 C.F.R. 1.17(p) for submission of an information disclosure statement. Please credit any overpayment or charge any underpayment to Deposit Account 19-1970.
☐	**37 CFR 1.97(d)**: This Information Disclosure Statement is being submitted after the period specified in 37 CFR 1.97(c). ☐ This information Disclosure Statement includes a Certification (below) as specified by 37 C.F.R. 1.97(e) AND ☐ Applicants hereby requests consideration of the reference(s) disclosed herein. Please charge Deposit Account 19-1970 in the amount of $180.00 under 37 C.F.R. 1.17(p). Please credit any overpayment or charge any underpayment to Deposit Account 19-1970. Election to pay the fee should not be taken as an indication that applicant(s) cannot execute a certification.

Certification (37 C.F.R. 1.97(e))
(Applicable only if checked)

☐ The undersigned certifies that:

☐ Each item of information contained in the Information Disclosure Statement submitted herewith was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(1).

☐ A copy of the communication from the foreign patent office is enclosed.

OR

☐ No item of information contained in the Information Disclosure Statement submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(2).

Respectfully submitted,

SHERIDAN ROSS P.C.

By: /Douglas W. Swartz/
Douglas W. Swartz
Registration No. 37,739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: November 25, 2014

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	6583-561	7690

111285 7590 01/26/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
01/26/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,204	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-7,9,11-17,19 and 20* is/are rejected.

8)☒ Claim(s) *8,10 and 18* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

4. Claims 1 – 20 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Lovitt et al., (20140028542).

5. (Claims 1 - 6, 11 - 15, 19 and 20): Lovitt discloses a method and system, comprising: determining a location inside a vehicle associated with a user (fig. 4; [0005 - 0006]); determining at least one vehicle control associated with the location inside the vehicle ([0010]); referring to a user profile memory associated with the user for vehicle control settings (abstract; figs. 1 and 5); and determining, based at least partially on the

vehicle control settings, to adjust the at least one vehicle control associated with the location inside the vehicle ([0019 - 0021]; [0027 - 0029]).

6. (Claims 7 and 16): Lovitt discloses a method and system, wherein determining the presence of the user inside the vehicle further comprises: detecting a person via at least one image sensor associated with the vehicle (fig. 1); identifying facial features associated with the person detected via the at least one image sensor ([0005 - 0007]); and determining whether the identified facial features associated with the person match user characteristics stored in a memory ([0025]).

7. (Claims 9 and 17): Lovitt discloses a method and system further comprising: determining that the user made a change to the adjusted at least one vehicle control ([0030]); and storing the change made to the adjusted at least one vehicle control in the user profile memory ([0027 - 0028]).

Allowable Subject Matter

8. Claims 8, 10 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,204	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0077985 A1	06-2002	Kobata et al.	705/51
*	B	US-2002/0126876 A1	09-2002	Paul et al.	382/104
*	C	US-2004/0225557 A1	11-2004	Phelan et al.	705/011
*	D	US-2009/0284359 A1	11-2009	Huang et al.	340/426.1
*	E	US-2010/0106418 A1	04-2010	Kindo et al.	701/300
*	F	US-2010/0304640 A1	12-2010	Sofman et al.	446/456
*	G	US-2011/0040438 A1	02-2011	Kluge et al.	701/29
*	H	US-2011/0309926 A1	12-2011	Eikelenberg et al.	340/439
*	I	US-2012/0059789 A1	03-2012	Sakai et al.	706/52
*	J	US-2014/0028542 A1	01-2014	Lovitt et al.	345/156
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14253204	RICCI, CHRISTOPHER P.
	Examiner	Art Unit
	ALEX C DUNN	3663

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
701	49	1/17/2015	Alex C. Dunn

SEARCH NOTES		
Search Notes	Date	Examiner
EAST	1/17/2015	Alex C. Dunn

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

/A.C.D./ Examiner.Art Unit 3663	

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	Group Art Unit: 3663
Christopher P. Ricci	Confirmation No.: 7690
Serial No.: 14/253,204	Examiner: DUNN, ALEX C
Filed: April 15, 2014	INFORMATION DISCLOSURE STATEMENT
Atty. File No.: 6583-561	*Electronically Submitted*
Entitled: "Customization of Vehicle Controls and Settings Based on User Profile Data"	

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

The references cited on attached Form PTO/SB08 are being called to the attention of the Examiner.

☒ Copies of the cited non-patent and/or foreign references are enclosed herewith.

☐ Copies of the cited U.S. patents and/or patent applications are enclosed herewith.

☒ Copies of the cited U.S. patents/unpublished patent applications/patent application publications are not enclosed in accordance with 37 C.F.R. § 1.98(a).

☐ Copies of the cited references are not enclosed, in accordance with 37 C.F.R. § 1.98(d), because the references were cited by or submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____ filed _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

☐ To the best of applicants' belief, the pertinence of the foreign-language references is believed to be summarized in the attached English abstracts and/or in the figures, although applicants do not necessarily vouch for the accuracy of the translation.

☒ Examiner's attention is drawn to the following related applications:

- Serial No. 14/253,843 filed 04/15/2014 (Attorney's Ref. No. 6583-530)
- Serial No. 14/253,836 filed 04/15/2014 (Attorney's Ref. No. 6583-537)
- Serial No. 14/253,840 filed 04/15/2014 (Attorney's Ref. No. 6583-538)
- Serial No. 14/253,213 filed 04/15/2014 (Attorney's Ref. No. 6583-543)
- Serial No. 14/252,863 filed 04/15/2014 (Attorney's Ref. No. 6583-544)
- Serial No. 14/253,216 filed 04/15/2014 (Attorney's Ref. No. 6583-545)
- Serial No. 14/252,865 filed 04/15/2014 (Attorney's Ref. No. 6583-546)

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

- Serial No. 14/253,240 filed 04/15/2014 (Attorney's Ref. No. 6583-547)
- Serial No. 14/253,220 filed 04/15/2014 (Attorney's Ref. No. 6583-548)
- Serial No. 14/253,315 filed 04/15/2014 (Attorney's Ref. No. 6583-549)
- Serial No. 14/253,706 filed 04/15/2014 (Attorney's Ref. No. 6583-550)
- Serial No. 14/252,868 filed 04/15/2014 (Attorney's Ref. No. 6583-551)
- Serial No. 14/253,745 filed 04/15/2014 (Attorney's Ref. No. 6583-553)
- Serial No. 14/253,752 filed 04/15/2014 (Attorney's Ref. No. 6583-554)
- Serial No. 14/253,729 filed 04/15/2014 (Attorney's Ref. No. 6583-555)
- Serial No. 14/252,934 filed 04/15/2014 (Attorney's Ref. No. 6583-556)
- Serial No. 14/253,243 filed 04/15/2014 (Attorney's Ref. No. 6583-557)
- Serial No. 14/252,978 filed 04/15/2014 (Attorney's Ref. No. 6583-558)
- Serial No. 14/253,023 filed 04/15/2014 (Attorney's Ref. No. 6583-559)
- Serial No. 14/252,871 filed 04/15/2014 (Attorney's Ref. No. 6583-560)
- Serial No. 14/253,099 filed 04/15/2014 (Attorney's Ref. No. 6583-562)
- Serial No. 14/253,330 filed 04/15/2014 (Attorney's Ref. No. 6583-563)
- Serial No. 14/253,351 filed 04/15/2014 (Attorney's Ref. No. 6583-564)
- Serial No. 14/252,858 filed 04/15/2014 (Attorney's Ref. No. 6583-565)
- Serial No. 14/253,034 filed 04/15/2014 (Attorney's Ref. No. 6583-566)
- Serial No. 14/253,405 filed 04/15/2014 (Attorney's Ref. No. 6583-567)
- Serial No. 14/252,876 filed 04/15/2014 (Attorney's Ref. No. 6583-568)
- Serial No. 14/253,321 filed 04/15/2014 (Attorney's Ref. No. 6583-569)
- Serial No. 14/253,226 filed 04/15/2014 (Attorney's Ref. No. 6583-570)
- Serial No. 14/253,492 filed 04/15/2014 (Attorney's Ref. No. 6583-571)
- Serial No. 14/253,838 filed 04/15/2014 (Attorney's Ref. No. 6583-574)
- Serial No. 14/253,312 filed 04/15/2014 (Attorney's Ref. No. 6583-585)
- Serial No. 14/253,334 filed 04/15/2014 (Attorney's Ref. No. 6583-586)
- Serial No. 14/253,476 filed 04/15/2014 (Attorney's Ref. No. 6583-587)
- Serial No. 14/253,371 filed 04/15/2014 (Attorney's Ref. No. 6583-588)
- Serial No. 14/253,393 filed 04/15/2014 (Attorney's Ref. No. 6583-589)
- Serial No. 14/253,233 filed 04/15/2014 (Attorney's Ref. No. 6583-590)
- Serial No. 14/253,376 filed 04/15/2014 (Attorney's Ref. No. 6583-591)
- Serial No. 14/253,396 filed 04/15/2014 (Attorney's Ref. No. 6583-594)
- Serial No. 14/253,416 filed 04/15/2014 (Attorney's Ref. No. 6583-595)
- Serial No. 14/253,435 filed 04/15/2014 (Attorney's Ref. No. 6583-596)
- Serial No. 14/253,446 filed 04/15/2014 (Attorney's Ref. No. 6583-597)

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

- Serial No. 14/253,048 filed 04/15/2014 (Attorney's Ref. No. 6583-598)
- Serial No. 14/253,424 filed 04/15/2014 (Attorney's Ref. No. 6583-599)
- Serial No. 14/253,058 filed 04/15/2014 (Attorney's Ref. No. 6583-600)
- Serial No. 14/253,006 filed 04/15/2014 (Attorney's Ref. No. 6583-601)
- Serial No. 14/253,022 filed 04/15/2014 (Attorney's Ref. No. 6583-602)
- Serial No. 14/253,060 filed 04/15/2014 (Attorney's Ref. No. 6583-603)
- Serial No. 14/253,135 filed 04/15/2014 (Attorney's Ref. No. 6583-604)
- Serial No. 14/253,486 filed 04/15/2014 (Attorney's Ref. No. 6583-605)
- Serial No. 14/253,251 filed 04/15/2014 (Attorney's Ref. No. 6583-607)
- Serial No. 14/253,426 filed 04/15/2014 (Attorney's Ref. No. 6583-608)
- Serial No. 14/253,388 filed 04/15/2014 (Attorney's Ref. No. 6583-609)
- Serial No. 14/253,406 filed 04/15/2014 (Attorney's Ref. No. 6583-610)
- Serial No. 14/253,464 filed 04/15/2014 (Attorney's Ref. No. 6583-611)
- Serial No. 14/253,755 filed 04/15/2014 (Attorney's Ref. No. 6583-614)
- Serial No. 14/253,015 filed 04/15/2014 (Attorney's Ref. No. 6583-615)
- Serial No. 14/253,727 filed 04/15/2014 (Attorney's Ref. No. 6583-619)
- Serial No. 14/253,199 filed 04/15/2014 (Attorney's Ref. No. 6583-620)
- Serial No. 14/253,067 filed 04/15/2014 (Attorney's Ref. No. 6583-621)
- Serial No. 14/253,144 filed 04/15/2014 (Attorney's Ref. No. 6583-622)
- Serial No. 14/253,078 filed 04/15/2014 (Attorney's Ref. No. 6583-623)
- Serial No. 14/543,535 filed 11/17/2014 (Attorney's Ref. No. 6583-623-CIP)
- Serial No. 14/253,423 filed 04/15/2014 (Attorney's Ref. No. 6583-624)
- Serial No. 14/253,091 filed 04/15/2014 (Attorney's Ref. No. 6583-625)
- Serial No. 14/253,743 filed 04/15/2014 (Attorney's Ref. No. 6583-626)
- Serial No. 14/253,766 filed 04/15/2014 (Attorney's Ref. No. 6583-627)
- Serial No. 14/253,470 filed 04/15/2014 (Attorney's Ref. No. 6583-628)
- Serial No. 14/253,341 filed 04/15/2014 (Attorney's Ref. No. 6583-629)
- Serial No. 14/253,506 filed 04/15/2014 (Attorney's Ref. No. 6583-637)
- Serial No. 14/253,526 filed 04/15/2014 (Attorney's Ref. No. 6583-638)

☐ Other:_____

Submission of the above information is not intended as an admission that any item is citable under the statutes or rules to support a rejection, that any item disclosed represents analogous art, or that those skilled in the art would refer to or recognize the pertinence of any reference without the benefit of hindsight, nor should an inference be drawn as to the pertinence

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

of the references based on the order in which they are presented. Submission of this statement should not be taken as an indication that a search has been conducted, or that no better art exists.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references made of record therein.

FEES

☒	**37 CFR 1.97(b)**: No fee is believed due in connection with this submission, because the information disclosure statement submitted herewith is satisfied by one of the following conditions ("X" indicates satisfaction): ☐ Within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d), or ☐ Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application, or ☒ Before the mailing date of a first Office Action on the merits, or ☐ Before the mailing of a first Office action after the filing of a request for continued examination under 37 CFR 1.114. Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970.
☐	**37 CFR 1.97(c)**: The information disclosure statement transmitted herewith is being filed after all the above conditions (37 CFR 1.97(b)), but before the mailing date of any one of the following conditions: (1) a final action under 37 C.F.R. 1.113, or (2) a notice of allowance under 37 C.F.R. 1.311, or (3) an action that otherwise closes prosecution in the application. This Information Disclosure Statement is accompanied by: ☐ A Certification (below) as specified by 37 C.F.R. 1.97(e). Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970. OR ☐ Please charge Deposit Account 19-1970 in the amount of $180.00 for the fee set forth in 37 C.F.R. 1.17(p) for submission of an information disclosure statement. Please credit any overpayment or charge any underpayment to Deposit Account 19-1970.
☐	**37 CFR 1.97(d)**: This Information Disclosure Statement is being submitted after the period specified in 37 CFR 1.97(c). ☐ This information Disclosure Statement includes a Certification (below) as specified by 37 C.F.R. 1.97(e) AND ☐ Applicants hereby requests consideration of the reference(s) disclosed herein. Please charge Deposit Account 19-1970 in the amount of $180.00 under 37 C.F.R. 1.17(p). Please credit any overpayment or charge any underpayment to Deposit Account 19-1970. Election to pay the fee should not be taken as an indication that applicant(s) cannot execute a certification.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

Certification (37 C.F.R. 1.97(e))
(Applicable only if checked)

☐ The undersigned certifies that:

☐ Each item of information contained in the Information Disclosure Statement submitted herewith was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(1).

☐ A copy of the communication from the foreign patent office is enclosed.

OR

☐ No item of information contained in the Information Disclosure Statement submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(2).

Respectfully submitted,

SHERIDAN ROSS P.C.

By: /Douglas W. Swartz/
Douglas W. Swartz
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(303) 863-9700

Date: November 25, 2014

/Alex Dunn/ (01/17/2015)

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	14/253,204
				Filing Date	April 15, 2014
(Use as many sheets as necessary)				First Named Inventor	Christopher P. Ricci
				Art Unit	3663
				Examiner Name	DUNN, ALEX C
Sheet	1	of	8	Attorney Docket Number	6583-561

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	4754255	06/28/1988	Sanders et al.	
	2	5296840	03/22/1994	Gieffers	
	3	5529138	06/25/1996	Shaw et al.	
	4	5825283	10/20/1998	Camhi	
	5	6356838	03/12/2002	Paul	
	6	6557752	05/06/2003	Yacoob	
	7	6563910	05/13/2003	Menard et al.	
	8	6675081	01/06/2004	Shuman et al.	
	9	7295904	11/13/2007	Kanevsky et al.	
	10	7526539	04/28/2009	Hsu	
	11	7667618	02/23/2010	Chitor et al.	
	12	8233919	07/31/2012	Haag et al.	
	13	8862299	11/16/2012	Ricci	
	14	8442758	05/14/2013	Rovik et al.	
	15	8521410	08/27/2013	Mizuno et al.	
	16	8543330	09/24/2013	Taylor et al.	
	17	8552886	10/08/2013	Bensoussan	
	18	8634984	01/21/2014	Sumizawa	
	19	8793034	07/29/2014	Ricci	
	20	8793065	07/29/2014	Seltzer et al.	
	21	8798918	08/05/2014	Onishi et al.	
	22	8818725	08/26/2014	Ricci	
	23	8825277	09/02/2014	McClellan et al.	
	24	8825362	09/02/2014	Kirsch	
	25	8825382	09/02/2014	Liu	
	26	8831826	09/09/2014	Ricci	
	27	8838095	09/16/2014	Jouin	
	28	2002/0026278	02/28/2002	Feldman et al.	
	29	2002/0103622	08/01/2002	Burge	
	30	2003/0065432	04/03/2003	Shuman et al.	
	31	2003/0204290	10/30/2003	Sadler et al.	
	32	2004/0093155	05/13/2004	Simonds et al.	

Examiner Signature	/Alex Dunn/ (01/17/2015)	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. [1] Applicant's unique citation designation number (optional). [2] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [3] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [4] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [5] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [6] Applicant is to place a check mark here if English language Translation is attached.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /A.D./

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	2	of	8

Complete if Known	
Application Number	14/253,204
Filing Date	April 15, 2014
First Named Inventor	Christopher P. Ricci
Art Unit	3663
Examiner Name	DUNN, ALEX C
Attorney Docket Number	6583-561

	33	2004/0153356	08/05/2004	Lockwood et al.	
	34	2004/0204837	10/14/2004	Singleton	
	35	2004/0217850	11/04/2004	Perttunen et al.	
	36	2004/0225557	11/11/2004	Phelan et al.	
	37	2005/0065716	03/24/2005	Timko et al.	
	38	2005/0261815	11/24/2005	Cowelchuk et al.	
	39	2005/0283284	12/22/2005	Grenier et al.	
	40	2006/0036358	02/16/2006	Hale et al.	
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Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Filing Date MM-DD-YYYY	Name of Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	198	14/543535	11/17/2014	Ricci	

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	199	EP 1909069	12/08/2010	HARMAN BECKER AUTOMOTIVE SYSTEMS GMBH		

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	200	WO 2012/102879	08/02/2012	HONDA MOTOR CO., LTD.		

NON-PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	201	"Accessibility A guide for Businesses and Organizations," Microsoft, 2011, 53 pages
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	223	Official Action for U.S. Patent Application No. 14/253,838, mailed Nov. 20, 2014 (Attorney's Ref. No. 6583-574) 31 pages
	224	Official Action for U.S. Patent Application No. 14/253,506, mailed Nov. 14, 2014 (Attorney's Ref. No. 6583-637) 9 pages
	225	Background of the Invention for the above-captioned application (previously provided)

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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	9	(US-20090284359-$ or US-20140028542-$ or US-20020126876-$ or US-20120059789-$ or US-20100106418-$ or US-20040225557-$ or US-20100304640-$ or US-20020077985-$ or US-20110309926-$).did.	US-PGPUB	OR	ON	2015/01/17 07:38
L2	4	1 AND (location ADJ3 vehicle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:39
L3	981	(((location OR area) ADJ inside) ADJ2 vehicle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:47
L4	896	3 AND @ay<"2013"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:48
L5	219	4 AND (vehicle ADJ control)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:50
L6	213	5 AND (user OR driver OR passenger)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:50
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	14253204	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	ALEX C DUNN	3663

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☒ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

CLAIM		DATE								
Final	Original		01/17/2015							
	1		✓							
	2		✓							
	3		✓							
	4		✓							
	5		✓							
	6		✓							
	7		✓							
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	11		✓							
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	16		✓							
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	19		✓							
	20		✓							

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BIB DATA SHEET

CONFIRMATION NO. 7690

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
14/253,204	04/15/2014 RULE	701	3663	6583-561

APPLICANTS

Flextronics AP, LLC, San Jose, CA, Assignee (with 37 CFR 1.172 Interest);

INVENTORS

Christopher P. Ricci, Saratoga, CA;

**** CONTINUING DATA ***************************

This appln claims benefit of 61/811,981 04/15/2013
and claims benefit of 61/865,954 08/14/2013
and claims benefit of 61/870,698 08/27/2013
and claims benefit of 61/891,217 10/15/2013
and claims benefit of 61/904,205 11/14/2013
and claims benefit of 61/924,572 01/07/2014
and claims benefit of 61/926,749 01/13/2014

**** FOREIGN APPLICATIONS ***************************

**** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ****

05/01/2014

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☐ No Verified and Acknowledged /ALEX C DUNN/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		CA	41	20	3

ADDRESS

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
UNITED STATES

TITLE

CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA

FILING FEE RECEIVED		
2140	FEES: Authority has been given in Paper No._____ to charge/credit DEPOSIT ACCOUNT No._____ for following:	☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit

BIB (Rev. 05/07).

To: flexpatents@sheridanross.com,edocket@sheridanross.com,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 111285

Jan 26, 2015 05:19:23 AM

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Application	Document	Mailroom Date	Attorney Docket No.
14253204	CTNF	01/26/2015	6583-561
	892	01/26/2015	6583-561
	1449	01/26/2015	6583-561
	1449	01/26/2015	6583-561

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PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	Group Art Unit: 3663
Christopher P. RICCI	Examiner: DUNN, ALEX C.
Application No.: 14/253,204	Confirmation No.: 7690
Filed: April 15, 2015	
Atty. File No.: 6583-561	

For: "CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA"

AMENDMENT AND RESPONSE

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Commissioner:

Applicant submits this Amendment and Response to address the non-final Office Action having a mailing date of January 26, 2015. Submitted herewith is payment in the amount of $420.00 for one independent claim in excess of three. Although Applicant believes that no additional fees are due in connection with the filing of this Amendment and Response, please charge any fees deemed necessary to Deposit Account No. 19-1970.

Please amend the above-identified patent application as follows:

Amendments to the Specification begin on page **2** of this paper.

Amendments to the Claims are shown in the listing of claims which begins on page **3** of this paper.

Remarks begin on page **9** of this paper.

Amendments to the Specification:

Please replace paragraph [0462] with the following amended paragraph:

[0462] This application is also related to PCT Patent Application Nos. PCT/US14/34092, filed on April 15, 2014, entitled, "Building Profiles Associated with Vehicle Users" (Attorney Docket No. 6583-543-PCT); PCT/US14/34099, filed on April 15, 2014, entitled "Access and Portability of User Profiles Stored as Templates" (Attorney Docket No. 6583-544-PCT); PCT/US14/34087, filed on April 15, 2014, entitled "User Interface and Virtual Personality Presentation Based on User Profile" (Attorney Docket No. 6583-547-PCT); PCT/US14/34088, filed on April 15, 2014, entitled "Creating Targeted Advertising Profiles Based on User Behavior" (Attorney Docket No. 6583-549-PCT); PCT/US14/34232, filed on April 15, 2014, entitled "Behavior Modification via Altered Map Routes Based on User Profile Information" (Attorney Docket No. 6583-550-PCT); PCT/US14/34098, filed on April 15, 2014, entitled "Vehicle Location-Based Home Automation Triggers" (Attorney Docket No. 6583-556-PCT); PCT/US14/34108, filed on April 15, 2014, entitled "Vehicle Initiated Communications with Third Parties via Virtual Personalities" (Attorney Docket No. 6583-559-PCT); PCT/US14/34101, filed on April 15, 2014, entitled "Vehicle Intruder Alert Detection and Indication" (Attorney Docket No. 6583-562-PCT); PCT/US14/34103, filed on April 15, 2014, entitled "Driver Facts Behavior Information Storage System" (Attorney Docket No. 6583-565-PCT); PCT/US14/34114, filed on April 15, 2014, entitled "Synchronization Between Vehicle and User Device Calendar" (Attorney Docket No. 6583-567-PCT); PCT/US14/34125, filed on April 15, 2014, entitled "User Gesture Control of Vehicle Features" (Attorney Docket No. 6583-569-PCT); PCT/US14/34254, filed on April 15, 2014, entitled "Central Network for the Automated Control of Vehicular Traffic" (Attorney Docket No. 6583-574-PCT); and PCT/US14/34194, filed on April 15, 2014, entitled "Vehicle-Based Multimode Discovery" (Attorney Docket No. 6583-585-PCT). The entire disclosures of the applications listed above are hereby incorporated by reference, in their entirety, for all that they teach and for all purposes.

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Canceled)

2. (Canceled)

3. (Canceled)

4. (Currently Amended) The method of ~~claim 1~~claim 8, wherein prior to determining the location inside the vehicle associated with the user the method further comprises:

storing, in the user profile memory, information corresponding to locations inside the vehicle occupied by the user;

collecting vehicle control setting data associated with the user, wherein the vehicle control setting data includes at least one vehicle control setting made by the user in at least one of the locations inside the vehicle; and

storing the vehicle control setting data in the user profile memory.

5. (Currently Amended) The method of ~~claim 1~~claim 8, wherein the at least one vehicle control includes one or more vehicle features such as a seat system, a steering control, a foot pedal control, a mirror position, and a display device.

6. (Original) The method of claim 5, wherein the vehicle control settings include at least one of a position, a sensitivity, an angle, and a movement, associated with the one or more vehicle features.

7. (Currently Amended) The method of ~~claim 3~~claim 8, wherein determining the presence of the user inside the vehicle further comprises:

detecting a person via at least one image sensor associated with the vehicle;

identifying facial features associated with the person detected via the at least one image sensor; and

determining whether the identified facial features associated with the person match user characteristics stored in a memory.

8. (Currently Amended) A method, comprising:

determining a location inside a vehicle associated with a user;

determining at least one vehicle control associated with the location inside the vehicle;

determining a presence of the user inside the vehicle, wherein determining the presence of the user comprises detecting a device associated with the user in an area of the vehicle;

referring to a user profile memory associated with the user for vehicle control settings;

determining, based at least partially on the vehicle control settings, to adjust the at least one vehicle control associated with the location inside the vehicle; and

providing an adjustment output to a vehicle control system, wherein the adjustment output is provided based at least partially on determining the user is present in the location inside the vehicle, wherein the vehicle control system is adapted to control the at least one vehicle control associated with the location inside the vehicle~~The method of claim 3, wherein determining the presence of the user inside the vehicle further comprises:~~

~~detecting a device associated with the user in an area of the vehicle~~.

9. (Currently Amended) The method of ~~claim 2~~claim 8, further comprising:

determining that the user made a change to the adjusted at least one vehicle control; and

storing the change made to the adjusted at least one vehicle control in the user profile memory.

10. (Currently Amended) A method, comprising:

determining a location inside a vehicle associated with a user;

determining at least one vehicle control associated with the location inside the vehicle;

referring to a user profile memory associated with the user for vehicle control settings;

determining, based at least partially on the vehicle control settings, to adjust the at least one vehicle control associated with the location inside the vehicle; and

providing an adjustment output to a vehicle control system, wherein the vehicle control system is adapted to control the at least one vehicle control associated with the location inside the vehicle~~The method of claim 2~~, wherein the at least one vehicle control is adjusted via the adjustment output to match the vehicle control settings in the user profile memory.

11. (Canceled)

12. (Canceled)

13. (Currently Amended) The non-transitory computer readable medium of ~~claim 12~~ claim 18, wherein prior to providing the adjustment output, the method further comprises:

determining a presence of the user inside the vehicle, wherein the adjustment output is provided based at least partially on determining the user is present in the location of the vehicle.

14. (Currently Amended) The non-transitory computer readable medium of ~~claim 11~~ claim 18, wherein prior to determining the location inside the vehicle associated with the user the method further comprises:

storing, in the user profile memory, information corresponding to locations inside the vehicle occupied by the user;

collecting vehicle control setting data associated with the user, wherein the vehicle control setting data includes at least one vehicle control setting made by the user in at least one of the locations inside the vehicle; and

storing the vehicle control setting data in the user profile memory.

15. (Currently Amended) The non-transitory computer readable medium of ~~claim 11~~ claim 18, wherein the at least one vehicle control includes one or more vehicle features such as a seat system, a steering control, a foot pedal control, a mirror position, and a display device, and wherein the vehicle control settings include at least one of a position, a sensitivity, an angle, and a movement, associated with the one or more vehicle features.

16. (Original) The non-transitory computer readable medium of claim 13, wherein determining the presence of the user inside the vehicle further comprises:

detecting a person via at least one image sensor associated with the vehicle;

identifying facial features associated with the person detected via the at least one image sensor; and

determining whether the identified facial features associated with the person match user characteristics stored in a memory.

17. (Currently Amended) The non-transitory computer readable medium of ~~claim 12~~claim 18, wherein the method further comprises:

determining that the user made a change to the adjusted at least one vehicle control; and

storing the change made to the adjusted at least one vehicle control in the user profile memory.

18. (Currently Amended) A non-transitory computer readable medium having instructions stored thereon that, when executed by a processor, perform a method comprising:

determining a location inside a vehicle associated with a user;

determining at least one vehicle control associated with the location inside the vehicle;

referring to a user profile memory associated with the user for vehicle control settings;

determining, based at least partially on the vehicle control settings, to adjust the at least one vehicle control associated with the location inside the vehicle; and

providing an adjustment output to a vehicle control system, wherein the vehicle control system is adapted to control the at least one vehicle control associated with the location inside the vehicle~~The non-transitory computer readable medium of claim 12~~, wherein the at least one vehicle control is adjusted via the adjustment output to match the vehicle control settings in the user profile memory.

19. (Currently Amended) A vehicle control system, comprising:

a profile identification module contained in a memory and executed by a processor of the vehicle control system, the profile identification module configured to determine a location inside a vehicle associated with a user, determine at least one vehicle control associated with the

location inside the vehicle, refer to a user profile memory associated with the user for vehicle control settings, and determine, based at least partially on the vehicle control settings, to adjust the at least one vehicle control associated with the location inside the vehicle, provide an adjustment output to the vehicle control system, wherein the vehicle control system is adapted to control the at least one vehicle control associated with the location inside the vehicle, wherein the at least one vehicle control is adjusted via the adjustment output to match the vehicle control settings in the user profile memory.

20. (Canceled)

21. (New) The vehicle control system of claim 19, wherein prior to providing the adjustment output, the profile identification module is further configured to determine a presence of the user inside the vehicle, wherein the adjustment output is provided based at least partially on determining the user is present in the location of the vehicle.

22. (New) The vehicle control system of claim 19, wherein prior to determining the location inside the vehicle associated with the user the profile identification module is further configured to store, in the user profile memory, information corresponding to locations inside the vehicle occupied by the user, collect vehicle control setting data associated with the user, wherein the vehicle control setting data includes at least one vehicle control setting made by the user in at least one of the locations inside the vehicle, and store the vehicle control setting data in the user profile memory.

23. (New) The vehicle control system of claim 19, wherein the at least one vehicle control includes one or more vehicle features such as a seat system, a steering control, a foot pedal control, a mirror position, and a display device, and wherein the vehicle control settings include at least one of a position, a sensitivity, an angle, and a movement, associated with the one or more vehicle features.

24. (New) The vehicle control system of claim 21, wherein, in determining the presence of the user inside the vehicle, the user the profile identification module is further

configured to detect a person via at least one image sensor associated with the vehicle, identify facial features associated with the person detected via the at least one image sensor, and determine whether the identified facial features associated with the person match user characteristics stored in a memory.

25. (New) The vehicle control system of claim 19, wherein the profile identification module is further configured to determine that the user made a change to the adjusted at least one vehicle control, and store the change made to the adjusted at least one vehicle control in the user profile memory.

26. (New) The vehicle control system of claim 19, wherein the profile identification module is further configured to determine a presence of the user inside the vehicle based at least partially on detecting a device associated with the user in an area of the vehicle, and wherein the adjustment output is provided based at least partially on determining the user is present in the location inside the vehicle.

ARGUMENTS/REMARKS

Applicant submits this Amendment and Response to respond to the Office Action dated January 26, 2015 ("*Office Action*"). Claims 4, 5, 7-10, 13-15, and 17-19 have been amended without intending to abandon or to dedicate to the public any patentable subject matter. 1-3, 11, 12, and 20 have been canceled without intending to abandon or to dedicate to the public any patentable subject matter. Claims 21-26 have been added. Accordingly, claims 4-10, 13-19, and 21-26 are currently pending.

Allowable Subject Matter

Applicant would like to thank the Examiner for indicating that claims 8, 10, and 18 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claims 8, 10, and 18 have been amended to include all of the limitations of the base claim and any intervening claims and without intending to abandon or to dedicate to the public any patentable subject matter. Applicant respectfully submits that amended claim 19 and new claims 21-26 are also in condition for allowance.

Claim Rejections Under 35 U.S.C. §102

Claims 1-20 have been rejected under 35 U.S.C. §102 as anticipated by U.S. Patent Publication No. 2014/0028542 to Lovitt et al. ("*Lovitt*"). In order for a rejection under 35 U.S.C. § 102 to be proper, each and every claim element must be found in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir. 1987). *Lovitt*, however, fails to at least teach, suggest, or describe several features disclosed in the currently amended claims.

Applicant respectfully requests reconsideration of this application as amended. To the extent that *Lovitt* fails to at least teach, suggest, or disclose all of the elements recited in the pending independent claims, Applicant submits that the rejections of the independent claims and the dependent claims therefrom should be reconsidered and withdrawn.

The application now appearing to be in form for allowance, early notification of same is respectfully requested. Applicant does not acquiesce to any objection, rejection, or argument not

specifically addressed herein. Rather, Applicant believes the amendments and arguments contained herein overcome all objections, rejections, or arguments.

In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

The Commissioner is hereby authorized to charge to deposit account number 19-1970 any fees under 37 CFR § 1.16 and 1.17 that may be required by this paper and to credit any overpayment to that Account. If any extension of time is required in connection with the filing of this paper and has not been separately requested, such extension is hereby Petitioned.

Respectfully submitted,

SHERIDAN ROSS P.C.

Date: April 27, 2015

By: /Thaine Lennox-Gentle/

Thaine Lennox-Gentle
Reg. No. 65,260
1560 Broadway, Suite 1200
Denver, CO 80202
Telephone: 303-863-9700

Electronic Acknowledgement Receipt

EFS ID:	22176138
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	111285
Filer:	Thaine Lennox-Gentle/Kathy Johnston
Filer Authorized By:	Thaine Lennox-Gentle
Attorney Docket Number:	6583-561
Receipt Date:	27-APR-2015
Filing Date:	15-APR-2014
Time Stamp:	14:50:29
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		AMEND_01_6583-561_V01.pdf	121288 57069018dca5704c65d54796db68efc63d6c1f50	yes	10

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Specification	2	2
	Claims	3	8
	Applicant Arguments/Remarks Made in an Amendment	9	10
Warnings:			
Information:			
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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/253,204	Filing Date 04/15/2014	☐ To be Mailed

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

FOR	(Column 1) NUMBER FILED	(Column 2) NUMBER EXTRA	RATE ($)	FEE ($)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X $ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X $ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is $310 ($155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

AMENDMENT	04/27/2015	(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0	X $80 =	0
	Independent (37 CFR 1.16(h))	* 4	Minus	***3	= 1	X $420 =	420
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	**420**

AMENDMENT		(Column 1) CLAIMS REMAINING AFTER AMENDMENT		(Column 2) HIGHEST NUMBER PREVIOUSLY PAID FOR	(Column 3) PRESENT EXTRA	RATE ($)	ADDITIONAL FEE ($)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X $ =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X $ =	
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
						TOTAL ADD'L FEE	

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.
** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".
*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".
The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/TRINA STEPTOE/

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NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 05/11/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 05/11/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	6583-561	7690

TITLE OF INVENTION: CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	08/11/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 05/11/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	6583-561	7690

TITLE OF INVENTION: CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	08/11/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-049000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Page 563 of 1087 Ford Ex. 1109

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	6583-561	7690

111285 7590 05/11/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 05/11/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,204	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *4/27/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *4-10,13-19 and 21-26*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/A. C. D./ Examiner, Art Unit 3663	/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14253204	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	ALEX C DUNN	3663

CPC						
Symbol					**Type**	**Version**
G07C		9	/	00158	F	2013-01-01
G08B		25	/	016	I	2013-01-01
G08G		1	/	0965	I	2013-01-01
H04W		76	/	021	I	2013-01-01
H04W		48	/	02	I	2013-01-01
H04W		4	/	12	I	2013-01-01
H04W		4	/	206	I	2013-01-01
H04W		84	/	005	A	2013-01-01
G05D		23	/	1917	I	2013-01-01
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G06F		3	/	017	I	2013-01-01
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G08G		1	/	166	I	2013-01-01
G01C		21	/	36	I	2013-01-01
G01C		21	/	3647	I	2013-01-01
G01C		21	/	26	I	2013-01-01
H04N		21	/	41422	I	2013-01-01
G08G		1	/	096725	A	2013-01-01
G08G		1	/	096741	A	2013-01-01
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H04N		7	/	181	A	2013-01-01
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H04W		12	/	08	A	2013-01-01
G08B		13	/	19647	I	2013-01-01
G08B		21	/	06	A	2013-01-01
G08B		29	/	188	A	2013-01-01
G06F		3	/	0488	A	2013-01-01

/ALEX C DUNN/ Examiner.Art Unit 3663	5/1/2015	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/THOMAS TARCZA/ Supervisory Patent Examiner.Art Unit 3663	05/01/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	8	25

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14253204	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	ALEX C DUNN	3663

B60R		25	/	1004	I	2013-01-01
G06F		21	/	31	I	2013-01-01
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H04L		67	/	10	I	2013-01-01
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B60R		16	/	037	I	2013-01-01
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G06Q		30	/	0633	I	2013-01-01
G06Q		30	/	0639	I	2013-01-01
G06Q		30	/	0645	I	2013-01-01
G06Q		50	/	30	I	2013-01-01
G07C		5	/	00	I	2013-01-01
G07C		5	/	008	I	2013-01-01

/ALEX C DUNN/ Examiner.Art Unit 3663	5/1/2015	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/THOMAS TARCZA/ Supervisory Patent Examiner.Art Unit 3663	05/01/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	8	25

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14253204	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	ALEX C DUNN	3663

G07C	5	/	0808	I	2013-01-01
G07C	5	/	085	I	2013-01-01
G07C	9	/	00126	I	2013-01-01
G08B	21	/	0205	I	2013-01-01
H04L	63	/	08	I	2013-01-01
H04L	67	/	12	I	2013-01-01
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H04N	21	/	2181	I	2013-01-01
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H04N	21	/	4542	I	2013-01-01
H04N	21	/	4751	I	2013-01-01

CPC Combination Sets					
Symbol			**Type**	**Set**	**Ranking**	**Version**
	/					
	/					

/ALEX C DUNN/ Examiner.Art Unit 3663	5/1/2015	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/THOMAS TARCZA/ Supervisory Patent Examiner.Art Unit 3663	05/01/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	8	25

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14253204	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	ALEX C DUNN	3663

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
701	49	B	6	0	R	16 / 037 (2006.0)						
CROSS REFERENCE(S)												
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)											

/ALEX C DUNN/ Examiner.Art Unit 3663	5/1/2015	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/THOMAS TARCZA/ Supervisory Patent Examiner.Art Unit 3663	05/01/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	8	25

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14253204	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	ALEX C DUNN	3663

☐ Claims renumbered in the same order as presented by applicant ☐ CPA ☐ T.D. ☐ R.1.47

Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
2	4	17	23												
3	5	18	24												
4	6	19	25												
5	7	20	26												
1	8														
6	9														
7	10														
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12	16														
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15	21														
16	22														

/ALEX C DUNN/ Examiner.Art Unit 3663	5/1/2015	**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	20	
/THOMAS TARCZA/ Supervisory Patent Examiner.Art Unit 3663	05/01/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	8	25

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	9	(US-20090284359-$ or US-20140028542-$ or US-20020126876-$ or US-20120059789-$ or US-20100106418-$ or US-20040225557-$ or US-20100304640-$ or US-20020077985-$ or US-20110309926-$).did.	US-PGPUB	OR	ON	2015/01/17 07:38
S2	4	S1 AND (location ADJ3 vehicle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:39
S3	981	(((location OR area) ADJ inside) ADJ2 vehicle)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:47
S4	896	S3 AND @ay<"2013"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:48
S5	219	S4 AND (vehicle ADJ control)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:50
S6	213	S5 AND (user OR driver OR passenger)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:50
S7	73	S6 AND "701".clas.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:51
S8	0	S7 AND (user ADJ profile)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/01/17 07:51
S9	13	S7 AND profile	US-PGPUB;	OR	ON	2015/01/17

Ford Ex. 1109

			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			07:51

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	1	((determining ADJ2 location) SAME7 (inside ADJ2 vehicle) SAME7 (determining ADJ3 one) SAME7 (vehicle ADJ control) SAME7 (associated ADJ4 inside) SAME7 (presence ADJ3 user) SAME7 (detecting ADJ2 device) SAME7 (user ADJ3 area) SAME7 (user ADJ profile ADJ memory) SAME7 (control ADJ settings) SAME7 (adjust ADJ4 one) SAME7 (vehicle ADJ control) SAME7 (providing ADJ2 adjustment) SAME7 (location ADJ inside) SAME7 (adapted ADJ2 control) SAME7 (one ADJ2 control ADJ5 inside ADJ2 vehicle)).clm.	US-PGPUB; USPAT; UPAD	OR	ON	2015/05/01 07:27

5/1/2015 7:30:19 AM
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Ford Ex. 1109

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	14253204	RICCI, CHRISTOPHER P.
	Examiner	Art Unit
	ALEX C DUNN	3663

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
701	49	1/17/2015	Alex C. Dunn

SEARCH NOTES		
Search Notes	Date	Examiner
EAST	1/17/2015	Alex C. Dunn

INTERFERENCE SEARCH			
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
	Text	5/1/2015	Alex C. Dunn

/A.C.D./ Examiner.Art Unit 3663	

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	14/253,204
				Filing Date	April 15, 2014
				First Named Inventor	Christopher P. Ricci
(Use as many sheets as necessary)				Art Unit	3663
				Examiner Name	DUNN, ALEX C
Sheet	1	of	8	Attorney Docket Number	6583-561

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Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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NAVIGATION SYSTEM WHICH IT FOLLOWS IN DRIVER PROPENSITY

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An active route searching and information guiding system according to driver's tendency is provided to supply the search information of the driver about a corresponding region if necessary, by storing the travel routes every time when the driver drives on a travel route except the supplied route and determining the priority order of the travel routes according to the frequency. In a navigation system, a driver tendency information detecting unit(50) comprises a searched route detecting unit(51) storing a searched route if a user searches the route; a user travel route detecting unit (52) storing the travel route when the user gets out of the searched route and researches another route; and a travel route learning and detecting unit(53) analyzing and storing the priority order of the searched roads and traveling patterns by analyzing the stored travel route.; A driver tendency information database(60) stores the analysis information and route information detected by the driver tendency information detecting unit. A learning route applying and searching unit(70) judges whether the analysis information stored in the driver tendency information database is applied to the present search range or not and searches the route suitable for the user travel route by regulating searching elements.

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(54) 운전자 성향에 따른 능동적 경로탐색 정보 안내 시스템

(57) 요약

본 발명은 네비게이션 시스템에 있어서, 운전자 성향을 고려하여 능동적인 경로탐색 정보를 제공하기 위한 알고리즘이 적용되는 경로탐색 정보 안내 시스템에 관한 것이다.

본 발명에서는 차량이 이동위치를 고려하여 운전자의 취향을 데이터 베이스화하여 운전자 성향정보로서 저장하고, 추후 경로 탐색시 상기한 운전자 성향정보를 고려하여 사용자의 의도와 일치하는 효율적인 경로탐색 및 안내가 가능하도록 하는 운전자 성향에 따른 능동적 경로탐색 정보 안내 시스템을 제공하고자 한다.

대표도

도 1

특허청구의 범위

청구항 1.

네비게이션 시스템에 있어서,

사용자에 의해 경로 탐색이 이루어질 경우 탐색된 경로를 저장하는 탐색경로 검출부와, 탐색된 경로를 이탈하고 재탐색이 이루어지는 경우 기존 탐색과의 비교를 통해 주행 경로를 저장하는 사용자 주행경로검출부와, 저장된 사용자의 주행경로를 분석하여 탐색도로의 우선순위 및 주행패턴을 분석하여 저장하는 주행경로학습검출부를 포함하는 운전자 성향정보 검출수단;

상기 운전자 성향정보 검출수단을 통해 검출된 경로 정보 및 분석정보가 저장되는 운전자 성향정보 데이터베이스;

운전자 성향정보 데이터 베이스에 저장된 분석정보를 이용하여 현재 탐색구간에서 적용가능성을 판단하고, 탐색요소를 조정하여 사용자 주행경로에 적합한 경로를 탐색하여 제공하는 학습경로 적용 탐색수단;을 포함하여 구성되되,

상기 주행경로 학습 검출부에서 생성되어 운전자 성향정보 데이터 베이스에 저장되는 분석정보는,

(A). 가장 자주 이용되는 주행 경로순으로 궤적 우선 순위정보,

(B). 사용자의 출발지, 목적지, 권역별 주요 (유,무료) 도로 이용 패턴 정보

(C). 사용자의 주행 경로중 주요 통과점 패턴 정보

(D). 사용자가 이용하는 주요 우회 도로 패턴 구간 정보

인 것을 특징으로 하는 운전자 성향에 따른 능동적 경로탐색 정보 안내 시스템.

청구항 2.

삭제

명세서

발명의 상세한 설명

발명의 목적

발명이 속하는 기술 및 그 분야의 종래기술

본 발명은 네비게이션 시스템에 있어서, 운전자 성향을 고려하여 능동적인 경로탐색 정보를 제공하기 위한 알고리즘이 적용되는 경로탐색 정보 안내 시스템에 관한 것이다.

지도를 저장매체에 담아 컴퓨터와 같은 단말기수단을 이용하여 사용자들이 쉽게 지도를 표시하여 살펴볼 수 있도록 하는 지리정보시스템(GIS ; Geographic Information System)을 시작으로, 근래에 이르러서는 인공위성을 이용하는 범용지구측위시스템(GPS ; Global Positioning System) 정보를 이용하여 자신의 위치를 검출, 확인하고, 이의 위치로부터 원하는 위치까지의 거리 및 최단거리 루트(route)를 쉽게 찾아 볼 수 있도록 하는 네비게이션 시스템의 기술이 급속도로 발전하고 상용화되어 많은 부가적인 서비스가 가능하게 되었다.

GPS는 표준 좌표계에서의 위치, 속도, 시간 측정을 가능하게 해주는 인공위성을 이용한 첨단 항법체계로써, 20,183km 상공에서 1일 2회 지구를 공전하며 현재 위치에 대한 좌표신호와 좌표신호를 송신한 시각에 대한 신호를 송신하는 GPS 위성을 6개의 궤도면에서 각각 3개씩 총 18개(각 궤도에 대한 예비 위성을 포함하면 총 24개)를 등간 격으로 배치한 후, GPS 수신기를 사용하여 상기 GPS 위성에서 송신된 신호를 수신, 처리함으로써, GPS 수신기가 존재할 수 있는 위치를 검출할 수 있는 장치이며, GPS 안테나와 GPS 수신회로로 이루어지는 GPS 수신기를 사용하여 3개 이상의 GPS 위성에서 송신되는 신호를 검출하여 자기의 신호를 검출하는 장치이다.

현재 많은 네비게이션 시스템에서 채용하여 사용하고 있으며, 일반적으로 네비게이션 시스템이라 함은 GIS와 GPS의 결합된 형태로써, 지도로 제작된 지리정보에서 위치 정보인 GPS정보를 이용하여 사용자가 원하는 위치를 쉽게 찾을 수 있도록 하는 것이라 할 수 있다.

최근들어 네비게이션의 대중화로 인하여 다양한 네비게이션 장치가 출시되고 있는 바, 종래의 네비게이션 장치는 목적지의 설정에 따라 지도 데이터 베이스에 의존한 최소 비용을 계산하고 이에 따라 산출된 경로를 운전자에게 제공하여 경로 안내를 수행하고 있다.

그러나 이와 같은 방법은 지도 데이터 베이스에 매우 의존적이라서, 단순히 최단 경로만을 고려하여 경로 탐색정보를 운전자에게 제공하게 되므로, 운전자의 불만이 야기되고 있다.

이러한 종래 네비게이션 시스템에서 사용자가 원하는 경로를 설정하기 위해서는 매번 수동으로 많은 설정을 해야하는 불편함이 뒤따른다.

탐색이 어루고자 하는 기술적 과제

본 발명에서는 차량이 이동위치를 고려하여 운전자의 취향을 데이터 베이스화하여 운전자 성향정보로서 저장하고, 추후 경로 탐색시 상기한 운전자 성향정보를 고려하여 사용자의 의도와 일치하는 효율적인 경로탐색 및 안내가 가능하도록 하는 운전자 성향에 따른 능동적 경로탐색 경로 안내 시스템을 제공하고자 한 것이다.

탐색의 구성

본 발명은 네비게이션 시스템에 있어서,

사용자에 의해 경로 탐색이 이루어질 경우 탐색된 경로를 저장하는 탐색경로 검출수단과, 탐색된 경로를 이탈하고, 재탐색이 이루어지는 경우 기존 탐색과의 비교를 통해 주행 경로를 저장하는 사용자 주행경로출수단과, 저장된 사용자의 주행경로를 분석하여 탐색도로의 우선순위 및 주행패턴을 분석하여 저장하는 주행경로학습검출수단을 포함하는 운전자 성향정보 검출수단과,

상기 운전자 성향정보 검출수단을 통해 검출된 경로 정보 및 분석정보가 저장되는 데이터베이스와,

데이터 베이스에 저장된 분석정보를 이용하여 현재 탐색구간에서 적용가능성을 판단 및 그 탐색요소를 조정하여 사용자 주행경로에 적합한 경로를 탐색하여 사용자에게 제공하는 학습경로 적용 탐색수단을 포함하여 구성되는 것을 특징으로 한다.

이와 같은 특징을 갖는 본 발명을 첨부된 도면에 도시된 실시예를 참조하여 그 구성 및 작용을 설명하면 다음과 같다.

도 1에 도시된 바와 같이, GPS 위성으로부터 송출되는 신호를 수신하여 자량의 자기 위치좌표를 검출하기 위한 GPS 수신부(10)와, 위치 좌표에 대하여 사용자에게 제공할 지리정보가 저장된 지리정보 데이터베이스(20)와, GPS 수신부(10)로부터 인식된 차량의 현재 위치에 대하여 지리정보 저장부(20)의 지리정보에 따라서 음성 또는 영상을 통해 사용자의 탐색경로 및 주행경로에 따른 안내정보를 제공하는 네비게이션 제어부(30)와, 사용자 키이입력부(40)를 포함하는 네비게이션 시스템에 있어서,

사용자에 의해 경로 탐색이 이루어질 경우 탐색된 경로를 저장하는 탐색경로 검출부(51)와, 탐색된 경로를 이탈하고 재탐색이 이루어지는 경우 기존 탐색과의 비교를 통해 주행 경로을 저장하는 사용자 주행경로검출부(52)와, 저장된 사용자의 주행경로를 분석하여 탐색도로의 우선순위 및 주행패턴을 분석하여 저장하는 주행경로학습검출부(53)를 포함하는 운전자 성향정보 검출부(50)와,

상기 운전자 성향정보 검출부(50)를 통해 검출된 경로 정보 및 분석정보가 저장되는 운전자 성향정보 데이터베이스(60)와,

데이터 베이스(60)에 저장된 분석정보를 이용하여 현재 탐색구간에서 적용가능성을 판단하고, 탐색요소를 조정하여 사용자 주행경로에 적합한 경로를 탐색하여 제공하는 학습경로 적용 탐색부(70)를 포함하여 구성된다.

이와 같은 본 발명 운전자 성향에 따른 능동적 경로탐색 정보 안내 시스템은, GPS시스템에 운전자 주행정보를 수집하고, 이로부터 운전자의 주행 성향을 파악하여, 이에 적합한 탐색경로를 제공할 수 있도록 네비게이션 시스템에 운전자 성향 검출부(50)를 구성한다.

운전자 성향 검출부(50)는 탐색경로 검출부(51), 주행경로검출부(52), 주행경로 학습 검출부(53)로 구성된다.

먼저, 탐색경로 검출부(51)는 운전자가 탐색한 경로를 검출하여 운전자 성향정보 데이터 베이스(60)에 저장하여, 운전자가 자주하는 탐색경로를 파악할 수 있도록 한다.

상기 주행경로 검출부(52)는 네비게이션 시스템에서 제공한 탐색경로에서 이탈한 후, 다시 재탐색을 요구할 경우에 기존 탐색과의 비교를 통해 주행경로를 운전자 성향정보 데이터 베이스(60)에 저장하여, 운전자의 주행경로를 파악할 수 있도록 한다.

주행경로 학습 검출부(53)는 저장된 운전자의 주행경로를 분석하여 탐색 도로의 우선 순위 및 주행패턴을 분석하여 저장한다.

(A). 가장 자주 이용되는 주행 경로순으로 궤적 우선 순위를 저장

(B). 사용자의 출발지, 목적지, 권역별 주요 (유,무료) 도로 이용 패턴 저장

(C). 사용자의 주행 경로중 주요 통과점 패턴 저장

(D). 사용자가 이용하는 주요 우회 도로 패턴 및 구간 저장

이와 같이 분석정보를 생성할 수 있으며, 분석정보는 이에 국한되지 않고, 다양하게 세분화하여 지정할 수 있다.

이와 같은 분석정보를 이용하여 운전자가 탐색 요구시 현재 탐색 구간에서 적용가능성을 판단하고, 또한 해당 분석정보에 따라 탐색요소를 조정하여 사용자 주행 경로에 적합한 경로 탐색을 제공하도록 학습경로 적용 탐색부(70)가 구성된다.

이와 같은 본 발명 운전자 성향에 따른 능동적 경로탐색 정보 안내 시스템의 동작과정을 설명하면 다음과 같다.

따라서 제어부(30)에서는 GPS 수신부(10)를 통해 파악된 차량의 현위치정보로 사용자가 요구한 탐색정보를 지리정보 데이터 베이스(20)에 저장된 정보를 이용하여 영상 또는 음성을 통해 운전자에게 알려주게 된다.

이때 탐색경로 검출부(51)에서는 탐색된 경로를 운전자 성향정보 데이터 베이스(60)에 저장한다.

이후, 운전자가 주행을 시작하여 제공한 탐색경로를 이탈하게 될 때, 운전자가 재 탐색을 요구하게 되면, 운전자 성향정보 검출부(50)의 주행경로검출부(52)는 기존 탐색과 비교하여 주행경로를 운전자 성향정보 데이터 베이스(60)에 저장한다.

이와 같이 저장된 운전자 주행정보를 이용하여 주행경로 학습검출부(53)에서는 탐색정보로 제공할 도로의 우선순위를 결정하여 운전자 성향정보 데이터 베이스(60)에 저장하는 바,

도 2는 이의 과정을 나타낸 플로우챠트이다.

탐색된 정보로부터 탐색경로열 저장, 출발지, 목적지, 권역을 저장한다.

이후, 재탐색이 요구되면, 재탐색지점을 등록(저장)하고, 재탐색 구간을 저장(도로 등급 및 경로열), 그리고 운전자의 주행경로를 저장한다.

이와 같은 정보로서 주행경로 학습검출부(53)에서 재탐색 지점 통과점을 저장하고, 이용 빈도수를 판단하여 주행경로의 우선순위를 판단하여 저장하고, 출발지, 목적지에 대한 도로의 등급(유료, 무료, 일반도로 등)을 결정하여 우선순위를 분석정보로 저장한다.

즉, 출발지, 목적지가 선택되어 경로탐색이 이루어진 후, 출발지, 목적지의 권역 및 탐색 경로열을 저장하고, 주행중 재탐색이 발생할 때마다 재탐색 지점 및 주행경로를 저장하고, 이에 대한 정보를 통과점 등록, 이용 빈도에 따른 주행경로 우선순위 설정, 주행도로 등급의 우선 순위 설정을 통하여 다음 탐색 알고리즘 수행시 이용할 수 있는 데이터를 생성하는 것이다.

한편, 학습경로 적용 탐색부(70)에서는 운전자가 목적지를 입력하여 탐색정보를 요구하게 되면, 운전자 성향 정보 데이터베이스(60)에 저장된 분석정보를 이용하여, 현재 운전자 요구한 탐색구간에 적용가능한지를 판단한다.

판단결과 적용한 가능한 경우 운전자에게 제공할 탐색요소를 분석된 정보에 맞게 조정하여 운전자 주행경로에 적합한 경로탐색 정보를 제공한다.

즉, 출발지, 목적지 권역분석, 학습된 주요 도로이용 패턴 적용, 주요 통과점 적용 여부 판단 및 탐색 적용, 주요 우회도로 구간 적용 여부 판단 및 탐색 적용 등에 관하여 판단하고, 가능한 부분에 대하여 해당 정보로부터 탐색요소를 수정하여 운전자에게 제공하는 것이다.

도 3은 이의 과정을 나타낸 플로우챠트이다.

운전자가 요구한 출발지,목적지 권역이 일치하는 가를 판단한다.

즉, 운전자 성향정보 데이터 베이스(60)에 이전에 이와 같은 출발지와 목적지에 대하여, 탐색 제공후 재탐색에 의해 주행경로가 저장되고, 이에대한 분석정보가 생성된 정보가 있는 가를 판단하는 단계를 의미한다.

권역이 일치할 경우 운전자 성향정보 데이터 베이스(60)에 저장된 분석정보를 이용하여 도로 등급 우선순위에 따라 팩터를 수정하여 각 통과점(안내정보를 제공하기 위한 지점)을 경유할 때마다 저장된 주행경로 우선 순위에 따라 경로를 수정하여 운전자의 주행경로를 안내하게 된다.

즉, 출발지, 목적지 권역이 기존에 저장된 데이터와 일치하는 것이 있는 지를 검색하고, 일치하는 경우 저장된 도로 등급 우선순위를 적용하고, 생성된 경로중 통과점에 등록된 지점과 일치하는 지점이 존재하는 경우 해당 구간을 저장된 경로열로 대치하고 경로 안내가 되도록 한다.

이와 같은 과정을 통해 운전자가 선호하는 주행경로를 능동적으로 안내하게 된다.

발명의 효과

이와 같은 본 발명은, 제공된 탐색 경로외의 주행경로를 운전자가 탐색하여 주행하게 될 때마다 운전자의 주행경로를 저장하고, 이의 빈도수에 따라 우선순위(등급)을 결정하여 분석정보로 저장하고, 이후 해당 구간에 대한 탐색정보가 필요한 경우 해당하는 분석정보를 이용하여 운전사의 탐색정보를 제공하도록 한 것으로, 이에 따르면 운전자의 성향에 따른 능동적인 경로 탐색정보를 제공할 수 있게 된다.

도면의 간단한 설명

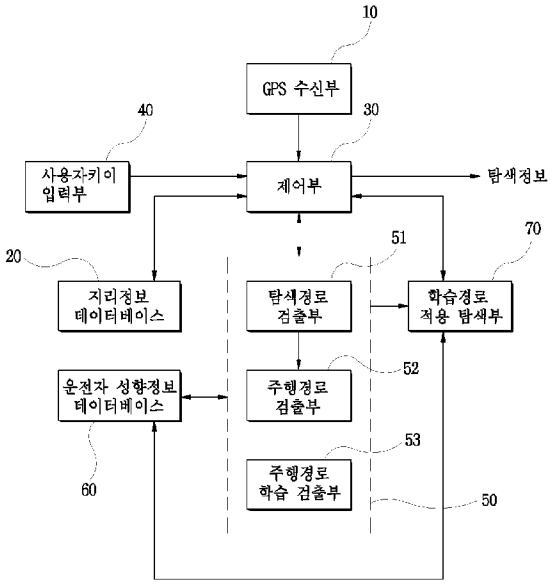
도 1은 본 발명 운전자 성향에 따른 능동적 경로탐색 정보 안내 시스템의 구성을 보인 블록도.

도 2는 본 발명에 있어서, 운전자의 주행경로 저장 및 분석정보생성 알고리즘을 나타낸 플로우챠트.

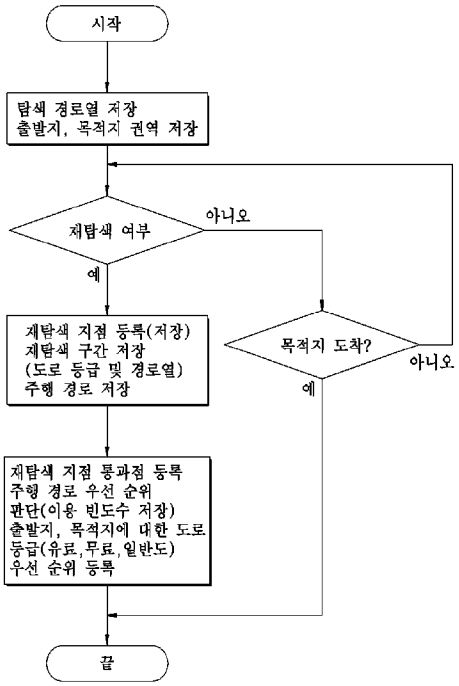
도 3은 본 발명에 있어서, 분석정보를 이용하여 운전자의 경로 탐색정보를 제공하는 알고리즘을 나타낸 플로우챠트.

도면

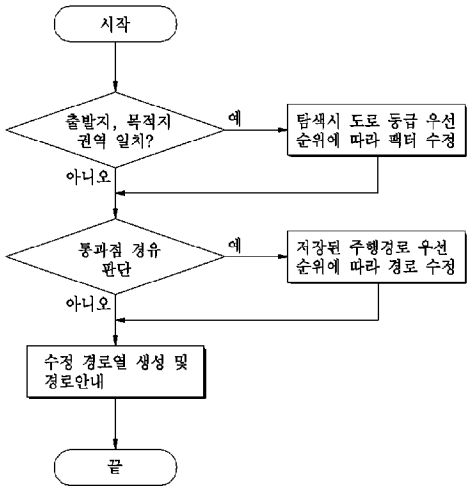
도면1


10
GPS 수신부
40
30
사용자키이 입력부
제어부
탐색정보
20
51
70
지리정보 데이터베이스
탐색경로 검출부
학습경로 적용 탐색부
52
운전자 성향정보 데이터베이스
주행경로 검출부
53
주행경로 학습 검출부
60
50

도면2


시작
탐색 경로열 저장
출발지, 목적지 권역 저장
재탐색 여부
아니오
예
재탐색 지점 등록(저장)
재탐색 구간 저장
(도로 등급 및 경로열)
주행 경로 저장
목적지 도착?
아니오
예
재탐색 지점 통과점 등록
주행 경로 우선 순위
판단(이용 빈도수 저장)
출발지, 목적지에 대한 도로
등급(유료,무료,일반도)
우선 순위 등록
끝

도면3


시작
출발지, 목적지 권역 일치?
예
탐색시 도로 등급 우선 순위에 따라 팩터 수정
아니오
통과점 경유 판단
예
저장된 주행경로 우선 순위에 따라 경로 수정
아니오
수정 경로열 생성 및 경로안내
끝

PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: RAQUEL F. BUCKLEY
SHERIDAN ROSS P.C.
1560 BROADWAY, SUITE 1200
DENVER, CO 80202

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

	Date of mailing *(day/month/year)* 24 DEC 2014
Applicant's or agent's file reference 6583-549-PCT	**FOR FURTHER ACTION** See paragraphs 1 and 4 below
International application No. PCT/US2014/034088	International filing date *(day/month/year)* 15 April 2014
Applicant FLEXTRONICS AP, LLC	

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

   Filing of amendments and statement under Article 19:
   The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

   When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

   How? Directly to the International Bureau of WIPO preferably through ePCT or on paper to, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: +41 22 338 82 70

   For more detailed instructions, see *PCT Applicant's Guide*, International Phase, paragraphs 9.004 – 9.011.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ **With regard to any protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
   - ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with any request to forward the texts of both the protest and the decision thereon to the designated Offices.
   - ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

   The applicant may **submit comments on an informal basis on the written opinion of the International Searching Authority** to the International Bureau. These comments will be made available to the public after international publication. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established.

   Shortly after the expiration of **18 months from the priority date, the international application will be published** by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau before the completion of the technical preparations for international publication (Rules 90*bis*.1 and 90*bis*.3).

   Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for **entry into the national phase** before those designated Offices. In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months. For details about the applicable time limits, Office by Office, see www.wipo.int/pct/en/texts/time_limits.html and the *PCT Applicant's Guide*, National Chapters.

   Within **19 months from the priority date, the applicant may request that a supplementary international search be carried out** by a different International Searching Authority that offers this service (Rule 45*bis*.1). The procedure for requesting supplementary international search is described in the *PCT Applicant's Guide*, International Phase, paragraphs 8.006-8.032.

Name and mailing address of the ISA/ Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 Telephone No. PCT OSP: 571-272-7774

Form PCT/ISA/220 (July 2014)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6583-549-PCT	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US2014/034088	International filing date *(day/month/year)* 15 April 2014	(Earliest) Priority Date *(day/month/year)* 15 April 2013
Applicant FLEXTRONICS AP, LLC		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 4 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of:

☒ the international application in the language in which it was filed.

☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

b. ☐ This international search report has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).

c. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (see Box No. II).

3. ☒ **Unity of invention is lacking** (see Box No. III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 20

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

Form PCT/ISA/210 (first sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/034088

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:
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.:
1-7

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.

Form PCT/ISA/210 (continuation of first sheet (2)) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/034088

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G06Q 30/02 (2014.01)
USPC - 705/14.62
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) - G06F 17/30; G06Q 30/00, 30/02 (2014.01)
USPC - 705/14.4, 14.49, 14.53, 14.62, 14.66

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
CPC - G06Q 30/02, 0241, 0251, 0255, 0265, 0269 (2014.02) (keyword delimited)

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

PatBase, Google Patents, Google Scholar
Search Terms Used: vehicular advertising, creating targeted advertising profiles based on user behavior, contextual advertising

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 2011/0078024 A1 (MESSIER et al) 31 March 2011 (31.03.2011) entire document	1-3, 5-7 --- 4
Y	US 2003/0101451 A1 (BENTOLILA et al) 29 May 2003 (29.05.2003) entire document	4
A	US 2007/0061057 A1 (HUANG et al) 15 March 2007 (15.03.2007) entire document	1-7
A	US 2012/0047530 A1 (SHKEDI) 23 February 2012 (23.02.2012) entire document	1-7

☐ 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
08 December 2014	24 DEC 2014
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: Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/034088

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 1-7, drawn to a method comprising recording information associated with at least one user.
Group II, claims 8-15, drawn to a vehicular advertising system comprising listening for a user response to a presented advertisement.

The inventions listed as Groups I-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: the special technical feature of the Group I invention: presenting an advertisement based at least partially on the stored advertising as claimed therein is not present in the invention of Group II. The special technical feature of the Group II invention: listen for a user response to the presented advertisement; determine that at least some of the user response includes information associated with the presented advertisement; and send at least one advertiser the information associated with the presented advertisement as claimed therein is not present in the invention of Group I.

Groups I and II lack unity of invention because even though the inventions of these groups require the technical feature of recording information associated with at least one user in a vehicle; determining that at least some of the recorded information includes advertising information; associating, the advertising information with the at least one user; storing, in a memory, the advertising information; and presenting an advertisement based at least partially on the stored advertising information, to the at least one user in the vehicle, this technical feature is not a special technical feature as it does not make a contribution over the prior art.

Specifically, US 2011/0078024 A1 (MESSIER et al) 31 March 2011 (31.03.2011) teaches recording information associated with at least one user in a vehicle (telematics device records one or more transactions made by a user of a vehicle, Para. 39); determining that at least some of the recorded information includes advertising information (telematics device determines whether the user has utilized one or more advertisements for carrying out the one or more transactions, Para. 39); associating, the advertising information with the at least one user (the advertising module provisions the one or more advertisements based on the user behavior, Para. 38); storing, in a memory, the advertising information (data collected by telematics device, including one or more advertisements, are stored in storage, Paras. 44 and 46); and presenting an advertisement based at least partially on the stored advertising information, to the at least one user in the vehicle (advertising module determines which advertisements to be provisioned to the user of the vehicle based on data collected by telematics device, including one or more advertisements, which are stored in storage, Paras. 37, 44, and 46).

Since none of the special technical features of the Group I or II inventions are found in more than one of the inventions, unity of invention is lacking.

Form PCT/ISA/210 (extra sheet) (July 2009)

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: RAQUEL F. BUCKLEY
SHERIDAN ROSS P.C.
1560 BROADWAY, SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	24 DEC 2014

Applicant's or agent's file reference	FOR FURTHER ACTION
6583-549-PCT	See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2014/034088	15 April 2014	15 April 2013

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06Q 30/02 (2014.01)
USPC - 705/14.62

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. **FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	08 December 2014	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/034088

Box No. I Basis of this opinion

1. With regard to the **language**, this opinion has been established on the basis of:

   ☒ the international application in the language in which it was filed.

   ☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the **rectification of an obvious mistake** authorized by or notified to this Authority under Rule 91 (Rule 43*bis*.1(a))

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

   a. (means)

      ☐ on paper

      ☐ in electronic form

   b. (time)

      ☐ in the international application as filed

      ☐ together with the international application in electronic form

      ☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

Form PCT/ISA/237 (Box No. I) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/034088

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the appicable time limit:

   ☐ paid additional fees

   ☐ paid additional fees under protest and, where applicable, the protest fee

   ☐ paid additional fees under protest but the applicable protest fee was not paid

   ☒ not paid additional fees

2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is

   ☐ complied with

   ☒ not complied with for the following reasons:

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 1-7, drawn to a method comprising recording information associated with at least one user.
Group II, claims 8-15, drawn to a vehicular advertising system comprising listening for a user response to a presented advertisement.

The inventions listed as Groups I-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: the special technical feature of the Group I invention: presenting an advertisement based at least partially on the stored advertising as claimed therein is not present in the invention of Group II. The special technical feature of the Group II invention: listen for a user response to the presented advertisement; determine that at least some of the user response includes information associated with the presented advertisement; and send at least one advertiser the information associated with the presented advertisement as claimed therein is not present in the invention of Group I.

Groups I and II lack unity of invention because even though the inventions of these groups require the technical feature of recording information associated with at least one user in a vehicle; determining that at least some of the recorded information includes advertising information; associating, the advertising information with the at least one user; storing, in a memory, the advertising information; and presenting an advertisement based at least partially on the stored advertising information, to the at least one user in the vehicle, this technical feature is not a special technical feature as it does not make a contribution over the prior art.

Specifically, US 2011/0078024 A1 (MESSIER et al) 31 March 2011 (31.03.2011) teaches recording information associated with at least one user in a vehicle (telematics device records one or more transactions made by a user of a vehicle, Para. 39); determining that at least some of the recorded information includes advertising information (telematics device determines whether the user has utilized one or more advertisements for carrying out the one or more transactions, Para. 39); associating, the advertising information with the at least one user (the advertising module provisions the one or more advertisements based on the user behavior, Para. 38); storing, in a memory, the advertising information (data collected by telematics device, including one or more advertisements, are stored in storage, Paras. 44 and 46); and presenting an advertisement based at least partially on the stored advertising information, to the at least one user in the vehicle (advertising module determines which advertisements to be provisioned to the user of the vehicle based on data collected by telematics device, including one or more advertisements, which are stored in storage, Paras. 37, 44, and 46).

Since none of the special technical features of the Group I or II inventions are found in more than one of the inventions, unity of invention is lacking.

4. Consequently, this opinion has been established in respect of the following parts of the international application:

   ☐ all parts

   ☒ the parts relating to claims Nos. 1-7

Form PCT/ISA/237 (Box No. IV) (July 2011)

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/034088

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	4	YES
	Claims	1-3, 5-7	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-7	NO
Industrial applicability (IA)	Claims	1-7	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-3 and 5-7 lack novelty under PCT Article 33(2) as being anticipated by Messier et al., hereinafter referred to as Messier.

Regarding claim 1, Messier discloses a method (Para. 6), comprising: recording information associated with at least one user in a vehicle (telematics device records one or more transactions made by a user of a vehicle, Para. 39); determining that at least some of the recorded information includes advertising information (telematics device determines whether the user has utilized one or more advertisements for carrying out the one or more transactions, Para. 39); associating, the advertising information with the at least one user (the advertising module provisions the one or more advertisements based on the user behavior, Para. 38); storing, in a memory, the advertising information (data collected by telematics device, including one or more advertisements, are stored in storage, Paras. 44 and 46); and presenting an advertisement based at least partially on the stored advertising information, to the at least one user in the vehicle (advertising module determines which advertisements to be provisioned to the user of the vehicle based on data collected by telematics device, including one or more advertisements, which are stored in storage, Paras. 37, 44, and 46).

Regarding claim 2, Messier discloses wherein recording is associated with an information receiving system, wherein the information receiving system comprises at least one of a plurality of vehicle sensors, user interface devices, and information exchange devices (recording the one or more transactions by the user is associated with a telematics device which is configured to monitor, aggregate, send and/or receive information to and from the vehicle, Para. 19).

Regarding claim 3, Messier discloses wherein the recordings are based at least partially on a plurality of observations made by the vehicle, where in the plurality of observations include a user behavior (telematics device integrated with the vehicle's on board diagnostics system records one or more transactions by the user, Paras. 19 and 39).

Regarding claim 5, Messier discloses wherein the advertising information may include at least one of preferred brands, purchasing decisions, advertisement effectiveness, and predictive advertisement measures (telematics device determines whether the user has utilized one or more advertisements for carrying out the one or more transactions, Para. 39).

Regarding claim 6, Messier discloses wherein an advertisement management module is configured to associate an advertisement based at least in part on the advertising information (advertising module determines which advertisements to be provisioned to the user of the vehicle based on data collected by telematics device, including one or more advertisements used by the user for one or more transactions, Paras. 37, 44, and 46).

Regarding claim 7, Messier discloses wherein the advertisement is presented to the at least one user via a broadcast system (the one or more advertisements are provisioned to the user on a mobile device connected to a wireless network, Paras. 20 and 38).

Claim 4 lacks an inventive step under PCT Article 33(3) as being obvious over Messier in view of Bentolila et al., hereinafter referred to as Bentolila.

Regarding claim 4, Messier discloses determining whether a user profile exists (the telematics device 122 is configured for determining the iris profile of the user, Para. 19). Messier fails to explicitly disclose retrieving the user profile, when the user profile is determined to exist; and creating the user profile, when the user profile is determined not exist. Bentolila is in the field of targeted advertising (abstract) and further teaches retrieving the user profile, when the user profile is determined to exist (the preference agent retrieves the demographic profiles of the viewers and the meta data contained in each advertisement to describe the target audience for the particular advertisement, Para. 336); and creating the user profile, when the user profile is determined not exist (the preference agent further contains software that allows it to create a demographic profile for each viewer, Para. 335). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine retrieving the user profile, when the user profile is determined to exist; and creating the user profile, when the user profile is determined not exist with the invention of Messier, based on the teachings of Bentolila, for the purpose of custom tailoring narrowly focused, targeted advertisements (Bentolila, Para. 335).

Claims 1-7 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

PATENT COOPERATION TREATY

RECEIVED
JAN 05 2015
SHERIDAN ROSS P.C.
DOCKETING DEPT

From the INTERNATIONAL SEARCHING AUTHORITY

To: DOUGLAS W. SWARTZ
SHERIDAN ROSS P.C.
1560 BROADWAY, SUITE 1200
DENVER, CO 80202

PCT

NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION

(PCT Rule 44.1)

	Date of mailing *(day/month/year)* 31 DEC 2014
Applicant's or agent's file reference 6583-585-PCT	**FOR FURTHER ACTION** See paragraphs 1 and 4 below
International application No. PCT/US2014/034194	International filing date *(day/month/year)* 15 April 2014
Applicant FLEXTRONICS AP, LLC	

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

   Filing of amendments and statement under Article 19:
   The applicant is entitled, if he so wishes, to amend the claims of the international application (see Rule 46):

   When? The time limit for filing such amendments is normally two months from the date of transmittal of the international search report.

   How? Directly to the International Bureau of WIPO preferably through ePCT or on paper to, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Facsimile No.: +41 22 338 82 70

   For more detailed instructions, see *PCT Applicant's Guide*, International Phase, paragraphs 9.004 - 9.011.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ **With regard to any protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
   - ☐ the protest together with the decision thereon has been transmitted to the International Bureau together with any request to forward the texts of both the protest and the decision thereon to the designated Offices.
   - ☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

4. **Reminders**

   The applicant may **submit comments on an informal basis on the written opinion of the International Searching Authority** to the International Bureau. These comments will be made available to the public after international publication. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established.

   Shortly after the expiration of **18 months from the priority date, the international application will be published** by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau before the completion of the technical preparations for international publication (Rules 90*bis*.1 and 90*bis*.3).

   Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase **until 30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for **entry into the national phase** before those designated Offices. In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months. For details about the applicable time limits, Office by Office, see www.wipo.int/pct/en/texts/time_limits.html and the *PCT Applicant's Guide*, National Chapters.

   Within **19 months from the priority date, the applicant may request that a supplementary international search be carried out** by a different International Searching Authority that offers this service (Rule 45*bis*.1). The procedure for requesting supplementary international search is described in the *PCT Applicant's Guide*, International Phase, paragraphs 8.006-8.032.

Name and mailing address of the ISA/ Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Authorized officer Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 Telephone No. PCT OSP: 571-272-7774

Form PCT/ISA/220 (July 2014)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 8583-585-PCT	FOR FURTHER ACTION	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US2014/034194	International filing date *(day/month/year)* 15 April 2014	(Earliest) Priority Date *(day/month/year)* 15 April 2013
Applicant FLEXTRONICS AP, LLC		

This international search report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This international search report consists of a total of 5 sheets.

☐ It is also accompanied by a copy of each prior art document cited in this report.

1. Basis of the report

a. With regard to the language, the international search was carried out on the basis of:

☒ the international application in the language in which it was filed.

☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

b. ☐ This international search report has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43.6*bis*(a)).

c. ☐ With regard to any nucleotide and/or amino acid sequence disclosed in the international application, see Box No. I.

2. ☐ Certain claims were found unsearchable (see Box No. II).

3. ☒ Unity of invention is lacking (see Box No. III).

4. With regard to the title,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the abstract,

☐ the text is approved as submitted by the applicant.

☒ the text has been established, according to Rule 38.2, by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the drawings,

a. the figure of the drawings to be published with the abstract is Figure No. 4

☒ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☐ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

Form PCT/ISA/210 (first sheet) (July 2009)

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2014/034194

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:
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.:
1-23

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.

Form PCT/ISA/210 (continuation of first sheet (2)) (July 2009)

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

Methods, systems, and a computer readable medium are provided for maintaining a persona of a vehicle occupant and, based on the persona of the vehicle occupant and vehicle-related information, performing an action assisting the vehicle occupant. Methods, systems, and a computer readable medium are also provided for a vehicle containing multiple blade processors for performing vehicle and/or infotainment tasks, functions, and operations

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/034184

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - B60W 10/00 (2014.01)
USPC - 701/45
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) - B60W 10/00 (2014.01)
USPC - 340/905; 701/22, 45, 424; 709/224

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
CPC: B60W 2530/14, B60W 2540/24, B60W 2540/28, B60W 2550/12 (2014.09) (keyword delimited)

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

Orbit, Google Patents, Google Scholar, Google.
Search terms used: vehicle, identification, profile, driver, occupant, location, sensor, route

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 2011/0210867 A1 (BENEDIKT) 01 September 2011 (01.09.2011) entire document	1-2, 4-5, 8-9, 11-12, 15-16, 18-19, 22 --- 3, 6, 7, 10, 13, 14, 17, 20, 21, 23
Y	US 2012/0053793 A1 (SALA et al) 01 March 2012 (01.03.2012) entire document	3, 6, 7, 10, 13, 14, 17, 20, 21, 23
(P, Y)	US 2013/0204455 A1 (CHIA et al) 08 August 2013 (08.08.2013) entire document	6
A	US 2013/0059607 A1 (HERZ et al) 07 March 2013 (07.03.2013) entire document	1-23
A	US 2013/0024060 A1 (SUKKARIE et al) 24 January 2013 (24.01.2013) entire document	1-23
A	US 2010/0106344 A1 (EDWARDS et al) 29 April 2010 (29.04.2010), abstract, paragraph 16	1-23

☐ 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
15 December 2014	31 DEC 2014

Name and mailing address of the ISA/US	Authorized officer:
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/210 (second sheet) (July 2009)

Continuation of Box III.

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 1-23, drawn to a method, vehicle and tangible non-transient computer readable medium; maintaining a persona of a vehicle occupant; and based on the persona and vehicle-related information, perform an action assisting the vehicle occupant.
Group II, claims 24-31, drawn to a vehicle comprising: a backplane having a first communication zone defining a trusted network; the backplane having a second communication zone defining an untrusted network; the backplane having a third communication zone providing power and data transmission to the plurality of blade processors.
Group III, claims 32-39, drawn to a vehicle wherein the plurality of blade processors comprises a master blade processor operable to assign a component and/or module requiring a blade processor for execution to a selected blade processor.

The inventions listed as Groups I, II and III 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: the special technical feature of the Group I invention: maintaining a persona of a vehicle occupant; and based on the persona and vehicle-related information, perform an action assisting the vehicle occupant as claimed therein is not present in the invention of Groups II and III. The special technical feature of the Group II invention: a backplane having a first communication zone defining a trusted network; the backplane having a second communication zone defining an untrusted network; the backplane having a third communication zone providing power and data transmission to the plurality of blade processors as claimed therein is not present in the invention of Groups I or III. The special technical feature of the Group III invention: the plurality of blade processors comprises a master blade processor operable to assign a component and/or module requiring a blade processor for execution to a selected blade processor as claimed therein is not present in the invention of Groups I or II.

Groups I, II and III lack unity of invention because even though the inventions of these groups require the technical feature of a vehicle having a plurality of blade processors, each blade processor performing a function that is at least one of a vehicle task, function, or operation and an infotainment task, function or operation, this technical feature is not a special technical feature as it does not make a contribution over the prior art. Specifically, US 2010/0106344 A1 (EDWARDS et al) 29 April 2010 (29.04.2010), abstract, paragraph 16.

Since none of the special technical features of the Group I, II or III inventions are found in more than one of the inventions, unity of invention is lacking.

PATENT COOPERATION TREATY

From the
INTERNATIONAL SEARCHING AUTHORITY

To: DOUGLAS W. SWARTZ
SHERIDAN ROSS P.C.
1560 BROADWAY, SUITE 1200
DENVER, CO 80202

PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43*bis*.1)

Date of mailing *(day/month/year)*	31 DEC 2014
Applicant's or agent's file reference 6583-585-PCT	FOR FURTHER ACTION See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2014/034194	15 April 2014	15 April 2013

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - B60W 10/00 (2014.01)
USPC - 701/45

Applicant FLEXTRONICS AP, LLC

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☒ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1*bis*(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

Name and mailing address of the ISA/US	Date of completion of this opinion	Authorized officer:
Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201	15 December 2014	Blaine R. Copenheaver PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

Form PCT/ISA/237 (cover sheet) (July 2011)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/034194

Box No. I Basis of this opinion

1. With regard to the language, this opinion has been established on the basis of:

☒ the international application in the language in which it was filed.

☐ a translation of the international application into _____ which is the language of a translation furnished for the purposes of international search (Rules 12.3(a) and 23.1(b)).

2. ☐ This opinion has been established taking into account the rectification of an obvious mistake authorized by or notified to this Authority under Rule 91 (Rule 43*bis* 1(a)).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, this opinion has been established on the basis of a sequence listing filed or furnished:

a. (means)

☐ on paper

☐ in electronic form

b. (time)

☐ in the international application as filed

☐ together with the international application in electronic form

☐ subsequently to this Authority for the purposes of search

4. ☐ In addition, in the case that more than one version or copy of a sequence listing has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

5. Additional comments:

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/034194

Box No. IV Lack of unity of invention

1. ☒ In response to the invitation (Form PCT/ISA/206) to pay additional fees the applicant has, within the appicable time limit.
   - ☐ paid additional fees
   - ☐ paid additional fees under protest and, where applicable, the protest fee
   - ☐ paid additional fees under protest but the applicable protest fee was not paid
   - ☒ not paid additional fees
2. ☐ This Authority found that the requirement of unity of invention is not complied with and chose not to invite the applicant to pay additional fees.
3. This Authority considers that the requirement of unity of invention in accordance with Rule 13.1, 13.2 and 13.3 is
   - ☐ complied with
   - ☒ not complied with for the following reasons:

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 1-23, drawn to a method, vehicle and tangible non-transient computer readable medium; maintaining a persona of a vehicle occupant; and based on the persona and vehicle-related information, perform an action assisting the vehicle occupant.
Group II, claims 24-31, drawn to a vehicle comprising: a backplane having a first communication zone defining a trusted network; the backplane having a second communication zone defining an untrusted network; the backplane having a third communication zone providing power and data transmission to the plurality of blade processors.
Group III, claims 32-39, drawn to a vehicle wherein the plurality of blade processors comprises a master blade processor operable to assign a component and/or module requiring a blade processor for execution to a selected blade processor.

The inventions listed as Groups I, II and III 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: the special technical feature of the Group I invention: maintaining a persona of a vehicle occupant; and based on the persona and vehicle-related information, perform an action assisting the vehicle occupant as claimed therein is not present in the invention of Groups II and III. The special technical feature of the Group II invention: a backplane having a first communication zone defining a trusted network; the backplane having a second communication zone defining an untrusted network; the backplane having a third communication zone providing power and data transmission to the plurality of blade processors as claimed therein is not present in the invention of Groups I or III. The special technical feature of the Group III invention: the plurality of blade processors comprises a master blade processor operable to assign a component and/or module requiring a blade processor for execution to a selected blade processor as claimed therein is not present in the invention of Groups I or II.

Groups I, II and III lack unity of invention because even though the inventions of these groups require the technical feature of a vehicle having a plurality of blade processors, each blade processor performing a function that is at least one of a vehicle task, function, or operation and an infotainment task, function or operation, this technical feature is not a special technical feature as it does not make a contribution over the prior art. Specifically, US 2010/0106344 A1 (EDWARDS et al) 29 April 2010 (29.04.2010), abstract, paragraph 16.

Since none of the special technical features of the Group I, II or III inventions are found in more than one of the inventions, unity of invention is lacking.

4. Consequently, this opinion has been established in respect of the following parts of the international application:
   - ☐ all parts
   - ☒ the parts relating to claims Nos. 1-23

Form PCT/ISA/237 (Box No. IV) (July 2011)

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/034194

Box No. V **Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Claims	3, 6, 7, 10, 13, 14, 17, 20, 21, 23	YES
	Claims	1-2, 4-5, 8-9, 11-12, 15-16, 18-19, 22	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-23	NO
Industrial applicability (IA)	Claims	1-23	YES
	Claims	None	NO

2. Citations and explanations

Claims 1-2, 4-5, 8-9, 11-12, 15-16, 18-19, 22 lack novelty under PCT Article 33(2) as being anticipated by Benedikt.

Regarding claims 1, 8, 15, Benedikt discloses a method, vehicle (para 86, Fig. 2), and tangible and non-transient computer readable medium comprising microprocessor executable instructions that (para 21), when executed, perform functions comprising: maintaining, by a microprocessor executable profile identification module (see Fig. 2), a persona of a vehicle occupant (profile of each driver stored, para 38); and based on the persona of the vehicle occupant and vehicle-related information (system used driver profile information and trip information and geographic information of vehicle, para 38; see para 101-106), performing, by a microprocessor executable vehicle control system, an action assisting the vehicle occupant (the situation awareness system includes an automatic vehicle control system that controls a parameter to assist the driver, see para 49-51, 118).

Regarding claims 2, 9, 16, Benedikt discloses wherein the vehicle-related information comprises at least one of a current and/or future vehicle location and path of vehicle travel (para 97).

Regarding claims 4, 11, 18, Benedikt discloses wherein the persona comprises one or more of bioinformatics, medical information, driving history (para 98), personal information, private information, travel information, and Internet browsing history and/or browsed content, wherein vehicle related information comprises one or more of vehicle context, state, external surroundings (para 94), location (para 97-98), past, current, and/or intended path of travel, waypoint, and destination, and wherein the action is one or more of making an appointment, making a reservation, purchasing an item on line, adding a waypoint or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the occupant (para 113, 118), notifying the occupant, and sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time.

Regarding claims 5, 12, 19, Benedikt discloses determining, by the vehicle control system, relevant information other than the persona of the vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a persona of a selected person not currently in the vehicle, a message from a friend or family member of the vehicle occupant, a current activity of the friend and/or family member, a location, hours of operation, and/or descriptive information about a point and/or location of interest near the vehicle and/or the vehicle's path of travel, a location, hours of operation, and/or descriptive information about a vehicle service facility near the vehicle and/or the vehicle's path of travel, a location, hours of operation, and/or descriptive information about a hotel and/or motel near the vehicle and/or the vehicle's path of travel, a current location of the friend or family member near the vehicle and/or the vehicle's path of travel, and a road condition along a path of travel of the vehicle (para 102).

Regarding claim 22, Benedikt discloses wherein the maintaining of the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source (see para 44, 100) and wherein a type of information collected depends on one or more of an identity of the occupant, an age of the occupant, and an association of the occupant with the vehicle (para 96, 38).

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/034194

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of

Claims 3, 6, 7, 10, 13, 14, 17, 20, 21, 23 lack an inventive step under PCT Article 33(3) as being obvious over Benedikt in view of Sala et al., hereinafter referred to as Sala.

Regarding claims 3, 10, 17, Benedikt lacks wherein the action performed depends on a seating position of the vehicle occupant. However, Sala is in the field of occupant recognition systems used in vehicles (abstract, para 14) and teaches wherein the action performed depends on a seating position of the vehicle occupant (occupant recognition and verification system 12, the identification and adjustment algorithm 60 resides in the wireless module 32. The identification and adjustment algorithm 60 uses remote keyless entry key fob information, along with seat position, occupant weight, and other data, to attempt to verify the identity of the driver 28 and/or the front seat passenger 30. If identity is verified, then the identification and adjustment algorithm 60 commands the adjustment of components, such as the driver seat 14, the headrest 16, the outside rearview mirrors 18, the shoulder belt height adjuster 20, the steering wheel and column 22, and the pedals 24, to optimum position, para 24-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the seat position identification features as taught in Sala with the invention of Benedikt in order to verify the driver identification before personalizing the vehicle action (see Sala, para 22, 25).

Regarding claims 6, 13, 20, Benedikt lacks wherein the vehicle obtains the persona from one or more of a different vehicle driven by the occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.
However, Sala is in the field of occupant recognition systems used in vehicles (abstract, para 14) and teaches wherein the vehicle obtains the persona from one or more of a different vehicle driven by the occupant and a home computer (vehicle can receive driver profile information through wireless module 32, para 14, 17; the driver's profile data could be wirelessly transmitted from a smart card or smart phone device (not shown) in the possession of the driver 28, para 29-30) and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto (para 29-30). Furthermore, transferring data only when the ignition of a vehicle is turned off would have been a matter of design choice, to ensure the driver is not distracted during the operation. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the driver profile features as taught in Sala with the invention of Benedikt in order to ensure the driver profile is updated on the vehicle (see Sala, para 14, 29-30).

Regarding claims 7, 14, 21, Benedikt discloses wherein the maintaining of the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source (see para 44, 100), but does not disclose wherein a type of information collected depends on a seating position of the occupant.
However, Sala is in the field of occupant recognition systems used in vehicles (abstract, para 14) and teaches wherein a type of information collected depends on a seating position of the occupant (occupant recognition and verification system 12, the identification and adjustment algorithm 60 resides in the wireless module 32. The identification and adjustment algorithm 60 uses remote keyless entry key fob information, along with seat position, occupant weight, and other data, to attempt to verify the identity of the driver 28 and/or the front seat passenger 30. If identity is verified, then the identification and adjustment algorithm 60 commands the adjustment of components, such as the driver seat 14, the headrest 16, the outside rearview mirrors 18, the shoulder belt height adjuster 20, the steering wheel and column 22, and the pedals 24, to optimum position, para 24-25). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the seat position identification features as taught in Sala with the invention of Benedikt in order to verify the driver identification before personalizing the vehicle action (see Sala, para 22, 25).

Regarding claim 23, Benedikt lacks wherein the persona is defined in a format that can be processed by vehicles of different manufacturers.
However, Sala is in the field of occupant recognition systems used in vehicles (abstract, para 14) and teaches transferring the persona to a vehicle (vehicle can receive driver profile information through wireless module 32, para 14, 17; the driver's profile data could be wirelessly transmitted from a smart card or smart phone device (not shown) in the possession of the driver 28, para 29-30). Furthermore, specifying the profile data can be used by different vehicles would have been a matter of design choice. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the driver profile features as taught in Sala with the invention of Benedikt in order to allow the system to transfer user profile data to any vehicle by standardizing the file format.

Claims 1-23 meet the criteria set out in PCT Article 33(4), and thus have industrial applicability because the subject matter claimed can be made or used in industry.

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,836	04/15/2014	Christopher P. Ricci	6583-537	9667

111285 7590 02/24/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
PAIGE, TYLER D

ART UNIT	PAPER NUMBER
3661	

NOTIFICATION DATE	DELIVERY MODE
02/24/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,836	Applicant(s) RICCI ET AL.	
	Examiner TYLER PAIGE	Art Unit 3661	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/25/2014*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA. This office action is in response to an application filed on 04/15/2015. The applicant submits one Information Disclosure Statement dated 11/25/2014. The applicant claims Domestic priority to numerous applications with the earliest filing date of 11/16/2012.

Claim Rejections - 35 USC § 102

1. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

3. Claims 1 - 7, 10 - 14, and 16 – 19 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Burns US 2002/0143461.

4. As per claim 1, A method for providing navigation information for a control server, comprising: a first control server, including a processor, determining that a vehicle in a traffic control system is leaving a first zone; the first control server determining a second zone to which a vehicle is entering; and the first control server passing the vehicle to the second zone. (claim 1)

5. As per claim 2, The method of claim 1, wherein a second control server receives the vehicle into the second zone. (claim 1)

6. As per claim 3, The method of claim 2, wherein the first control server maintains the vehicle as an item in a first. (claims 1)

7. As per claim 4, The method of claim 3, wherein, when the first control server passes the vehicle to the second zone, the second control server accepts the vehicle as an item in a second queue administered by the second control server. (paragraphs 0043, 0058, and claim 1)

8. As per claim 5, The method of claim 4, further comprising: the second control server establishing communication with the vehicle; and the second control determining if the vehicle has confirmed that communication has been established. (paragraphs 0043, 0058, and claim 1)

9. As per claim 6, The method of claim 5, further comprising, if the vehicle has not confirmed that communication has been established, the second control server re-establishing communication with the vehicle. (paragraphs 0043, 0058, and claim 1)

10. As per claim 7, The method of claim 6, wherein each zone is defined by an extents. (paragraphs 0043, 0058, and claim 1)

11. As per claim 10, The method of claim 9, wherein the first control server passes the vehicle to the second zone when a boundary condition is met that defines when to pass control of the vehicle.

12. As per claim 11, A control server comprising: a processor operable to execute one or more modules, the modules comprising: a traffic control module operable to determine that a vehicle in a traffic control system is leaving a first zone; a zonal communication module operable to: determine a second zone to which a vehicle is entering; and pass the vehicle to the second zone.(paragraph 0059)

13. As per claim 12, The control server of claim 11, wherein the first control server maintains the vehicle as an item in a first, and wherein, when the first control server passes the vehicle to the second zone, the second control server accepts the vehicle as an item in a second queue administered by the second control server. (paragraph 0059)

14. As per claim 13, The control server of claim 12, wherein a second traffic control module, associated with the second control server, is further operable to: establish communication with the vehicle; and determine if the vehicle has confirmed that communication has been established. (paragraph 0059)

15. As per claim 14, The control server of claim 13, wherein the second traffic control module is further operable to, if the vehicle has not confirmed that communication has been established, re-establish communication with the vehicle. (paragraph 0059)

16. As per claim 16, A non-transitory computer readable medium stored on a storage medium and having instructions that when executed by a processor cause the processor to perform a method, the instructions comprising: instructions to determine

that a vehicle in a traffic control system is leaving a first zone; instructions to determine a second zone to which a vehicle is entering; and instructions to pass the vehicle to the second zone. (paragraphs 0005 and 0059)

17. As per claim 17, The computer readable medium of claim 16, wherein the first control server maintains the vehicle as an item in a first, and wherein, when the first control server passes the vehicle to the second zone, the second control server accepts the vehicle as an item in a second queue administered by the second control server. (paragraphs 0005, 0058, and 0059)

18. As per claim 18, The computer readable medium of claim 17, further comprising: instructions to establish communication with the vehicle; and instructions to determine if the vehicle has confirmed that communication has been established. (paragraphs 0005, 0058, and 0059)

19. As per claim 19, The computer readable medium of claim 18, further comprising, if the vehicle has not confirmed that communication has been established, instructions to re-establish communication with the vehicle. (paragraphs 0005, 0058, and 0059)

Claim Rejections - 35 USC § 103

20. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

21. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

22. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

23. Claims 8, 9, 15 and 20 are rejected under 35 U.S.C. 103 as being unpatentable over Burns US 2002/0143461 in view of Worthy US 5,572,450.

24. As per claim 8, The method of claim 7, wherein the extents are associated with a range of an antennae associated with the zone and in communication with the vehicle. (Worthy Col 3 lines 17 – 26)

Burns discloses a permission system and method for controlling interaction between autonomous vehicles in mining operation. Burns does not disclose the range of an antenna as it affects the transition between zones. Worthy teaches of the antenna strength of a roadside sensors affects the detention of vehicles along a roadside.

Therefore, at the time of filing it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Worthy et.al. into the invention of Burns. Such incorporation is motivated by the need ensuring accurate control and detection of a vehicle within a respective zone.

25. As per claim 9, The method of claim 7, wherein the extents are defined by two or more physical locations along a roadway. (Worthy Col 1 lines 22 – 35)

26. As per claim 15, The control server of claim 14, wherein each zone is defined by an extents, wherein the extents are defined by one of a range of an antennae associated with the zone and in communication with the vehicle or by two or more physical locations along a roadway. (Worthy Col 1 lines 22 – 35 and Col 3 lines 17 – 26)

27. As per claim 20, The computer readable medium of claim 19, wherein each zone is defined by an extents, wherein the extents are defined by one of a range of an antennae associated with the zone and in communication with the vehicle or by two or more physical locations along a roadway. (Worthy Col 1 lines 22 – 35 and Col 3 lines 17 – 26)

Examiner Request

The examiner requests, in response to this office action, support must be shown for language added to any original claims on amendment and any new claims. That is, indicate support for newly added claim language by specifically pointing to page(s) and line number(s) in the specification and/or drawing figure(s). This will assist the examiner in prosecuting the application. When responding to this office action, applicant is advised to clearly point out the patentable novelty which he or she thinks the claims

present, in view of the state of art disclosed by the references cited or the objections made. He or she must also show how the amendments avoid such references or objections. In amending in reply to a rejection of claims in an application or patent under reexamination, the applicant or patent owner must clearly point out the patentable novelty which he or she thinks the claims present in view the state of the art disclosed by the references cited or the objections made. The applicant or patent owner must also show how the amendments avoid such references or objections.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TYLER PAIGE whose telephone number is (571)270-5425. The examiner can normally be reached on 7:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. P./
Examiner, Art Unit 3661

/Thomas G Black/

Supervisory Patent Examiner, Art Unit 3661

Notice of References Cited	Application/Control No. 14/253,836	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner TYLER PAIGE	Art Unit 3661	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0143461 A1	10-2002	Burns et al.	701/117
*	B	US-6,617,981 B2	09-2003	Basinger, John	340/909
*	C	US-6,892,131 B2	05-2005	Coffee et al.	701/482
*	D	US-2005/0122235 A1	06-2005	Teffer et al.	340/937
*	E	US-2005/0197748 A1	09-2005	Holst et al.	701/003
*	F	US-2006/0287807 A1	12-2006	Teffer, Dean W.	701/117
*	G	US-2007/0194944 A1	08-2007	Galera et al.	340/686.6
*	H	US-2008/0169940 A1	07-2008	Lee et al.	340/928
*	I	US-2010/0145987 A1	06-2010	Harper et al.	707/770
*	J	US-2010/0174474 A1	07-2010	Nagase, Kenji	701/118
*	K	US-2010/0211300 A1	08-2010	Jaffe et al.	701/119
*	L	US-7,969,324 B2	06-2011	Chevion et al.	340/901
*	M	US-2011/0246210 A1	10-2011	MATSUR, IGOR YURIEVICH	705/1.1

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited	Application/Control No. 14/253,836	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner TYLER PAIGE	Art Unit 3661	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2012/0327231 A1	12-2012	Cochran et al.	348/148
*	B	US-2013/0116915 A1	05-2013	Ferreira et al.	701/117
*	C	US-2013/0212065 A1	08-2013	Rahnama, Hossein	707/609
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,706	04/15/2014	Christopher P. Ricci	6583-550	7498

111285 7590 01/29/2015

Sheridan Ross P.C.
1560 Broadway
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Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
01/29/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,706	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-6,11-14 and 16-19* is/are rejected.

8)☒ Claim(s) *7-10,15 and 20* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

4. Claims 1 – 4, 11 – 12 and 16 - 17 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Wang et al., (20130261966).

5. (Claims 1, 11 and 16): Wang discloses a method and system for providing navigation information for a conveyance comprising: a vehicle control system, including a processor, receiving route information for two or more routes (fig. 1); the vehicle control system determining the context associated with route information (figs. 2 and 6); the vehicle control system storing the route information and the context (fig. 2, blk 36); the vehicle control system identifying a pattern associated with the route information

and context (abstract; fig. 6, blk 104); and the vehicle control system providing pattern information to plan a next route (fig. 3; [0038]).

6. (Claims 2 - 4, 12 and 17): Wang discloses the system of claims 1, 11 and 16, wherein the route information includes at least an origin location and a destination (abstract), wherein at least one route was generated by a navigation system, and wherein the context includes information indicating a reason why a driver followed the route ([0003]; [0054, claim 4]).

Claim Rejections - 35 USC § 103

7. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

8. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5, 13 and 18 are rejected under 35 U.S.C. 103 as being unpatentable over Wang et al., (20130261966) as applied to claims 1, 11 and 16 above, and further in view of Phelan et al., (20040225557).

10. (Claims 5, 13 and 18): Wang discloses the system of claims 1, 11 and 18. Wang does not teach two or more drivers in two or more vehicles. However, in a related invention, Phelan teaches multiple drivers in multiple vehicles providing route information for storing in a database (fig. 26; [0047]). It would have been obvious to one of ordinary skill in the art, before the effective filing date of the invention, to modify Wang to handle situations with multiple drivers using multiple vehicles, thus making his invention useful in common situations like fleet management applications.

11. Claims 6, 14 and 19 are rejected under 35 U.S.C. 103 as being unpatentable over Wang et al., (20130261966) as applied to claims 1, 11 and 16 above, and further in view of Phelan et al., (20040225557), and in further view of Lee et al., (7864073).

12. (Claims 6, 14 and 19): Wang discloses the system of claims 1, 11 and 18, while Phelan teaches the system of claims 5, 13 and 18. Wang and Phelan do not teach multiple destinations arrived at in various time periods. However, in a related invention Lee teaches an apparatus and method of providing schedule and route, wherein the pattern information includes one or more of destinations arrived at, at certain time periods, routes driven on certain days, or often-traveled routes (figs. 6 – 7). It would have been obvious to one of ordinary skill in the art, before the effective filing date of the invention, to modify Wang to handle situations with multiple drivers using multiple vehicles involving specific time schedules, thus making his invention useful in common situations like fleet management applications.

Allowable Subject Matter

13. Claims 7 – 10, 15 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,706	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,204,817 A	04-1993	Yoshida, Motomasa	701/411
*	B	US-2004/0225557 A1	11-2004	Phelan et al.	705/011
*	C	US-7,047,129 B2	05-2006	Uotani, Kazushi	701/414
*	D	US-7,233,861 B2	06-2007	Van Buer et al.	701/424
*	E	US-2010/0125405 A1	05-2010	Chae et al.	701/200
*	F	US-7,873,471 B2	01-2011	Gieseke, Arnold	701/416
*	G	US-7,864,073 B2	01-2011	Lee et al.	340/988
*	H	US-2011/0313653 A1	12-2011	Lindner, Jeffery Erhard	701/201
*	I	US-8,509,982 B2	08-2013	Montemerlo et al.	701/26
*	J	US-2013/0261966 A1	10-2013	Wang et al.	701/533
*	K	US-2013/0304371 A1	11-2013	Kitatani et al.	701/408
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	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
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	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,729	04/15/2014	Christopher P. Ricci	6583-555	8377

111285 7590 03/06/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
03/06/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,729	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *2/19/2015*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Response to Arguments

2. Applicant's arguments, see pages 5 and 7, filed 2/19/2015, with respect to the rejection(s) of claim(s) 1, 11 and 16 under 35 USC 102 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of applicant's amendments.

Claim Rejections - 35 USC § 103

3. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

4. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1 – 8, 11 – 14 and 16 – 19 are rejected under 35 U.S.C. 103 as being unpatentable over Link II et al., (20130116882) and further in view of Seltzer et al., (20090210143).

6. (Claims 1, 11 and 16): Link discloses a method for providing navigation information for a conveyance, comprising: a vehicle control system, including a processor, determining an origin location (figs. 1 and 9; [0024]); the vehicle control system determining two or more destination locations ([0057]); the vehicle control system determining a timeframe for the route (fig. 3; [0062]); and the vehicle control system generating a best route to the two or more destinations in the timeframe (fig. 10; [0062]; [0096 – 0097]). Link does not teach determining multiple locations based on information in a user profile. However, in a related invention Seltzer teaches wherein the two or more destination locations are determined based on information stored in a user profile (fig. 7; [0005 - 0007]; [0063 – 0066]). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to modify Link to use data stored in user profiles to analyze and determine destinations, as a very common requirement in today's navigation systems.

7. (Claims 2 – 4, 12 and 17): Link and Seltzer teach the methods of claims 1, 11 and 16. Link further teaches a method for providing navigation information for a conveyance, wherein the timeframe is an amount of time available to a user to travel the route, wherein the best route includes a return to the origin location, and wherein the user provide the amount of time available (fig. 3; [0062]; [0096 – 0097]).

8. (Claims 5 – 6, 13 and 18): Link and Seltzer teach the methods of claims 1, 11 and 16. Link further teaches a method for providing navigation information for a conveyance, wherein the route suggestion module accesses preference data in a user

profile to determine preferred routes, wherein the best route is a preferred route (fig. 3; [0052]; [0055 - 0056]).

9. (Claims 7 – 8, 14 and 19): Link and Seltzer teach the methods of claims 1, 11 and 16. Seltzer further teaches wherein the user profile includes a first location that should be avoided, and wherein the best route avoids the first location ([0003]; [0027]; [0063]).

10. **Claims 9 – 10, 15 and 20 are rejected under 35 U.S.C. 103 as being unpatentable over Link II, et al., (20130116882) and further in view of Seltzer et al., (20090210143) as applied to claims 1, 11 and 16 above, and in further view of Sumizawa (20110077855).**

11. (Claims 9 – 10, 15 and 20): Link and Seltzer teach the methods of claims 1, 11 and 16. Link and Seltzer do not explicitly teach a first location being an area between the original location and a destination. However, in a related invention Sumizawa teaches a navigation system, wherein the first location is an area between the origin location and at least one destination (abstract; figs. 3 - 4; [0066]). (Note: The feature of an address in a user profile is taught in Link's fig. 3). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to modify Link to use an area instead of a single location, as a very desirable feature in modern navigation systems.

Conclusion

12. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/
Supervisory Patent Examiner, Art Unit 3663

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/252,871	04/15/2014	Christopher P. Ricci	6583-560	1084

111285 7590 03/27/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
FIGUEROA, JAIME

ART UNIT	PAPER NUMBER
3664	

NOTIFICATION DATE	DELIVERY MODE
03/27/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/252,871	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JAIME FIGUEROA	Art Unit 3664	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/25/2014*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA. Pursuant to communications filed on 04/15/2014, this is a First Action Non-Final Rejection on the Merits. Claims 1-20 are currently pending in the instant application.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 11/25/2014 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the Examiner.

Examiner's Note

Examiner has cited particular paragraphs / columns and line numbers or figures in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner. Applicant is reminded that the Examiner is entitled to give the broadest reasonable interpretation to the language of the claims. Furthermore, the Examiner is not limited to Applicants' definition which is not specifically set forth in the claims.

Claim Rejections - 35 USC § 102

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

Claims 1, 2, 4-12, 14-20 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by White et al. (US2007/0200663).

Regarding claims 1 and 11, White et al discloses a system that reports one or more vehicle conditions (e.g. via a Method and system for controlling a vehicle given to a third party as shown in fig. 1) comprising:

a vehicle reporting module (see at least fig. 1: via vehicle control module and identification system 16; see also fig. 32: via system controller 1016) adapted to receive one or more of a request, a smart calendar item, a trigger and context information, and determine what one or more types of information should be monitored (see at least [0240] disclosing the plurality of

data received by the controller, for example the substance detecting sensor 1014 provides data that can be trigger a monitoring; the identity board 1018 along the biometric authenticator 1012 can perform trigger monitoring; see also [0134] disclosing the monitoring feature);

a communication system (see at least fig. 1: via a wireless communication unit) adapted to forward one or more of the one or more types of information to one or more destinations (see at least [0116] disclosing notifying to the police or to family members of the driver).

Regarding claims 2 and 12, White et al discloses wherein the one or more destinations include a smartphone, a communications device and a remote access device (see at least [0118 and 0121] disclosing communication with cellphone).

Regarding claims 4 and 14, White et al discloses wherein a context module determines context of the vehicle and based on one or more thresholds, initiates the trigger (see at least fig. 38 and [0258] disclosing the threshold feature and determining if the system cab be override or not based on information detected fro driver).

Regarding claims 5 and 15, White et al discloses wherein a context module cooperates with a breathalyzer and determines when monitoring should commence (see fig. 1 showing the breathalyzer coupled to the state detector, see [0152]; see fig. 34 having the alcohol level detector 2014 and see at least [0116]).

Regarding claims 6 and 16, White et al discloses wherein one or more of images, video, audio, GPS information, location information, passenger information and time at location information are monitored (see at least fig. 1 showing the GPS system, a camera, scanners, microphone, heart monitor, etc.; see at least [0115]) .

Regarding claims 7 and 17, White et al discloses wherein a parental control module initiates the request to begin monitoring (see at least [0118 and 0150] disclosing the parental control).

Regarding claims 8 and 18, White et al discloses wherein one or more of an expression, facial ID and gestures are the trigger (see at least [0154] disclosing the face recognition authenticator; see [0169] disclosing the face scanner or retinal scanner in combination with a breathalyzer).

Regarding claims 9 and 19, White et al discloses wherein a remote access device can establish one or more of audio and video communication with the vehicle, and can also control one or more vehicle functions (see at least [0150] disclosing the remote control of the vehicle).

Regarding claims 10 and 20, White et al discloses wherein the remote access device is a communications device, a smartphone, a tablet computer and a computer 9see [0073, 0121, and 0134]).

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 3and 13 are rejected under 35 U.S.C. 103 as being unpatentable over White et al. (US2007/0200663) in view of Rovik et al (US2013/0226449).

Regarding claims 3 and 13, White et al discloses as discussed above in claims 1 and 11. White et al is silent to disclose wherein a smart calendar module initiates one or more triggers, the initiation based on one or more calendared events.

However, in the same field of endeavour, Rovik et al teaches the claimed feature implemented in a vehicle 102 to be used by the driver, specifically the smart calendar feature and interface as shown in fig. 7-9 providing multiple events to the driver with reminders (see [0081-0083]). It would have been obvious to one having ordinary skill in the art before the effective filing date of the claimed invention to provide White et al with the smart calendar feature as taught by Rovik et al, since a combination will provide White et al the benefit of having an interface with an smart calendar full of events and reminders for the driver.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAIME FIGUEROA whose telephone number is (571)270-7620. The examiner can normally be reached on Monday-Friday, 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the

examiner's supervisor, Khoi H. Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAIME FIGUEROA/
Examiner, Art Unit 3664

Notice of References Cited	Application/Control No. 14/252,871	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner JAIME FIGUEROA	Art Unit 3664	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2007/0200663 A1	08-2007	White et al.	340/5.31
*	B	US-2011/0231091 A1	09-2011	Gourlay et al.	701/204
*	C	US-8,442,758 B1	05-2013	Rovik et al.	701/424
*	D	US-2013/0226449 A1	08-2013	Rovik et al.	701/424
*	E	US-2013/0226371 A1	08-2013	Rovik et al.	701/2
*	F	US-2013/0332023 A1	12-2013	Bertosa et al.	701/29.4
*	G	US-2014/0164611 A1	06-2014	Molettiere et al.	709/224
*	H	US-2014/0281971 A1	09-2014	Isbell et al.	715/716
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,330	04/15/2014	Christopher P. Ricci	6583-563	1076

111285 7590 04/13/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
FIGUEROA, JAIME

ART UNIT	PAPER NUMBER
3664	

NOTIFICATION DATE	DELIVERY MODE
04/13/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,330	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JAIME FIGUEROA	Art Unit 3664	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/25/2014*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA. Pursuant to communications filed on 04/15/2014, this is a First Action Non-Final Rejection on the Merits. Claims 1-20 are currently pending in the instant application.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 11/25/2014 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the Examiner.

Claim Objections

Claim 20 is objected to because of the following informalities: it appears there is a typo error in claim 20 because the claim reads as follows:

20. The system of claim **20**, wherein….. Therefore, for examination purposes claim 20 should be dependent of claim **19**. Appropriate correction is required.

Examiner's Note

Examiner has cited particular paragraphs / columns and line numbers or figures in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art

or disclosed by the examiner. Applicant is reminded that the Examiner is entitled to give the broadest reasonable interpretation to the language of the claims. Furthermore, the Examiner is not limited to Applicants' definition which is not specifically set forth in the claims.

Claim Rejections - 35 USC § 102

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

Claims 1-8, 12-20 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Hagan, Jr. (US 2014/0257627).

Regarding claims, 1, 14 and 19, Hagan Jr discloses a method, the associated non-transitory CRM and the associated system (e.g. via a system for monitoring components within a vehicle to determine if chassis damage may have occurred – see fig. 1 below), comprising:

receiving sensor data (see fig. 1: chassis damage control 40 receives signals from sensors) from one or more vehicle sensors (see fig. 1 showing at least sensors 16/18; see at least [0006, 0017] disclosing one or more sensors connected to the vehicle provide data relating to the operation of the vehicle);

determining, from the sensor data, if vehicle damage has occurred (see at least [0020-0021] disclosing controller 40 determines if there is a chassis damage based on the sensor signals); and

taking action if vehicle damage occurs (e.g. the action is being interpreted as for example providing to the driver an alert of the potential chassis damage as shown in fig. 1 and [0023]; alternatively, the action can be transmitting the chassis damage signal to a remote server 64).

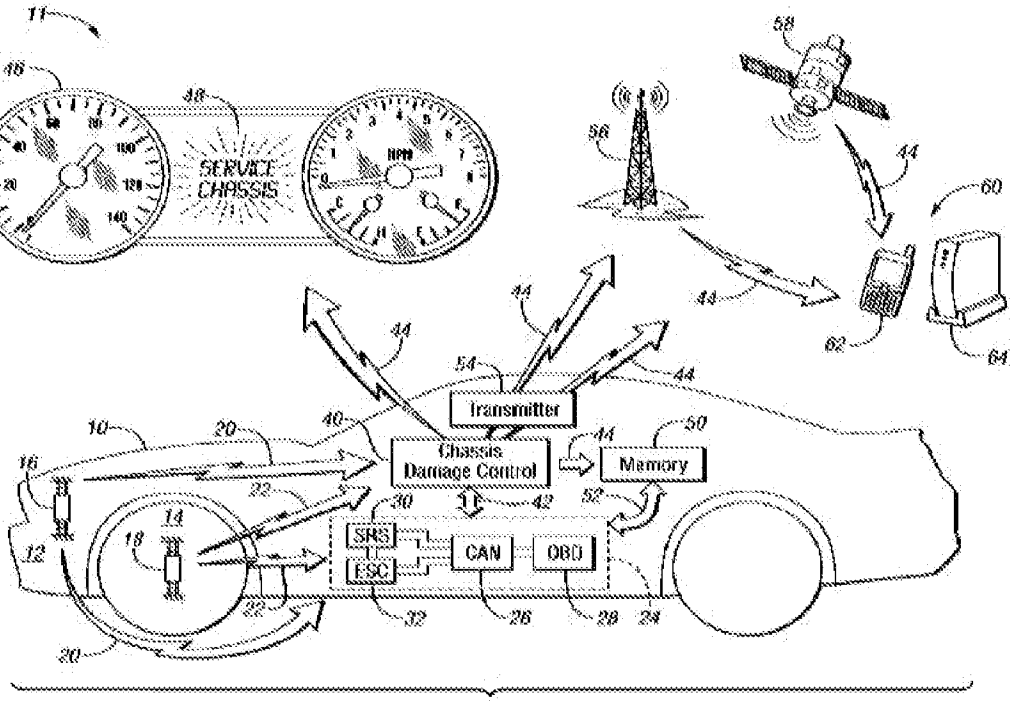


FIG. 1

Regarding claims 2, 15 and 20, Hagan Jr discloses further comprising comparing the sensor data to vehicle damage threshold data (see [0008, 0021, 0024, 0027] disclosing the controller 40 performs comparison of sensed data with the potential damage range).

Regarding claims 3 and 16, Hagan Jr discloses wherein vehicle damage occurs if one or more vehicle damage thresholds are exceeded (see [0021]).

Regarding claim 4, Hagan Jr discloses wherein the vehicle damage threshold data is stored in authorized user profile data (see [0024, 0028]).

Regarding claims 5 and 17, Hagan Jr discloses wherein the one or more vehicle sensors comprise an image sensor, a motion sensor, a vibration sensor and a force sensor (see [0017] disclosing the plurality of sensors that can be used in the vehicle).

Regarding claim 6, Hagan Jr discloses wherein the taking action comprises providing an alert (providing to the driver an alert of the potential chassis damage as shown in fig. 1 and [0023]).

Regarding claims 7 and 18, Hagan Jr discloses wherein the providing an alert comprises a **visual alert**, an audio alert, emergency responder alert, and alert to one or more authorized users (providing to the driver a visual alert of the potential chassis damage as shown in fig. 1 and [0023]; alternatively, the action can be transmitting the chassis damage signal to a remote server 64).

Regarding claim 8, Hagan Jr discloses further comprising providing a notice in real-time (vehicle data monitoring is inherently performed in real time in order to

provide safety determinations; see also [0023-0024]) .

Regarding claim 12, Hagan Jr discloses wherein the one or more vehicle sensor comprises a sensor located within a body frame of the vehicle (see fig. 1 showing at least sensors 16/18; see at least [0006, 0017] disclosing one or more sensors connected to the vehicle provide data relating to the operation of the vehicle).

Regarding claim 13, Hagan Jr discloses further comprising recording sensor data associated with vehicle damage (see [0024] disclosing storage device 50 for storing the potential-chassis-damage signal 44).

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148

USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 9-11 are rejected under 35 U.S.C. 103 as being unpatentable over Hagan, Jr. in view of Sundermeyer et al. (US 2006/0243056).

Regarding claims 9-11, Hagan Jr discloses as discussed above in claim 1. Hagan Jr is silent to disclose specifically (claim 9) the method further comprising identifying at least one of the locations of the damage and the degree of the damage. (claim 10) wherein both the location of the damage and the degree of the damage are identified and both are communicated to a third party. (claim 11) wherein the taking action comprises guiding one or more vehicle sensors to sense an area surrounding the vehicle damage.

However, in the same field of endeavour, Sundermeyer et al teaches the claimed features implemented in a system and method for monitoring, determining, and evaluating the loads, health, and use of a work machine (vehicle 100). Sundermeyer et al teaches particularly the claimed identification of the damage location (see [0149]), the degree of the damage (see [0160-0164]), communicating the damage data with a third party (see [0127]) and guiding one or more vehicle

sensors to sense an area surrounding the vehicle damage (see [0031]).

Therefore, it would have been obvious to one having ordinary skill in the art before the effective filing date of the claimed invention to provide Hagan et al with the teachings of Sundermeyer et al, since such a combination will provide Hagan et al the benefit of having a vehicle health monitoring that provides damage location, damage degree, monitoring the surrounding the damage and communicating this data to an external server providing useful information that allows operators, user, and computer systems to assess the health of a vehicle and perform further analysis based on this information.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAIME FIGUEROA whose telephone number is (571)270-7620. The examiner can normally be reached on Monday-Friday, 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi H. Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAIME FIGUEROA/
Examiner, Art Unit 3664

Notice of References Cited	Application/Control No. 14/253,330	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner JAIME FIGUEROA	Art Unit 3664	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,531,122 A	07-1996	Chatham et al.	73/760
*	B	US-2003/0004624 A1	01-2003	Wilson et al.	701/33
*	C	US-6,778,888 B2	08-2004	Cataldo et al.	701/29.6
*	D	US-2006/0243056 A1	11-2006	Sundermeyer et al.	073/760
*	E	US-2007/0118301 A1	05-2007	Andarawis et al.	702/033
*	F	US-2008/0082237 A1	04-2008	Breed, David S.	701/045
*	G	US-2012/0046822 A1	02-2012	Anderson, Noel Wayne	701/29.1
*	H	US-2013/0066512 A1	03-2013	Willard et al.	701/29.1
*	I	US-8,548,669 B2	10-2013	Naylor, David Glen	701/29.1
*	J	US-8,600,611 B2	12-2013	Seize, Guilhem	701/33.2
*	K	US-2014/0207328 A1	07-2014	Wolf et al.	701/31.7
*	L	US-2014/0257627 A1	09-2014	Hagan, Jr., Daniel Lee	701/33.8
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/252,858	04/15/2014	Christopher P. Ricci	6583-565	9964

111285 7590 01/26/2015

Sheridan Ross P.C.
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EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
01/26/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/252,858	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2015*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

1. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

3. Claims 1 – 4, 6, 9, 11 – 14, 16 and 19 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Phelan et al., (20040225557).

4. (Claims 1 - 4 and 11 - 14): Phelan discloses a driver facts system comprising: one or more systems that track user behavior ([0003]), the user behavior including one or more of: one or more user actions and one or more user interactions with a vehicle (abstract; figs 1- 2; [0012]); and a storage system adapted to store the user behavior, wherein the tracked user behavior is associated with a driver and the storage system is capable of storing the tracked behavior for the driver from a plurality of vehicles (fig. 2; [0047]; [0052]).

5. (Claims 6, 9, 16 and 19): Phelan discloses a driver facts system, wherein the storage system that stores the user behavior is interrogatable by one or more of law enforcement, a vehicle manufacturer, a vehicle dealer, a vehicle repair shop, an insurance company, a warranty company, and another user ([0045]).

Claim Rejections - 35 USC § 103

6. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

7. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 5 and 15 are rejected under 35 U.S.C. 103 as being unpatentable over Phelan et al., (20040225557) as applied to claims 1 and 11 above, and further in view of Kobata (20020077985).

9. (Claims 5 and 15): Phelan discloses a driver facts system comprising: one or more systems that track user behavior ([0003]), the user behavior including one or more of: one or more user actions and one or more user interactions with a vehicle (abstract; figs 1- 2; [0012]). Phelan does not teach

preventing disablement of the tracking. However, in a related invention, Kobata teaches controlling and managing digital assets wherein disabling of the tracking of user behavior is prohibited ([0182]). It would have been obvious to one of ordinary skill in the art before the filing date of the claimed invention to modify Phelan to prohibit disablement of tracking, as a fairly common requirement in digital assets management.

10. Claims 7 – 8 and 17 - 18 are rejected under 35 U.S.C. 103 as being unpatentable over Phelan et al., (20040225557) as applied to claims 1 and 11 above, and further in view of Eikelenberg (20110309926).

11. (Claims 7 - 8 and 17 - 18): Phelan discloses a driver facts system comprising: one or more systems that track user behavior ([0003]), the user behavior including one or more of: one or more user actions and one or more user interactions with a vehicle (abstract; figs 1- 2; [0012]). Phelan does not teach modifying a route based on user behavior. However, in a related invention, Eikelenberg teaches routing for efficient energy consumption, wherein the user behavior is used as input to determine whether an intended vehicle route should be modified in conjunction with one or more of: traffic information, weather information, prior routes, purchase information, patterns, preferences, prior route modification decisions, and user input ([0051 – 0052]). It would have been obvious to one of ordinary skill in the art before the filing date of the claimed invention, to modify Phelan to change a route based on user behavior, as a way improve his device offering with a desired capability, given today's interest in energy efficient vehicles.

12. Claims 10 and 20 are rejected under 35 U.S.C. 103 as being unpatentable over Phelan et al., (20040225557).

13. (Claims 10 and 20): Maintaining data integrity by restricting who can modify stored data in a system is well known. It would be obvious to prevent a user from modifying their behavior in a system designed to track and record such behavior.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/252,858	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0077985 A1	06-2002	Kobata et al.	705/51
*	B	US-2002/0126876 A1	09-2002	Paul et al.	382/104
*	C	US-2004/0225557 A1	11-2004	Phelan et al.	705/011
*	D	US-2009/0284359 A1	11-2009	Huang et al.	340/426.1
*	E	US-2010/0106418 A1	04-2010	Kindo et al.	701/300
*	F	US-2010/0304640 A1	12-2010	Sofman et al.	446/456
*	G	US-2011/0309926 A1	12-2011	Eikelenberg et al.	340/439
*	H	US-2012/0059789 A1	03-2012	Sakai et al.	706/52
*	I	US-2014/0028542 A1	01-2014	Lovitt et al.	345/156
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,034	04/15/2014	Christopher P. Ricci	6583-566	6457

111285 7590 01/26/2015

Sheridan Ross P.C.
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EXAMINER
TECKLU, ISAAC TUKU

ART UNIT	PAPER NUMBER
2198	

NOTIFICATION DATE	DELIVERY MODE
01/26/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,034	Applicant(s) RICCI ET AL.	
	Examiner ISAAC T. TECKLU	Art Unit 2198	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

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- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/26/2014*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Examiner Notes

Examiner cites particular columns, paragraphs, figures and line numbers from the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested that, in preparing responses, the applicant fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Claim Interpretation

After careful review of the original specification, the Examiner is unable to locate any lexicographic definitions with the required clarity, deliberateness, and precision. See MPEP §2111.01 IV.

The Examiner finds that because the Examined Claims recite neither "step for" nor "means for," the examined claims fail Prong (A) as set forth in MPEP §2181 I. Because all examined claims fail Prong (A) as set forth in MPEP §2181 I., the Examiner concludes that all examined claims do not invoke 35 U.S.C. §112, 6th paragraph. See also Ex parte Miyazaki, 89 USPQ2d 1207, 1215-16 (B.P.A.I. 2008)(precedential).

Terms such as "when", "if", "only if", "on the condition", "or", "in the event" and "in a case where" are representative of optional limitations; therefore, optional or conditional language do not narrow the claims because they can always be omitted.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-10 are rejected under 35 U.S.C 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claim 1, the claim is directed to a system. However, as recited, the system is reasonably interpreted as entirely software, which amounts to descriptive material per se. The system is not supported by hardware such as tangible computer storage or execution engine, which would enable one skill in the art to construe that the system, is built from tangible product to carry out any functionality being conveyed from the claim. Thus, the system is software *per se* and therefore is not being tangibly embodied in a manner as to be executable. See MPEP § 2106.01.

Claims 2-10 are rejected for failing to cure the deficiencies of the above rejected non-statutory base claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the

claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

It has been noted that, a claimed invention is unpatentable if the differences between it and the prior art are "such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art." 35 U.S.C. § 103(a) (2000); *KSR Int'l v. Teleflex Inc.,* 127 S.Ct. 1727, 1734 (2007); *Graham v. John Deere Co.,* 383 U.S. 1, 13-14 (1966).

In *Graham,* the Court held that that the obviousness analysis is bottomed on several basic factual inquiries: "[(1)] the scope and content of the prior art are to be determined; [(2)] differences between the prior art and the claims at issue are to be ascertained; and [(3)] the level of ordinary skill in the pertinent art resolved." 383 U.S. at 17. *See also KSR,* 127 S.Ct. at 1734. "The combination of familiar elements according to known methods is likely to be obvious when it does no more; than yield predictable results." *KSR,* at 1739.

"When a work is available in one field of endeavor, design incentives and other market forces can prompt variations of it, either in the same field or in a different one. If a person of ordinary skill in the art can implement a predictable variation, § 103 likely bars its patentability." *Id.* at 1740.

"For the same reason, if a technique has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill." *Id.*

"Under the correct analysis, any need or problem known in the field of endeavor at the time of invention and addressed by the patent can provide a reason for combining the elements in the manner claimed." *Id.* t 1742.

Claims 1-20 are rejected under 35 U.S.C. 103 as being unpatentable over Rao et al. (US 2013/0139140 A1) in view of Throop et al. (US 2013/0031540 A1) / ZELLEN (US 2014/0245278 A1).

As per claim 1, Rao discloses a system for updating one or more of software and firmware in a vehicle comprising (see for example Fig. 2, 219):

a status module adapted to determine the availability of an update to the one or more of software and firmware (see for example [0054] and Fig. 2, 204); and

a message module adapted to query one or more other vehicles to determine if they have the update (see for example [0034]-[0035]); and

a vehicle firmware/software system adapted to download all or a portion of the update from the one or more other vehicles (see for example [0008] and [0052]).

Rao does not explicitly disclose updating of a firmware. Nevertheless, as evidenced by the teaching of Throop /ZELLEN, it is commonly known to update a firmware of a device (see for example Throop [0003]; see for example [0004]). Thus, it is respectfully submitted that it would have been obvious to one skilled in the art before the filing of the claimed invention to modify the teachings of Rao by including firmware in order to dynamically update both software and firmware

especially when the firmware experience a high level of wear with frequent and voluminous updates as once suggested by Throop/ZELLEN.

As per claim 2, the above combined references disclose the system of claim 1, wherein the update is partially downloaded from a plurality of the one or more other vehicles (see for example [0008] and [0052]).

As per claim 3, the above combined references disclose the system of claim 1, wherein the update is partially updated from a central repository (see for example ZELLEN: FIG. 1, 18 and 24).

As per claim 4, the above combined references disclose the system of claim 1, wherein the update is downloaded based on one or more rules or preferences (see for example Fig. 2, 204).

As per claim 5, the above combined references disclose the system of claim 1, wherein the update is downloaded based on a projected proximity to the one or more other vehicles (see for example [0037]; Throop: [0005]).

As per claim 6, the above combined references disclose the system of claim 1, wherein the update is downloaded directly from the one or more other vehicles (see for example [0008] and [0052]).

As per claim 7, the above combined references disclose the system of claim 1, wherein the update is sharable with one or more additional vehicles (see for example [0008] and [0052]).

As per claim 8, the above combined references disclose the system of claim 1, wherein a diagnostics module confirms the integrity of the update (see for example [0042]).

As per claim 9, the above combined references disclose the system of claim 1, wherein the message module broadcasts the availability of the update to one or more additional vehicles (see for example [0034]-[0035]).

As per claim 10, the above combined references disclose the system of claim 1, wherein the message module confirms the update is correct for the vehicle (see for example [0057] and Fig. 2, 204).

Per claims 11-20, these are method claims substantially paralleling the limitations in system claims 1-10. The above combined references disclose the use of such media (see, e.g., Fig. 1, 10) in implementing the prescribed steps, and all other limitations have been addressed as set forth above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAC TECKLU whose telephone number is (571)272-7957. The examiner can normally be reached on M-F 9:00A - 5:00P.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ISAAC T. TECKLU/

Primary Examiner, Art Unit 2198

Notice of References Cited	Application/Control No. 14/253,034	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner ISAAC T. TECKLU	Art Unit 2198	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2005/0097541 A1	05-2005	Holland, Steven W.	717/168
*	B	US-2006/0130033 A1	06-2006	Stoffels et al.	717/166
*	C	US-7,346,435 B2	03-2008	Amendola et al.	701/1
*	D	US-2009/0119657 A1	05-2009	Link, II, Charles M.	717/171
*	E	US-2011/0093846 A1	04-2011	Moinzadeh et al.	717/178
*	F	US-2011/0197187 A1	08-2011	ROH, Seung Hyun	717/173
*	G	US-2011/0247013 A1	10-2011	FELLER et al.	719/320
*	H	US-2011/0320089 A1	12-2011	Lewis, Derek Lane	701/32
*	I	US-2012/0030512 A1	02-2012	Wadhwa et al.	714/23
*	J	US-2012/0204166 A1	08-2012	Ichihara, Masaaki	717/168
*	K	US-2013/0031540 A1	01-2013	Throop et al.	717/173
*	L	US-2013/0139140 A1	05-2013	Rao et al.	717/170
*	M	US-2014/0109075 A1	04-2014	Hoffman et al.	717/169

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited	Application/Control No. 14/253,034	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner ISAAC T. TECKLU	Art Unit 2198	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2014/0245278 A1	08-2014	ZELLEN, JEFFREY M.	717/170
*	B	US-2014/0245284 A1	08-2014	Alrabady et al.	717/173
*	C	US-2014/0282470 A1	09-2014	Buga et al.	717/170
*	D	US-2015/0007155 A1	01-2015	Hoffman et al.	717/168
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
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NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 03/05/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	
ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 03/05/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,405	04/15/2014	Christopher P. Ricci	6583-567	8768

TITLE OF INVENTION: Synchronization Between Vehicle and User Device Calendar

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	06/05/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 03/05/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,405	04/15/2014	Christopher P. Ricci	6583-567	8768

TITLE OF INVENTION: Synchronization Between Vehicle and User Device Calendar

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	06/05/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-036000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,405	04/15/2014	Christopher P. Ricci	6583-567	8768

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Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 03/05/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,405	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *2/18/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-20*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/A. C. D./ Examiner, Art Unit 3663	/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/252,876	04/15/2014	Christopher P. Ricci	6583-568	6268

111285 7590 01/30/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
01/30/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/252,876	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

4. Claims 1 – 8 and 11 – 18 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Rector et al., (20110137520).

5. (Claims 1 - 3 and 11 - 13): Rector discloses a parental control system for a vehicle comprising: a parental control module ([0031]) adapted to limit one or more vehicle functions based on one or more rules (fig. 3; [0009]; [0025]) and a profile module adapted to interact with the parental control module to limit the one or more vehicle functions based on whether the profile is associated with a driver or a passenger ([0049 - 0050]).

6. (Claims 4 and 14): Rector discloses a parental control system of claims 1 and 11, wherein communications are established with one or more remote devices (fig. 1; [0026]; [0030]).

7. (Claims 5 - 7 and 15 - 17): Rector discloses a parental control system of claims 1 and 11, wherein one or more rules based functions are enabled or disabled, wherein the one or more rules based functions include at least one vehicle operational function (fig. 4; [0008]; [0023 - 0024]; [0057]).

8. (Claims 8 and 18): Rector discloses a parental control system of claims 1 and 11, wherein the parental control module is activated based on one or more of a facial recognition and a profile associated with the vehicle ([0059]).

Claim Rejections - 35 USC § 103

9. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

10. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 9 and 19 are rejected under 35 U.S.C. 103 as being unpatentable over Rector et al., (20110137520) as applied to claims 1 and 11 above, and further in view of Lovitt et al., (20140028542). (Note: Lovitt is a 102(a)(2) reference).

12. (Claims 9 and 19): Rector discloses a parental control system of claims 1 and 11. Rector does not teach real-time video or audio communications between the vehicle and a device. However, in a related invention, Lovitt teaches a system, wherein real-time audio or video communications are established between the vehicle and a communications device or a computing device (fig. 1; [0021]; [0059]; [0072]). It would have been obvious to one of ordinary skill in the art, before the effective filing date of the claimed invention to modify Rector to incorporate audio or video outputs to communicate with vehicle occupants, as a common offering in today's interactive vehicles.

13. Claims 10 and 20 are rejected under 35 U.S.C. 103 as being unpatentable over Rector et al., (20110137520) as applied to claims 1 and 11 above, and further in view of White et al., (20100152976).

14. (Claims 10 and 20): Rector discloses a parental control system of claims 1 and 11. Rector does not teach using a breathalyzer to limit vehicle functions. However, in a related invention White teaches a system, wherein the one or more vehicle functions are limited based on a determined context of one or more of the vehicle and one or more passengers, and wherein information from a local or remote breathalyzer is used as input to determine whether to limit the one or more vehicle functions ([01116]). It would have been obvious to one of ordinary skill in the art, before the effective filing

date of the claimed invention to modify Rector to incorporate a breathalyzer input in his invention, as a common offering in today's interactive vehicles.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/252,876	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0077985 A1	06-2002	Kobata et al.	705/51
*	B	US-2004/0039504 A1	02-2004	Coffee et al.	701/35
*	C	US-2005/0038598 A1	02-2005	Oesterling et al.	701/207
*	D	US-2005/0159853 A1	07-2005	Takahashi et al.	701/001
*	E	US-2007/0135995 A1	06-2007	Kikuchi et al.	701/209
*	F	US-2008/0255721 A1	10-2008	Yamada, Mitsuo	701/33
*	G	US-2009/0299572 A1	12-2009	Fujikawa et al.	701/36
*	H	US-2010/0023204 A1	01-2010	Basir et al.	701/33
*	I	US-2010/0125405 A1	05-2010	Chae et al.	701/200
*	J	US-2010/0152976 A1	06-2010	White et al.	701/48
*	K	US-2011/0090078 A1	04-2011	Kim et al.	340/522
*	L	US-2011/0112717 A1	05-2011	Resner, Benjamin	701/33
*	M	US-2011/0137520 A1	06-2011	Rector et al.	701/36

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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	Examiner ALEX C. DUNN	Art Unit 3663	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2012/0197523 A1	08-2012	Kirsch, David M.	701/426
*	B	US-2012/0254804 A1	10-2012	Sheha et al.	715/834
*	C	US-2014/0028542 A1	01-2014	Lovitt et al.	345/156
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

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	P					
	Q					
	R					
	S					
	T					

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Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,838	04/15/2014	Christopher P. Ricci	6583-574	3352

111285 7590 03/12/2015

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Suite 1200
Denver, CO 80202

EXAMINER
ISMAIL, MAHMOUD S

ART UNIT	PAPER NUMBER
3662	

NOTIFICATION DATE	DELIVERY MODE
03/12/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,838	Applicant(s) RICCI ET AL.	
	Examiner MAHMOUD ISMAIL	Art Unit 3662	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02/20/2015*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.
2. The amendment filed on 02/20/2015 has been entered and fully considered.
3. Claims 1, 4, 8, 10, 11, 13, 14, and 16-20 have been amended.
4. Claims 1-20 are pending in Instant Application.

Response to Arguments

5. Applicant's arguments with respect to claim 1 have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.
6. Applicant's amendment to claim 10 has overcome the claim objection raised in the previous action; therefore the claim objection is hereby withdrawn.
7. Applicant's amendments to claims 17-20 have overcome the 101 rejection raised in the previous action; therefore the 101 rejection is hereby withdrawn.
8. Applicant's amendments to claims 17-20 have overcome the 101 rejection raised in the previous action; therefore the 101 rejection is hereby withdrawn.
9. Applicant's amendments/arguments to claims 4-15 and 17-20 have overcome the 112 rejection raised in the previous action; therefore the 112 rejection is hereby withdrawn.

Claim Rejections - 35 USC § 103

10. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

11. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.
>
> The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:
> 1. Determining the scope and contents of the prior art.
> 2. Ascertaining the differences between the prior art and the claims at issue.
> 3. Resolving the level of ordinary skill in the pertinent art.
> 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1-20 are rejected under 35 U.S.C. 103 as being unpatentable over Breed (USPGPub 2008/0161986) in view of Nguyen (US 7,333,012).

As per claim 1, Breed discloses a method for controlling a vehicle, comprising:

the control server receiving travel information from the vehicle **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as**

determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar);

the control server determining a control arrangement for the vehicle **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes,**

prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes); and

the control server sending a control message to control the vehicle in the traffic control system **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes)**.

However Breed does not explicitly mention:

a control server, including a processor and associated with a traffic control system, receiving a registration of a vehicle; and

the control server registering the vehicle in the traffic control system in response to receiving the registration of the vehicle.

However Nguyen does teach:

a control server, including a processor and associated with a traffic control system, receiving a registration of a vehicle (**see at least col 3 lines 16-33; wherein the vehicles 150 and 160 are any vehicles that are being monitored by the vehicle monitor. They may be moving or stationary. The vehicle 150 includes a vehicle control subsystem 155 that controls the vehicle 150. The owner of the vehicle registers the information necessary for the monitoring and control of the vehicle. The registration may be performed via a law-enforcement agency (e.g., the department of motor vehicles) or a commercial private organization. The vehicle control subsystem 155 communicates with the traffic monitor 140 to send identification information and receive command to control the vehicle 150. The communication may be passive or active. A passive communication is one in which the driver of the vehicle 150 is not aware of the communication. An active communication is one in which the driver is aware of and may even participate in the communication. The vehicle 160 does not have a vehicle control subsystem but it is monitored by the vehicle monitor 140**); and

the control server registering the vehicle in the traffic control system in response to receiving the registration of the vehicle (**see at least col 3 lines 16-33; wherein the vehicles 150 and 160 are any vehicles that are being monitored by the**

vehicle monitor. They may be moving or stationary. The vehicle 150 includes a vehicle control subsystem 155 that controls the vehicle 150. The owner of the vehicle registers the information necessary for the monitoring and control of the vehicle. The registration may be performed via a law-enforcement agency (e.g., the department of motor vehicles) or a commercial private organization. The vehicle control subsystem 155 communicates with the traffic monitor 140 to send identification information and receive command to control the vehicle 150. The communication may be passive or active. A passive communication is one in which the driver of the vehicle 150 is not aware of the communication. An active communication is one in which the driver is aware of and may even participate in the communication. The vehicle 160 does not have a vehicle control subsystem but it is monitored by the vehicle monitor 140).

Therefore it would have been obvious for one of ordinary skill in the art before the effective filing data of the claimed invention to utilize the teachings as in Nguyen with the teachings as in Breed. The motivation for doing so would have been to have an effective method to monitor and/or control vehicles (col 1 lines 29-30).

As per claim 2, Breed further discloses wherein the vehicle automatically, without driver input, follows instructions in the control message **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the**

traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

As per claim 3, Breed further discloses wherein the travel information includes a current location and a destination **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel,**

the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar).

As per claim 4, Breed further discloses wherein the control message includes a speed and a position within traffic to which the vehicle must adhere **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the**

distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

As per claim 5, Breed further discloses wherein the vehicle generates a route based on the control arrangement **(see at least paragraph 0418; wherein the determination of a route that a vehicle should take to go from its present location to its destination can be accomplished using a vehicle-resident system. A central server can be used to derive the GPS coordinates of the destination if it is not known based on its address, phone number or other identifying information. Once the route has been selected, the network can be checked to see if there is any congestion, tie-ups or other problems along the route and if so, then the driver can be asked as to whether the system should choose an alternate route and the process repeated)**.

As per claim 6, Breed further discloses wherein the vehicle follows the route automatically without driver input **(see at least paragraph 0588; wherein since the road conditions will now be known to the system, an enhanced RtZF.RTM. system will be able to advise an operator not to travel or, alternately, it can pick an alternate route if certain roads have accidents or have iced over, for example. Some people may decide not drive if there is bad weather or congestion. The important point here is that sensors will be available to sense the road condition as to both traffic and weather, this information will be available automatically and not require reporting from weather stations which usually have only late and inaccurate information. Additionally, pricing for the**

use of certain roads can be based on weather, congestion, time of day, etc. That is, pricing can by dynamically controlled).

As per claim 7, Breed further discloses wherein the control server sends a second control message to change a behavior of the vehicle **(see at least paragraph 0583; wherein once the system determines that the vehicle is in danger or a rollover situation, the operator can be notified with an audible or visual warning (via a display or light) so that he or she can take corrective action. Additionally or alternately, the system can take control of the situation and prevent the rollover through appropriate application of brakes (either on all wheels or selectively on particular wheels), throttle or steering)**.

As per claim 8, Breed further discloses wherein the second control message instructs the vehicle to exit from a roadway **(see at least paragraph 0556; wherein FIG. 12a is a flow chart of the method in accordance with the invention. The absolute position of the vehicle is determined at 130, e.g., using a GPS, DGPS, PPS system, and compared to the edges of the roadway at 134, which is obtained from a memory unit 132. Based on the comparison at 134, it is determined whether the absolute position of the vehicle is approaching close to or intersects an edge of the roadway at 136. If not, then the position of the vehicle is again obtained, e.g., at a set time interval thereafter, and the process continues. If yes, an alarm and/or warning system will be activated and/or the system will take control of the vehicle (at 140) to guide it to a shoulder of the roadway or other safe location)**.

As per claim 9, Breed further discloses wherein the control message includes a lane designation **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes)**.

As per claim 10, Breed further discloses wherein a second vehicle receives the second control message, wherein the second control message is different from the control message sent to the vehicle **(see at least paragraph 0562-0563; wherein another common accident is where vehicle 18 does in fact stop but then proceeds forward without noticing vehicle 25 thereby causing an accident. Since in the fully deployed RtZF.RTM. system, vehicle 18 will know through the vehicle-to-vehicle communication, and possibly infrastructure-to-vehicle**

communications, the existence and location of vehicle 25 and can calculate its velocity, the system can once again take control of vehicle 18 if a warning is not heeded and prevent vehicle 18 from proceeding into the intersection and thereby prevent the accident…In the event that the vehicle 25 is not equipped with the RtZF.RTM. system, vehicle 18 will still sense the presence of vehicle 25 through the laser radar, radar and camera systems, or be notified of the presence of vehicle 25 via a communication from an infrastructure-based scanning system. Once again, when the position and speed of vehicle 25 is known, appropriate action can be taken by the system in vehicle 18 to prevent the accident. The infrastructure-based scanning system 27 can be situated in the vicinity of the intersection and determine the presence of vehicles approaching the intersection and their position and speed. It could also determine which vehicle has the right-of-way and if one of the vehicles violates the right-of-way, it could notify any vehicle equipped with the RtZF.RTM. system about the violation so that the vehicle 25 or driver thereof could undertake action to prevent a collision with the vehicle violating the right-of-way).

As per claim 11, Breed discloses a control server associated with a traffic control system comprising:

a processor operable to execute one or more modules **(see at least paragraph 0032; wherein there are disclosed several processors or controllers)**, the modules comprising:

a traffic control module operable to:

receive travel information from the vehicle **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar)**;

determine a control arrangement for the vehicle **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the**

traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes); and

send a control message to control the vehicle in the traffic control system **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data**

facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

However Breed does not explicitly mention:

a registration module operable to:

receive a registration of a vehicle; and

register, in response to receiving the registration of the vehicle, the vehicle in the traffic control system.

However Nguyen does teach:

receive a registration of a vehicle (**see at least col 3 lines 16-33; wherein the vehicles 150 and 160 are any vehicles that are being monitored by the vehicle monitor. They may be moving or stationary. The vehicle 150 includes a vehicle control subsystem 155 that controls the vehicle 150. The owner of the vehicle registers the information necessary for the monitoring and control of the vehicle. The registration may be performed via a law-enforcement agency (e.g., the department of motor vehicles) or a commercial private organization. The vehicle control subsystem 155 communicates with the traffic monitor 140 to send identification information and receive command to control the vehicle 150. The communication may be passive or active. A passive communication is one in which the driver of the vehicle 150 is not aware of the communication. An active communication is one in which the driver is aware**

of and may even participate in the communication. The vehicle 160 does not have a vehicle control subsystem but it is monitored by the vehicle monitor 140); and

register, in response to receiving the registration of the vehicle, the vehicle in the traffic control system (**see at least col 3 lines 16-33; wherein the vehicles 150 and 160 are any vehicles that are being monitored by the vehicle monitor. They may be moving or stationary. The vehicle 150 includes a vehicle control subsystem 155 that controls the vehicle 150. The owner of the vehicle registers the information necessary for the monitoring and control of the vehicle. The registration may be performed via a law-enforcement agency (e.g., the department of motor vehicles) or a commercial private organization. The vehicle control subsystem 155 communicates with the traffic monitor 140 to send identification information and receive command to control the vehicle 150. The communication may be passive or active. A passive communication is one in which the driver of the vehicle 150 is not aware of the communication. An active communication is one in which the driver is aware of and may even participate in the communication. The vehicle 160 does not have a vehicle control subsystem but it is monitored by the vehicle monitor 140**).

Therefore it would have been obvious for one of ordinary skill in the art before the effective filing data of the claimed invention to utilize the teachings as in Nguyen with

the teachings as in Breed. The motivation for doing so would have been to have an effective method to monitor and/or control vehicles (col 1 lines 29-30).

As per claim 12, Breed further discloses wherein the vehicle generates a route based on the control arrangement **(see at least paragraph 0418; wherein the determination of a route that a vehicle should take to go from its present location to its destination can be accomplished using a vehicle-resident system. A central server can be used to derive the GPS coordinates of the destination if it is not known based on its address, phone number or other identifying information. Once the route has been selected, the network can be checked to see if there is any congestion, tie-ups or other problems along the route and if so, then the driver can be asked as to whether the system should choose an alternate route and the process repeated)**, and wherein the vehicle follows the route automatically without driver input **(see at least paragraph 0588; wherein since the road conditions will now be known to the system, an enhanced RtZF.RTM. system will be able to advise an operator not to travel or, alternately, it can pick an alternate route if certain roads have accidents or have iced over, for example. Some people may decide not drive if there is bad weather or congestion. The important point here is that sensors will be available to sense the road condition as to both traffic and weather, this information will be available automatically and not require reporting from weather stations which usually have only late and inaccurate information.**

Additionally, pricing for the use of certain roads can be based on weather, congestion, time of day, etc. That is, pricing can by dynamically controlled).

As per claim 13, Breed further discloses wherein the control server sends a second control message to change a behavior of the vehicle **(see at least paragraph 0583; wherein once the system determines that the vehicle is in danger or a rollover situation, the operator can be notified with an audible or visual warning (via a display or light) so that he or she can take corrective action. Additionally or alternately, the system can take control of the situation and prevent the rollover through appropriate application of brakes (either on all wheels or selectively on particular wheels), throttle or steering)**, and wherein the second control message instructs the vehicle to exit from a roadway **(see at least paragraph 0556; wherein FIG. 12a is a flow chart of the method in accordance with the invention. The absolute position of the vehicle is determined at 130, e.g., using a GPS, DGPS, PPS system, and compared to the edges of the roadway at 134, which is obtained from a memory unit 132. Based on the comparison at 134, it is determined whether the absolute position of the vehicle is approaching close to or intersects an edge of the roadway at 136. If not, then the position of the vehicle is again obtained, e.g., at a set time interval thereafter, and the process continues. If yes, an alarm and/or warning system will be activated and/or the system will take control of the vehicle (at 140) to guide it to a shoulder of the roadway or other safe location)**.

As per claim 14, Breed further discloses wherein the control message includes one or more of a lane, a speed, and a position within traffic to which the vehicle must adhere **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes)**.

As per claim 15, Breed further discloses wherein the travel information includes a current location and a destination **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location**

and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar).

As per claim 16, Breed discloses a non-transitory computer readable medium stored on a storage medium and having instructions that when executed by a processor cause the processor to perform a method **(see at least paragraph 0032; wherein there are disclosed several processors or controllers)**, the instructions comprising:

instructions to receive travel information from the vehicle **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each**

transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar);

instructions to determine a control arrangement for the vehicle **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands,**

acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes); and

instructions to send a control message to control the vehicle in the traffic control system **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes)**.

However Breed does not explicitly mention:

instructions to receive a registration of a vehicle; and

instructions to register the vehicle in the traffic control system.

However Nguyen does teach:

instructions to receive a registration of a vehicle (**see at least col 3 lines 16-33; wherein the vehicles 150 and 160 are any vehicles that are being monitored by the vehicle monitor. They may be moving or stationary. The vehicle 150 includes a vehicle control subsystem 155 that controls the vehicle 150. The owner of the vehicle registers the information necessary for the monitoring and control of the vehicle. The registration may be performed via a law-enforcement agency (e.g., the department of motor vehicles) or a commercial private organization. The vehicle control subsystem 155 communicates with the traffic monitor 140 to send identification information and receive command to control the vehicle 150. The communication may be passive or active. A passive communication is one in which the driver of the vehicle 150 is not aware of the communication. An active communication is one in which the driver is aware of and may even participate in the communication. The vehicle 160 does not have a vehicle control subsystem but it is monitored by the vehicle monitor 140**); and

instructions to register the vehicle in the traffic control system (**see at least col 3 lines 16-33; wherein the vehicles 150 and 160 are any vehicles that are being monitored by the vehicle monitor. They may be moving or stationary. The vehicle 150 includes a vehicle control subsystem 155 that controls the vehicle 150. The owner of the vehicle registers the information necessary for the**

monitoring and control of the vehicle. The registration may be performed via a law-enforcement agency (e.g., the department of motor vehicles) or a commercial private organization. The vehicle control subsystem 155 communicates with the traffic monitor 140 to send identification information and receive command to control the vehicle 150. The communication may be passive or active. A passive communication is one in which the driver of the vehicle 150 is not aware of the communication. An active communication is one in which the driver is aware of and may even participate in the communication. The vehicle 160 does not have a vehicle control subsystem but it is monitored by the vehicle monitor 140).

Therefore it would have been obvious for one of ordinary skill in the art before the effective filing data of the claimed invention to utilize the teachings as in Nguyen with the teachings as in Breed. The motivation for doing so would have been to have an effective method to monitor and/or control vehicles (col 1 lines 29-30).

As per claim 17, Breed further discloses wherein the vehicle generates a route based on the control arrangement **(see at least paragraph 0418; wherein the determination of a route that a vehicle should take to go from its present location to its destination can be accomplished using a vehicle-resident system. A central server can be used to derive the GPS coordinates of the destination if it is not known based on its address, phone number or other identifying information. Once the route has been selected, the network can be checked to see if there is any congestion, tie-ups or other problems along the**

route and if so, then the driver can be asked as to whether the system should choose an alternate route and the process repeated), and wherein the vehicle follows the route automatically without driver input **(see at least paragraph 0588; wherein since the road conditions will now be known to the system, an enhanced RtZF.RTM. system will be able to advise an operator not to travel or, alternately, it can pick an alternate route if certain roads have accidents or have iced over, for example. Some people may decide not drive if there is bad weather or congestion. The important point here is that sensors will be available to sense the road condition as to both traffic and weather, this information will be available automatically and not require reporting from weather stations which usually have only late and inaccurate information. Additionally, pricing for the use of certain roads can be based on weather, congestion, time of day, etc. That is, pricing can by dynamically controlled)**.

As per claim 18, Breed further discloses wherein the control server sends a second control message to change a behavior of the vehicle **(see at least paragraph 0583; wherein once the system determines that the vehicle is in danger or a rollover situation, the operator can be notified with an audible or visual warning (via a display or light) so that he or she can take corrective action. Additionally or alternately, the system can take control of the situation and prevent the rollover through appropriate application of brakes (either on all wheels or selectively on particular wheels), throttle or steering)**, and wherein the second control message instructs the vehicle to exit from a roadway **(see at**

least paragraph 0556; wherein FIG. 12a is a flow chart of the method in accordance with the invention. The absolute position of the vehicle is determined at 130, e.g., using a GPS, DGPS, PPS system, and compared to the edges of the roadway at 134, which is obtained from a memory unit 132. Based on the comparison at 134, it is determined whether the absolute position of the vehicle is approaching close to or intersects an edge of the roadway at 136. If not, then the position of the vehicle is again obtained, e.g., at a set time interval thereafter, and the process continues. If yes, an alarm and/or warning system will be activated and/or the system will take control of the vehicle (at 140) to guide it to a shoulder of the roadway or other safe location).

As per claim 19, Breed further discloses wherein the control message includes one or more of a lane, a speed, and a position within traffic to which the vehicle must adhere **(see at least paragraph 0435; wherein data facility 300 could also function as a supervisory vehicle travel management system as described above in section 6.0. In this case, it would use some or all of the information available to it about the traveling of the vehicles, in particular, on dedicated lanes, and be programmed to generate instructions for each vehicle able to communicate with the data facility 300 to direct the movement of the vehicle. This would constitute autonomous operation of the vehicle since the vehicle would be provided with a control system which is capable of converting the instructions received from the data facility 300 into operational commands, e.g., steering commands, acceleration and braking commands, etc. Data**

facility 300 would generate such instructions to maximize the speed of travel on the dedicated lanes, prevent collisions between vehicles in the dedicated lanes and minimize the distance between adjacent vehicles in order to maximize usage of the dedicated lanes).

As per claim 20, Breed further discloses wherein the travel information includes a current location and a destination **(see at least paragraph 0201; wherein FIG. 20 shows a schematic of the operation of a communication and/or information transmission system and method in accordance with the invention. Transmitters are provided, for example at fixed locations and/or in vehicles or other moving objects, and data about each transmitter, such as its location and an identification marker, is generated at 240. The location of the transmitter is preferably its GPS coordinates as determined, for example, by a GPS-based position determining system (although other position determining systems can alternatively or additionally be used). The data may include, when the transmitter is a moving vehicle, the velocity, speed, the direction of travel, the estimated travel path and the destination of the vehicle. The data is encoded at 242 using coding techniques such as those described above, e.g., phase modulation of distance or time between code transmissions, phase or amplitude modulation of the code sequences themselves, changes of the polarity of the entire code sequence or the individual code segments, or bandwidth modulation of the code sequence. The coded data is transmitted at 244 using, e.g., noise or pseudo-noise radar)**.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MAHMOUD ISMAIL whose telephone number is (571)272-1326. The examiner can normally be reached on Monday - Friday from 9:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Helal Algahaim can be reached on (571) 270-5227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MAHMOUD ISMAIL/
Examiner, Art Unit 3662

/HELAL A ALGAHAIM/

Supervisory Patent Examiner, Art Unit 3662

Notice of References Cited	Application/Control No. 14/253,838	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner MAHMOUD ISMAIL	Art Unit 3662	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,333,012	02-2008	Nguyen, Martin Khang	340/539.1
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

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NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 12/19/2014

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 12/19/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,312	04/15/2014	Christopher P. Ricci	6583-585	5072

TITLE OF INVENTION: VEHICLE-BASED MULTIMODE DISCOVERY

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	03/19/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 12/19/2014
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,312	04/15/2014	Christopher P. Ricci	6583-585	5072

TITLE OF INVENTION: VEHICLE-BASED MULTIMODE DISCOVERY

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	03/19/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-036000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Page 726 of 1087 Ford Ex. 1109

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,312	04/15/2014	Christopher P. Ricci	6583-585	5072

111285 7590 12/19/2014

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1560 Broadway
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Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 12/19/2014

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,312	Applicant(s) RICCI ET AL.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *4/15/2014*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-21*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: Claims 1 – 21 are allowed for the following reasons.

3. The prior art of record fails to teach - applying, by the device discovery daemon, at least the following rules: (C1) when the computational device is located within the predetermined area and/or zone of the vehicle, permitting the computational device to access or attempt to access the vehicle network and/or communication subsystem; and (C2) when the computational device is not located within the predetermined area and/or zone of the vehicle, not permitting the computational device to access or attempt to access the vehicle network and/or communication subsystem.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,312	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0009978 A1	01-2002	Dukach et al.	455/99
*	B	US-2002/0065046 A1	05-2002	Mankins et al.	455/59
*	C	US-2004/0036622 A1	02-2004	Dukach et al.	340/691.6
*	D	US-2009/0138336 A1	05-2009	Ashley et al.	705/10
*	E	US-2010/0169432 A1	07-2010	Santori et al.	709/206
*	F	US-2010/0235891 A1	09-2010	Oglesbee et al.	726/5
*	G	US-2010/0305807 A1	12-2010	Basir et al.	701/33
*	H	US-8,350,721 B2	01-2013	Carr, Jeffrey Thomas	340/903
*	I	US-8,660,735 B2	02-2014	Tengler et al.	701/24
*	J	US-8,730,033 B2	05-2014	Yarnold et al.	340/539.13
*	K	US-8,793,034 B2	07-2014	Ricci, Christopher P.	701/1
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,334	04/15/2014	Christopher P. Ricci	6583-586	4129

111285 7590 01/27/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
RABOVIANSKI, JIVKA A

ART UNIT	PAPER NUMBER
2426	

NOTIFICATION DATE	DELIVERY MODE
01/27/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,334	Applicant(s) RICCI ET AL.	
	Examiner JIVKA RABOVIANSKI	Art Unit 2426	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-22* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-22* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Objections

2. Claims 18 – 22 are objected to because of the following informalities: Claims depend on claim 17, but cite different preamble than claim 17: "computer readable medium". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1, 5, 11, 12, 13, 17, 18 and 19 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Claim 1 cites: "selected content", "the media controller subsystem", "the distributed network control server", "the media server" and "the computation device". It is not clear from the claim what the references of these citations are. Claim 5 cites: "the filtered and/or permitted media".

Claim 11 cites: "the vehicle occupant requesting media content", "the requested media content" and "the filtered and/or permitted media". Claim 12 cites: "the media processing board". Claim 13 cites: "source of the content". Claim 17 cites: "the vehicle occupant requesting media content", "the requested media content" and "the filtered and/or permitted media". Claim 18 cites: "the media processing board". Claim 19 cites: "source of the content". It is not clear from the claim what the references of these citations are.

5. Claims 1, 5, 11, 12, 13, 17, 18 and 19 recites the limitation "the media controller subsystem", "the distributed network control server", "the media server", "the computation device", "the filtered and/or permitted media", "the vehicle occupant requesting media content", "the requested media content", "the media processing board" and "source of the content". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another

inventor and was effectively filed before the effective filing date of the claimed invention.

7. Claims 1 - 4 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Kim (USPPGPubN 20130055096, referred to as Kim).

Regarding claim 1:

Kim anticipates a microprocessor executable distributed network control server operable to access selected content on a public network external to a vehicle comprising the media controller subsystem, the distributed network control server having at least one of an assigned Internet Protocol address and global unicast address (Kim, the content provided by the server external from the vehicle wherein IP addresses are assigned to the mobile terminal in the vehicle; a wireless local area network (WLAN), Wi-Fi, wireless broadband (WiBro); [0055], [0069], [0093], [0126], [0170], Fig. 3);

Kim anticipates a microprocessor executable media server operable to receive requests for content from a vehicle occupant and provide requested content to a portable computational device associated with the vehicle occupant, the media server having a contactable electronic address on a local area network maintained by the vehicle (Kim, Figs. 4 and 6; navigation session receives position information of the peripheral vehicle from the terminal mounted to the peripheral vehicle, and receives position information from the mobile terminal held by the passerby, [0115]);

Kim anticipates microprocessor readable memory to store content (Kim, Fig. 1/item 160, [0092]); and

Kim anticipates a microprocessor executable virtual network console operable to provide the computational device with remote access to the media server (Kim, Fig. 3).

Regarding claim 2:

Kim anticipates The media controller subsystem of claim 15, wherein the distributed network control server, media server, and virtual network console are on a common media processing board mounted on the vehicle and wherein the portable computational device is discrete from, remote from, and in wireless communication with the media processing board (Kim, the mobile terminal 100 and the image display apparatus 200 mounted in a vehicle are connected to each other in a wireless manner such that they can perform data communication, [0145]).

Regarding claim 3:

Kim anticipates the media controller subsystem of claim 16, wherein the virtual network console operates in accordance with the Remote Frame Buffer protocol on top of the TCP/IP suite of protocols, thereby causing the remote computational device to appear to a computer mounted in the vehicle as if the remote computational device is part of the on board vehicle control system comprising the computer (Kim, virtual network computing

(VNC) manner using a remote frame buffer (RFB) protocol, [0057], IP protocol, [0170], Figs. 1 and 3).

Regarding claim 4:

Kim anticipates media controller of claim 17, wherein the vehicle occupant, through the remote computational device, can control one or more of the following media presentation features of a screen and sound system mounted on the vehicle: volume, contrast, resolution, and channel selection (Kim, providing a user interface by which the user can control the image display apparatus 200 mounted in a vehicle according to the screen information: contrast and resolution, [0107], [0140]; controlling the tuner for receiving channels, [0109], voice control, [0086], [0101]).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 5 - 22 are rejected under 35 U.S.C. 103 as being unpatentable over Kim (USPPGPubN 20130055096, referred to as Kim), and further in view of Hulet (USPPN 8613385, referred to as Hulet).

Regarding claims 5, 11 and 17:

Kim teaches determining, by a microprocessor executable media server, at least one of an identity of a vehicle occupant requesting media content, an identity of a portable computational device associated with the vehicle occupant, and a spatial location of the vehicle occupant and/or remote computational device (Kim, the device are identified to be set for communication as shown in Fig. 5, [0144]; navigation session receives position information of the peripheral vehicle from the terminal mounted to the peripheral vehicle, and receives position information from the mobile terminal held by the passerby, [0115]);

Kim does not specifically teach based on the at least one of the identity of the vehicle occupant requesting media content, the identity of a portable computational device associated with the vehicle occupant, and the spatial location of the vehicle occupant and/or remote computational device, applying, by the microprocessor executable media server, at least one of a filter and restriction to the requested media content to form filtered and/or permitted media content to be provided to the portable computational device. However, Hulet teaches personal information is exchanged to allow the media player to determine what content is permitted to be accessed, C 25: L 33 – 43. It would have been obvious to one of ordinary skill in the art

at the time the invention was made to incorporate Hulet with the teaching of allow permitted media to be distributed into the invention of Kim for the purpose of preventing unappropriated media to be watched by people.

Kim in view of Hulet teaches providing, by a microprocessor executable media server, the filtered and/or permitted media content to the portable computational device (Hulet, granting permission and providing the content to the media player 302, Fig. 3, C 13: L 11 – 35, C 25: L 33 – 43).

Regarding claims 6, 12 and 18:

Kim in view of Hulet teaches the portable computational device is discrete from, remote from, and in wireless communication with the media processing board, wherein the at least one of a filter and restriction is applied to a media request of the vehicle occupant before the requested media content is accessed and wherein the at least one of a filter and restriction is one or more of an age-related content filter and/or restriction, a vehicle occupant seating location filter and/or restriction, and a privacy filter and/or restriction (Hulet, permissions for content can be inherited based on the location class structure, for example, the parent class location of "vehicle type" may have an associated "aircraft" value that permits access to some content on the media player 302. A class location of "coach" for the compartment type can inherit permissions from its aircraft parent and also

grant permission to additional content on the media player 302, based on the siting location, Fig. 3, C 13: L 11 – 35).

Regarding claims 7, 13 and 19:

Kim in view of Hulet teaches the at least one of a filter and restriction bans a type of content requested, bans a source of the content, redirects the request to a different source of the content, and/or limits the vehicle occupant to content from an approved source (Hulet, the media player is used in a number of different locations, and with different content permissions based on location-dependent information, C 9: L 47 – 50, the restriction depends on the type of the content, C 13: L 11 – 53).

Regarding claims 8, 14 and 20:

Kim in view of Hulet teaches the portable computational device is discrete from, remote from, and in wireless communication with the media processing board, wherein the at least one of a filter and restriction is applied after the requested media content is accessed and wherein the at least one of a filter and restriction is one or more of an age-related content filter and/or restriction, a vehicle occupant seating location filter and/or restriction, and a privacy filter and/or restriction (Hulet, based on the siting location, Fig. 3, C 13: L 11 – 35; content restrictions or permissions may be inherited from a parent location type, Fig. 3, C 13: L 11 – 35).

Regarding claims 9, 15 and 21:

Kim in view of Hulet teaches a menu displayed to each occupant enables access to media content and wherein the at least one of a filter and restriction determines a content and/or configuration of the menu presented to each occupant (Hulet, determine which content, applications, information and functions should be displayed in a menu and/or user interface, C 13: L 45 – 56).

Regarding claims 10, 16 and 22:

Kim teaches application of the at least one of a filter and restriction is based on an electronic address of the portable computational device on a network of the vehicle (Hulet, the user executes application using e-mail, [0051]).

Contact

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jivka Rabovianski whose telephone number is (571) 270-1845. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NASSER GOODARZI can be reached on (571)272-4195. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/JIVKA RABOVIANSKI/

Primary Examiner, Art Unit 2426

January 21, 2015

Notice of References Cited	Application/Control No. 14/253,334	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner JIVKA RABOVIANSKI	Art Unit 2426	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2013/0055096 A1	02-2013	KIM et al.	715/738
*	B	US-8,613,385 B1	12-2013	Hulet et al.	235/375
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,371	04/15/2014	Christopher P. Ricci	6583-588	2967

111285 7590 12/16/2014

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
12/16/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,371	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-21* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☒ Claim(s) *1-21(allowable)* is/are allowed.

7)☒ Claim(s) *1-21(112(a))* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112(a):

> (a) IN GENERAL.—The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor or joint inventor of carrying out the invention.

The following is a quotation of the first paragraph of pre-AIA 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1 – 21 are rejected under 35 U.S.C. 112(a) or 35 U.S.C. 112 (pre-AIA), first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor or a joint inventor, or for pre-AIA the inventor(s), at the time the application was filed, had possession of the claimed invention. In their first paragraphs, independent claims 1, 8 and 15 recite the limitation “task, function and/or operation”, without defining either in the specification or claims, what activities are tasks, what activities are functions or what activities are operations.

4. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.
>
> The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1 – 21 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Independent claims 1, 8 and 15 recite the limitation "task, function and/or operation" in their first paragraph. There is insufficient antecedent basis for this limitation in the claims.

Allowable Subject Matter

6. The following is a statement of reasons for the indication of allowable subject matter over the prior art: Claims 1 - 21 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112(a) and 112(b), set forth in this Office action. Claims 1 – 21 would be allowable over the prior art for the following reasons.

7. The prior art of record fail to teach - based upon the account corresponding to the vehicle occupant and the at least one of an area and/or zone occupied by the vehicle occupant and an operating state of the vehicle, applying, by the microprocessor executable vehicle control system, the following rules: (i) when the account permits the vehicle occupant to perform the requested vehicle task, function and/or operation, performing or causing to be performed the vehicle task, function, and/or operation; and

(ii) when the account does not permit the vehicle occupant to perform the requested vehicle task, function and/or operation, not performing or causing to be performed the vehicle task, function, and/or operation.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,371	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2010/0169432 A1	07-2010	Santori et al.	709/206
*	B	US-2010/0235891 A1	09-2010	Oglesbee et al.	726/5
*	C	US-2010/0305807 A1	12-2010	Basir et al.	701/33
*	D	US-8,350,721 B2	01-2013	Carr, Jeffrey Thomas	340/903
*	E	US-8,660,735 B2	02-2014	Tengler et al.	701/24
*	F	US-8,730,033 B2	05-2014	Yarnold et al.	340/539.13
*	G	US-8,793,034 B2	07-2014	Ricci, Christopher P.	701/1
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 04/15/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 04/15/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,371	04/15/2014	Christopher P. Ricci	6583-588	2967

TITLE OF INVENTION: REMOTE CONTROL OF ASSOCIATED VEHICLE DEVICES

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	07/15/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 04/15/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,371	04/15/2014	Christopher P. Ricci	6583-588	2967

TITLE OF INVENTION: REMOTE CONTROL OF ASSOCIATED VEHICLE DEVICES

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	07/15/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-048000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Page 754 of 1087 Ford Ex. 1109

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,371	04/15/2014	Christopher P. Ricci	6583-588	2967

111285 7590 04/15/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 04/15/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice Requiring Inventor's Oath or Declaration	Application No. 14/253,371	Applicant(s) Christopher P. Ricci	
	Examiner DUNN, ALEX C	Art Unit 3663	

This notice is an attachment to the Notice of Allowability (PTOL-37), or the Notice of Allowability For A Design Application (PTOL-37D).

An inventor's oath or declaration in compliance with 37 CFR 1.63 or 1.64 executed by or with respect to each inventor has not yet been submitted.

An oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each inventor (for any inventor for which a compliant oath, declaration, or substitute statement has not yet been submitted) MUST be filed no later than the date on which the issue fee is paid. See 35 U.S.C. 115(f). Failure to timely comply will result in ABANDONMENT of this application.

A properly executed inventor's oath to declaration has not been received for the following inventor(s):

If applicant previously filed one or more oaths, declarations, or substitute statements, applicant may have received an informational notice regarding deficiencies therein.

The following deficiencies are noted:

INFORMAL ACTION PROBLEMS

- A properly executed inventor's oath or declaration has not been received for the following inventor(s): **Christopher P. Ricci**.
  Applicant may submit the inventor's oath or declaration at any time before the Notice of Allowance and Fee(s) Due, PTOL-85, is mailed.

Questions relating to this Notice should be directed to the Application Assistance Unit at 571-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,371	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *3/16/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-21*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/A. C. D./ Examiner, Art Unit 3663	/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,416	04/15/2014	Christopher P. Ricci	6583-595	8775

111285 7590 12/01/2014

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
12/01/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,416	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-7,11-14 and 16-19* is/are rejected.

8)☒ Claim(s) *8-10,15 and 20* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

4. Claims 1, 3 – 4, 6 – 7, 11, 13 – 14, 16 and 18 – 19 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Tan (20120109451).

5. (Claims 1, 11 and 16): Tan discloses a method for controlling a user interface in a conveyance, comprising: a vehicle control system, including a processor, providing content on the user interface (fig. 2; [0023]); the vehicle control system determining if a user within the conveyance should be prohibited from viewing the content (fig. 2; [0028]); the vehicle control system determining a location of the prohibited user ([0008]); and the vehicle control system modifying a display of the content to prevent viewing by the prohibited user (fig. 8; [0005]; [0038]; [0040]).

6. (Claims 3 - 4, 13 and 18): Tan discloses a method for controlling a user interface in a conveyance, wherein the prohibited user is one of a driver, another passenger, or a child passenger (figs. 2 and 9; [0045]).

7. (Claims 6 - 7, 14 and 19): Tan discloses a method for controlling a user interface in a conveyance, wherein the display is modified by one of at least a portion of the user interface is blacked out when the prohibited user looks at the user interface (figs. 6 – 7; [0037]; [0047 – 0048]).

Claim Rejections - 35 USC § 103

7. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

8. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2, 5, 12 and 17 are rejected under 35 U.S.C. 103 as being unpatentable over Tan (20120109451).

11. (Claims 2, 12 and 17): Tan teaches enabling the viewing of Internet content on a display or a mobile device ([0031]). It would have been obvious for part of the Internet content to be a movie, as a very common offering of most content providers today.

12. (Claim 5): Tan teaches an occupant sensor as part of his invention (fig. 2; [0046]). It would have been obvious to determine if a passenger is a child, as is very common for other vehicle safety systems such as air bag deployment.

Allowable Subject Matter

13. Claims 8 – 10, 15 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/
Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,416	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,020,544 B2	03-2006	Shinada et al.	701/1
*	B	US-7,096,431 B2	08-2006	Tambata et al.	715/834
*	C	US-2009/0079705 A1	03-2009	Sizelove et al.	345/173
*	D	US-7,796,190 B2	09-2010	Basso et al.	348/445
*	E	US-8,060,631 B2	11-2011	Collart et al.	709/229
*	F	US-2012/0109451 A1	05-2012	TAN, Adrian	701/36
*	G	US-8,334,847 B2	12-2012	Tomkins, Steve	345/173
*	H	US-8,346,233 B2	01-2013	Aaron et al.	455/418
*	I	US-2013/0080371 A1	03-2013	Harber et al.	706/50
*	J	US-8,447,598 B2	05-2013	Chutorash et al.	704/231
*	K	US-8,442,389 B2	05-2013	Kashima et al.	386/343
*	L	US-8,497,842 B2	07-2013	Tomkins et al.	345/173
*	M	US-8,547,340 B2	10-2013	Sizelove et al.	345/173

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited	Application/Control No. 14/253,416	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-8,671,068 B2	03-2014	Harber et al.	706/50
*	B	US-8,782,262 B2	07-2014	Collart et al.	709/229
*	C	US-8,812,171 B2	08-2014	Filev et al.	701/1
*	D	US-8,825,031 B2	09-2014	Aaron et al.	455/418
*	E	US-8,862,317 B2	10-2014	Shin et al.	701/36
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 03/18/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 03/18/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,416	04/15/2014	Christopher P. Ricci	6583-595	8775

TITLE OF INVENTION: UNIVERSAL VEHICLE VOICE COMMAND SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	06/18/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 03/18/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,416	04/15/2014	Christopher P. Ricci	6583-595	8775

TITLE OF INVENTION: UNIVERSAL VEHICLE VOICE COMMAND SYSTEM

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	06/18/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-036000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Page 768 of 1087 Ford Ex. 1109

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,416	04/15/2014	Christopher P. Ricci	6583-595	8775

111285 7590 03/18/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 03/18/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice Requiring Inventor's Oath or Declaration	Application No. 14/253,416	Applicant(s) Christopher P. Ricci	
	Examiner DUNN, ALEX C	Art Unit 3663	

This notice is an attachment to the Notice of Allowability (PTOL-37), or the Notice of Allowability For A Design Application (PTOL-37D).

An inventor's oath or declaration in compliance with 37 CFR 1.63 or 1.64 executed by or with respect to each inventor has not yet been submitted.

An oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each inventor (for any inventor for which a compliant oath, declaration, or substitute statement has not yet been submitted) MUST be filed no later than the date on which the issue fee is paid. See 35 U.S.C. 115(f). Failure to timely comply will result in ABANDONMENT of this application.

A properly executed inventor's oath to declaration has not been received for the following inventor(s):

If applicant previously filed one or more oaths, declarations, or substitute statements, applicant may have received an informational notice regarding deficiencies therein.

The following deficiencies are noted:

INFORMAL ACTION PROBLEMS

- A properly executed inventor's oath or declaration has not been received for the following inventor(s): **Christopher P. Ricci**.
  Applicant may submit the inventor's oath or declaration at any time before the Notice of Allowance and Fee(s) Due, PTOL-85, is mailed.

Questions relating to this Notice should be directed to the Application Assistance Unit at 571-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,416	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *3/2/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-20*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/A. C. D./ Examiner, Art Unit 3663	/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 01/28/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 01/28/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,058	04/15/2014	Christopher P. Ricci	6583-600	4806

TITLE OF INVENTION: SHARED NAVIGATIONAL INFORMATION BETWEEN VEHICLES

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	04/28/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 01/28/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,058	04/15/2014	Christopher P. Ricci	6583-600	4806

TITLE OF INVENTION: SHARED NAVIGATIONAL INFORMATION BETWEEN VEHICLES

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	04/28/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-025000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Page 774 of 1087 Ford Ex. 1109

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,058	04/15/2014	Christopher P. Ricci	6583-600	4806

111285 7590 01/28/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 01/28/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,058	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *4/15/2014*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-20*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
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Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Allowable Subject Matter

2. The following is an examiner's statement of reasons for allowance: Claims 1 – 20 are allowed for the following reasons.

3. The prior art of record fails to teach - a first vehicle adapted to one or more of broadcast and post a query for navigational assistance; a navigation subsystem adapted to analyze the query and determine if a user in a second vehicle has information related to the query for navigational assistance.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,058	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,986,575 A	11-1999	Jones et al.	340/906
*	B	US-6,148,261 A	11-2000	Obradovich et al.	701/438
*	C	US-2002/0128774 A1	09-2002	Takezaki et al.	701/211
*	D	US-2003/0060937 A1	03-2003	Shinada et al.	701/1
*	E	US-6,853,910 B1	02-2005	Oesterling et al.	701/517
*	F	US-7,096,431 B2	08-2006	Tambata et al.	715/834
*	G	US-2007/0182625 A1	08-2007	Kerai et al.	342/357.1
*	H	US-2009/0006525 A1	01-2009	Moore, Darryl Cynthia	709/202
*	I	US-2009/0234578 A1	09-2009	Newby et al.	701/207
*	J	US-7,748,021 B2	06-2010	Obradovich, Michael L.	725/105
*	K	US-2011/0301844 A1	12-2011	Aono, Hiroyuki	701/300
*	L	US-2012/0053888 A1	03-2012	Stahlin et al.	702/150
*	M	US-2013/0300554 A1	11-2013	Braden, Jude	340/441

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited	Application/Control No. 14/253,058	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2014/0292545 A1	10-2014	Nemoto, Yusuke	340/988
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,022	04/15/2014	Christopher P. Ricci	6583-602	3364

111285 7590 02/20/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
LANG, MICHAEL DEAN

ART UNIT	PAPER NUMBER
3667	

NOTIFICATION DATE	DELIVERY MODE
02/20/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,022	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner Michael D. Lang	Art Unit 3667	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/25/2014*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

Claim Rejections - 35 USC § 112

2. The following is a quotation of 35 U.S.C. 112(b):

> (b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 3 and 15 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

4. Claim 3 which depends upon claim 2 claims the heads-up display and wherein claim 2 presents an alternative where no heads-up display is present. It is unclear to examiner whether there is always a heads-up display present or not and therefore the claim is indefinite.

5. Claim 15 recites the limitation "The communication device" in line 1. There is insufficient antecedent basis for this limitation in the claim and it is unclear to the examiner what communication device is being referred to, therefore the claim is indefinite.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

7. Claims 1-9, 15-17, and 19 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Patel et al. (2013/0207794).

8. Regarding claims 1, 16, and 19: Patel discloses a method, a tangible computer readable medium, and vehicle control system, comprising:

a. displaying, by a microprocessor executable dash configuration module, in a first area, an instrument display of a vehicle in a first configuration, wherein the instrument display comprises one or more instruments that indicate a state of the vehicle (Figure 1, Paragraph 0051 and 0052);

b. determining, by a microprocessor executable traffic law module, that a second configuration of the instrument display is required in a second area, the first and second configurations being different (Paragraph 0051 and 0052);

c. determining, by the microprocessor executable dash configuration module, that the vehicle has entered, or is about to enter, the second area (Paragraph 0051 and 0052); and

d. in response, displaying, by the microprocessor executable dash configuration module, the instrument display in the second configuration (Paragraph 0051 and 0052).

9. Regarding claim 2: Patel discloses wherein the instrument display comprises at least one of a configurable dash display and a heads-up display, wherein the first configuration and the second configuration display the same vehicle state information, and wherein the second configuration of the instrument display is selected from one or more preconfigured instrument display configurations (Paragraph 0025, 0051, and 0052; configurable dash display).

10. Regarding claim 3: Patel discloses wherein the configurable dash display comprises at least one instrument not displayed by the heads-up display (Paragraph 0025, 0051, and 0052; wherein the at least one of a configurable dash display has been shown and therefore a heads-up display need not be present).

11. Regarding claim 4: Patel discloses wherein the one or more instruments include at least one of a speedometer, an odometer, a tachometer, a trip odometer, a fuel gage, a coolant temperature gage, and a battery charge meter (Paragraph 0051, Speedometer).

12. Regarding claim 5: Patel discloses wherein the second configuration includes at least one instrument not displayed by the first configuration, wherein determining that

the second configuration of the instrument display is required includes changing at least one of: a size; a scale; a unit of measure to one of metric units and non-metric units; and a language of at least one instrument displayed in the first configuration (Paragraph 0041 and 0051, unit of measure).

13. Regarding claim 6: Patel discloses wherein the first configuration includes at least one instrument not displayed by the second configuration (Paragraph 0038, engine speed).

14. Regarding claim 7: Patel discloses presenting, by a microprocessor executable alert module, an alert on at least one of an instrument display and a communication device, wherein the alert includes information about traffic rules of the second area that are different than traffic rules of the first area, and wherein the alert includes information about the differences between the first configuration and the second configuration (Paragraph 0045).

15. Regarding claim 8: Patel discloses retrieving, by the microprocessor executable traffic law module, one or more traffic laws and vehicle regulations for the second area from an external memory of the vehicle, wherein the traffic law module determines that the second configuration of the instrument display is required in the second area by interpreting the one or more traffic laws and vehicle regulations applicable in the second area (Paragraph 0052).

16. Regarding claim 9: Patel discloses determining, by the microprocessor executable traffic law module, that the vehicle is approaching the second area, wherein the microprocessor executable traffic law module determines that the vehicle is

approaching the second area after a least one of receiving one or more signals sent from a plurality of sensing elements associated with the vehicle, receiving a location of the vehicle from a vehicle navigation system, receiving the location of the vehicle from a communication device, and receiving a destination of the vehicle entered into the vehicle navigation system (Paragraph 0051); and

e. selecting, by the dash configuration module, the second configuration (Paragraph 0051).

17. Regarding claim 15: Patel discloses wherein the communication device is not within the vehicle, and wherein the communication device comprises one or more of a smart phone, a laptop, and a computer (Paragraph 0023, wherein the computing device communicates with the drive via a display and is removable from the vehicle).

18. Regarding claim 17: Claim 17 contains similar limitations as claims 8 and 9 therefore claim 17 is rejected under same grounds of rejection.

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences

> between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 10, 11, 18, and 20 are rejected under 35 U.S.C. 103 as being unpatentable over Patel as applied to claim 1 above, and further in view of Gross et al. (2014/0244111).

21. Regarding claims 10, 11, 18, and 20: As discussed above, Patel discloses the claimed invention except receiving, by the microprocessor executable traffic law module, one or more signals sent from a plurality of sensing elements associated with the vehicle; retrieving, by the microprocessor executable traffic law module, rules that define a plurality of signal conditions corresponding to the plurality of emergency events; interpreting, by the microprocessor executable traffic law module, the one or more signals using the rules to determine that one of a plurality of emergency events has occurred; wherein the emergency event comprises the vehicle travelling too fast; and automatically displaying, by a microprocessor executable alert module, an emergency alert on the instrument display. However, Gross discloses a similar vehicle dash display and further discloses except receiving, by the microprocessor executable traffic law module, one or more signals sent from a plurality of sensing elements associated with the vehicle; retrieving, by the microprocessor executable traffic law module, rules that define a plurality of signal conditions corresponding to the plurality of emergency events; interpreting, by the microprocessor executable traffic law module, the one or more signals using the rules to determine that one of a plurality of emergency events has occurred; wherein the emergency event comprises the vehicle travelling too

fast; and automatically displaying, by a microprocessor executable alert module, an emergency alert on the instrument display (Figure 4, Paragraphs 0026-0028). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dash display of Patel in view of the emergency alert of Gross in order to increase vehicle safety by reducing traffic accidents due to excessive speed.

22. Claim 12 is rejected under 35 U.S.C. 103 as being unpatentable over Patel as applied to claim 1 above, and further in view of Bowden et al. (2013/0345929).

23. Regarding claim 12: As discussed above, Patel discloses the claimed invention including a mobile phone device removably connected to the vehicle dashboard (Paragraph 0024) but fails to disclose determining, by the microprocessor executable traffic law module, that a second language is used in the second area; imaging, by one or more sensors of the vehicle, road signs in the second area; translating, by a microprocessor executable traffic sign translation module, the imaged road signs into the first language of the first area; and displaying the text of the translated road sign on the instrument display. However, Bowden discloses a similar mobile phone device removably connected to the vehicle dashboard and further discloses determining, by the microprocessor executable traffic law module, that a second language is used in the second area; imaging, by one or more sensors of the vehicle, road signs in the second area; translating, by a microprocessor executable traffic sign translation module, the imaged road signs into the first language of the first area; and displaying the text of the translated road sign on the instrument display (Paragraphs 0016-0020). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to

modify the dash display of Patel in view of the traffic sign translation method of Bowden in order to increase vehicle safety by reducing traffic accidents due to operator failure to abide by traffic signs.

24. Claims 13 and 14 are rejected under 35 U.S.C. 103 as being unpatentable over Patel as applied to claim 1 above, and further in view of Chow et al. (2012/0188876).

25. Regarding claim 13: As discussed above, Patel discloses the claimed invention including a mobile phone device removably connected to the vehicle dashboard (Paragraph 0024) but fails to disclose determining, by a microprocessor executable network monitoring module, that at least one of data rate and voice rates charged by a service provider will change in the second area; determining, by the microprocessor executable network monitoring module, if an alternate provider is available in the second area; providing, by an microprocessor executable alert module, an alert to a driver of the vehicle, wherein the alert includes information associated with: the change of the at least one data rate and voice rate in the second area; a way to maximize data and voice usage in the second area; and the alternate provider; and switching, by the microprocessor executable network monitoring module, to the alternate provider. However, Chow discloses a similar mobile phone device and further discloses determining, by a microprocessor executable network monitoring module, that at least one of data rate and voice rates charged by a service provider will change in the second area; determining, by the microprocessor executable network monitoring module, if an alternate provider is available in the second area; providing, by an microprocessor executable alert module, an alert to a driver of the vehicle, wherein the alert includes

information associated with: the change of the at least one data rate and voice rate in the second area; a way to maximize data and voice usage in the second area; and the alternate provider; and switching, by the microprocessor executable network monitoring module, to the alternate provider (Paragraphs 0038-0044). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the dash display of Patel in view of the smart connection manager method of Bowden in order to provide the user with the best data connection at the lowest cost.

26. Regarding claim 14: As discussed above, Patel discloses the claimed invention including a mobile phone device removably connected to the vehicle dashboard (Paragraph 0024) but fails to disclose determining, by the microprocessor executable network monitoring module, that the second area is associated with an interruption of service for at least one of a data provider and a voice provider; determining, by the microprocessor executable network monitoring module, if an alternate provider is available in the second area associated with the interruption of service; providing, by an microprocessor executable alert module, an alert to a driver of the vehicle, wherein the alert includes information associated with: the interruption of service; and the alternate provider; and switching, by the microprocessor executable network monitoring module, to the alternate provider. (Paragraphs 0038-0044). See claim 13 above for obviousness and motivation to combine.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael D. Lang whose telephone number is (571)270-3213. The examiner can normally be reached on Mon thru Thurs - 9:00a to 4:30p EDT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571)272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael D Lang/
Examiner, Art Unit 3667

Notice of References Cited	Application/Control No. 14/253,022	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner Michael D. Lang	Art Unit 3667	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2012/0188876 A1	07-2012	Chow et al.	370/237
*	B	US-2013/0207794 A1	08-2013	Patel et al.	340/425.5
*	C	US-2013/0345929 A1	12-2013	Bowden et al.	701/36
*	D	US-2014/0244111 A1	08-2014	Gross et al.	701/36
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,251	04/15/2014	Christopher P. Ricci	6583-607	6723

111285 7590 12/29/2014

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
12/29/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,251	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-7,9-17,19 and 20* is/are rejected.

8)☒ Claim(s) *8 and 18* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

4. Claims 1 – 7, 9 – 17 and 19 - 20 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Divine et al., (20130030645).

5. (Claims 1, 5, 9 - 11, 15 and 19): Divine discloses a method and system, comprising: detecting a user profile associated with a user (abstract; figs. 3 and 5; [0004]; [0026]), the user profile having infotainment information stored therein ([0004 – 0005]); detecting at least one infotainment system associated with the user (fig. 2; [0030]); and determining to adjust a configuration of the at least one infotainment system based at least partially on the infotainment information in the user profile (fig. 3; [0036 – 0037]).

6. (Claims 2 - 3, 12 - 13 and 20): Divine discloses a method and system, wherein the at least one infotainment system is a vehicle infotainment system (figs. 1 – 2; [0029]), and wherein prior to detecting the user profile the method further comprises: identifying the user inside a vehicle via one or more sensors associated with the vehicle ([0005]; [0025]); and referring, in response to identifying the user, to a memory associated with the identified user, wherein the memory includes the user profile (fig. 1; [0026]).

7. (Claims 4 and 14): Divine discloses a method and system, wherein detecting the at least one infotainment system associated with the user is based at least partially on one or more of a proximity of a user and a user device to the at least one infotainment system (fig. 1; [0005]; [0027]; [0030]).

8. (Claims 6 and 16): Divine discloses a method and system, wherein when the infotainment information does not match the determined configuration of the at least one infotainment system, an adjustment output configured to adjust the configuration of the at least one infotainment system ([0061]).

9. (Claims 7 and 17): Divine discloses a method and system, wherein determining to adjust the configuration of the at least one infotainment system further comprises: determining an access priority of the user (fig. 5; [0032]); and determining whether the access priority of the user allows for the adjustment to the configuration of the at least one infotainment system ([0033]; [0044 - 0045]; [0050]).

Allowable Subject Matter

10. Claims 8 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,251	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2004/0093155 A1	05-2004	Simonds et al.	701/200
*	B	US-7,058,898 B2	06-2006	McWalter et al.	715/762
*	C	US-7,142,696 B1	11-2006	Engelsberg et al.	382/118
*	D	US-7,313,547 B2	12-2007	Mocek et al.	705/51
*	E	US-2010/0169432 A1	07-2010	Santori et al.	709/206
*	F	US-2010/0235891 A1	09-2010	Oglesbee et al.	726/5
*	G	US-2010/0305807 A1	12-2010	Basir et al.	701/33
*	H	US-7,864,029 B2	01-2011	Huang et al.	340/426.1
*	I	US-2012/0065815 A1	03-2012	Hess, Wolfgang	701/2
*	J	US-2013/0030645 A1	01-2013	Divine et al.	701/36
*	K	US-8,350,721 B2	01-2013	Carr, Jeffrey Thomas	340/903
*	L	US-8,578,279 B2	11-2013	Chen et al.	715/745
*	M	US-8,660,735 B2	02-2014	Tengler et al.	701/24

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited	Application/Control No. 14/253,251	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2014/0067201 A1	03-2014	Visintainer et al.	701/36
*	B	US-8,718,797 B1	05-2014	Addepalli et al.	700/17
*	C	US-8,730,033 B2	05-2014	Yarnold et al.	340/539.13
*	D	US-8,793,034 B2	07-2014	Ricci, Christopher P.	701/1
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
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NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 04/10/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 04/10/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,251	04/15/2014	Christopher P. Ricci	6583-607	6723

TITLE OF INVENTION: INFOTAINMENT SYSTEM BASED ON USER PROFILE

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	07/10/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 04/10/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,251	04/15/2014	Christopher P. Ricci	6583-607	6723

TITLE OF INVENTION: INFOTAINMENT SYSTEM BASED ON USER PROFILE

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	07/10/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-036000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Page 804 of 1087 Ford Ex. 1109

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,251	04/15/2014	Christopher P. Ricci	6583-607	6723

111285 7590 04/10/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 04/10/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,251	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *3/30/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-20*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/A. C. D./ Examiner, Art Unit 3663	/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,388	04/15/2014	Christopher P. Ricci	6583-609	2931

111285 7590 01/30/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
MAWARI, REDHWAN K

ART UNIT	PAPER NUMBER
3665	

NOTIFICATION DATE	DELIVERY MODE
01/30/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,388	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner REDHWAN k. MAWARI	Art Unit 3665	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

3. Claims 1-2, 4-12 are rejected under 35 U.S.C. 102 a(1) as being anticipated by Wilson (2003/0004624).

Regarding claim 1, Wilson discloses a method, comprising:

receiving sensor data from one or more vehicle sensors;

determining vehicle health state of one or more subsystems of a vehicle;

determining an overall vehicle health status; and

taking action regarding the vehicle health status (see at least paragraph [0021,0025-0027], and FIG. 1).

Regarding claim 2, Wilson discloses comprising comparing the sensor data to subsystem specification data (see at least paragraph [0035]).

Regarding claim 4, Wilson discloses wherein the one or more subsystems of a vehicle is

unhealthy if the comparison results in one or more characteristics of subsystem specification data not satisfied (see at least paragraph [0034, 0035]).

Regarding claim 5, Wilson discloses wherein if one or more subsystems of a vehicle is unhealthy, the vehicle is unhealthy (see at least paragraph [0027]).

Regarding claim 6, Wilson discloses further comprising noticing a third party if the vehicle is in an unhealthy status (see at least FIG. 1 and FIG. 2).

Regarding claim 7, Wilson discloses wherein the third party is at least one of an original equipment manufacturer (OEM), a maintenance provider, a regulatory monitor and a user (see at least FIG. 1 and FIG. 2).

Regarding claim 8, Wilson discloses further comprising updating a fleet-wide OEM performance database if one or more subsystems are unhealthy (see at least paragraph [0022]).

Regarding claim 9, Wilson discloses wherein the taking action comprises providing an alert (see at least paragraph [0024]).

Regarding claim 10, Wilson discloses further comprising receiving a query from a third-party as to the health state of one or more subsystems of the vehicle (see at least paragraph [0029]).

Regarding claim 11, Wilson discloses further comprising diagnosing the unhealthy

subsystem (see at least abstract).

Regarding claim 12, Wilson discloses further comprising noticing a third party if the vehicle is in an unhealthy status (see at least FIG. 1 and FIG. 2).

Claim Rejections - 35 USC § 103

1. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

2. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 3 and 13 are rejected under 35 U.S.C. 103 as being unpatentable over Wilson (2003/0004624) in view of Anderson (2012/0046822).

Regarding claim 3, Wilson does not explicitly disclose wherein the subsystem specification data is stored in a maintenance database.

Anderson teaches wherein the subsystem specification data is stored in a maintenance database (see at least paragraph [0081]).

It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the invention of Anderson into the invention of Wilson for the purpose of keeping track of vehicle at all times especially at crisis situations.

Regarding claim 13, Wilson does not explicitly disclose where the one or more vehicle sensors include an odometer, a tachometer, an oil level meter and an image sensor.

Anderson teaches where the one or more vehicle sensors include an odometer, a tachometer, an oil level meter and an image sensor (see at least paragraph [0071]).

It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention to combine the invention of Anderson into the invention of Wilson for the purpose of keeping track of vehicle at all times especially at crisis situations.

Regarding claims 14-20, claims 14-20 are rejected using the same art and rationale used to reject claims 1-13.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Redhwan Mawari whose telephone number is 571 270

1535. The examiner can normally be reached on 7:30 AM - 5PM Mon-Fri Eastern Alt Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Nguyen can be reached on 571 272 6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/REDHWAN k MAWARI/

Primary Examiner, Art Unit 3665

Notice of References Cited	Application/Control No. 14/253,388	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner REDHWAN k. MAWARI	Art Unit 3665	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2003/0004624 A1	01-2003	Wilson et al.	701/33
*	B	US-2004/0153356 A1	08-2004	Lockwood et al.	705/009
*	C	US-2012/0046822 A1	02-2012	Anderson, Noel Wayne	701/29.1
*	D	US-8,245,609 B1	08-2012	Greenwald et al.	82/112
*	E	US-2013/0066512 A1	03-2013	Willard et al.	701/29.1
*	F	US-2014/0309852 A1	10-2014	Ricci, Christopher P.	701/34.4
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

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United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,406	04/15/2014	Christopher P. Ricci	6583-610	6197

111285 7590 12/11/2014

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
12/11/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,406	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-7,14-17,19 and 20* is/are rejected.

8)☒ Claim(s) *8-13 and 18* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

4. Claims 1 – 3, 5 - 7, 14 – 17 and 19 - 20 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Breed (20080082237).

5. (Claims 1 – 3, 5, 14 – 16 and 19 - 20): Breed discloses a method and system, comprising: receiving sensor data from one or more vehicle sensors comprising a vehicle skin sensor (fig. 45; [0365]; [0381]); calibrating a vehicle skin baseline condition ([0239]); determining, from the sensor data as against the vehicle skin baseline condition, if a vehicle skin event has occurred ([0255]); and taking action if a vehicle skin event occurs (abstract; fig. 21C; [0035 - 0036]).

6. (Claims 6 - 7 and 17): Breed discloses a method and system, wherein the providing an alert comprises a visual alert, an audio alert, emergency responder alert, and alert to one or more authorized users ([0931]; [0956]; [0965]).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claim 4 is rejected under 35 U.S.C. 103 as being unpatentable over Breed (20080082237).

9. (Claim 4): Breed teaches storing crash data in network input nodes ([0260]). It would be obvious to store threshold data in authorized user profiles, purely as a programming convenience.

Allowable Subject Matter

10. Claims 8 – 13 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,406	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,607,212 B1	08-2003	Reimer et al.	280/735
*	B	US-6,757,593 B2	06-2004	Mori et al.	701/1
*	C	US-2008/0082237 A1	04-2008	Breed, David S.	701/045
*	D	US-2008/0147280 A1	06-2008	Breed, David S.	701/46
*	E	US-2009/0312998 A1	12-2009	Berckmans et al.	703/11
*	F	US-2010/0179712 A1	07-2010	Pepitone et al.	701/14
*	G	US-7,832,762 B2	11-2010	Breed, David S.	280/735
*	H	US-2011/0130915 A1	06-2011	Wright et al.	701/32
*	I	US-2011/0224865 A1	09-2011	Gordon et al.	701/32
*	J	US-2011/0245999 A1	10-2011	Kordonowy, David	701/3
*	K	US-2013/0103196 A1	04-2013	Monceaux et al.	700/253
*	L	US-8,862,317 B2	10-2014	Shin et al.	701/36
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 04/06/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	
ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 04/06/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,406	04/15/2014	Christopher P. Ricci	6583-610	6197

TITLE OF INVENTION: VEHICLE DIAGNOSTIC DETECTION THROUGH SENSITIVE VEHICLE SKIN

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	07/06/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 04/06/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,406	04/15/2014	Christopher P. Ricci	6583-610	6197

TITLE OF INVENTION: VEHICLE DIAGNOSTIC DETECTION THROUGH SENSITIVE VEHICLE SKIN

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	07/06/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-033100

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Page 823 of 1087 Ford Ex. 1109

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,406	04/15/2014	Christopher P. Ricci	6583-610	6197

111285 7590 04/06/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 04/06/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice Requiring Inventor's Oath or Declaration	Application No. 14/253,406	Applicant(s) Christopher P. Ricci	
	Examiner DUNN, ALEX C	Art Unit 3663	

This notice is an attachment to the Notice of Allowability (PTOL-37), or the Notice of Allowability For A Design Application (PTOL-37D).

An inventor's oath or declaration in compliance with 37 CFR 1.63 or 1.64 executed by or with respect to each inventor has not yet been submitted.

An oath or declaration in compliance with 37 CFR 1.63, or a substitute statement in compliance with 37 CFR 1.64, executed by or with respect to each inventor (for any inventor for which a compliant oath, declaration, or substitute statement has not yet been submitted) MUST be filed no later than the date on which the issue fee is paid. See 35 U.S.C. 115(f). Failure to timely comply will result in ABANDONMENT of this application.

A properly executed inventor's oath to declaration has not been received for the following inventor(s):

If applicant previously filed one or more oaths, declarations, or substitute statements, applicant may have received an informational notice regarding deficiencies therein.

The following deficiencies are noted:

INFORMAL ACTION PROBLEMS

- A properly executed inventor's oath or declaration has not been received for the following inventor(s): **Christopher P. Ricci**.
  Applicant may submit the inventor's oath or declaration at any time before the Notice of Allowance and Fee(s) Due, PTOL-85, is mailed.

Questions relating to this Notice should be directed to the Application Assistance Unit at 571-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,406	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *3/12/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-20*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/A. C. D./ Examiner, Art Unit 3663	/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,464	04/15/2014	Christopher P. Ricci	6583-611	1454

111285 7590 01/28/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
01/28/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,464	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-12 and 15-20* is/are rejected.

8)☒ Claim(s) *13 and 14* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

4. Claims 1 – 6, 9 – 11, 16 and 19 - 20 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Lovitt et al., (20140028542).

5. (Claims 1 - 2, 4, 6, 10 - 11, 16 and 19 - 20): Lovitt discloses vehicle system comprising: a vehicle (Figs. 2A and 2B; [0014]); and a configuration unit coupled to said vehicle, wherein when said configuration unit receives information from a device accessed by a user (fig. 1), said configuration unit configures said vehicle based on said information (fig. 3B; [0006]; [0030]; [0037]).

6. (Claim 3): Lovitt discloses vehicle system, wherein said configuration unit configures a GPS unit of said vehicle based on said information ([0056]).

7. (Claim 5): Lovitt discloses vehicle system, wherein said information is stored in a cloud ([0073]).

8. (Claim 9): Lovitt discloses vehicle system, wherein said information includes at least one of a text message, an email, a phone recording, a social networking status, or a social networking post ([0020]; [0060]).

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

10. Claims 1, 7 – 8 and 18 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Fujikawa et al., (20090299572).

11. (Claims 1): Fujikawa discloses vehicle system comprising: a vehicle (abstract) and a configuration unit coupled to said vehicle, wherein when said configuration unit receives information from a device accessed by a user (fig. 1; [0015]), said configuration unit configures said vehicle based on said information (figs. 5, 6(a) – 6(c); [0077]).

12. (Claims 7 – 8 and 18): Fujikawa discloses vehicle system, wherein said device is detected by said configuration unit upon receiving a registration signal from said device associated with said user (figs. 35 - 36; [0247]).

Claim Rejections - 35 USC § 103

13. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

14. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 12 and 17 are rejected under 35 U.S.C. 103 as being unpatentable over Fujikawa et al., (20090299572) as applied to claims 1 and 16 above, and further in view of Basir et al., (20100023204).

16. (Claims 12 and 17): Fujikawa discloses the vehicle of claim 1 and method of claim 16. Fujikawa does not teach synchronizing the vehicle and a device when they are a certain distance apart. However, in a related invention Basir teaches a vehicle, wherein said device and said configuration unit are synchronized when said vehicle is within a certain distance from a location of said device ([0017]; [0066]). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention, to modify Fujikawa to synchronize a device and the vehicle, as a common requirement in asset tracking/management applications.

17. Claim 15 is rejected under 35 U.S.C. 103 as being unpatentable over Fujikawa et al., (20090299572) as applied to claim 1 above, and further in view of Coffee et al., (20040039504).

18. (Claim 15): Fujikawa discloses the vehicle of claim 1. Fujikawa does not teach synchronizing based on a timer or event. However, in a related invention Coffee teaches a vehicle, wherein said configuration unit and said device are synchronized based on a timer or event ([0006]). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention, to modify Fujikawa to synchronize based on a timer, as a programming convenience.

Allowable Subject Matter

19. Claims 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/
Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,464	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0077985 A1	06-2002	Kobata et al.	705/51
*	B	US-2004/0039504 A1	02-2004	Coffee et al.	701/35
*	C	US-2005/0038598 A1	02-2005	Oesterling et al.	701/207
*	D	US-2005/0159853 A1	07-2005	Takahashi et al.	701/001
*	E	US-2007/0135995 A1	06-2007	Kikuchi et al.	701/209
*	F	US-2008/0255721 A1	10-2008	Yamada, Mitsuo	701/33
*	G	US-2009/0299572 A1	12-2009	Fujikawa et al.	701/36
*	H	US-2010/0023204 A1	01-2010	Basir et al.	701/33
*	I	US-2010/0125405 A1	05-2010	Chae et al.	701/200
*	J	US-2011/0090078 A1	04-2011	Kim et al.	340/522
*	K	US-2011/0112717 A1	05-2011	Resner, Benjamin	701/33
*	L	US-2012/0197523 A1	08-2012	Kirsch, David M.	701/426
*	M	US-2012/0254804 A1	10-2012	Sheha et al.	715/834

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited	Application/Control No. 14/253,464	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2014/0028542 A1	01-2014	Lovitt et al.	345/156
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
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	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,755	04/15/2014	Christopher P. Ricci	6583-614	7824

111285 7590 04/24/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
FIGUEROA, JAIME

ART UNIT	PAPER NUMBER
3664	

NOTIFICATION DATE	DELIVERY MODE
04/24/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,755	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JAIME FIGUEROA	Art Unit 3664	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/25/2014*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA. Pursuant to communications filed on 04/15/2014, this is a First Action Non-Final Rejection on the Merits. Claims 1-20 are currently pending in the instant application.

Information Disclosure Statement

The information disclosure statement (IDS) submitted on 11/25/2014 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the Examiner.

Examiner's Note

Examiner has cited particular paragraphs / columns and line numbers or figures in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner. Applicant is reminded that the Examiner is entitled to give the broadest reasonable interpretation to the language of the claims. Furthermore, the Examiner is not limited to Applicants' definition which is not specifically set forth in the claims.

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4, 11, 12, 16, 17 are rejected under 35 U.S.C. 103 as being unpatentable over Mangalvedkar et al. (US (2013/0325568).

Regarding claim 1, Mangalvedkar et al discloses a method for providing navigation information for a conveyance (e.g. performed via a synchronization of home shopping carts with advertisements as shown in fig. 1-2), comprising:

A *handheld wireless device* (see fig. 1: 120), including a processor (see fig. 2: CPU 202), communicating with a home automation system (via inventory management devices 102/104/106/108/110/112 such as smart home appliances as shown in fig. 1) (see also [0040]);

the *handheld wireless device* (120) receiving a shopping list (e.g. receiving shopping cart) from the home automation system (via inventory management devices 102/104/106/108/110/112 as shown in fig. 1) (see also [0015, 0017, 0035-0037]); and

the *handheld wireless device* (120) generating a route based on a product in the shopping list (e.g. shopping cart) (see also fig. 6 showing steps 614 or 618 to provide guidance with a travel route to the consumer).

Examiner notes that Mangalvedkar et al does not disclose specifically the "vehicle control system". Nevertheless, Mangalvedkar et al discloses at [0040] that the handheld wireless device 120 can be implemented in any portable platform such as a plane, train, automobile, or other moving vehicle. Thus, with this in mind, it would have been obvious to one having ordinary skill in the art before the effective filing date of the instant application, to provide Mangalvedkar et al with a wireless communication device

associated and embedded into the vehicle control system such as a navigation system, an infotainment system or the like.

Regarding claim 2, Mangalvedkar et al discloses as discussed in claim 1.

Mangalvedkar et al further discloses wherein the shopping list includes two or more products (see for example [0025-0026] and see fig. 5A steps 516/518).

Regarding claim 3, Mangalvedkar et al discloses as discussed in claim 2.

Mangalvedkar et al further discloses wherein the two or more products are available at two or more destinations (see [0026] disclosing analyzing the purchase/availability location of the set of inventory items to be acquired).

Regarding claim 4, Mangalvedkar et al discloses as discussed in claim 3.

Mangalvedkar et al further discloses wherein the generated route includes the two or more destinations (see [0026] disclosing the generation of shopping trips; see also fig. 6 steps loop 618/620 for generating multiple destinations).

Regarding claims 11 and 16, Mangalvedkar et al discloses a conveyance and the associated non-transitory CRM (e.g. performed via a synchronization of home shopping carts with advertisements as shown in fig. 1-2 implemented in any mobile platform such a mobile vehicle) comprising:

a processor (see fig. 2: CPU 202) operable to execute one or more modules (e.g. see modules at fig. 2), the modules comprising:

a home automation interaction module operable to: communicate with a home automation system (via inventory management devices 102/104/106/108/110/112 such as smart home appliances as shown in fig. 1) (see also [0040]);

receive a shopping list (e.g. receiving shopping cart) from the home automation system (via inventory management devices 102/104/106/108/110/112 such as smart home appliances as shown in fig. 1) (see also [0015, 0017, 0035-0037, 0040]); and

a route suggestion module operable to: generate a route based on a product in the shopping list (e.g. shopping cart) (see also fig. 6 showing steps 614 or 618 to provide guidance with a travel route to the consumer).

Regarding claims 12 and 17, Mangalvedkar et al discloses as discussed in claim 11 and 16. Mangalvedkar et al further discloses wherein the shopping list includes two or more products (see for example [0025-0026] and see fig. 5A steps 516/518), wherein the two or more products are available at two or more destinations (see [0026] disclosing analyzing the purchase/availability location of the set of inventory items to be acquired), and wherein the generated route includes the two or more destinations (see [0026] disclosing the generation of shopping trips; see also fig. 6 steps loop 618/620 for generating multiple destinations).

Claims 5-10, 13-15, 18-20 are rejected under 35 U.S.C. 103 as being unpatentable over Mangalvedkar et al. (US (2013/0325568) in view of Fossen McConnell et al (US 2006/0175403).

Regarding claim 5, Mangalvedkar et al discloses as discussed in claim 4.

Mangalvedkar et al does not disclose wherein the vehicle control system accesses a user profile to determine the two or more destinations based on past purchases of the two or more products.

However, Fossen et al teaches the claimed featured implemented in a household management system, and particularly teaches at [0028] the use of a “household profile”. A data store 36 may include a purchase history data store 41, a shopping list data store 42, a diet/nutrition data store 43, a recipe data store 44, a pantry inventory data store 45, a media content data store 46, a product catalog data store 47 and a household profile data store 48).

Thus, it would have been obvious to one having ordinary skill in the art before the effective filing date of the instant application, to provide Mangalvedkar et al with the teachings of Fossen et al, since such a combination will provide Mangalvedkar et al the benefit of using and implementing the “household profile” identifying a purchase history for an easier reordering of future products.

Regarding claim 6, Mangalvedkar et al/ Fossen et al discloses as discussed in claim 5.

Mangalvedkar et al further discloses the method further comprising *handheld wireless device* (120) determining if the shopping list should be communicated to a device (see [0031, 0036-0037]).

Regarding claim 7, Mangalvedkar et al/ Fossen et al discloses as discussed in claim 6.

Mangalvedkar et al further discloses the method further comprising, if the shopping list should be communicated to a device, the *handheld wireless device* (120) communicating the shopping list to the device (see [0031, 0036-0037]).

Regarding claim 8, Mangalvedkar et al/ Fossen et al discloses as discussed in claim 7.

Mangalvedkar et al further discloses wherein the device is in the conveyance (e.g. via any mobile platform as disclosed at [0040]).

Regarding claim 9, Mangalvedkar et al/ Fossen et al discloses as discussed in claim 8.

Mangalvedkar et al further discloses wherein the home automation system includes a refrigerator that generates the shopping list (see [0016, 0026-0027]).

Regarding claim 10, Mangalvedkar et al/ Fossen et al discloses as discussed in claim 9. Mangalvedkar et al further discloses wherein the *handheld wireless device* (120) communicates wirelessly with the refrigerator (see [0031, 0033, and 0036] disclosing the wireless communication between devices).

Regarding claims 13 and 18, Mangalvedkar et al/ Fossen et al discloses as discussed in claim 12 and 16. Mangalvedkar et al does not disclose wherein the vehicle control system accesses a user profile to determine the two or more destinations based on past purchases of the two or more products.

However, Fossen et al teaches the claimed featured implemented in a household management system, and particularly teaches at [0028] the use of a “household profile”. A data store 36 may include a purchase history data store 41, a shopping list data store 42, a diet/nutrition data store 43, a recipe data store 44, a pantry inventory data store 45, a media content data store 46, a product catalog data store 47 and a household profile data store 48).

Thus, it would have been obvious to one having ordinary skill in the art before the effective filing date of the instant application, to provide Mangalvedkar et al with the teachings of Fossen et al, since such a combination will provide Mangalvedkar et al the benefit of using and implementing the “household profile” identifying a purchase history for an easier reordering of future products.

Regarding claims 14 and 19, Mangalvedkar et al/ Fossen et al discloses as discussed in claim 13 and 18. Mangalvedkar et al further discloses wherein the home automation interaction module is further operable to: determine if the shopping list should be communicated to a device (see [0031, 0036-0037]); and

if the shopping list should be communicated to a device, communicate the shopping list to the device (see [0031, 0036-0037]), wherein the device is in the conveyance (e.g. the handheld device 120 can be implemented in any mobile platform such a mobile vehicle).

Regarding claims 15 and 20, Mangalvedkar et al/ Fossen et al discloses as discussed in claim 14 and 19. Mangalvedkar et al further discloses wherein the home automation system includes a refrigerator that generates the shopping list (see [0016, 0026-0027]), and wherein the vehicle control system communicates wirelessly with the refrigerator (see [0031, 0033, and 0036] disclosing the wireless communication between devices).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAIME FIGUEROA whose telephone number is (571)270-7620. The examiner can normally be reached on Monday-Friday, 9:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi H. Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JAIME FIGUEROA/
Examiner, Art Unit 3664

Notice of References Cited	Application/Control No. 14/253,755	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner JAIME FIGUEROA	Art Unit 3664	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0143643 A1	10-2002	Catan, Carolyn Ramsey	705/26
*	B	US-6,587,739 B1	07-2003	Abrams et al.	700/83
*	C	US-2006/0175403 A1	08-2006	Fossen McConnell et al.	235/385
*	D	US-2007/0032225 A1	02-2007	Konicek et al.	455/417
*	E	US-7,249,708 B2	07-2007	McConnell et al.	235/383
*	F	US-2009/0254446 A1	10-2009	Chernyak, Valentin	705/26
*	G	US-2010/0066498 A1	03-2010	Fenton, Charles Stanley	340/10.1
*	H	US-2010/0070338 A1	03-2010	Siotia et al.	705/10
*	I	US-2010/0306080 A1	12-2010	Trandal et al.	705/26.8
*	J	US-2012/0101914 A1	04-2012	Kumar et al.	705/26.8
*	K	US-2012/0101876 A1	04-2012	Turvey et al.	705/14.1
*	L	US-2012/0179547 A1	07-2012	Besore et al.	705/14.58
*	M	US-2013/0215116 A1	08-2013	SIDDIQUE et al.	345/420

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

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*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited	Application/Control No. 14/253,755	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner JAIME FIGUEROA	Art Unit 3664	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2013/0325568 A1	12-2013	Mangalvedkar et al.	705/14.4
*	B	US-2014/0252091 A1	09-2014	Morse et al.	235/385
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,727	04/15/2014	Christopher P. Ricci	6583-619	8596

111285 7590 01/06/2015

Sheridan Ross P.C.
1560 Broadway
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EXAMINER
BUTLER, RODNEY ALLEN

ART UNIT	PAPER NUMBER
3667	

NOTIFICATION DATE	DELIVERY MODE
01/06/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,727	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner RODNEY BUTLER	Art Unit 3667	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/25/2014*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Status of the Application

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Status of the Claims

2. This action is in response to the applicant's filing on April 15, 2014. Claims 1-20 are pending and examined below.

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 11-13, and 16-18 are rejected under 35 U.S.C. 103 as being unpatentable over U.S. Patent Application Publication No. 2008/0300778 A1 to Kuznetsov (herein after "Kuznetsov publication") in view of U.S. Patent No. 6,944,533 A1 to Obradovich et al. (herein after "Kozak et al. publication").

As to claims 1-7, 11-13, and 16-18,

the Kuznetsov publication discloses a method for providing navigation information for a conveyance, comprising:

a vehicle control system (see Figure 4), including a processor, receiving route information for two or more routes (see ¶6, where the Kuznetsov publication discusses "a CPU with processing power");

the vehicle control system interrogating the route information (see Abstract, ¶4 and ¶6, where the Kuznetsov publication discusses "analyz[ing] trip data");

the vehicle control system storing the interrogated route information (see ¶6, where the Kuznetsov publication discusses "an I/O device to store . . . results of the analyzed trip data");

the vehicle control system retrieving the interrogated route information (see ¶6, where the Kuznetsov publication discusses "an I/O device to . . . retrieve results of the analyzed trip data"); and

the vehicle control system generating a route based on the interrogated route information. (See ¶6, where the Kuznetsov publication discusses "an I/O device to . . . retrieve results of the analyzed trip data to assist the user");

The Kuznetsov publication, however, does not specifically disclose the vehicle control system storing the interrogated route information locally with the conveyance.

Storing route information locally or remotely is a well-known concept in vehicle navigation art. For instance, the Kozak et al. publication discloses a navigation system (110) that allows each end user to store a number of personal destinations. These destinations may include the end user's home, place of businesses, homes of relatives,

or other destinations. The list of personal destinations identifies the location of each destination, e.g., by address, name, coordinates, road segment, etc. The list of personal destinations may be stored remotely on the navigation server 120 or locally on the end user's computing platform 130. (See Col. 5, ln 63 through Col. 6, ln 3).

It would have been obvious to one having ordinary skill in the art before the time the invention was filed to modify the Kuznetsov publication so that the vehicle control system stores the interrogated route information locally with the conveyance, as suggested by the Kozak et al. publication, in order to facilitate the navigation process.

5. Claims 8 and 9 are rejected under 35 U.S.C. 103 as being unpatentable over the Kuznetsov publication in view of the Kozak et al. publication, and further in view of U.S. Patent Application Publication No. 2013/0197796 A1 to Obradovich et al. (herein after "Obradovich et al. publication").

As to claims 8 and 9,

the modified Kuznetsov publication discloses the invention substantially as claimed, except for where the suggested route includes a location for a shop or business where the user may desire to buy a product, based on preference in a user profile associated with the user.

The Obradovich et al. publication, however, teaches a navigation device where the user profiles may be stored and used to navigate a user who may be driving in a vehicle, on foot, or in other mode of transportation. For example, the user business profile corresponding to the user's business persona may be different from the user personal profile corresponding to the user's personal persona. For instance, the user

business profile may include fine-dining type restaurants for business meetings while the user personal profile may instead include fast-food type restaurants for personal dining. (See Abstract.)

It would have been obvious to one having ordinary skill in the art before the time the invention was filed to further modify the Kuznetsov publication, as taught by the Obradovich et al. publication, in order to facilitate the navigation process.

6. Claims 10, 14-15 and 19-20 are rejected under 35 U.S.C. 103 as being unpatentable over the Kuznetsov publication, the Kozak et al. publication and the Obradovich et al. publication, and further in view of U.S. Patent Application Publication No. 2013/0226365 A1 to Brozovich (herein after “Brozovich publication”).

As to claims 10, 14-15 and 19-20,

the modified Kuznetsov publication discloses the invention substantially as claimed, except for the interrogation route information being stored in cloud storage.

The Brozovich publication, however, teaches a server 10 communicates with a database, which can store the log of previously traveled routes to a network cloud 12. (See ¶17.)

It would have been obvious to one having ordinary skill in the art before the time the invention was filed to further rmodify the Kuznetsov publication so that the interrogation route information is stored in cloud storage, as taught by the Brozovich publication, in order to facilitate the navigation process.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RODNEY BUTLER whose telephone number is (313)446-6513. The examiner can normally be reached on Monday - Friday, 6:30 am - 3:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James P. Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/RODNEY BUTLER/
Examiner, Art Unit 3667

Notice of References Cited	Application/Control No. 14/253,727	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner RODNEY BUTLER	Art Unit 3667	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,944,533 B2	09-2005	Kozak et al.	701/540
*	B	US-2006/0173841 A1	08-2006	Bill, David S.	707/006
*	C	US-2008/0300778 A1	12-2008	Kuznetsov, Tsia	701/200
*	D	US-2010/0211304 A1	08-2010	Hwang et al.	701/200
*	E	US-2012/0323413 A1	12-2012	Kedar-Dongarkar et al.	701/22
*	F	US-2013/0019252 A1	01-2013	Haase et al.	719/328
*	G	US-8,417,449 B1	04-2013	Denise, Jason A.	701/411
*	H	US-2013/0166208 A1	06-2013	Forstall et al.	701/538
*	I	US-2013/0197796 A1	08-2013	Obradovich et al.	701/423
*	J	US-2013/0226365 A1	08-2013	Brozovich, Shawn Daniel	701/1
*	K	US-2013/0261966 A1	10-2013	Wang et al.	701/533
*	L	US-2014/0244156 A1	08-2014	Magnusson et al.	701/418
*	M	US-2014/0278070 A1	09-2014	McGavran et al.	701/465

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	KR 20060128484 A	12-2006	Korea	NAM KI MO	
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

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	U	
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,743	04/15/2014	Christopher P. Ricci	6583-626	9037

111285 7590 02/12/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
02/12/2015	ELECTRONIC

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The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,743	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Rejections - 35 USC § 102

2. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale or otherwise available to the public before the effective filing date of the claimed invention.

4. Claims 1 – 6, 9 – 13, 15 – 18 and 20 are rejected under 35 U.S.C. 102(a)(1) as being anticipated by Liu et al., (20090287405).

5. (Claims 1, 11 and 16): Liu discloses a method for providing navigation information for a conveyance, comprising: a vehicle control system, including a processor, providing a route for travel (fig. 2; [0030]); the vehicle control system, while traveling the route, determining statistics about the travel ([0050]); and the vehicle control system communicating the statistics (fig. 2; [0002]; [0035]; [0037]).

6. (Claims 2 – 4, 10, 12 and 17): Liu discloses the system of claims 1, 11 and 16, wherein the statistics are communicated to a device (fig. 1; [0055]), and wherein the device is associated with a passenger in the conveyance ([0015 - 0016]).

7. (Claims 5, 6, 13 and 18): Liu discloses the system of claims 1, 11 and 16, wherein the statistics include information about the route, wherein the statistics include one or more of an estimated time of arrival ([0035]) and average speed ([0027]), and wherein the information about the route includes information about sites or destinations that are along the route ([0037 – 0039]).

8. (Claims 9, 15 and 20): Liu discloses the system of claims 1, 11 and 16, wherein the statistics are updated periodically ([0022]; [0042]).

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 7, 8, 14 and 19 are rejected under 35 U.S.C. 103 as being unpatentable over Liu et al., (20090287405) as applied to claims 1, 11 and 16 above, and further in view of Van Buer et al., (7233861).

11. (Claims 7, 8, 14 and 19): Liu discloses the system of claims 1, 11 and 16, and wherein the passenger searches for destinations along the route ([0027]). Liu does not teach sites or destinations based on information in a user profile. However, in a related

invention Van Buer teaches predicting vehicle operator's destinations, wherein the sites or destinations may be of interest to the passenger based on information in a user profile associated with the passenger (col 2, lns 49 – 51; col 3, ln 4). It would have been obvious to one of ordinary skill in the art, before the effective filing date of the claimed invention to modify Liu to use information stored in user profiles to search for POIs, merely as a programming convenience.

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 10 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a judicial exception (i.e., a law of nature, a natural phenomenon, or an abstract idea) without significantly more. Claims 1 - 10 are directed to an abstract idea. The claims do not include additional elements that are sufficient to amount to significantly more than the judicial exception because;

13. (Claim 1): The steps of providing a route for travel, determining statistics and communicating those statistics are respectively considered as a mental step, another mental step and insignificant post solution activity and thus directed to an abstract idea.

14. (Claims 2 – 10): These claims are dependent on claim 1 and only add further details to the steps in that independent claim without adding significantly more to the abstract idea. They are therefore also rejected on the same grounds as claim 1.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/

Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,743	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,204,817 A	04-1993	Yoshida, Motomasa	701/411
*	B	US-2004/0225557 A1	11-2004	Phelan et al.	705/011
*	C	US-7,047,129 B2	05-2006	Uotani, Kazushi	701/414
*	D	US-7,233,861 B2	06-2007	Van Buer et al.	701/424
*	E	US-2009/0287405 A1	11-2009	Liu et al.	701/119
*	F	US-2010/0125405 A1	05-2010	Chae et al.	701/200
*	G	US-7,873,471 B2	01-2011	Gieseke, Arnold	701/416
*	H	US-7,864,073 B2	01-2011	Lee et al.	340/988
*	I	US-2011/0313653 A1	12-2011	Lindner, Jeffery Erhard	701/201
*	J	US-2012/0010807 A1	01-2012	Zhou, Leqing	701/207
*	K	US-8,509,982 B2	08-2013	Montemerlo et al.	701/26
*	L	US-2013/0261966 A1	10-2013	Wang et al.	701/533
*	M	US-2013/0304371 A1	11-2013	Kitatani et al.	701/408

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,766	04/15/2014	Christopher P. Ricci	6583-627	4564

111285 7590 12/12/2014

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
12/12/2014	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,766	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *4/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-5,11-14 and 16-19* is/are rejected.

8)☒ Claim(s) *6-10,15 and 20* is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *4/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date _____.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claim Objections

2. Claims 2 – 10 and 12 – 20 are objected to because of the following informalities: The claim dependencies such as 121, 131, etc., are incorrect. For purposes of this office action, the first two digits of the dependencies in claims 2 – 10 are ignored, while for claims 12 – 20, the middle digits are ignored. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(2) the claimed invention was described in a patent issued under section 151, or in an application for patent published or deemed published under section 122(b), in which the patent or application, as the case may be, names another inventor and was effectively filed before the effective filing date of the claimed invention.

5. Claims 1 – 3, 11 – 13 and 16 - 18 are rejected under 35 U.S.C. 102(a)(2) as being anticipated by Mitchell et al., (20130198031).

6. (Claims 1 - 3, 11 - 13 and 16 - 18): Mitchell discloses a method and system for optimum routing for providing navigation information for a conveyance, comprising: a vehicle control system, including a processor, receiving a list of goods to purchase (figs. 1 and 3); the vehicle control system determining a cost of the goods (fig. 3; [0012]); the vehicle control system determining two or more best locations where the cost of the goods is the least (fig. 4; [0018]); the vehicle control system determining a cost of travel to each of the two or more best locations ([0018]); and the vehicle control system determining a total cost of obtaining the goods based on the cost of goods at and the travel cost to the two or more best locations (fig. 3; [0016]; [0018]).

Claim Rejections - 35 USC § 103

7. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

8. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 4 – 5, 14 and 19 are rejected under 35 U.S.C. 103 as being unpatentable over Mitchell et al., (20130198031) as applied to claims 1, 11 and 16 above, and further in view of Chu et al., (20020174021).

10. (Claims 4 – 5, 14 and 19): Mitchell discloses a method and system for optimum routing for providing navigation information for a conveyance, comprising: a vehicle control system, including a processor, receiving a list of goods to purchase (figs. 1 and 3); the vehicle control system determining a cost of the goods (fig. 3; [0012]). Mitchell also teaches wherein the cost of travel is based on a distance to the best location ([0017 – 0018]). Mitchell does not specifically disclose one or more product on the shopping list being associated with multiple best locations. However, in a related invention Chu teaches an optimized shopping list process wherein a cost for at least one product in the list of goods is associated with each of the two or more best locations ([0013]). It would have been obvious to one of ordinary skill in the art before the effective filing date of the claimed invention, to modify Mitchell to consider an item available in multiple locations, as a fairly common situation for this type of application.

Allowable Subject Matter

11. Claims 6 – 10, 15 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please refer to form 892 for cited references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX C. DUNN whose telephone number is (571)270-5323. The examiner can normally be reached on Flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Tarcza can be reached on 26979. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ALEX C. DUNN
Examiner, Art Unit 3663

/THOMAS TARCZA/
Supervisory Patent Examiner, Art Unit 3663

Notice of References Cited	Application/Control No. 14/253,766	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0174021 A1	11-2002	Chu et al.	705/26
*	B	US-2004/0260470 A1	12-2004	Rast, Rodger H.	701/300
*	C	US-7,239,960 B2	07-2007	Yokota et al.	701/533
*	D	US-2010/0057337 A1	03-2010	Fuchs, Gil	701/200
*	E	US-2010/0211441 A1	08-2010	Sprigg et al.	705/14.1
*	F	US-2010/0332130 A1	12-2010	Shimizu et al.	701/209
*	G	US-2013/0166096 A1	06-2013	Jotanovic, Mark A.	701/1
*	H	US-2013/0198031 A1	08-2013	Mitchell et al.	705/26.8
*	I	US-2014/0058672 A1	02-2014	WANSLEY et al.	701/533
*	J	US-2014/0067564 A1	03-2014	Yuan, Mark D.	705/16
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

UNITED STATES PATENT AND TRADEMARK OFFICE

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NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 04/10/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 04/10/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,766	04/15/2014	Christopher P. Ricci	6583-627	4564

TITLE OF INVENTION: SHOPPING COST AND TRAVEL OPTIMIZATION APPLICATION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	07/10/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 04/10/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,766	04/15/2014	Christopher P. Ricci	6583-627	4564

TITLE OF INVENTION: SHOPPING COST AND TRAVEL OPTIMIZATION APPLICATION

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	07/10/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-400000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,766	04/15/2014	Christopher P. Ricci	6583-627	4564

111285 7590 04/10/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 04/10/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,766	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *3/12/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *3-10,13-15 and 18-26*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/A. C. D./ Examiner, Art Unit 3663	/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 03/06/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 03/06/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,506	04/15/2014	Christopher P. Ricci	6583-637	5446

TITLE OF INVENTION: INTELLIGENT VEHICLE FOR ASSISTING VEHICLE OCCUPANTS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	06/08/2015

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 03/06/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,506	04/15/2014	Christopher P. Ricci	6583-637	5446

TITLE OF INVENTION: INTELLIGENT VEHICLE FOR ASSISTING VEHICLE OCCUPANTS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	06/08/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-001000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ❑ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ❑ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1 _____
2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ❑ Individual ❑ Corporation or other private group entity ❑ Government

4a. The following fee(s) are submitted:
- ❑ Issue Fee
- ❑ Publication Fee (No small entity discount permitted)
- ❑ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ❑ A check is enclosed.
- ❑ Payment by credit card. Form PTO-2038 is attached.
- ❑ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ❑ Applicant certifying micro entity status. See 37 CFR 1.29 — NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ❑ Applicant asserting small entity status. See 37 CFR 1.27 — NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ❑ Applicant changing to regular undiscounted fee status. — NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

Page 879 of 1087 Ford Ex. 1109

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,506	04/15/2014	Christopher P. Ricci	6583-637	5446

111285 7590 03/06/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

DATE MAILED: 03/06/2015

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(Applications filed on or after May 29, 2000)

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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 14/253,506	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *2/17/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are *1-35*. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/A. C. D./ Examiner, Art Unit 3663	/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663

Electronic Patent Application Fee Transmittal

Application Number:	14253204
Filing Date:	15-Apr-2014
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Filer:	Douglas W. Swartz/Robert Roe-Pachirat
Attorney Docket Number:	6583-561

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Miscellaneous:				
Submission- Information Disclosure Stmt	1806	1	180	180
		Total in USD ($)		**180**

Electronic Acknowledgement Receipt

EFS ID:	22287292
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	111285
Filer:	Douglas W. Swartz/Robert Roe-Pachirat
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-561
Receipt Date:	07-MAY-2015
Filing Date:	15-APR-2014
Time Stamp:	18:25:59
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$180
RAM confirmation Number	4385
Deposit Account	191970
Authorized User	SWARTZ, DOUGLAS W.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		6583-561_IDS_02.pdf	511977 469bbe3a1a32322518fd08d344276b1fbe149e3d	yes	11
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Transmittal Letter		1	3	
	Information Disclosure Statement (IDS) Form (SB08)		4	11	
Warnings:					
Information:					
2	Foreign Reference	KR20060128484.pdf	417667 5924368ba1a6900a6faba8bcfc6a91daab0239ea	no	8
Warnings:					
Information:					
3	Non Patent Literature	6583-549-PCT_ISR-WO_12-24-2014.pdf	470177 2d427ef92f03fb6a2a40dc0886fda6a0c0c3add2	no	9
Warnings:					
Information:					
4	Non Patent Literature	6583-585-PCT_ISR_WO_12-31-2014.pdf	961512 a5c1ca759b403f5d0462b487f4db94b19bd704fd	no	11
Warnings:					
Information:					
5	Non Patent Literature	6583-537_OA_02-24-2015.pdf	1086960 b8722b2fc2570924874700dce0c14344da9d458a	no	12
Warnings:					
Information:					
6	Non Patent Literature	6583-550_OA_01-29-2015.pdf	271947 1b9a57dd02dcc706fba75855b28da53bb12a7fce	no	8
Warnings:					
Information:					

7	Non Patent Literature	6583-555_OA_03-06-2015.pdf	248941 cd4a2577aadbae82627329ef7d4a56896bee4c60	no	7
Warnings:					
Information:					
8	Non Patent Literature	6583-560_OA_03-27-2015.pdf	901789 b37210b5bd554123bd8a3a299ec497536ed7dd5d	no	10
Warnings:					
Information:					
9	Non Patent Literature	6583-563_OA_04-13-2015.pdf	1040571 ab6e9afcd4c5304db6f9cdb3b03fff8a3df1fd4a	no	11
Warnings:					
Information:					
10	Non Patent Literature	6583-565_OA_01-26-2015.pdf	272684 f399ae8f9cfff2dfcc1a709177575887746a26b8	no	8
Warnings:					
Information:					
11	Non Patent Literature	6583-566_OA_01-26-2015.pdf	361804 52a3d729c26bcd09f5c7b94d1929c755ec70d5a2	no	12
Warnings:					
Information:					
12	Non Patent Literature	6583-567_NOA_03-05-2015.pdf	354150 71533493296f8f8dbbdedb7e21d9507393563470	no	5
Warnings:					
Information:					
13	Non Patent Literature	6583-568_OA_01-30-2015.pdf	288957 199cd3c10dcb444d9438dfef13bb6473e1441d9a	no	9
Warnings:					
Information:					
14	Non Patent Literature	6583-574_FOA_03-12-2015.pdf	2999054 9f2b89372ee5b3a14b26e7ae7956c2f345dec84d	no	32
Warnings:					
Information:					
15	Non Patent Literature	6583-585_NOA_12-19-2014.pdf	1057834 4c69ff91a9ac37dbfdd84eaca8132bf8e10f7d6a	no	8
Warnings:					
Information:					

16	Non Patent Literature	6583-586_OA_01-27-2015.pdf	422982 66475b59f87a800f2c811ebb6b06f3eaacd2d146	no	13
Warnings:					
Information:					
17	Non Patent Literature	6583-588_OA_12-16-2014.pdf	624190 77f76d4714b41eb1d92d2dbb95936a629a8f1676	no	7
Warnings:					
Information:					
18	Non Patent Literature	6583-588_NOA_04-15-2015.pdf	895255 3895022ad12ac5fee862e388f8977851b647b9e4	no	6
Warnings:					
Information:					
19	Non Patent Literature	6583-595_OA_12-01-2014.pdf	264797 514060a7c52df843c72276e51207d7da91b703a5	no	8
Warnings:					
Information:					
20	Non Patent Literature	6583-595_NOA_03-18-2015.pdf	896797 830d5347264b5240d9a5278ec9cbf0a7f3605d6a	no	6
Warnings:					
Information:					
21	Non Patent Literature	6583-600_NOA_01-28-2015.pdf	456442 154da2e34a0576f3c0ea8eec10feaa87e6e817e6	no	9
Warnings:					
Information:					
22	Non Patent Literature	6583-602_OA_02-20-2015.pdf	493138 11ffea2af5d5342cfe2b5c758a884e4e07bb09c6	no	13
Warnings:					
Information:					
23	Non Patent Literature	6583-607_OA_12-29-2014.pdf	252683 b79d0860047287dec1fb449f7041c21647bce31d	no	8
Warnings:					
Information:					
24	Non Patent Literature	6583-607_NOA_04-10-2015.pdf	805525 2e79a178fe08a37ec682c7da0986c4805603d4a3	no	5
Warnings:					
Information:					

25	Non Patent Literature	6583-609_OA_01-30-2015.pdf	263052 5a994c6eafc847182150fb2206d2c1931a8477ba	no	8
Warnings:					
Information:					
26	Non Patent Literature	6583-610_OA_12-11-2014.pdf	218125 9d4b62d6c53ada8ace8a506868a8019e2430cab9	no	6
Warnings:					
Information:					
27	Non Patent Literature	6583-610_NOA_04-06-2015.pdf	896474 836f4db334ff53999bf9314e683372b7fa89b4e4	no	6
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Information:					
28	Non Patent Literature	6583-611_OA_01-28-2015.pdf	832699 c7d2da65af14455bfe7409dba2cd4e1eb77077a4	no	9
Warnings:					
Information:					
29	Non Patent Literature	6583-614_OA_04-24-2015.pdf	456355 9f340efbcfbfd10c10878a038846a15a4a5317cf	no	13
Warnings:					
Information:					
30	Non Patent Literature	6583-619_OA_01-06-2015.pdf	295624 4fbe11cc986c12a39bc25adeaba5d83474b91c31	no	8
Warnings:					
Information:					
31	Non Patent Literature	6583-626_OA_02-12-2015.pdf	265256 cbc2cdde9b3a3d3c6248e5968a177b32af79dabf	no	8
Warnings:					
Information:					
32	Non Patent Literature	6583-627_OA_12-12-2014.pdf	258053 cc5e74ed08edaa1d2526912ba0e5921158ecbf8a	no	7
Warnings:					
Information:					
33	Non Patent Literature	6583-627_NOA_04-10-2015.pdf	805710 89194a13a633dd3872c1e813bb3026ad63d1a212	no	5
Warnings:					
Information:					

34	Non Patent Literature	6583-637_NOA_03-06-2015.pdf	354350 f0d9d78ab78d5ada3756d3f91ec625bfc1d6c5dc	no	5
Warnings:					
Information:					
35	Fee Worksheet (SB06)	fee-info.pdf	30991 ba07f40cee207fbc1567004c2f904743e4acea6a	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	21034522	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	)	Group Art Unit: 3663
Christopher P. Ricci	)	Confirmation No.: 7690
Serial No.: 14/253,204	)	Examiner: DUNN, ALEX C
Filed: April 15, 2014	)	SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
Atty. File No.: 6583-561	)	
Entitled: "Customization of Vehicle Controls and Settings Based on User Profile Data"	)	*Electronically Submitted*

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

The references cited on attached Form PTO/SB08 are being called to the attention of the Examiner.

☒ Copies of the cited non-patent and/or foreign references are enclosed herewith.

☐ Copies of the cited U.S. patents and/or patent applications are enclosed herewith.

☒ Copies of the cited U.S. patents/patent application publications are not enclosed in accordance with 37 C.F.R. § 1.98(a).

☐ Copies of the cited references are not enclosed, in accordance with 37 C.F.R. § 1.98(d), because the references were cited by or submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____ filed _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

☒ To the best of applicants' belief, the pertinence of the foreign-language references is believed to be summarized in the attached English abstracts and/or in the figures, although applicants do not necessarily vouch for the accuracy of the translation.

☐ Examiner's attention is drawn to the following related applications:

Serial No. _____ filed _____ (Attorney Ref. No. _____)

Serial No. _____ filed _____ (Attorney Ref. No. _____)

☐ Other:_____

Submission of the above information is not intended as an admission that any item is citable under the statutes or rules to support a rejection, that any item disclosed represents analogous art, or that those skilled in the art would refer to or recognize the pertinence of any reference without the benefit of hindsight, nor should an inference be drawn as to the pertinence

of the references based on the order in which they are presented. Submission of this statement should not be taken as an indication that a search has been conducted, or that no better art exists.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references made of record therein.

FEES

☐	**37 CFR 1.97(b)**: No fee is believed due in connection with this submission, because the information disclosure statement submitted herewith is satisfied by one of the following conditions ("X" indicates satisfaction): ☐ Within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d), or ☐ Within three months of the date of entry of the national stage as set forth in § 1.491 in an international application, or ☐ Before the mailing date of a first Office Action on the merits, or ☐ Before the mailing of a first Office action after the filing of a request for continued examination under 37 CFR 1.114. Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970.
☒	**37 CFR 1.97(c)**: The information disclosure statement transmitted herewith is being filed after all the above conditions (37 CFR 1.97(b)), but before the mailing date of any one of the following conditions: (1) a final action under 37 C.F.R. 1.113, or (2) a notice of allowance under 37 C.F.R. 1.311, or (3) an action that otherwise closes prosecution in the application. This Information Disclosure Statement is accompanied by: ☐ A Certification (below) as specified by 37 C.F.R. 1.97(e). Although no fee is believed due, if any fee is deemed due in connection with this submission, please charge such fee to Deposit Account 19-1970. OR ☒ Please charge Deposit Account 19-1970 in the amount of $180.00 for the fee set forth in 37 C.F.R. 1.17(p) for submission of an information disclosure statement. Please credit any overpayment or charge any underpayment to Deposit Account 19-1970.
☐	**37 CFR 1.97(d)**: This Information Disclosure Statement is being submitted after the period specified in 37 CFR 1.97(c). ☐ This information Disclosure Statement includes a Certification (below) as specified by 37 C.F.R. 1.97(e) AND ☐ Applicants hereby requests consideration of the reference(s) disclosed herein. Please charge Deposit Account 19-1970 in the amount of $180.00 under 37 C.F.R. 1.17(p). Please credit any overpayment or charge any underpayment to Deposit Account 19-1970. Election to pay the fee should not be taken as an indication that applicant(s) cannot execute a certification.

Certification (37 C.F.R. 1.97(e))
(Applicable only if checked)

☐ The undersigned certifies that:

☐ Each item of information contained in the Information Disclosure Statement submitted herewith was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(1).

☐ A copy of the communication from the foreign patent office is enclosed.

OR

☐ No item of information contained in the Information Disclosure Statement submitted herewith was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in the Information Disclosure Statement was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement. 37 C.F.R. 1.97(e)(2).

Respectfully submitted,

SHERIDAN ROSS P.C.

By: /Douglas W. Swartz/
Douglas W. Swartz
Registration No. 37739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: May 07, 2015

To: flexpatents@sheridanross.com,edocket@sheridanross.com,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 111285

May 11, 2015 05:28:12 AM

Dear PAIR Customer:

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
UNITED STATES

The following USPTO patent application(s) associated with your Customer Number, 111285 , have new outgoing correspondence. This correspondence is now available for viewing in Private PAIR.

The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

Disclaimer:
The list of documents shown below is provided as a courtesy and is not part of the official file wrapper. The content of the images shown in PAIR is the official record.

Application	Document	Mailroom Date	Attorney Docket No.
14253204	NOA	05/11/2015	6583-561

To view your correspondence online or update your email addresses, please visit us anytime at https://sportal.uspto.gov/secure/myportal/privatepair.

If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov with 'e-Office Action' on the subject line or call 1-866-217-9197 during the following hours:

Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

PRINTER RUSH

(PTO ASSISTANCE)

Application:	**14253204**	**Examiner:**	**Dunn**	**GAU:**	**3663**
From:	**Midel Geronimo**	**Location:**	**IDC**	**Creation Date:**	**06/11/2015**

Tracking #: Week Date: 05/04/2015

DOC CODE	DOC DATE	MISCELLANEOUS
[ ] 1449		[ ] Continuing Data
[X] IDS	05/07/2015	[ ] Foreign Priority
[ ] CLM		[ ] Document Legibility
[ ] IIFW/FWCLM		[ ] Fees
[ ] SRFW		[ ] Petition (TC)
[ ] DRW		[ ] Other
[ ] OATH		
[ ] 312		
[ ] SPEC		

[RUSH] Message:

In the FORMs PTO-1449:
--- Please initial or draw line(s) through the citations.

Thank you.

[XRUSH] Response:

Initials: _____

Examiner: PUBS contacts - for DESIGNS: Don Fairchild, 703-756-1566; for ALL OTHER files: Bernadette Queen, 703-756-1565.
NOTE: This form will be included as part of the official USPTO record with the response document coded as XRUSH.
REV: Oct 11

PRINTER RUSH

(PTO ASSISTANCE)

Application:	**14253204**	**Examiner:**	**Dunn**	**GAU:**	**3663**
From:	**Midel Geronimo**	**Location:**	**IDC**	**Creation Date:**	**06/11/2015**

Tracking #: Week Date: 05/04/2015

DOC CODE	DOC DATE	MISCELLANEOUS
[ ] 1449		[ ] Continuing Data
[X] IDS	05/07/2015	[ ] Foreign Priority
[ ] CLM		[ ] Document Legibility
[ ] IIFW/FWCLM		[ ] Fees
[ ] SRFW		[ ] Petition (TC)
[ ] DRW		[ ] Other
[ ] OATH		
[ ] 312		
[ ] SPEC		

[RUSH] Message:

In the FORMs PTO-1449:
--- Please initial or draw line(s) through the citations.

Thank you.

[XRUSH] Response:

Initials: _____

Examiner: PUBS contacts - for DESIGNS: Don Fairchild, 703-756-1566; for ALL OTHER files: Bernadette Queen, 703-756-1565.
NOTE: This form will be included as part of the official USPTO record with the response document coded as XRUSH.
REV: Oct 11

PRINTER RUSH

(PTO ASSISTANCE)

Application:	**14253204**	**Examiner:**	**Dunn**	**GAU:**	**3663**
From:	**Midel Geronimo**	**Location:**	**IDC**	**Creation Date:**	**06/11/2015**

Tracking #: Week Date: 05/04/2015

DOC CODE	DOC DATE	MISCELLANEOUS
[ ] 1449		[ ] Continuing Data
[X] IDS	05/07/2015	[ ] Foreign Priority
[ ] CLM		[ ] Document Legibility
[ ] IIFW/FWCLM		[ ] Fees
[ ] SRFW		[ ] Petition (TC)
[ ] DRW		[ ] Other
[ ] OATH		
[ ] 312		
[ ] SPEC		

[RUSH] Message:

In the FORMs PTO-1449:
--- Please initial or draw line(s) through the citations.

Thank you.

[XRUSH] Response:

Initials: _____

Examiner: PUBS contacts - for DESIGNS: Don Fairchild, 703-756-1566; for ALL OTHER files: Bernadette Queen, 703-756-1565.
NOTE: This form will be included as part of the official USPTO record with the response document coded as XRUSH.
REV: Oct 11

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	6583-561	7690

111285 7590 06/24/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
06/24/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Corrected Notice of Allowability	Application No. 14/253,204	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ALEX C. DUNN	Art Unit 3663	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *5/7/2015*.
   ☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on_____.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.
3. ☐ The allowed claim(s) is/are _____. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov .
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   Certified copies:

   a) ☐ All b) ☐ Some *c) ☐ None of the:
   1. ☐ Certified copies of the priority documents have been received.
   2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
   3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☒ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____ .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☒ Other *see continuation sheet*.

/A. C. D./ Examiner, Art Unit 3663	/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663

This Corrected NOA is only to consider IDS submitted 5/7/2015.

Substitute for form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet	1	of	8

Complete if Known	
Application Number	14/253,204
Filing Date	April 15, 2014
First Named Inventor	Christopher P. Ricci
Art Unit	3663
Examiner Name	DUNN, ALEX C
Attorney Docket Number	6583-561

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	5204817	04/20/1993	Yoshida	
	2	5531122	07/02/1996	Chatham et al.	
	3	5572450	11/05/1996	Worthy	
	4	5986575	11/16/1999	Jones et al.	
	5	6148261	11/14/2000	Obradovich et al.	
	6	6587739	07/01/2003	Abrams et al.	
	7	6607212	08/19/2003	Reimer et al.	
	8	6617981	09/09/2003	Basinger	
	9	6757593	06/29/2004	Mori et al.	
	10	6778888	08/17/2004	Cataldo et al.	
	11	6892131	05/10/2005	Coffee et al.	
	12	6944533	09/13/2005	Obradovich et al.	
	13	7020544	03/28/2006	Shinada et al.	
	14	7047129	05/16/2006	Uotani	
	15	7058898	06/06/2006	McWalter et al.	
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Application	Document	Mailroom Date	Attorney Docket No.
14253204	NOA	06/24/2015	6583-561
	1449	06/24/2015	6583-561

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PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of: RICCI, Christopher P. Serial No.: 14/253,204 Filed: April 15, 2014 Atty. File No.: 6583-561 Entitled: "CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA"	Group Art Unit: 3663 Confirmation No.: 7690 Examiner: DUNN, ALEX C ***Submitted Via EFS-Web***

Mail Stop Issue Fee
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

AMENDMENT AFTER ALLOWANCE PURSUANT TO 37 CFR § 1.312

Dear Sir/Madam:

Applicants submit this Amendment After Allowance pursuant to 37 CFR § 1.312 in response to the Notice of Allowance and Fee(s) Due having a mailing date of May 11, 2015. An amendment may be entered after the mailing of a Notice of Allowance but prior to payment of the issue fee upon the recommendation of the primary examiner. Therefore, it is respectfully requested that the above-referenced application be amended as follows:

Amendments to the Specification begin on page **2** of this paper.
Remarks/Arguments begin on page **3** of this paper.

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph **[0377]** with the following amended paragraph:

[0377] In one example, a virtual personality may be represented by an avatar. The avatar may be an intelligent assistant, a virtual assistant, and/or an intelligent virtual assistant as described in application PCT/US14/34194~~PCT/US14/_____~~, filed on April 15, 2014, entitled "Intelligent Vehicle for Assisting Vehicle Occupants and Incorporating Vehicle Crate for Blade Processors~~Vehicle-Based Multimode Discovery~~" (Attorney Docket No. 6583-585-PCT), which is hereby incorporated herein by reference, in its entirety, for all that it teaches and for all purposes. The avatar may be presented as a theme, color, specific sound output, other user preference, etc., and/or combinations thereof. For instance, the avatar may be configured as one or more icons, figures, colors, and/or themes that are configured to represent the virtual personality.

REMARKS/ARGUMENTS

The amendments to paragraph [0377] of the specification insert an application serial number and correct an application title. These amendments do not introduce any new matter.

Accordingly, Applicant believes that the requirements of 37CFR§1.312 and MPEP§714.16 have been satisfied and entry of this amendment is respectfully requested. Although no fees are believed to be due with the filing of this paper, please charge any deficiency or credit any overpayment to Deposit Account 19-1970.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: /Douglas W. Swartz/
Douglas W. Swartz
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Date: July 30, 2015

Electronic Acknowledgement Receipt

EFS ID:	23073765
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	111285
Filer:	Douglas W. Swartz/Amy Duarte
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-561
Receipt Date:	30-JUL-2015
Filing Date:	15-APR-2014
Time Stamp:	16:18:55
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		Rule_312_Amendment_6583-561.pdf	137778 021099ec28dbb16ad8b919ce327ff4910eca383b	yes	3

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment after Notice of Allowance (Rule 312)	1	1
	Specification	2	2
	Applicant Arguments/Remarks Made in an Amendment	3	3
Warnings:			
Information:			
	Total Files Size (in bytes):	137778	

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New Applications Under 35 U.S.C. 111
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National Stage of an International Application under 35 U.S.C. 371
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Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	14/253,204
				Filing Date	April 15, 2014
				First Named Inventor	Christopher P. Ricci
(Use as many sheets as necessary)				Art Unit	3663
				Examiner Name	DUNN, ALEX C
Sheet	1	of	2	Attorney Docket Number	6583-561

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No.[1]	Document Number Number-kind Code[2] (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	7164117	01/16/2007	Breed et al.	
	2	7386799	06/10/2008	Clanton et al.	
	3	2008/0119994	05/22/2008	Kameyama	
	4	2008/0269958	10/30/2008	Filev et al.	
	5	2008/0278298	11/13/2008	Waeller et al.	
	6	2009/0144622	06/04/2009	Evans et al.	
	7	2010/0217458	08/26/2010	Schweiger et al.	
	8	2011/0093158	04/21/2011	Theisen et al.	
	9	2011/0172873	07/14/2011	Szwabowski et al.	
	10	2011/0193707	08/11/2011	Ngo	
	11	2011/0193726	08/11/2011	Szwabowski et al.	
	12	2011/0298808	12/08/2011	Rovik	
	13	2012/0150651	06/14/2012	Hoffberg et al.	
	14	2012/0215375	08/23/2012	Chang	
	15	2013/0013157	01/10/2013	Kim et al.	
	16	2013/0173531	07/04/2013	Rinearson et al.	
	17	2013/0232142	09/05/2013	Nielsen et al.	
	18	2014/0171752	06/19/2014	Park et al.	
	19	2014/0200737	07/17/2014	Lortz et al.	
	20	2014/0347265	11/27/2014	Allen et al.	
	21	2015/0012186	01/08/2015	Horseman	
	22	2015/0032670	01/29/2015	Brazell	
	23	2015/0081133	03/19/2015	Schulz	
	24	2015/0081167	03/19/2015	Pisz t al.	
	25	2015/0088515	03/26/2015	Beaumont et al.	

Examiner Signature		Date Considered	

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Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*				Application Number	14/253,204
				Filing Date	April 15, 2014
				First Named Inventor	Christopher P. Ricci
				Art Unit	3663
				Examiner Name	DUNN, ALEX C
Sheet	2	of	2	Attorney Docket Number	6583-561

FOREIGN PATENT DOCUMENTS						
Examiner Initials*	Cite No.[1]	Foreign Patent Document Country Code[3]; Number[4]; Kind Code[5] *(if known)*	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T[6]
	26	JP 2004-284450	10/14/2004	DENSO CORP		(with English abstract)

NON-PATENT LITERATURE DOCUMENTS		
Examiner Initials*	Cite No.[1]	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.
	27	Official Action for U.S. Patent Application No. 14/253,836, mailed Jul. 14, 2015 (Attorney's Ref. No. 6583-547) 16 pages
	28	Official Action for U.S. Patent Application No. 14/253,233, mailed Jul. 17, 2015 (Attorney's Ref. No. 6583-590) 39 pages

Examiner Signature		Date Considered	

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Electronic Acknowledgement Receipt

EFS ID:	23085427
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	111285
Filer:	Douglas W. Swartz/Theresa Brown
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-561
Receipt Date:	31-JUL-2015
Filing Date:	15-APR-2014
Time Stamp:	15:49:03
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Foreign Reference	JP2004284450_with_English_abstract.pdf	1326338 5a2ce00f153d3f5332e048bb4ebcf22d6647c497	no	23

Warnings:	
Information:	

2	Other Reference-Patent/App/Search documents	6583-547_OA_07-14-2015.pdf	1363170 45ac6b46487da844fd044a734816d681eb5f17fa	no	16
Warnings:					
Information:					
3	Other Reference-Patent/App/Search documents	6583-590_OA_07-17-2015.pdf	3710338 3b1635242397c16bb3ba097f5bbfe039414795b4	no	39
Warnings:					
Information:					
4		6583-561_IDS_03.pdf	168065 b1d735459bb49dfc61ef756f2dbc6765590f3b0e	yes	4

Multipart Description/PDF files in .zip description

Document Description	Start	End
Transmittal Letter	1	2
Information Disclosure Statement (IDS) Form (SB08)	3	4

Warnings:	
Information:	
Total Files Size (in bytes):	6567911

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New Applications Under 35 U.S.C. 111

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National Stage of an International Application under 35 U.S.C. 371

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New International Application Filed with the USPTO as a Receiving Office

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Espacenet

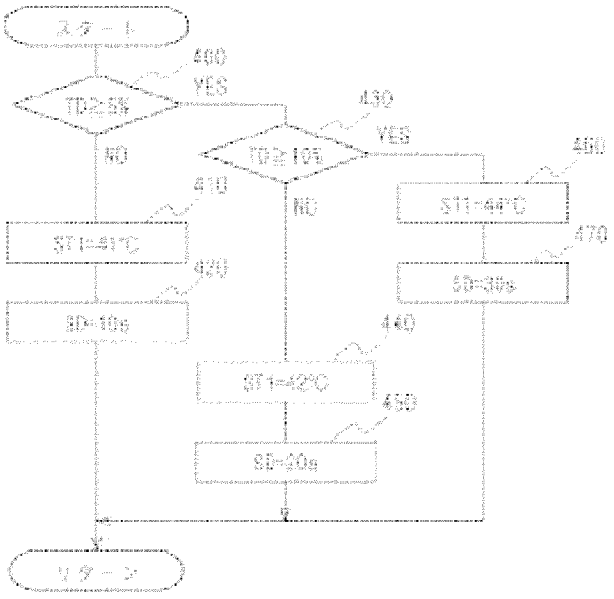
Bibliographic data: JP2004284450 (A) — 2004-10-14

SEAT TEMPERATURE ADJUSTMENT SYSTEM

Inventor(s):	YOSHINORI TAKESHI; NAKAGAWA TAKESHI ± (YOSHINORI TAKESHI, ; NAKAGAWA TAKESHI)
Applicant(s):	DENSO CORP ± (DENSO CORP)
Classification:	**- international:** ***B60H1/00; F24F11/02;*** (IPC1-7): B60H1/00; F24F11/02 **- cooperative:**
Application number:	JP20030077282 20030320
Priority number (s):	JP20030077282 20030320
Also published as:	JP3843958 (B2)

Abstract of JP2004284450 (A)

PROBLEM TO BE SOLVED: To provide a seat temperature adjustment system capable of mitigating fatigue or suppressing the fatigue increase of a seated occupant. ;SOLUTION: A heart beat signal is detected from an occupant seated in a driver's seat. A normal heart rate is calculated thereby, and a present heart rate is calculated at a cycle of about two minutes. The ratio of reduction of the present heart rate to the normal heart rate is calculated as a fatigue degree TD. If the fatigue degree is >= 2%, it is determined that the occupant is in fatigue, and the driver's seat is temporarily heated by an electric heater. If the fatigue degree TD is >= 2% and < 5%, a target temperature is set to be 41[deg.]C in Step 410, and a heating time is set to be 10 seconds in a Step 420. If the fatigue degree is >= 5% and < 10%, the target temperature is set to be 42 [deg.]C in a Step 440, and the heating time is set to be 20 seconds in a Step 450.; If the fatigue degree TD is >= 10%, the target temperature is set to be 44[deg.]C in a Step 460, and the heating time is set to be 30 seconds in a Step 470. ;COPYRIGHT: (C)2005,JPO&NCIPI


スタート
400
YES
TD≦3秒
NO
410
ST1=41℃
420
SD=10g
430
TD≧10秒
YES
NO
440
ST1=42℃
450
SD=20g
460
ST1=46℃
470
SD=30g
リターン

(19)日本国特許庁(JP)　(12)公開特許公報(A)　(11)特許出願公開番号
特開2004-284450
(P2004-284450A)
(43)公開日　平成16年10月14日(2004.10.14)

(51)Int.Cl.[7]	F I		テーマコード（参考）
B60H 1/00	B60H 1/00	101Z	3L060
F24F 11/02	F24F 11/02	Y	

審査請求 未請求　請求項の数 26　OL　（全 20 頁）

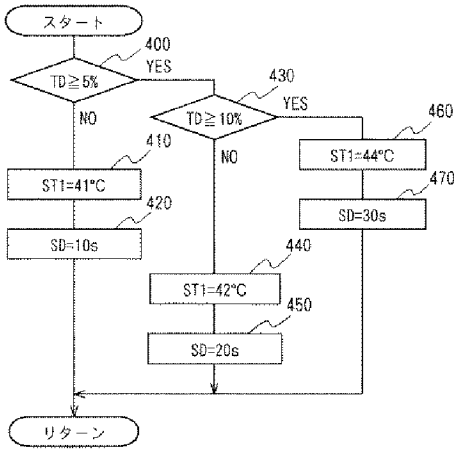
(21)出願番号　特願2003-77282(P2003-77282)
(22)出願日　平成15年3月20日(2003.3.20)

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Ｆターム(参考)　3L060 AA05　CC19　DD08　EE01　EE45

(54)【発明の名称】シート温度調節システム

(57)【要約】
【課題】着座者の疲労軽減または疲労増加の抑制が可能なシート温度調節システムを提供する。
【解決手段】運転席の乗員から心拍信号を検出し、これにより、まず通常時心拍数を算出し、その後、２分ほどの周期で現在心拍数を算出する。現在心拍数が通常時心拍数に対して低下した割合を疲労度ＴＤとして算出し、これが２％以上である場合には乗員が疲労していると判断して、電気ヒータにより運転席を一時的に加温する。疲労度ＴＤが２％以上５％未満である場合には、ステップ４１０においてヒータ目標温度を４１℃に、ステップ４２０において加温時間を１０秒に設定し、疲労度ＴＤが５％以上１０％未満である場合には、ステップ４４０において目標温度を４２℃に、ステップ４５０において加温時間を２０秒に設定し、疲労度ＴＤが１０％以上である場合には、ステップ４６０において目標温度を４４℃に、ステップ４７０において加温時間を３０秒に設定する。
【選択図】　図６



Ford Ex. 1109

【特許請求の範囲】
【請求項1】
シート（８）を加温する加温手段（３、３７）と、
前記シート（８）に着座している着座者（７）に関する着座者情報を検出する着座者情報検出手段（２、１５０、１６０）と、
前記着座者情報に基づいて前記着座者（７）が疲労しているか否かを判定する疲労判定手段（１６５、１７０）と、
前記疲労判定手段（１６５、１７０）による判定結果に基づいて前記加温手段（３、３７）による加温を制御する加温制御手段（１８０、１８５、１９０、１９５）とを備えたシート温度調節システム。
【請求項2】
前記加温制御手段（１８０、１８５、１９０、１９５）は、前記疲労判定手段（１６５、１７０）により前記着座者（７）が疲労していると判定されたら、前記加温手段（３、３７）に前記シート（８）を加温させることを特徴とする請求項１記載のシート温度調節システム。
【請求項3】
前記加温制御手段（１８０、１８５、１９０、１９５）は、前記疲労判定手段（１６５、１７０）により前記着座者（７）が疲労していると判定されたら、前記加温手段（３、３７）に前記シート（８）を所定継続時間だけ加温させることを特徴とする請求項２記載のシート温度調節システム。
【請求項4】
前記疲労判定手段（１６５、１７０）は、前記着座者（７）が疲労しているか否かを判定する基準として、前記着座者情報に基づいて前記着座者（７）の疲労の程度を示す疲労度を算出し、
前記加温制御手段（１８０、１８５、１９０、１９５）は、前記所定継続時間を前記疲労度に基づいて決定することを特徴とすることを請求項３記載のシート温度調節システム。
【請求項5】
前記加温制御手段（１８０、１８５、１９０、１９５）は、前記疲労判定手段（１６５、１７０）による前記判定結果に基づいて前記シート（８）の目標温度を設定して、前記シート（８）が前記目標温度に近づくように前記加温手段（３、３７）による加温を制御することを特徴とする請求項１記載のシート温度調節システム。
【請求項6】
前記疲労判定手段（１６５、１７０）は、前記着座者（７）が疲労しているか否かを判定する基準として、前記着座者情報に基づいて前記着座者（７）の疲労の程度を示す疲労度を算出し、
前記加温制御手段（１８０、１８５、１９０、１９５）は、前記目標温度を前記疲労度に基づいて決定することを特徴とすることを特徴とする請求項５記載のシート温度調節システム。
【請求項7】
前記加温制御手段（１８０、１８５、１９０、１９５）は、前記疲労度が第１所定値以上第２所定値未満である場合は、前記目標温度を第１所定温度に設定し、前記疲労度が第２所定値以上である場合は、前記目標温度を前記第１所定温度より高い第２所定温度に設定することを特徴とする請求項６記載のシート温度調節システム。
【請求項8】
前記第１所定温度は、人間の皮膚温度に近い温度であることを特徴とする請求項７記載のシート温度調節システム。
【請求項9】
前記加温制御手段（１８０、１８５、１９０、１９５）は、前記疲労判定手段（１６５、１７０）により前記着座者（７）が疲労していると判定されたら、所定継続時間だけ、前記シート（８）が前記疲労度に基づいて決定した前記目標温度に近づくよう前記加温手段

（３、３７）による加温を制御することを特徴とする請求項６ないし８のいずれか１項に記載のシート温度調節システム。
【請求項10】
前記加温制御手段（１８０、１８５、１９０、１９５）は、前記所定継続時間を前記疲労度に基づいて決定することを特徴とする請求項９記載のシート温度調節システム。
【請求項11】
前記加温制御手段（１８０、１８５、１９０、１９５）は、前記疲労度が第３所定値以上第４所定値未満である場合は、前記所定継続時間を第１所定時間に設定し、前記疲労度が第４所定値以上である場合は、前記所定継続時間を前記第１所定時間より長い第２所定時間に設定することを特徴とする請求項４または１０記載のシート温度調節システム。
【請求項12】
前記シート（８）を冷却する冷却手段（３７）と、
前記疲労判定手段（１６５、１７０）による判定結果に基づいて前記冷却手段（３７）による冷却を制御する冷却制御手段（１８５、１９５）とを備えたことを特徴とする請求項１記載のシート温度調節システム。
【請求項13】
前記冷却制御手段（１８５、１９５）は、前記疲労判定手段（１６５、１７０）により前記着座者（７）が疲労していると判定されたら、前記冷却手段（３７）による前記シート（８）の冷却を停止させることを特徴とする請求項１２記載のシート温度調節システム。
【請求項14】
前記冷却制御手段（１８５、１９５）は、前記疲労判定手段（１６５、１７０）により前記着座者（７）が疲労していると判定されたら、前記冷却手段（３７）による前記シート（８）の冷却を所定継続時間だけ停止させることを特徴とする請求項１３記載のシート温度調節システム。
【請求項15】
前記疲労判定手段（１６５、１７０）は、前記着座者（７）が疲労しているか否かを判定する基準として、前記着座者情報に基づいて前記着座者（７）の疲労の程度を示す疲労度を算出し、
前記冷却制御手段（１８５、１９５）は、前記所定継続時間を前記疲労度に基づいて決定することを特徴とする請求項１４記載のシート温度調節システム。
【請求項16】
前記冷却制御手段（１８５、１９５）は、前記疲労判定手段（１６５、１７０）による前記判定結果に基づいて前記シート（８）の目標温度を設定して、前記シート（８）が前記目標温度に近づくように前記冷却手段（３７）による冷却を制御することを特徴とする請求項１２記載のシート温度調節システム。
【請求項17】
前記疲労判定手段（１６５、１７０）は、前記着座者（７）が疲労しているか否かを判定する基準として、前記着座者情報に基づいて前記着座者（７）の疲労の程度を示す疲労度を算出し、
前記冷却制御手段（１８５、１９５）は、前記目標温度を前記疲労度に基づいて決定することを特徴とする請求項１６記載のシート温度調節システム。
【請求項18】
前記冷却制御手段（１８５、１９５）は、前記疲労度が第１所定値以上第２所定値未満である場合は、前記目標温度を第１所定温度に設定し、前記疲労度が第２所定値以上である場合は、前記目標温度を前記第１所定温度より高い第２所定温度に設定することを特徴とする請求項１７記載のシート温度調節システム。
【請求項19】
前記第１所定温度は、人間の皮膚温度に近い温度であることを特徴とする請求項１８記載のシート温度調節システム。
【請求項20】

前記冷却制御手段（１８５、１９５）は、前記疲労判定手段（１６５、１７０）により前記着座者（７）が疲労していると判定されたら、所定継続時間だけ、前記シート（８）が前記疲労度に基づいて決定した前記目標温度に近づくように前記冷却手段（３７）による冷却を制御することを特徴とする請求項１７ないし１９のいずれか１項に記載のシート温度調節システム。
【請求項21】
前記冷却制御手段（１８５、１９５）は、前記所定継続時間を前記疲労度に基づいて決定することを特徴とする請求項２０記載のシート温度調節システム。
【請求項22】
前記冷却制御手段（１８５、１９５）は、前記疲労度が第３所定値以上第４所定値未満である場合は、前記所定継続時間を第１所定時間に設定し、前記疲労度が第４所定値以上である場合は、前記所定継続時間を前記第１所定時間より長い第２所定時間に設定することを特徴とする請求項１５または２１記載のシート温度調節システム。
【請求項23】
前記着座者情報検出手段は、前記着座者（７）の生理情報、動作情報、着座継続時間の少なくとも１つを前記着座者情報として検出することを特徴とする請求項１ないし２２のいずれか１項に記載のシート温度調節システム。
【請求項24】
前記着座者情報検出手段は、前記着座者情報として前記着座者（７）から心拍信号を検出し、
前記疲労判定手段（１６５、１７０）は、前記心拍信号に基づいて前記疲労度を算出することを特徴とする請求項４、６、１５、１７のいずれか１項に記載のシート温度調節システム。
【請求項25】
前記疲労判定手段（１６５、１７０）は、前記心拍信号から前記着座者（７）の通常時心拍数と現在の心拍数を算出し、前記現在の心拍数が前記通常時心拍数に比較して低下した割合を前記疲労度として算出することを特徴とする請求項２４記載のシート温度調節システム。
【請求項26】
前記シート（８）は車室内に配設されている座席であることを特徴とする請求項１ないし２５のいずれか１項に記載のシート温度調節システム。

【発明の詳細な説明】
【０００１】
【発明の属する技術分野】
本発明は、椅子や座席などのシートの温度を調節するシート温度調節システムに関する。
【０００２】
【従来の技術】
従来より、車両用シートなどにおいて、シートヒータやシート空調装置などを用いて、シートの温度を調節することが提案されている（例えば、特許文献１参照。）。シートヒータの場合は、例えばシート内部に埋め込んだ電気ヒータにより、シート温度を乗員により設定された設定温度に近づけるように加温する。シート空調装置は、空気を加熱・冷却する装置を用いて、シートに設けられた複数のエア吹出孔から温風や冷風を吹き出すことにより、シート温度を設定温度に近づけるように調節する。
【０００３】
【特許文献１】
特表平１０－５０４９７７号公報
【０００４】
【発明が解決しようとする課題】
しかしながら、上記従来技術においては、シートに着座している着座者が疲労している場合でも、シート温度を設定温度に近づける制御が行われるため、特にシート温度が設定温

度に比較して高いような状況においては、着座者が疲労している場合でもシートが冷却されていたり、あるいはシートの加温が停止されていることにより、着座者の背中、腰、ふくらはぎなど、シートと接触している部分が冷えて、血液の流れが悪くなるということがあった。このような状態でさらに着座が長時間継続されると、血管が圧迫されることにより、さらに血液の流れが悪くなり、疲労物質が蓄積して、疲労が解消されなかったり、疲労が増加したりすることになる。

【０００５】

本発明は、上記点に鑑みなされたものであり、着座者の疲労軽減または疲労増加の抑制が可能なシート温度調節システムを提供することを目的としている。

【０００６】

【課題を解決するための手段】

上記課題を解決するため、請求項１記載のシート温度調節システムは、シートを加温する加温手段と、シートに着座している着座者に関する着座者情報を検出する着座者情報検出手段と、着座者情報に基づいて前記着座者が疲労しているか否かを判定する疲労判定手段と、疲労判定手段による判定結果に基づいて加温手段による加温を制御する加温制御手段とを備えている。

【０００７】

このような構成によると、疲労判定手段により着座者が疲労していると判定されたか否かの判定結果に基づいて加温手段を制御することにより、着座者の疲労を軽減したり、あるいは疲労の増加を抑制することが可能である。

【０００８】

特に、請求項２記載のように、疲労判定手段により着座者が疲労していると判定されたら、加温制御手段により加温手段にシートを加温させるようにすると、着座者の血液の流れを促進させて、疲労軽減または疲労増加の抑制を効果的に行うことができる。

【０００９】

また、この場合の加温は、請求項３記載のように、所定継続時間だけ行うようにするとよい。このように、加温を所定継続時間だけ行うようにすると、連続的に加温する場合に比較して、着座者がシートを熱く感じたり不快に感じたりすることが少なくなる。

【００１０】

さらに、請求項４記載のように、疲労判定手段は、着座者が疲労しているか否かを判定する基準として、前記着座者情報に基づいて着座者の疲労の程度を示す疲労度を算出し、加温制御手段は、加温の所定継続時間を疲労度に基づいて決定するようにするとよい。このような構成によると、加温の継続時間が疲労度に基づいて適切に設定されるため、必要以上の時間継続して加温を行うことにより着座者がシートを熱く感じたり不快に感じたりすることを回避できる。

【００１１】

請求項１記載のシート温度調節システムにおいて、加温制御手段は、請求項５記載のように、疲労判定手段による判定結果に基づいてシートの目標温度を設定して、シートがこの目標温度に近づくように加温手段による加温を制御するようにするとよい。このようにして、着座者の疲労が検出された場合は、疲労軽減あるいは疲労増加の抑制のために適切な目標温度を設定して、シートがこの目標温度に近づくように加温手段による加温を制御すると、必要以上の加温を行うことにより着座者がシートを熱く感じたり不快に感じたりすることを回避できる。

【００１２】

この場合、加温制御手段は、請求項６記載のように、疲労判定手段により算出された疲労度に基づいて目標温度を決定するようにすると、着座者の疲労軽減あるいは疲労増加の抑制のために、より適切に目標温度を設定することができる。

【００１３】

さらに、請求項７記載のように、疲労度が第１所定値以上第２所定値未満である場合は、目標温度を第１所定温度に設定し、疲労度が第２所定値以上である場合には、目標温度を

第１所定温度より高い第２所定温度に設定するようにするとよく、特に、請求項８記載のように、第１所定温度として人間の皮膚温度に近い温度を用いるようにするとよい。このように、着座者の疲労が検出されたら、シートが人間の皮膚温度に近い温度に近づくように加温手段による加温を制御し、より高い程度の疲労が検出された場合には目標温度を高めるようにすると、着座者の疲労度に応じて適切な加温を行うことができる。

【００１４】

また、加温制御手段は、請求項９記載のように、着座者の疲労が検出された場合に、シートを疲労度に基づいて決定した目標温度に近づけるための加温が所定継続時間だけ行われるように制御するとよく、さらにこの所定継続時間を、請求項１０記載のように、疲労度に基づいて決定するようにするとよい。このように、加温を疲労度に基づいて決定した所定継続時間だけ行うようにすると、必要以上の時間継続して加温を行うことにより着座者がシートを熱く感じたり不快に感じたりすることを回避できる。

【００１５】

この場合、請求項１１記載のように、疲労度が第３所定値以上第４所定値未満である場合は、加温の所定継続時間を第１所定時間に設定し、疲労度が第４所定値以上である場合は、所定継続時間を第１所定時間より長い第２所定時間に設定するようにするとよい、このように、着座者から、より高い程度の疲労が検出された場合には、加温の所定継続時間を長く設定するようにすると、着座者の疲労度に応じた適切な継続時間での加温を行うことができる。

【００１６】

請求項１記載のシート温度調節システムにおいて、請求項１２記載のように、シートを冷却する冷却手段を備えている場合には、この冷却手段による冷却を制御する冷却制御手段は、疲労判定手段による判定結果に基づいて制御を行うようにするとよい。このように、疲労判定手段により着座者が疲労していると判定されたか否かの判定結果に基づいて冷却手段を制御すると、これにより、着座者の疲労を軽減したり、あるいは疲労の増加を抑制することが可能である。

【００１７】

特に、請求項１３記載のように、疲労判定手段により着座者が疲労していると判定されたら、冷却制御手段により冷却手段によるシートの冷却を停止させるようにすると、着座者の疲労軽減あるいは疲労増加の抑制を効果的に行うことができる。

【００１８】

また、この場合の冷却停止は、請求項１４記載のように、所定継続時間だけ行うようにするとよく、さらにこの所定継続時間は、請求項１５記載のように、疲労判定手段により算出された疲労度に基づいて決定するようにするとよい。このような構成によると、着座者の疲労が検出された場合に、疲労度に基づいて決定された適切な継続時間だけ冷却が停止されるため、冷却を連続的に停止する場合に比較して、必要以上に長い時間冷却を停止することにより着座者がシートを熱く感じたり不快に感じたりすることを回避できる。

【００１９】

請求項１２記載のシート温度調節システムにおいて、冷却制御手段は、請求項１６記載のように、疲労判定手段による判定結果に基づいてシートの目標温度を設定して、シートがこの目標温度に近づくように冷却手段による冷却を制御するようにするとよい。このようにして、着座者の疲労が検出された場合は、疲労軽減あるいは疲労増加の抑制のために適切な目標温度を設定して、シートがこの目標温度に近づくように冷却手段による冷却を制御すると、必要以上に冷却を弱めたり停止したりすることにより着座者がシートを熱く感じたり不快に感じたりすることを回避できる。

【００２０】

この場合、冷却制御手段は、請求項１７記載のように、疲労判定手段により算出された疲労度に基づいて目標温度を決定するようにすると、着座者の疲労軽減あるいは疲労増加の抑制のために、より適切に目標温度を設定することができる。

【００２１】

さらに、請求項１８記載のように、疲労度が第１所定値以上第２所定値未満である場合は、目標温度を第１所定温度に設定し、疲労度が第２所定値以上である場合には、目標温度を第１所定温度より高い第２所定温度に設定するようにするとよく、特に、請求項１９記載のように、第１所定温度として人間の皮膚温度に近い温度を用いるようにするとよい。このように、着座者の疲労が検出されたら、シートが人間の皮膚温度に近い温度に近づくように冷却手段による冷却を制御し、より高い程度の疲労が検出された場合には目標温度を高めるようにすると、着座者の疲労度に応じて適切な冷却の軽減あるいは停止を行うことができる。

【００２２】

また、冷却制御手段は、請求項２０記載のように、着座者の疲労が検出された場合に、シートを疲労度に基づいて決定した目標温度に近づけるための冷却制御が所定継続時間だけ行われるようにするとよく、さらにこの所定継続時間を、請求項２１記載のように、疲労度に基づいて決定するようにするとよい。このように、疲労軽減のための冷却制御を、疲労度に基づいて決定した所定継続時間だけ行うようにすると、必要以上に冷却を弱めたり停止することにより着座者がシートを熱く感じたり不快に感じたりすることを回避できる。

【００２３】

特に、請求項２２記載のように、疲労度が第３所定値以上第４所定値未満である場合は、疲労軽減のための冷却制御の所定継続時間を第１所定時間に設定し、疲労度が第４所定値以上である場合は、所定継続時間を第１所定時間より長い第２所定時間に設定するようにするとよい、このように、着座者から、より高い程度の疲労が検出された場合には、疲労軽減のための冷却制御の継続時間を長く設定するようにすると、着座者の疲労度に応じた適切な継続時間で疲労軽減のための冷却制御を行うことができる。

【００２４】

本発明のシート温度調節システムにおいて、着座者情報検出手段は、請求項２３記載のように、着座者の生理情報、動作情報、着座継続時間の少なくとも１つを着座者情報として検出するようにするとよい。着座者が疲労しているか否かは、このような着座者の生理情報、動作情報、着座継続時間に基づいて判定すると、正確な判定が可能である。

【００２５】

また、請求項４、６、１５、１７のいずれかに記載のシート温度調節システムおいて、請求項２４記載のように、着座者情報検出手段により着座者の心拍信号を着座者情報として検出し、疲労判定手段は、この心拍信号に基づいて疲労度を算出するとよく、特に、請求項２５記載のように、疲労判定手段は、心拍信号から着座者の通常時心拍数と現在の心拍数を算出し、現在の心拍数が通常時心拍数に比較して低下した割合を疲労度として算出するようにするとよい。心拍信号は着座者から比較的簡単に検出することができるため、このように、心拍信号に基づいて疲労度を算出すると、簡単に、しかも正確に疲労度を算出することが可能である。

【００２６】

また、本発明のシート温度調節システムは、請求項２６記載のように、車室内に配設されている座席の温度調節に用いると特に有効である。このような車両の座席の着座者はある程度の時間継続して着座していることを強いられることが多く、特に運転席に着座している運転手は運転により疲労しやすいため、本発明のシート温度調節システムにより疲労軽減のためのシート温度調節を行うと、このような着座者の疲労を軽減したり、あるいは疲労の増加を抑制したりすることができる。

【００２７】

【発明の実施の形態】

（第１実施形態）

本発明の第１実施形態に係るシート温度調節システムは、車両に搭載されて、運転席の温度を調節する。図１は、シート温度調節システム１の全体構成を示している。車両のステアリングホイール上には、運転席（シート）８に着座している乗員（着座者）７から心拍

情報ＢＳを検出するための金属電極２が組み込まれており、運転席８には、シートを加温するための電気ヒータ３が埋め込まれている。乗員７は、車室内に設けられた設定スイッチ６により、電気ヒータ３を「強」と「弱」との間で切り替えることができる。

【００２８】

シート温度調節ＥＣＵ４は、設定スイッチ６から乗員による設定に基づく設定温度ＴＳＥＴを示す信号を受け取り、さらにヒータ温度センサ５から電気ヒータ３の温度を示す信号ＨＴを受け取って、通常は、設定温度ＴＳＥＴおよびヒータ温度ＨＴに基づいて、ヒータ温度が設定温度ＴＳＥＴに調節されるように、電気ヒータ３をＯＮ／ＯＦＦする制御信号ＣＴＬを出力する。乗員が設定スイッチ６により「強」を選択した場合の設定温度ＴＳＥＴは例えば５０℃であり、「弱」を選択した場合の設定温度ＴＳＥＴは例えば４０℃である。また、電気ヒータ３が４０℃のときのシート８の温度は３３℃くらいである。

【００２９】

シート温度調節ＥＣＵ４は、さらに、金属電極２により検出した乗員の心拍情報ＢＳに基づいて、乗員の疲労を検出し、乗員が疲労していると判断した場合には、上記通常の制御に優先させて、疲労度に基づく制御を行う。

【００３０】

シート温度調節ＥＣＵ４は、その内部に、図示しないＣＰＵ、ＲＯＭ、ＲＡＭ等からなるマイクロコンピュータを備えており、車両のイグニションスイッチ（図示せず）がＯＮであるときに、車載バッテリ（図示せず）からの電力が供給されて作動するように構成されている。シート温度調節ＥＣＵ４は、ＲＯＭに記憶されているプログラムを実行することにより、つぎのように動作する。

【００３１】

乗員７が車両のイグニションスイッチをＯＮにして、最初に運転を開始してから所定時間（例えば５分）が経過したら、その時点から所定時間（例えば１０分）、乗員７の心拍信号ＢＳを金属電極２により検出して、この１０分間に得られた心拍情報から、乗員７の運転時の通常の心拍数ＢＥＡＴｎを算出する。その後、継続して乗員７の心拍信号ＢＳを検出して蓄積し、２分ごとに、蓄積した心拍情報から乗員７の現在の心拍数ＢＥＡＴｃを算出する。この現在の心拍数ＢＥＡＴｃが通常時の心拍数ＢＥＡＴｎから低下している割合を乗員７の疲労度ＴＤとして算出する。

【００３２】

疲労度ＴＤが所定値を超えているときには、乗員７は疲労していると判断して、疲労度ＴＤの値に基づいて電気ヒータ３の目標温度および加温時間を決定し、決定した加温時間の間だけ目標温度での加温が一時的に実行されるように、電気ヒータ３に制御信号ＣＴＬを出力する。

【００３３】

一方、疲労度ＴＤが所定値未満であるときには、通常制御を実行し、これにより、ヒータ温度が乗員７による設定に応じた設定温度ＴＳＥＴに連続的に維持されるように、電気ヒータ３に制御信号ＣＴＬを出力する。

【００３４】

図２は、シート温度調節ＥＣＵ４により実行される処理の手順を示している。シート温度調節ＥＣＵ４は、車両のイグニションスイッチがＯＮにされると作動を開始し、まずステップ１００でデータ処理用メモリ（ＲＡＭ）の記憶内容などの初期化を行う。このとき、後のステップで用いる運転開始フラグＳＦおよび一時加温時間ＳＤが０に初期化される。

【００３５】

運転開始フラグＳＦは、車両のイグニションスイッチがＯＮにされて、最初に運転が開始されると１に設定され、その後、イグニションスイッチがＯＦＦにされてシート温度調節ＥＣＵ４が作動を終了するまで、継続して１に設定されている。また、一時加温時間ＳＤは、疲労度に基づいて一時的に加温を行う場合の加温継続時間を表しており、後のステップ１８０において設定される。

【００３６】

つぎに、ステップ１１０で各種センサ信号およびスイッチ信号を読み込む。このとき、車速センサ（図示せず）からの車速信号ＳＰＤ、設定スイッチ６からの設定温度信号ＴＳＥＴ、ヒータ温度センサ５からのヒータ温度信号ＨＴなどが読み込まれる。

【００３７】

ステップ１２０では、電気ヒータ３の目標温度ＳＴ１を設定温度ＴＳＥＴに設定する。

【００３８】

ステップ１３０で、条件「ＳＦ＝０　＆　ＳＰＤ＞０」が満足されているか否か判定する。ＹＥＳと判定した場合は、乗員７により運転が開始されたと判断して、ステップ１３５において、運転開始フラグＳＦを１に設定し、タイマＤＤをスタートさせる。タイマＤＤにより、イグニションスイッチがＯＮにされてから最初に運転開始後、経過した時間を測定する。ステップ１３５の実行が終了したら、ステップ１９０に進む。

【００３９】

ステップ１３０でＮＯと判定した場合は、ステップ１４０において、タイマＤＤが５分未満であるか否か判定する。ＹＥＳと判定した場合は、ステップ１９０に進む。

【００４０】

ステップ１４０においてＮＯと判定した場合は、ステップ１４５において、タイマＤＤが１５分未満であるか否か判定する。ＹＥＳと判定した場合は、ステップ１５０において通常時心拍数ＢＥＡＴｎを検出し、その後、ステップ１６０に進む。ステップ１５０における通常時心拍数ＢＥＡＴｎの検出処理の詳細は後述する。ステップ１４５においてＮＯと判定した場合は、ステップ１５０を迂回して、ステップ１６０に進む。

【００４１】

ステップ１６０では、現在の心拍数ＢＥＡＴｃを検出する。この処理の詳細については後述する。ステップ１６５では、通常時心拍数ＢＥＡＴｎと現在心拍数ＢＥＡＴｃに基づいて、乗員の疲労度ＴＤを算出する。具体的には、乗員は疲労してくると心拍数が低下する傾向があるため、つぎのような式を用いて、通常時心拍数ＢＥＡＴｎに対して現在心拍数ＢＥＡＴｃが低下した割合を疲労度として算出する。

【００４２】

【数１】

ＴＤ＝（ＢＥＡＴｎ－ＢＥＡＴｃ）／ＢＥＡＴｎ

つぎに、ステップ１７０で、疲労度ＴＤが第１所定値（例えば２％）未満であるか否か判定する。ＹＥＳと判定した場合は、乗員は疲労していないと判断して、そのままステップ１９０に進む。

【００４３】

ステップ１７０でＮＯと判定した場合は、ステップ１８０において、疲労度ＴＤの値に基づいて、シート８を一時的に加温するためのヒータ目標温度ＳＴ１および加温時間ＳＤを決定し、ステップ１９０に進む。ステップ１８０における処理の詳細は後述する。

【００４４】

ステップ１９０では、ステップ１２０またはステップ１８０において設定された目標温度ＳＴ１、ステップ１８０において設定された加温時間ＳＤに基づいて、電気ヒータ３に制御信号ＣＴＬを出力する。具体的には、一時加温時間ＳＤが０より大きい場合には、この加温時間ＳＤの間だけ電気ヒータ３を一時的に目標温度ＳＴ１に維持するように制御され、加温時間ＳＤが終了すると加温を停止する。加温時間ＳＤが０である場合は、電気ヒータ３を目標温度ＳＴ１に維持するように連続的に制御される。

【００４５】

また、電気ヒータ３を目標温度ＳＴ１に制御する場合は、ヒータ温度ＨＴが目標温度ＳＴ１より低いならば、制御信号ＣＴＬにより電気ヒータ３をＯＮにし、ヒータ温度ＨＴが目標温度ＳＴ１以上であるならば、制御信号ＣＴＬにより電気ヒータ３をＯＦＦにする。

【００４６】

ステップ１９０の実行後は、ステップ１１０に戻って、以下のステップが繰り返し実行される。ステップ１６０における現在心拍数ＢＥＡＴｃの検出処理に２分ほどの時間を要す

るため、ステップ１５０における通常時心拍数の検出が実行された後は、つまり、乗員による運転が開始されてから１５分ほど経過した後は、ステップ１１０～１９０は、２分ほどの周期で実行されることになる。

【００４７】

従って、乗員７の疲労が検出された場合（疲労度ＴＤが２％以上である場合）には、疲労度ＴＤが２％未満に軽減されるまで、２分ほどの周期で加温が断続的に繰り返されることになる。

【００４８】

図３はステップ１５０において実行される通常時心拍数検出処理の手順を示している。まず、ステップ２００においてタイマＢＤをスタートさせる。ステップ２０５において、金属電極２から乗員の心拍信号ＢＳを読込み、記憶する。このとき、心拍信号ＢＳは、所定の周波数（例えば１００Ｈｚ以上）でサンプリングされ、さらに、例えば６～３０Ｈｚのバンドパスフィルタで、フィルター処理が施されてから、記憶される。ステップ２１０において、タイマＢＤが１０分を超えたか否か判定し、ＮＯと判定した場合は、ステップ２０５に戻って、心拍信号の読込み・記憶を繰り返し実行する。このようにして、１０分間の心拍信号を蓄積する。ただし、この場合、心拍信号を蓄積する時間は、１０分に限らず、乗員の運転通常時の心拍数ＢＥＡＴｎを正確に算出するのに必要なデータが得られるような時間に設定することができる。

【００４９】

ステップ２１０でＹＥＳと判定した場合は、ステップ２２０において、１０分間の心拍データから、通常時心拍数ＢＥＡＴｎを算出する。具体的には、図４に示すように、所定の閾値を超えた波をＲ波とし、その時間間隔（心拍間隔）をＲＲＩとしてＲＲＩデータを算出する。算出したＲＲＩデータから、心拍間隔ＲＲＩの平均値ＲＲＩａｖｇを算出し、これを用いて運転通常時の平均心拍数ＢＥＡＴｎを次の式により求める。

【００５０】

【数２】

ＢＥＡＴｎ＝６０／ＲＲＩａｖｇ

ステップ２２０の実行を終了したら、メインルーチンに戻る。

【００５１】

図５は、図２に示すステップ１６０において実行される現在心拍数検出処理の手順を示している。まず、ステップ３００においてタイマＢＤをスタートさせる。ステップ３０５において、上記ステップ２０５と同様にして、金属電極２から乗員の心拍信号ＢＳを読込み、記憶する。ステップ３１０において、タイマＢＤが２分を超えたか否か判定し、ＮＯと判定した場合は、ステップ３０５に戻って、心拍信号ＢＳの読込み・記憶を繰り返し実行する。このようにして、２分間の心拍信号ＢＳを蓄積する。ただし、この場合、心拍信号ＢＳを蓄積する時間は、２分に限らず、乗員の現在の心拍数ＢＥＡＴｃを正確に算出するのに必要なデータが得られるような時間に設定することができる。

【００５２】

ステップ３１０でＹＥＳと判定した場合は、ステップ３２０において、２分間の心拍データから、上記ステップ２２０と同様にして、現在心拍数ＢＥＡＴｃを算出する。ステップ３２０の実行を終了したら、メインルーチンに戻る。

【００５３】

図６は、図２に示すステップ１８０において実行される疲労度ＴＤに基づく目標温度ＳＴ１および加温時間ＳＤの決定処理の手順を示している。まず、ステップ４００において疲労度ＴＤが第２所定値（例えば５％）以上であるか否か判定する。ＮＯと判定した場合には、つまり疲労度ＴＤが２％以上５％未満である場合には、疲労は少ないと判断して、ステップ４１０において、シート温度が人間の皮膚温度と同じ程度の温度（例えば３４℃）になるようにヒータ目標温度ＳＴ１を例えば４１℃に設定する。また、ステップ４２０において、加温時間ＳＤを比較的短く、例えば１０秒に設定する。その後、メインルーチンに戻る。

【００５４】
一方、ステップ４００においてＹＥＳと判定した場合は、ステップ４３０において、疲労度ＴＤが、第２所定値（５％）より大きい所定値（例えば１０％）以上であるか否か判定する。ＮＯと判定した場合は、つまり、疲労度ＴＤが５％以上１０％未満である場合は、疲労は中程度であると判断して、ステップ４４０において、シート温度が人間の皮膚温度より少し高めの温度（例えば３５℃）になるように、ヒータ目標温度ＳＴ１を例えば４２℃に設定する。また、ステップ４５０において、加温時間ＳＤを少し長く、例えば２０秒に設定する。その後、メインルーチンに戻る。
【００５５】
ステップ４３０においてＹＥＳと判定した場合は、つまり疲労度ＴＤが１０％以上である場合は、疲労が大きいと判断して、ステップ４６０において、シート温度がさらに高い温度（例えば３７℃）になるように、ヒータ目標温度ＳＴ１を例えば４４℃に設定する。またステップ４７０において、加温時間ＳＤをさらに長く、例えば３０秒に設定する。その後、メインルーチンに戻る。
【００５６】
このようにして、疲労度ＴＤが２％未満である場合は、電気ヒータ３は乗員７による設定温度ＴＳＥＴを目標温度として連続的に制御され、疲労度ＴＤが２％以上５％未満である間は、４１℃を目標温度とした１０秒の加温が２分ほどの周期で断続的に繰り返される。疲労度ＴＤが５％以上１０％未満である間は、４２℃を目標温度とした２０秒の加温が２分ほどの周期で断続的に繰り返され、疲労度ＴＤが１０％以上である間は、４４℃を目標温度とした３０秒の加温が２分ほどの周期で断続的に繰り返される。
【００５７】
このように、本実施形態のシート温度調節システムでは、乗員７の疲労が検出されたときには、電気ヒータ３によりシート８の加温を行うため、乗員７の血管を刺激して拡張させ、血液の流れを促進させることができる。これにより、乗員７の疲労が軽減されたり、あるいは疲労の増加が抑制されたりする。また、疲労が検出された場合のシート８の加温は、疲労度に応じた適切な目標温度、加温時間で行うため、必要以上の加温を行うことにより乗員が不快に感じたり熱く感じたりすることを回避できる。
【００５８】
また、心拍信号は脳波などのような他の生理情報に比較して簡単に検出することができるため、上記のように、通常時心拍数ＢＡＥＴｎに対する現在心拍数ＢＥＡＴｃの低下した割合を乗員の疲労度ＴＤとして用いると、比較的に簡単に、しかも正確に疲労度を算出することができる。
【００５９】
本実施形態における金属電極２は本発明の着座者情報検出手段に対応しており、電気ヒータ３は本発明の加温手段に対応している。また、ステップ１５０および１６０は、本発明の着座者情報検出手段に対応しており、ステップ１６５および１７０は、本発明の疲労判定手段に対応しており、ステップ１８０および１９０は、本発明の加温制御手段に対応している。本実施形態における加温時間ＳＤは本発明の所定継続時間に対応している。ステップ１７０において用いる第１所定値は本発明の第１所定値および第３所定値に対応しており、ステップ４００において用いる第２所定値は本発明の第２所定値および第４所定値に対応している。
【００６０】
（第２実施形態）
本発明の第２実施形態に係るシート温度調節システムは、上記第１実施形態と同様、車両に搭載されて、運転席の温度を調節する。図７は、本実施形態のシート温度調節システム３０の全体構成を示している。車両のステアリングホイール上には、運転席８の乗員７から心拍情報を検出するための金属電極２が組み込まれており、運転席（シート）８には、その着座部および背当て部に複数のエア吹出孔４０が形成されている。
【００６１】

これらのエア吹出孔４０は、着座部内部に形成された連通路４１ならびに背当て部内部に形成された連通路４２にそれぞれ連通しており、連通路４１、４２はエア供給管４３を介して、シート加温・冷却装置３７の吹出口４４に接続されている。

【００６２】

シート加温・冷却装置３７は、その吹出口４４からシート８へ温風または冷風を供給することにより、シート８の空調を行う。シート加温・冷却装置３７は、電動ファン３８と加温・冷却部３９とを備えており、加温・冷却部３９は、ペルチェ効果による熱の発生・吸収を利用した素子により構成されている。

【００６３】

乗員７は車室内に設けられた設定スイッチ６により、例えば、「暖房」３レベル、「中立」、「冷房」３レベルの間で、シート加温・冷却装置３７によるシート空調の温度設定を切り替えることができる。

【００６４】

シート温度調節ＥＣＵ３４は、設定スイッチ６から乗員による設定に基づく設定温度ＴＳＥＴを示す信号を受け取り、さらにシート８に埋め込まれたシート温度センサ３５からシート温度ＡＳＴを示す信号を受け取って、通常は、設定温度ＴＳＥＴおよびシート温度ＡＳＴに基づいて、シート８が設定温度ＴＳＥＴに調節されるように、シート加温・冷却装置３７に制御信号ＣＴＬ１、ＣＴＬ２を出力する。乗員７が設定スイッチ６により「中立」を選択した場合の設定温度ＴＳＥＴは、例えば３４℃である。「暖房」を選択した場合はこれより高い温度に設定され、「冷房」を選択した場合はこれより低い温度に設定される。

【００６５】

さらに、シート温度調節ＥＣＵ３４は、金属電極２により検出した乗員の心拍情報に基づいて、乗員の疲労を検出し、乗員が疲労していると判断した場合には、上記通常の制御に優先させて、疲労度に基づく制御を行う。

【００６６】

シート温度調節ＥＣＵ３４は、その内部に、図示しないＣＰＵ、ＲＯＭ、ＲＡＭ等からなるマイクロコンピュータを備えており、車両のイグニションスイッチ（図示せず）がＯＮであるときに、車載バッテリ（図示せず）からの電力が供給されて作動するように構成されている。シート温度調節ＥＣＵ３４は、ＲＯＭに記憶されているプログラムを実行することにより、つぎのように動作する。

【００６７】

まず、上記第１実施形態と同様の方法により、金属電極２により検出した乗員の心拍情報に基づいて乗員の疲労度ＴＤを算出する。疲労度ＴＤが所定値未満であるときには、通常制御を実行し、これにより、設定温度ＴＳＥＴに基づいて、加温・冷却装置３７の吹出口４４から吹き出す空気の目標吹出温度（目標温度）および風量を決定し、この目標吹出温度および風量で連続的に吹き出しが行われるように、電動ファン３８および加温・冷却部３９にそれぞれ制御信号ＣＴＬ１、ＣＴＬ２を出力する。

【００６８】

一方、疲労度ＴＤが所定値を超えているときには、乗員７は疲労していると判断して、疲労度ＴＤに応じて決定される設定温度に基づいて目標吹出温度および風量を決定し、さらに加温時間を決定する。そして、決定した加温時間の間だけ目標吹出温度での加温が一時的に実行されるように、電動ファン３８および加温・冷却部３９にそれぞれ制御信号ＣＴＬ１、ＣＴＬ２を出力する。

【００６９】

但し、この場合、疲労度ＴＤに応じた設定温度より乗員７により設定された設定温度ＴＳＥＴの方が高い場合には、乗員７による設定温度ＴＳＥＴに基づく通常制御により、連続的な空気の吹き出しが行われるように制御される。また、吹き出される空気が冷風になる場合、つまり疲労度ＴＤに応じた設定温度または乗員７による設定温度ＴＳＥＴのうち高い方（低くない方）がシート温度ＡＳＴより低い場合には、空気の吹き出しが停止される

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【００７０】
図８は、シート温度調節ＥＣＵ３４により実行される処理の手順を示している。シート温度調節ＥＣＵ３４は、車両のイグニションスイッチがＯＮにされると作動を開始し、まずステップ１０５でデータ処理用メモリ（ＲＡＭ）の記憶内容などの初期化を行う。このとき、後のステップで用いる運転開始フラグＳＦおよび一時加温時間ＳＤが０に初期化される。運転開始フラグＳＦは、上記第１実施形態と同様に設定されて用いられる。また、一時加温時間ＳＤは、疲労度に基づいて一時的に温風を吹き出すことにより加温を行う場合の加温継続時間を表しており、後のステップ１８５において設定される。
【００７１】
つぎに、ステップ１１５で、各種センサ信号およびスイッチ信号を読み込む。このとき、車速センサ（図示せず）からの車速信号ＳＰＤ、シート温度センサ３５からのシート温度信号ＡＳＴ、設定スイッチ６からの設定温度信号ＴＳＥＴなどが読み込まれる。
【００７２】
ステップ１２５では、設定温度ＴＳＥＴに基づき、目標吹出温度ＳＴ２および風量ＳＢを決定する。具体的には、設定温度ＴＳＥＴとシート温度ＡＳＴに基づいて、シート温度を設定温度ＴＳＥＴに近づけるため必要な吹出温度が目標吹出温度ＳＴ２として算出される。
【００７３】
つぎに、ステップ１３５～１７０を上記第１実施形態と同様に実行する。但し、ステップ１３５の実行終了後はステップ１９５に進む。ステップ１４０においてＹＥＳと判定した場合およびステップ１７０においてＹＥＳと判定した場合にも、ステップ１９５に進む。また、ステップ１７０でＮＯと判定した場合は、ステップ１８５に進む。
【００７４】
ステップ１８５では、疲労度ＴＤの値に基づいて、目標吹出温度ＳＴ２、風量ＳＢ、および加温時間ＳＤを決定し、その後ステップ１９５に進む。ステップ１８５における処理の詳細は後述する。
【００７５】
ステップ１９５では、ステップ１２５あるいはステップ１８５において決定した目標吹出温度ＳＴ２および風量ＳＢ、ステップ１８５において決定した加温時間ＳＤに基づいて、電動ファン３８および加温・冷却部３９に制御信号ＣＴＬ１、ＣＴＬ２をそれぞれ出力する。具体的には、加温時間ＳＤが０より大きい場合には、加温時間ＳＤの間だけ目標温度ＳＴ２および風量ＳＢでの空気の吹き出しが一時的に行われ、その後、空気の吹き出しが停止されるように、制御信号ＣＴＬ１、ＣＴＬ２が出力される。加温時間ＳＤが０である場合は、目標吹出温度ＳＴ２および風量ＳＢでの吹き出しが連続的に行われるように、制御信号ＣＴＬ１、ＣＴＬ２が出力される。
【００７６】
ステップ１９５の実行後は、ステップ１１５に戻って、以下のステップが繰り返し実行され、実際には、ステップ１５０における通常時心拍数ＢＥＡＴｎ検出処理の実行後は、ステップ１１５～１９５が２分ほどの周期で実行されることになる。
【００７７】
図９および１０は、ステップ１８５において実行される疲労度ＴＤに基づく目標吹出温度ＳＴ２、風量ＳＢおよび加温時間ＳＤの決定処理の手順を示している。まず、ステップ６１０において、疲労度ＴＤが５％以上であるか否か判定する。ＮＯと判定した場合は、つまり疲労度ＴＤが２％以上５％未満である場合は、ステップ６１２において、設定温度ＴＳＥＴと３４℃のうち高い方（低くない方）がシート温度ＡＳＴより低いか否か判定する。ＹＥＳと判定した場合は、ステップ６１３において風量ＳＢを空気の吹き出しを行わないＬＥＶＥＬ０に設定して、メインルーチンに戻る。
【００７８】
ステップ６１２においてＮＯと判定した場合は、ステップ６１４において、設定温度ＴＳ

ＥＴが３４℃以下であるか否か判定する。ＮＯと判定した場合はメインルーチンに戻る。

【００７９】

ステップ６１４においてＹＥＳと判定した場合は、ステップ６２０において、３４℃を設定温度として目標吹出温度ＳＴ２を算出し、ステップ６２５において、風量ＳＢを最低風量であるＬＥＶＥＬ１に設定する。さらにステップ６３０において、加温時間ＳＤを１０秒に設定する。その後、メインルーチンに戻る。

【００８０】

一方、ステップ６１０においてＹＥＳと判定した場合は、ステップ６３５において疲労度ＴＤが１０％以上であるか否か判定する。ＮＯと判定した場合は、つまり疲労度ＴＤが５％以上１０％未満である場合は、ステップ６３７において、設定温度ＴＳＥＴと３５℃のうち高い方（低くない方）がシート温度ＡＳＴより低いか否か判定する。ＹＥＳと判定した場合は、ステップ６３８において風量ＳＢをＬＥＶＥＬ０に設定して、メインルーチンに戻る。

【００８１】

ステップ６３７においてＮＯと判定した場合は、ステップ６３９において、設定温度ＴＳＥＴが３５℃以下であるか否か判定する。ＮＯと判定した場合はメインルーチンに戻る。

【００８２】

ステップ６３９においてＹＥＳと判定した場合は、ステップ６４０において、設定温度を３５℃として目標吹出温度ＳＴ２を算出し、ステップ６４５において、風量ＳＢをＬＥＶＥＬ１より一段階高いＬＥＶＥＬ２に設定する。さらに、ステップ６５０において、加温時間ＳＤを２０秒に設定する。その後、メインルーチンに戻る。

【００８３】

ステップ６３５においてＹＥＳと判定した場合は、つまり疲労度ＴＤが１０％以上である場合は、ステップ６５２において、設定温度ＴＳＥＴと３７℃のうち高い方（低くない方）がシート温度ＡＳＴより低いか否か判定する。ＹＥＳと判定した場合は、ステップ６５３において風量ＳＢをＬＥＶＥＬ０に設定して、メインルーチンに戻る。

【００８４】

ステップ６５２においてＮＯと判定した場合は、ステップ６５４において、設定温度ＴＳＥＴが３７℃以下であるか否か判定する。ＮＯと判定した場合はメインルーチンに戻る。

【００８５】

ステップ６５４においてＹＥＳと判定した場合は、ステップ６５５において、設定温度と３７℃として目標吹出温度ＳＴ２を算出し、ステップ６６０において、風量ＳＢをＬＥＶＥＬ２より一段階高いＬＥＶＥＬ３に設定する。さらに、ステップ６６５において、加温時間ＳＤを３０秒に設定する。その後、メインルーチンに戻る。

【００８６】

このようにして、乗員７の疲労度ＴＤが２％以上である場合には疲労度ＴＤの値に応じた設定温度に基づいて目標吹出温度ＳＴ２および風量ＳＢを設定し、この目標吹出温度ＳＴ２および風量ＳＢで所定時間ＳＤだけ空気が吹き出され、所定時間経過後は空気の吹き出しが停止されるように制御される。実際には、疲労度ＴＤが２％未満に下がるまで、２分ほどの周期で、空気の吹き出しが断続的に繰り返される。

【００８７】

但し、乗員７の疲労度ＴＤが２％以上である場合でも、乗員による設定温度ＴＳＥＴが疲労度ＴＤの値に応じた設定温度より高い場合には、乗員による設定温度ＴＳＥＴに基づく通常の制御が実行される。

【００８８】

また、目標吹出温度ＳＴ２の算出に用いられる設定温度、つまり乗員による設定温度ＴＳＥＴと疲労度ＴＤの値に応じた設定温度のうち高い方（低くない方）がシート温度ＡＳＴより低い場合には、シート８を冷却するための冷風が吹き出されることになるため、この場合は風量ＳＢをＬＥＶＥＬ０に設定することにより、冷風の吹き出しを停止させる。冷風の吹き出しは、疲労度ＴＤが２％未満に軽減されるまで連続的に停止される。このよう

にして、冷風により乗員７の体が冷えて血液の流れが悪くなるようなことを回避できる。

【００８９】

このように、本実施形態のシート温度調節システムにおいては、運転席８に着座している乗員７の疲労が検出されたときには、シート加温・冷却装置３７によりシート８から乗員７に対して冷風ではない空気の吹き出しを行うため、乗員の血管を拡張させ、血液の流れを促進させることができる。これにより、乗員の疲労が軽減されたり、あるいは疲労の増加が抑制されたりする。また、この場合の空気の吹き出しは、疲労度ＴＤに応じた適切な吹出温度、加温時間で行うため、必要以上に高い温度や長い時間での吹き出しを行うことにより乗員が熱く感じたり不快に感じたりすることを回避できる。

【００９０】

本実施形態におけるシート加温・冷却装置３７は、本発明の加温手段および冷却手段に対応している。本実施形態におけるステップ１８５および１９５は、本発明の加温制御手段および冷却制御手段に対応している。

【００９１】

（他の実施形態）

本発明は上記実施形態に限定されることなく、つぎのように種々の変形が可能である。

【００９２】

上記実施形態では、乗員からの心拍信号をステアリングホイール上に組み込まれた金属電極により検出したが、乗員に金属電極を直接装着して、この電極により心拍信号を検出してもよく、また、電極は金属電極に限らず、導電性のものであればよく、例えばジェル状の導電性物質の電極などであってもよい。さらに、乗員の心拍信号は、シート内に組み込んだ超音波センサや加速度センサなどにより検出してもよい。

【００９３】

上記実施形態では、乗員の心拍数の低下に基づいて疲労を検出したが、心拍間隔の減少や心拍波形における振幅の減少に基づいて疲労を検出してもよい。また、心拍情報ではなく、その他の生理情報に基づいて疲労を検出してもよい。例えば、脳波情報、血圧情報、皮膚電気活動情報、眼球情報（瞬き、視線など）などの生体信号や、分泌物（汗，唾液などの生体物質）に関する情報に基づいて疲労を検出することができる。乗員が疲労している場合には、脳波におけるα波の増加、血圧の上昇などがみられ、さらに皮膚の電位差は０に近づき、目の開きや瞬きが少なくなったり、視線の動きがゆるやかになったりする。さらに、汗の分泌が減少し、唾液内のコルチゾールが減少する。

【００９４】

また、生理情報ではなく、乗員の動作情報や着座時間情報（着座継続時間）などに基づいて疲労を検出してもよい。乗員が疲労している場合には、上体を前後左右に動かしたり、腰をうかすなどの動作が見られるため、このような動作が検出された場合には、乗員が疲労していると判定することができる。着座時間情報に基づいて疲労を検出する場合は、例えば、着座継続時間が１時間を超えたら乗員は疲労していると判断することができる。その後、着座継続時間が所定値（例えば２時間）を超えたら、さらに疲労度が増加したと判断してもよい。

【００９５】

さらに、より正確に乗員の疲労度を算出するために、上記のような生理情報、動作情報、着座時間情報を組み合わせて用いてもよい。

【００９６】

上記第１実施形態では、運転席の加温手段として電気ヒータを用いたが、これに限らず、運転席への温風送風装置を用いてもよく、また化学変化により発熱する媒体を利用した加温装置を用いてもよい。温風送風装置は、上記第２実施形態における加温・冷却装置の加温・冷却部を、加温のみ行う加温部で置き換えた装置によって実現することができる。加温手段として温風送風装置を用いる場合、疲労度に応じて加温するときには、疲労度に応じた設定温度に基づいて算出された目標吹出温度の温風を、疲労度に応じて決定された加温時間だけ吹き出すことにより加温し、加温が終了したら、温風を停止させてもよいし、

あるいは送風に切り替えてもよい。

【００９７】

上記第１実施形態では、乗員７の疲労が検出された場合には、ユーザによる設定が「弱」であるか「強」であるかに拘わらず、疲労度ＴＤに基づいて目標温度ＳＴ１を設定したが、ユーザによる設定が「強」である場合は、疲労が検出された場合でも、目標温度ＳＴ１は設定温度ＴＳＥＴ（５０℃）に設定してもよい。また、ユーザによる設定が「強」である場合は、このように目標温度ＳＴ１を５０℃に設定するだけでなく、疲労が検出された場合でも「強」に設定されている場合の通常制御を行って、ヒータ目標温度を５０℃とした連続的な加温を行うようにしてもよい。

【００９８】

上記第２実施形態では、疲労度に応じて算出された吹出温度で所定時間空気の吹き出しを行う場合には、所定時間経過後は空気の吹き出しを停止させたが、所定時間経過後は乗員による設定温度に基づいて算出した目標吹出温度での吹き出しを行うようにしてもよい。また、上記第２実施形態では、目標吹出温度での吹き出しを行うと冷風が吹き出されるような場合は、この冷風の吹き出しを連続的に停止させたが、所定時間だけ冷風の吹き出しを停止させて、所定時間経過後は乗員による設定温度に基づいて算出した目標吹出温度あるいは疲労度に応じて算出された目標吹出温度での吹き出しを行うようにしてもよい。

【００９９】

上記実施形態では、乗員の疲労が検出された場合に、疲労度に応じた設定温度に基づいて算出された一定の目標温度（あるいは目標吹出温度）での加温を所定時間行ったが、目標温度にゆらぎをもたせてもよい。例えば、第２実施形態において、疲労度がＴＤが２％以上５％未満である場合に、図１１に示すように、１０秒の加温時間の間に吹出温度をＳＴ２±０．３℃の範囲内でゆらがせることができる。また、上記実施形態では、疲労が検出されてから疲労が２％未満に軽減されるまでの間は、２分ほどの周期で加温が断続的に繰り返されることになるが、この場合の加温時間と加温休止時間を所定の範囲でゆらがせるようにしてもよい。このように加温の温度や加温時間にゆらぎをもたせると、乗員は不快感を覚えにくい。

【０１００】

上記実施形態では、乗員の疲労が検出されると、疲労度ＴＤが２％未満に軽減されるまで、電気ヒータ３による加温あるいはシート加温・冷却装置３７による空気の吹き出しが断続的に行われたが、これを連続的に行うようにしてもよい。

【０１０１】

上記実施形態では、疲労度ＴＤを「２％以上５％未満」「５％以上１０％未満」「１０％以上」の３段階の範囲に分けて疲労度ＴＤに基づく制御を行ったが、これと異なる範囲に区切ってもよく、また３段階に限らず、２段階や４段階以上に区切ってもよい。また、疲労が検出された場合の疲労度ＴＤの範囲を１段階として、つまり、疲労が検出された場合（例えば疲労度ＴＤが２％以上）と疲労が検出されない場合（疲労度ＴＤが２％未満）のみ区別して、疲労が検出された場合は疲労度ＴＤの値に拘わらず同様の制御を行うようにしてもよい。

【０１０２】

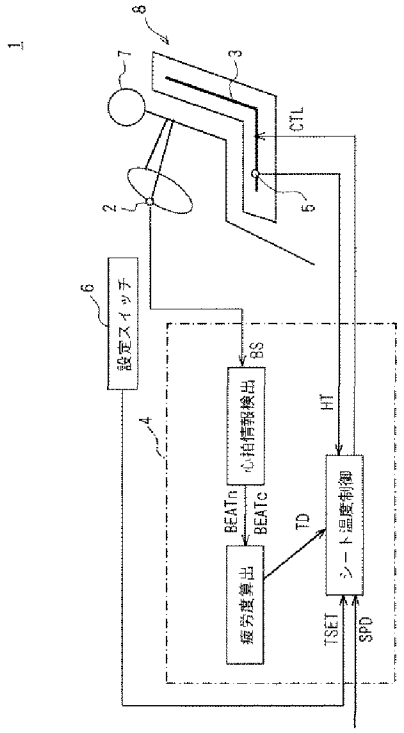
また、上記実施形態では、乗員７の疲労を検出した場合の目標温度（あるいは目標吹出温度）と加温時間を、同じ３段階の疲労度範囲に対してそれぞれ設定したが、例えば、疲労度ＴＤが２％以上５％未満のとき、および５％以上１０％未満のときはいずれも加温時間を１５秒に設定するなど、目標温度と加温時間を異なる区切りで区切った疲労度範囲に対して設定するようにしてもよい。

【０１０３】

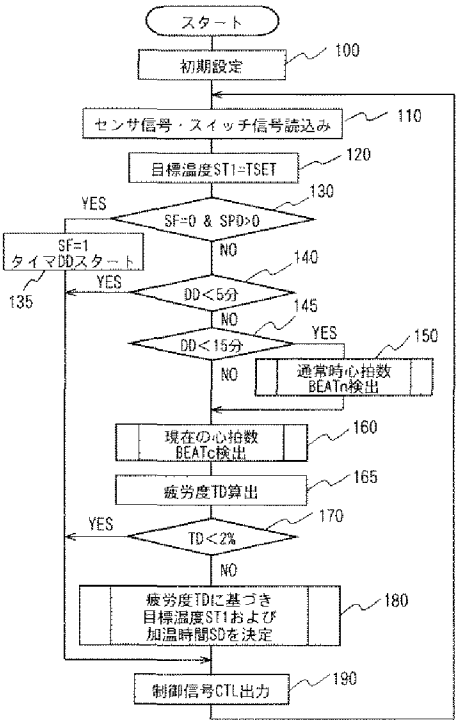
上記第２実施形態では、設定温度がシート温度より低い場合に吹き出される空気を冷風として、乗員７の疲労が検出された場合にはこれを停止したが、目標吹出温度ＳＴ２が２５℃未満である場合に吹き出される空気を冷風として、このような場合には風量ＳＢをＬＥＶＥＬ０に設定することにより、空気の吹き出しを停止するようにしてもよい。

【０１０４】
上記第２実施形態では、ステップ１３５およびステップ１８５において、加温・冷却装置３７からの空気の目標吹出温度ＳＴ２をシート温度ＡＳＴと設定温度に基づいて決定したが、さらにシートの周囲の空気温度などを加味して決定するようにしてもよい。
【０１０５】
上記第２実施形態では、加温・冷却装置３７の加温・冷却部３９はペルチェ効果による熱の発生・吸収を利用した素子を用いて構成されていたが、熱電変換機能を有する熱電素子により構成されていてもよく、また、電子冷却素子により構成されていてもよい。
【０１０６】
上記実施形態において、シート温度調節のための制御は専用のシート温度制御ＥＣＵにより実行したが、エアコンＥＣＵなどにより実行するようにしてもよい。
【０１０７】
上記実施形態では、車両の運転席の温度調節を疲労度に応じて行ったが、助手席の温度調節も疲労度に応じて行うようにしてもよい。あるいは、疲労度に応じたシート温度調節は助手席のみとし、運転席は着座者の眠気を覚ますための制御を行うようにしてもよい。また、後部座席の温度調節を疲労度に応じて行ってもよく、後部座席に主に人が着座するような車両においては、後部座席のみ疲労度に応じた温度調節を行ってもよい。
【０１０８】
上記実施形態では、本発明を車両の座席の温度調節システムに適用したが、これに限らず、飛行機の座席や、歯科の椅子、床屋の椅子など、着座者が自由に立ち上ることができない状況で着座するシート、あるいは作業場や家庭での事務椅子、家庭用リクライニングシートなど、さまざまなシートのための温度調節システムに本発明を適用することができる。
【図面の簡単な説明】
【図１】本発明の第１実施形態に係るシート温度調節システムの全体構成図である。
【図２】シート温度調節ＥＣＵにより実行される制御処理のメインルーチンのフローチャートである。
【図３】図２に示すステップ１５０において実行される通常時心拍数検出処理のフローチャートである。
【図４】心拍信号の時間間隔（ＲＲＩ）を示す説明図である。
【図５】図２に示すステップ１６０において実行される現在心拍数検出処理のフローチャートである。
【図６】図２に示すステップ１８０において実行される疲労度に基づく目標温度および加温時間決定処理のフローチャートである。
【図７】本発明の第２実施形態に係るシート温度調節システムの全体構成図である。
【図８】シート温度調節ＥＣＵにより実行される制御処理のメインルーチンのフローチャートである。
【図９】図８に示すステップ１８５において実行される疲労度に基づく目標吹出温度、風量および加温時間決定処理の前半部分のフローチャートである。
【図１０】図８に示すステップ１８５において実行される疲労度に基づく目標吹出温度、風量および加温時間決定処理の後半部分のフローチャートである。
【図１１】シート加温・冷却装置から吹き出す空気の吹出温度にゆらぎを与える場合の目標吹出温度の変化を示す図である。
【符号の説明】
２　金属電極（着座者情報検出手段）
３　電気ヒータ（加温手段）
７　乗員（着座者）
８　運転席（シート）
３７　シート加温・冷却装置（加温手段・冷却手段）

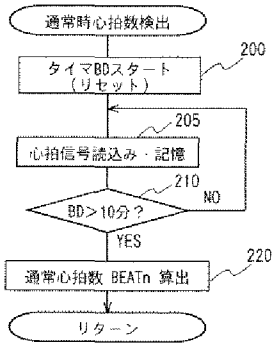
【図1】


1
2
3
4
5
6
7
8
CTL
設定スイッチ
BS
心拍情報検出
HIT
BEATn
BEATc
TD
シート温度制御
疲労度算出
TSET
SPD

【図2】


スタート
初期設定
100
センサ信号・スイッチ信号読込み
110
目標温度ST1=TSET
120
SF=0 & SPD>0
130
YES
NO
SF=1
タイマDDスタート
135
DD<5分
140
YES
NO
DD<15分
145
YES
NO
通常時心拍数
BEATn検出
150
現在の心拍数
BEATc検出
160
疲労度TD算出
165
TD<2%
170
YES
NO
疲労度TDに基づき
目標温度ST1および
加温時間SDを決定
180
制御信号CTL出力
190

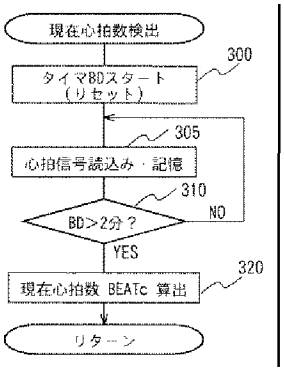
【図3】


通常時心拍数検出
タイマBDスタート
（リセット）
200
205
心拍信号読込み・記憶
210
BD>10分？
NO
YES
通常心拍数 BEATn 算出
220
リターン

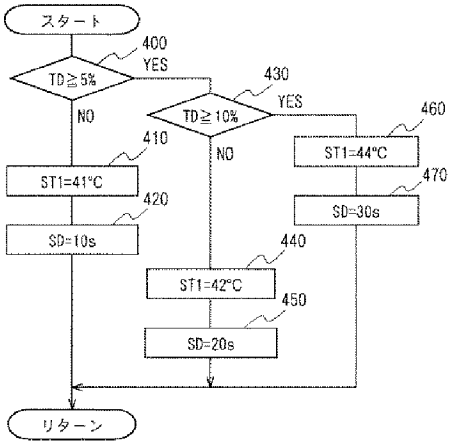
【図4】


RRI
R波

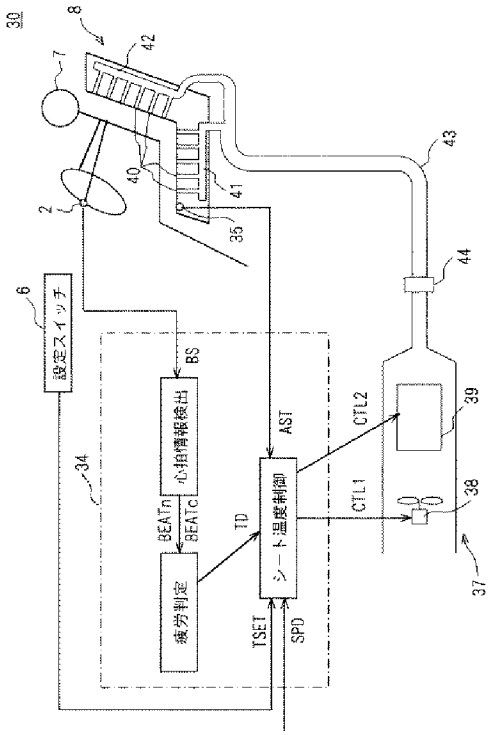
【図5】


現在心拍数検出
タイマBDスタート
（リセット）
300
305
心拍信号読込み・記憶
310
BD>2分？
NO
YES
現在心拍数 BEATc 算出
320
リターン

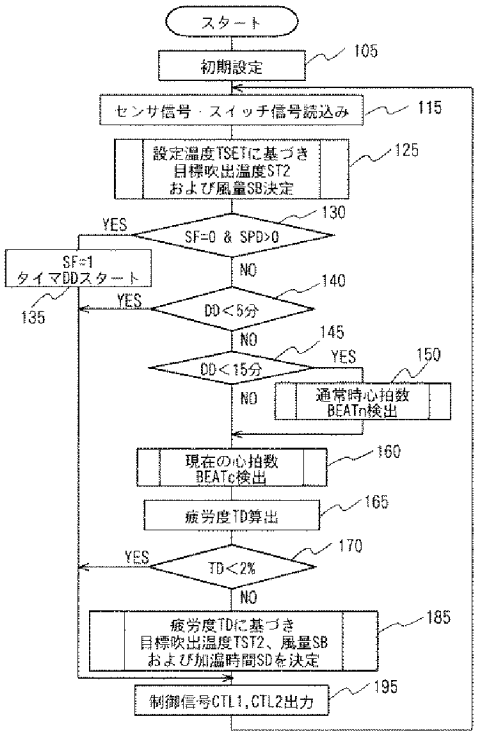
【図6】



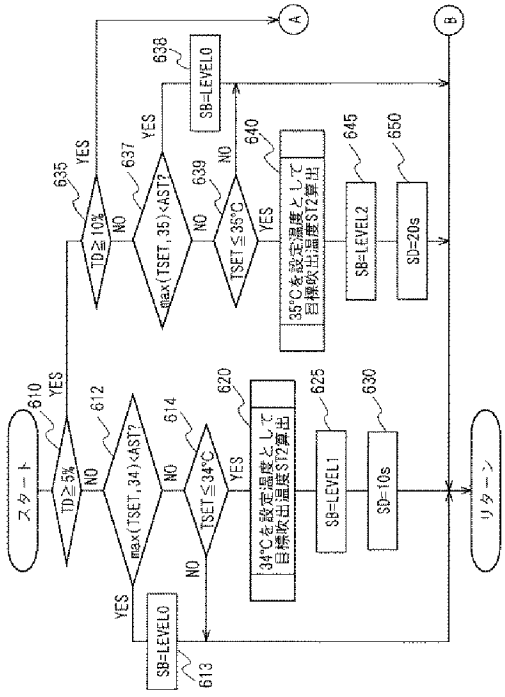
【図7】



【図8】

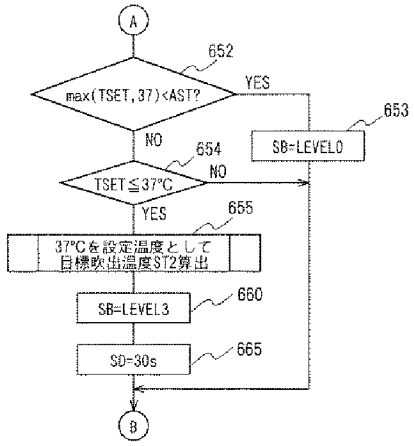


【図9】

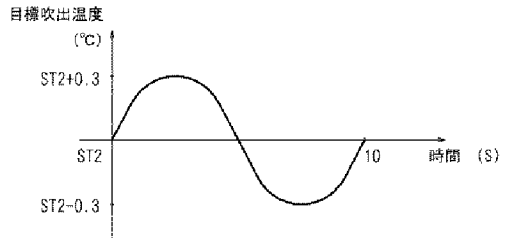


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【図10】


A
652
max(TSET,37)<AST?
YES
653
SB=LEVEL0
NO
654
TSET≦37℃
NO
YES
655
37℃を設定温度として
目標吹出温度ST2算出
SB=LEVEL3
660
SD=30s
665
B

【図11】


目標吹出温度
(℃)
ST2+0.3
ST2
ST2-0.3
10
時間 (S)

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,240	04/15/2014	Christopher P. Ricci	6583-547	4804

111285 7590 07/14/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
RAMESH, KRISHNAN

ART UNIT	PAPER NUMBER
3668	

NOTIFICATION DATE	DELIVERY MODE
07/14/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,240	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner KRISHNAN RAMESH	Art Unit 3668	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☒ The drawing(s) filed on *04/15/2014* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/25/2014, 05/07/2015*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

DETAILED ACTION

Notice of Pre-AIA or AIA Status

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA. In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

Status of Claims

This action is in response to Application No. 14253240 filed on 04/15/2014.

Claims 1-20 are pending and have been examined below.

Priority

Examiner acknowledges Applicant's claim for the benefit of a prior-filed application under 35 USC 119(e) or under 35 USC 120, 121, or 365(c).

Information Disclosure Statement

The information disclosure statement(s) (IDS) submitted on 11/25/2014 and 05/07/2015 was/were filed before the mailing date of the current non-final Office Action. The submission is in compliance with the provisions of 37 CRF 1.97. Accordingly, the information disclosure statement(s) is/are being considered by the examiner.

Related Applications

Because of the large amount of related applications as listed in [0002] of Applicant's specification, Examiner requests Applicant to provide the patent status of all the related applications in the response to this Office Action.

Specification

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 USC 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a)(1) the claimed invention was patented, described in a printed publication, or in public use, on sale, or otherwise available to the public before the effective filing date of the claimed invention.

Claims 1, 2, 6-12, and 16-20 are rejected under 35 USC 102 as being anticipated by US20080269958 ("Fliev").

Claim 1

Fliev discloses a method, comprising:

- determining a presence of a user inside a vehicle ([0043] *occupant recognition*);

- determining an identity of the user ([0044] *Occupant recognition is a parameter that characterizes the identity of the occupant*);
- receiving input provided by the user, the input having a context associated therewith ([0032] *In one example response, the EAS 10 may limit or discontinue dialog that it initiates with the occupant 12 while the occupant 12 is angry. In another example response, the avatar may be rendered in blue color tones with a concerned facial expression and ask in a calm voice "Is something bothering you?",* [0026]); and
- retrieving, based at least partially on the input provided by the user, a virtual personality for presentation to at least one device associated with the vehicle ([0032] *In one example response, the EAS 10 may limit or discontinue dialog that it initiates with the occupant 12 while the occupant 12 is angry. In another example response, the avatar may be rendered in blue color tones with a concerned facial expression and ask in a calm voice "Is something bothering you?"*).

Claim 2

Fliev discloses wherein determining the presence of the user inside the vehicle further comprises: detecting a person via at least one image sensor associated with the vehicle ([0045] *image recognition module 82 recognizes occupant features*).

Claim 6

Fliev discloses wherein receiving the input provided by the user further comprises: determining the context of the input, wherein the context corresponds to an emotional state of the user ([0032] *In one example response, the EAS 10 may limit or discontinue dialog that it initiates with the occupant 12 while the occupant 12 is angry. In another example response, the avatar may be rendered in blue color tones with a concerned facial expression and ask in a calm voice "Is something bothering you?"*).

Claim 7

Fliev discloses wherein retrieving the virtual personality for presentation to at least one device further comprises: determining, based at least partially on the context of the input, a content of the virtual personality to suit the emotional state of the user ([0032] *In one example response, the EAS 10 may limit or discontinue dialog that it initiates with the occupant 12 while the occupant 12 is angry. In another example response, the avatar may be rendered in blue color tones with a concerned facial expression and ask in a calm voice "Is something bothering you?"*).

Claim 8

Fliev discloses comparing the determined content of the virtual personality with emotional information in a user profile virtual personality; and generating, when the determined content of the virtual personality differs from the emotional information in the user profile virtual personality, an adjusted user profile virtual personality for presentation, wherein the adjusted user profile includes the content to suit the emotional

state of the user ([0032] *In one example response, the EAS 10 may limit or discontinue dialog that it initiates with the occupant 12 while the occupant 12 is angry. In another example response, the avatar may be rendered in blue color tones with a concerned facial expression and ask in a calm voice "Is something bothering you?"*).

Claim 9

Fliev discloses presenting the virtual personality having the content to suit the emotional state of the user, wherein the content of the virtual personality includes an opposite emotional state to the emotional state of the user ([0032] *In one example response, the EAS 10 may limit or discontinue dialog that it initiates with the occupant 12 while the occupant 12 is angry. In another example response, the avatar may be rendered in blue color tones with a concerned facial expression and ask in a calm voice "Is something bothering you?"*).

Claim 10

Fliev discloses wherein the virtual personality includes at least one of an avatar, a voice output, a visual output, a tone, and a volume intensity ([0032] *avatar*).

Claim 11

Claim 11 recites subject matter similar to that of claim 1 and is rejected under the same grounds.

Claim 12

Claim 12 recites subject matter similar to that of claim 2 and is rejected under the same grounds.

Claim 16

Claim 16 recites subject matter similar to that of claim 6 and is rejected under the same grounds.

Claim 17

Claim 17 recites subject matter similar to that of claim 7 and is rejected under the same grounds.

Claim 18

Claim 18 recites subject matter similar to that of claim 8 and is rejected under the same grounds.

Claim 19

Claim 19 recites subject matter similar to that of claim 9 and is rejected under the same grounds.

Claim 20

Claim 20 recites subject matter similar to that of claims 6 and 7 and is rejected under the same grounds.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 USC 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 3 and 13 are rejected under 35 USC 103(a) as being unpatentable over Fliev.

Claim 3

Fliev discloses wherein determining the identity of the user further comprises: identifying facial features associated with the person detected via the at least one image sensor ([0045] *image recognition module 82 recognizes occupant features*, [0043] *occupant recognition, gaze direction, head nods, smile index, lip size and shape, pupil position, pupil size*). Fliev fails to explicitly disclose determining whether the identified facial features associated with the person match user characteristics stored in a memory. However, Fliev does disclose determining whether identified vocal features associated with the person match stored user characteristics ([0054] *occupant recognition parameter is generated by comparing a sound recording captured from the occupant 12 with stored sound features associated with a known list of occupants*). Given that Fliev already recognizes facial features of the person (already suggesting by the *recognition*

that the identification is determined by comparing to a previous data set), one of ordinary skill would have found it obvious to employ a similar algorithm of determining whether the identified facial features associated with the person match user characteristics stored in a memory.

Claim 13

Claim 13 recites subject matter similar to that of claim 3 and is rejected under the same grounds.

Claims 4 and 14 are rejected under 35 USC 103(a) as being unpatentable over Fliev.in view of US20120215375 (“Chang”).

Claim 4

Fliev fails to explicitly disclose wherein the identified facial features associated with the person do not match the user characteristics stored in the memory, and wherein determining the identity of the user further comprises: prompting the user for identification information; receiving identification information from the user; and storing the identification information received from the user in the memory. However, Fliev does disclose facial feature recognition for identifying users ([0043], [0044]). Furthermore, Chang discloses wherein the identified facial features ([0022] *retinal scan device scans a driver's eye*) associated with the person do not match the user characteristics stored in the memory ([0022] *if no match is found, the driver identification module 202*

determines that a new driver has entered the vehicle), and wherein determining the identity of the user further comprises: prompting the user for identification information ([0022] *keypad or another input device receives an identification from the driver and transmits the identification to the identification module*); receiving identification information from the user ([0022] *keypad or another input device receives an identification from the driver and transmits the identification to the identification module*); and storing the identification information received from the user in the memory ([0022] *stored identification information*).

Fliev and Chang both disclose methods of identifying drivers or users in a vehicle. For the trivial case in which recognized information of the driver do not match stored information (the driver is new to the vehicle), Chang teaches receiving identifying information from the driver for storage, a feature well-known in the general art of user identification and recognition, and storage of such information. Thus, it would have been obvious to one having ordinary skill in the art before the effective filing date of Applicant's invention to modify they system in Fliev to include the teaching in Chang since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claim 14

Claim 14 recites subject matter similar to that of claim 4 and is rejected under the same grounds.

Claims 5 and 15 are rejected under 35 USC 103(a) as being unpatentable over Fliev in view of US20130232142 (“Nielsen”).

Claim 5

Fliev discloses wherein the identified facial features associated with the person match the user characteristics stored in the memory (see prior art rejection of claim 3). Fliev fails to disclose wherein the virtual personality is retrieved from a user profile associated with the user identified. However, Fliev does disclose the virtual personality interacting with a recognized user ([0054], [0032]). Furthermore, Nielsen teaches a system in which a virtual personality is retrieved from a user profile associated with the user identified ([0033] *the prompt generated by the example confirmation requester 312 may include a name, picture, and/or avatar associated with the user identification information obtained by the handling pattern recognizer 308 in conjunction with a yes/no question, such as "Are you this person?"*).

Fliev and Nielsen both disclose systems that utilize a virtual personality to represent or interact with a user, where Nielsen simply explicitly teaches that a virtual personality may be associated with a user profile of a user, a feature easily implemented in Fliev. Thus, it would have been obvious to one having ordinary skill in the art before the effective filing date of Applicant's invention to modify the system in

Fliev to include the teaching in Nielsen since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Claim 15

Claim 15 recites subject matter similar to that of claim 5 and is rejected under the same grounds.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner KRISHNAN RAMESH, whose telephone number is (571)272-6407. The examiner can normally be reached Monday-Thursday 5:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fadey S. Jabr can be reached at (571)272-1516. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/K. R./
Examiner, Art Unit 3668
/Yonel Beaulieu/
Primary Examiner – AU3668

Notice of References Cited	Application/Control No. 14/253,240	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner KRISHNAN RAMESH	Art Unit 3668	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,142,696 B1	11-2006	Engelsberg et al.	382/118
*	B	US-7,386,799 B1	06-2008	Clanton et al.	715/758
*	C	US-2008/0269958 A1	10-2008	Filev et al.	701/1
*	D	US-2008/0278298 A1	11-2008	Waeller et al.	340/425.5
*	E	US-2009/0144622 A1	06-2009	Evans et al.	715/706
*	F	US-2010/0217458 A1	08-2010	Schweiger et al.	701/3
*	G	US-2011/0093158 A1	04-2011	Theisen et al.	701/30
*	H	US-2011/0172873 A1	07-2011	Szwabowski et al.	701/30
*	I	US-2011/0193726 A1	08-2011	Szwabowski et al.	340/996
*	J	US-2011/0298808 A1	12-2011	Rovik, Christopher Lee	345/473
*	K	US-2012/0150651 A1	06-2012	Hoffberg et al.	705/14.58
*	L	US-2012/0215375 A1	08-2012	Chang, Hsuan	701/1
*	M	US-2013/0013157 A1	01-2013	KIM et al.	701/49

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

Notice of References Cited	Application/Control No. 14/253,240	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner KRISHNAN RAMESH	Art Unit 3668	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2013/0030645 A1	01-2013	Divine et al.	701/36
*	B	US-2013/0173531 A1	07-2013	Rinearson et al.	707/608
*	C	US-2013/0232142 A1	09-2013	Nielsen et al.	707/736
*	D	US-2014/0171752 A1	06-2014	PARK et al.	600/301
*	E	US-2014/0200737 A1	07-2014	Lortz et al.	701/1
*	F	US-2014/0347265 A1	11-2014	AIMONE et al.	345/156
*	G	US-2015/0012186 A1	01-2015	Horseman, Samantha J.	701/49
*	H	US-2015/0032670 A1	01-2015	Brazell, Robert	706/11
*	I	US-2015/0081133 A1	03-2015	Schulz, Jason A.	701/1
*	J	US-2015/0088515 A1	03-2015	Beaumont et al.	704/251
*	K	US-2015/0081167 A1	03-2015	Pisz et al.	701/36
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
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	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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	X	

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,233	04/15/2014	Christopher P. Ricci	6583-590	8647

111285 7590 07/17/2015

Sheridan Ross P.C.
1560 Broadway
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EXAMINER
SMITH, ISAAC G

ART UNIT	PAPER NUMBER
3662	

NOTIFICATION DATE	DELIVERY MODE
07/17/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Office Action Summary	Application No. 14/253,233	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ISAAC SMITH	Art Unit 3662	AIA (First Inventor to File) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04/15/2014*.

☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims*

5)☒ Claim(s) *1-20* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-20* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a)☐ All b)☐ Some** c)☐ None of the:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

** See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date *11/25/2014,11/25/2014,05/08/2015*.

3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .

4) ☐ Other: _____.

The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

DETAILED ACTION

Claims 1-20 have been examined.

P = paragraph e.g. P[0001] = paragraph[0001]

Claim Objections

Claim 18 is objected to because of the following informalities: Claim 18 recites "**wherein wherein the data**" in lines 1 and 2. Only a single "wherein" should appear. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):
(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-20 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Independent Claims 1 and 11 recite "**determining, based at least partially on the detected deviation, to provide an output configured to address the deviation**" and independent Claim 19 recites "**determine, based at least partially on the detected deviation, to provide an output configured to address the deviation**". It is unclear if "determining" to provide an output and to "determine" to provide an output are both actually a step of providing the output, or if these "determining" and "determine" steps are merely a decision that an output should be provided, without actually providing the output.

It is understood by the Examiner that the "determining" and "determine" steps encompass merely a determination that an output should be "provided".

As per Claims 7 and 16, the claims recite "**wherein the one or more settings include at least one of a vehicle interior environment, temperature, air composition, oxygen level, sound level, window position, seat position, and lighting level**". The limitations "**vehicle interior environment**", "**air composition**" and "**oxygen level**" are not vehicle settings and are rather descriptions related to an environment, air and oxygen, and therefore, it is unclear what vehicle setting is related to each of "**vehicle interior environment**", "**air composition**" and "**oxygen level**", and it is unclear what vehicle device is controlled to achieve the adjusting of a setting as claimed. For example, it is unknown what vehicle component and therefore vehicle setting would relate to an "oxygen level".

It is understood by the Examiner that the "settings" may be related in any way to any vehicle systems and/or components in any way which allows the claimed functions to be performed.

Claim Rejections - 35 USC § 103

In the event the determination of the status of the application as subject to AIA 35 U.S.C. 102 and 103 (or as subject to pre-AIA 35 U.S.C. 102 and 103) is incorrect, any correction of the statutory basis for the rejection will not be considered a new ground of rejection if the prior art relied upon, and the rationale supporting the rejection, would be the same under either status.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent for a claimed invention may not be obtained, notwithstanding that the claimed invention is not identically disclosed as set forth in section 102 of this title, if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 8-15 and 17-20 are rejected under 35 U.S.C. 103 as being unpatentable over Breed et al. (7,164,117) in view of Ngo (2011/0193707).

Regarding Claim 1, Breed et al. teaches the claimed **method, comprising:**

detecting a presence of at least one user in a vehicle ("The interior monitoring system is capable of detecting the presence of an object, occupying objects such as a

box, an occupant or a rear facing child seat 2, determining the type of object, determining the location of the object, and/or determining another property or characteristic of the object", see col.191, particularly lines 15-34);

determining an identity of the at least one user ("A processor 264 is embodied with the pattern recognition algorithm thus trained to identify whether a person is the authorized individual by analysis of subsequently obtained data derived from optical images 262", see col.313, particularly lines 23-35);

receiving data associated with the at least one user, wherein the data includes biometric information ("…other occupant sensing systems can also be provided that monitor the breathing or other motion of the driver, for example, including the driver's heartbeat, eye blink rate, gestures, direction or gaze and provide appropriate responses including the control of a vehicle component including any such components listed herein", see col.238, particularly lines 51-59 and "The obtained image, or images if multiple optical receiving units are used, plus other **biometric information**, are input into the pattern recognition algorithm 271, preferably after some image processing, and a determination is made whether the pattern recognition algorithm indicates that the image includes an authorized driver 272", see col.314, particularly lines 7-21).

Breed et al. does not explicitly recite "**an established baseline biometric profile associated with the at least one user**" as in the claimed

detecting a deviation between the received data and an established baseline biometric profile associated with the at least one user; and

determining, based at least partially on the detected deviation, to provide an output configured to address the deviation.

However, Breed et al. does teach monitoring health information of a driver and determining whether or not the monitored health information requires activation of a vehicle function ("The health state determining means 151 may be used to detect whether the driver's breathing is erratic or indicative of a state in which the driver is dozing off…In this case, the health state of the driver is relayed through the processor 153 and the communications unit 154 to the remote facility and appropriate action can be taken. For example, it would be possible to transmit a command, e.g., in the form of a signal, to the vehicle to activate an alarm or illuminate a warning light or if the vehicle is equipped with an automatic guidance system and ignition shut-off, to cause the vehicle to come to a stop on the shoulder of the roadway or elsewhere out of the traffic stream", see col.327, particularly lines 1-23).

Furthermore, **Ngo (2011/0193707)** teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle (Ngo; "The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions", see P[0014]), and where an alert is activated if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; "The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication", see P[0015]

and “…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate”, see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range”, see P[0020]). Therefore, the baseline heart rate is equivalent to the claimed received "**established baseline biometric profile associated with the at least one user**", and the activation of an alarm when the monitored heart rate is outside an acceptable range is equivalent to the claimed “outputting” of a signal based on the "deviation".

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to provide an output based on a comparison between detected biometric data of a user and baseline biometric data for the user, as taught by Ngo et al., in order to “detect driver fatigue or sleepiness in a cost effective manner” (Ngo et al.; see P[0003]).

Regarding Claim 2, Breed et al. does not explicitly teach the claimed **method of claim 1, wherein prior to receiving data associated with the at least one user the method further comprises:**

determining the baseline biometric profile associated with the at least one user; and

storing the determined baseline biometric profile in a user profile memory associated with the at least one user.

Ngo (2011/0193707) teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle using an initial heart rate which establishes the baseline heart rate and an acceptable heart rate range (Ngo; “The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions”, see P[0014]), and where an alert is activated if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; “The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication”, see P[0015] and “…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate”, see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range”, see P[0020]). Therefore, the baseline heart rate is stored prior to receiving new heart rate data which is used to determine whether or not to activate an alarm.

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to store baseline biometric data for a user suing initial

data prior which is obtained prior to receiving additional data used to create an output, as taught by Ngo et al., in order to “detect driver fatigue or sleepiness in a cost effective manner” (Ngo et al.; see P[0003]).

Regarding Claim 3, Breed et al. teaches the claimed **method of claim 1, wherein determining the presence of the at least one user inside the vehicle further comprises:**

detecting a person via at least one image sensor associated with the vehicle (“A processor 264 is embodied with the pattern recognition algorithm thus trained to identify whether a person is the authorized individual by analysis of subsequently obtained data derived from optical images 262”, see col.313, particularly lines 23-35, where clearly a person must be present in an obtained image in order to identify the person).

Regarding Claim 4, Breed et al. teaches the claimed **method of claim 3, wherein determining the identity of the at least one user further comprises:**

identifying facial features associated with the person detected via the at least one image sensor; and

determining whether the identified facial features associated with the person match user characteristics stored in a memory user (see section "6.5 Face Recognition" and “A processor 264 is embodied with the pattern recognition algorithm thus trained to identify whether a person is the authorized individual by analysis of

subsequently obtained data derived from optical images 262", see col.313, particularly lines 23-35 and "…distinctive facial markings are evident when viewed under near UV or MWIR illumination that can be used to positively identify a person", see col.313, particularly lines 36-45, where it is clear that the processor includes a memory in order to recognize stored patterns).

Regarding Claim 5, Breed et al. does not explicitly teach the claimed **method of claim 1, wherein the data associated with the at least one user is provided by a sensor worn by the at least one user**.

Ngo (2011/0193707) teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle using an initial heart rate which establishes the baseline heart rate and an acceptable heart rate range (Ngo; "The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions", see P[0014]), where the heart rate may be obtained by **a device worn by the user** (Ngo; "The heart rate monitor 18 may be a device that is worn by a driver 20", see P[0010]).

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to monitor biometric data using a device worn by a user,

as taught by Ngo et al., in order to “detect driver fatigue or sleepiness in a cost effective manner” (Ngo et al.; see P[0003]).

Regarding Claim 6, Breed et al. does not explicitly teach the same “baseline” data of Claim 1 used to control a vehicle output as in the claimed **method of claim 1, wherein the output configured to address the deviation is provided by the vehicle, and wherein addressing the deviation includes adjusting one or more settings associated with the vehicle**.

However, as mentioned with respect to Claim 1, Breed et al. does teach monitoring health information of a driver and determining whether or not the monitored health information requires activation of a vehicle function (“The health state determining means 151 may be used to detect whether the driver's breathing is erratic or indicative of a state in which the driver is dozing off…In this case, the health state of the driver is relayed through the processor 153 and the communications unit 154 to the remote facility and appropriate action can be taken. For example, it would be possible to transmit a command, e.g., in the form of a signal, to the vehicle to activate an alarm or illuminate a warning light or if the vehicle is equipped with an automatic guidance system and ignition shut-off, to cause the vehicle to come to a stop on the shoulder of the roadway or elsewhere out of the traffic stream", see col.327, particularly lines 1-23).

Furthermore, **Ngo (2011/0193707)** teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle (Ngo; “The determined initial heart rate also provides a baseline heart rate

indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions", see P[0014]), and where **an alert is activated** if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; "The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication", see P[0015] and "…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate", see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range", see P[0020]). Therefore, the baseline heart rate is equivalent to the claimed received "**established baseline biometric profile associated with the at least one user**", and the activation of an alarm when the monitored heart rate is outside an acceptable range is equivalent to the claimed "outputting" of a signal based on the "deviation". **The activation of an alert system of the vehicle of Ngo is equivalent to adjusting a "setting" of a vehicle as claimed**.

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to provide an output which adjusts a vehicle setting or function based on a comparison between detected biometric data of a user and baseline biometric data for the user, as taught by Ngo et al., in order to "detect driver fatigue or sleepiness in a cost effective manner" (Ngo et al.; see P[0003]).

Regarding Claim 8, Breed et al. teaches the claimed **method of claim 1, further comprising:**

detecting a vehicle incident via one or more sensors associated with the vehicle ("The transmission of the information could be triggered by a signal from a crash sensor 591 that the vehicle was experiencing a crash or experienced a crash. The information transmitted could come from the occupant sensing system 600 so that the emergency response could be tailored to the status of the occupants", see col.329, particularly lines 1-18)**;**

collecting, based at least partially on the detected vehicle incident, the data associated with the at least one user ("…other occupant sensing systems can also be provided that monitor the breathing or other motion of the driver, for example, including the driver's heartbeat, eye blink rate, gestures, direction or gaze and provide appropriate responses including the control of a vehicle component including any such components listed herein", see col.238, particularly lines 51-59 and see section "9.1 Transmission of Occupancy Information" including "**In the event of an accident**, the electronic system associated with the telematics system **interrogates the various interior monitoring system memories** in processor 20 and can arrive at a count of the number of occupants in the vehicle, if each seat is monitored, and, in more sophisticated systems, even makes a determination as to whether each occupant was wearing a seatbelt and if he or she is moving after the accident, **and/or the health state of one or more of the occupants** as described above, for example" and "FIG. 134

shows a schematic diagram of an embodiment of the invention including a system for **determining the presence and health state of any occupants of the vehicle** and a telecommunications link. This embodiment includes means for determining the presence of any occupants 150 which may take the form of a **heartbeat sensor, chemical sensor and/or motion sensor as described above and means for determining the health state of any occupants 151** as discussed above", see col.325, particularly lines 24-67 and col.326, particularly lines 1-29)**; and**

sending the…**collected data associated with the at least one user to a third party** ("The phone system or telematics communication device 34 can be coupled to the vehicle interior monitoring system in accordance with any of the embodiments disclosed herein and serves to establish a communications channel with one or more remote assistance facilities, such as an EMS facility or dispatch facility from which emergency response personnel are dispatched", see col.325, particularly lines 25-35 and "In use after a crash, the presence determining means 150, health state determining means 151 and location determining means 152 obtain readings from the passenger compartment and direct such readings to the processor 153. The processor 153 analyzes the information and directs or controls the transmission of the information about the occupant(s) to a remote, manned facility", see col.327, particularly lines 24-48).

Breed et al. does not explicitly teach **sending the established baseline biometric profile** to a third party.

Ngo (2011/0193707) teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle (Ngo; “The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions”, see P[0014]), and where an alert is activated if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; “The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication”, see P[0015] and “…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate”, see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range”, see P[0020]). Furthermore, Ngo teaches transmitting data to a third party such as an outside service (Ngo; "...the vehicle operator alert module 14 is configured to communicate with another device 40 supported on the vehicle 12 that is configured to communicate information to an outside service that may facilitate sending assistance to the location of the vehicle 12”, see P[0021]).

Therefore, to send any information regarding a vehicle occupant to a third party, such as the baseline data of Ngo, involves no novelty or inventive step and is rendered obvious by Breed et al. in view of Ngo.

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to transmit any vehicle occupant data to a third party in the event of a vehicle incident, such as the baseline biometric data for a user, as rendered obvious by Ngo et al., in order to “detect driver fatigue or sleepiness in a cost effective manner” (Ngo et al.; see P[0003]).

Regarding Claim 9, Breed et al. teaches the claimed **method of claim 8, wherein the data associated with the at least one user is received at a first data rate in the absence of a detected vehicle incident and collected at a higher second data rate upon detecting the vehicle incident** as the system and method where data regarding the vehicle occupants is gathered in response to a detected crash, where additional information is obtained by the system after a crash as opposed to a normal operation prior to the crash, such as data regarding the breathing of the occupants, whether or not the occupants are conscious such as by detecting eye movements and/or whether or not the occupants are making sounds, and other data (see col.,326, particularly lines 30-42 regarding the use of the system in a state other than after a crash, and see “In use after a crash, the presence determining means 150, health state determining means 151 and location determining means 152 obtain readings from the passenger compartment and direct such readings to the processor 153. The processor 153 analyzes the information and directs or controls the transmission of the information about the occupant(s) to a remote, manned facility. Such

information could include the number and type of occupants, i.e., adults, children, infants, whether any of the occupants have stopped breathing or are breathing erratically, whether the occupants are conscious (as evidenced by, e.g., eye motion), whether blood is present (as detected by a chemical sensor) and whether the occupants are making sounds (as detected by a microphone)", see col.327, particularly lines 24-48). Therefore, because this information explicitly obtained after a crash is not explicitly obtained when the vehicle has not crashed, this teaches obtaining specific data at a "higher second data rate" after a vehicle incident such as a crash, where the "first data rate" could be a rate of zero.

Regarding Claim 10, Breed et al. teaches the claimed **method of claim 8, wherein the collected data associated with the at least one user is sent to the third party in real-time** ("The transmission of the information could be triggered by a signal from a crash sensor 591 that the vehicle was experiencing a crash or experienced a crash. The information transmitted could come from the occupant sensing system 600 so that the emergency response could be tailored to the status of the occupants", see col.329, particularly lines 1-18, where the data collected to be sent is transmitted in real time in response to a crash).

Regarding Claim 11, Breed et al. teaches the claimed **non-transitory computer readable medium having instructions stored thereon that, when executed by a**

processor ("processor 20", see at least col.195, particularly lines 45-58)**, perform a method comprising:**

detecting a presence of at least one user in a vehicle ("The interior monitoring system is capable of detecting the presence of an object, occupying objects such as a box, an occupant or a rear facing child seat 2, determining the type of object, determining the location of the object, and/or determining another property or characteristic of the object", see col.191, particularly lines 15-34)**;**

determining an identity of the at least one user ("A processor 264 is embodied with the pattern recognition algorithm thus trained to identify whether a person is the authorized individual by analysis of subsequently obtained data derived from optical images 262", see col.313, particularly lines 23-35)**;**

receiving data associated with the at least one user, wherein the data includes biometric information ("…other occupant sensing systems can also be provided that monitor the breathing or other motion of the driver, for example, including the driver's heartbeat, eye blink rate, gestures, direction or gaze and provide appropriate responses including the control of a vehicle component including any such components listed herein", see col.238, particularly lines 51-59 and "The obtained image, or images if multiple optical receiving units are used, plus other **biometric information**, are input into the pattern recognition algorithm 271, preferably after some image processing, and a determination is made whether the pattern recognition algorithm indicates that the image includes an authorized driver 272", see col.314, particularly lines 7-21).

Breed et al. does not explicitly recite "**an established baseline biometric profile associated with the at least one user**" as in the claimed

detecting a deviation between the received data and an established baseline biometric profile associated with the at least one user; and

determining, based at least partially on the detected deviation, to provide an output configured to address the deviation.

However, Breed et al. does teach monitoring health information of a driver and determining whether or not the monitored health information requires activation of a vehicle function ("The health state determining means 151 may be used to detect whether the driver's breathing is erratic or indicative of a state in which the driver is dozing off…In this case, the health state of the driver is relayed through the processor 153 and the communications unit 154 to the remote facility and appropriate action can be taken. For example, it would be possible to transmit a command, e.g., in the form of a signal, to the vehicle to activate an alarm or illuminate a warning light or if the vehicle is equipped with an automatic guidance system and ignition shut-off, to cause the vehicle to come to a stop on the shoulder of the roadway or elsewhere out of the traffic stream", see col.327, particularly lines 1-23).

Furthermore, **Ngo (2011/0193707)** teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle (Ngo; "The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers

or the same driver under different conditions", see P[0014]), and where an alert is activated if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; "The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication", see P[0015] and "…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate", see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range", see P[0020]). Therefore, the baseline heart rate is equivalent to the claimed received "**established baseline biometric profile associated with the at least one user**", and the activation of an alarm when the monitored heart rate is outside an acceptable range is equivalent to the claimed "outputting" of a signal based on the "deviation".

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to provide an output based on a comparison between detected biometric data of a user and baseline biometric data for the user, as taught by Ngo et al., in order to "detect driver fatigue or sleepiness in a cost effective manner" (Ngo et al.; see P[0003]).

Regarding Claim 12, Breed et al. does not explicitly teach the claimed **non-transitory computer readable medium of claim 11, wherein prior to receiving data associated with the at least one user the method further comprises:**

determining the baseline biometric profile associated with the at least one user; and

storing the determined baseline biometric profile in a user profile memory associated with the at least one user.

Ngo (2011/0193707) teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle using an initial heart rate which establishes the baseline heart rate and an acceptable heart rate range (Ngo; "The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions", see P[0014]), and where an alert is activated if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; "The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication", see P[0015] and "…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate", see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range", see P[0020]). Therefore, the baseline heart rate is

stored prior to receiving new heart rate data which is used to determine whether or not to activate an alarm.

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to store baseline biometric data for a user suing initial data prior which is obtained prior to receiving additional data used to create an output, as taught by Ngo et al., in order to "detect driver fatigue or sleepiness in a cost effective manner" (Ngo et al.; see P[0003]).

Regarding Claim 13, Breed et al. teaches the claimed **non-transitory computer readable medium of claim 11, wherein determining the presence of the at least one user inside the vehicle further comprises:**

detecting a person via at least one image sensor associated with the vehicle ("A processor 264 is embodied with the pattern recognition algorithm thus trained to identify whether a person is the authorized individual by analysis of subsequently obtained data derived from optical images 262", see col.313, particularly lines 23-35, where clearly a person must be present in an obtained image in order to identify the person).

Regarding Claim 14, Breed et al. teaches the claimed **non-transitory computer readable medium of claim 13, wherein determining the identity of the at least one user further comprises:**

identifying facial features associated with the person detected via the at least one image sensor; and

determining whether the identified facial features associated with the person match user characteristics stored in a memory (see section "6.5 Face Recognition" and “A processor 264 is embodied with the pattern recognition algorithm thus trained to identify whether a person is the authorized individual by analysis of subsequently obtained data derived from optical images 262”, see col.313, particularly lines 23-35 and “…distinctive facial markings are evident when viewed under near UV or MWIR illumination that can be used to positively identify a person”, see col.313, particularly lines 36-45, where it is clear that the processor includes a memory in order to recognize stored patterns).

Regarding Claim 15, Breed et al. does not explicitly teach the same “baseline” data of Claim 11 used to control a vehicle output as in the claimed **non-transitory computer readable medium of claim 11, wherein the output configured to address the deviation is provided by the vehicle, and wherein addressing the deviation includes adjusting one or more settings associated with the vehicle**.

However, as mentioned with respect to Claim 11, Breed et al. does teach monitoring health information of a driver and determining whether or not the monitored health information requires activation of a vehicle function (“The health state determining means 151 may be used to detect whether the driver's breathing is erratic or indicative of a state in which the driver is dozing off…In this case, the health state of

the driver is relayed through the processor 153 and the communications unit 154 to the remote facility and appropriate action can be taken. For example, it would be possible to transmit a command, e.g., in the form of a signal, to the vehicle to activate an alarm or illuminate a warning light or if the vehicle is equipped with an automatic guidance system and ignition shut-off, to cause the vehicle to come to a stop on the shoulder of the roadway or elsewhere out of the traffic stream", see col.327, particularly lines 1-23).

Furthermore, **Ngo (2011/0193707)** teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle (Ngo; “The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions”, see P[0014]), and where **an alert is activated** if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; “The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication”, see P[0015] and “…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate”, see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range”, see P[0020]). Therefore, the baseline heart rate is equivalent to the claimed received "**established baseline biometric profile associated with the at least one user**", and the activation of an alarm when the

monitored heart rate is outside an acceptable range is equivalent to the claimed "outputting" of a signal based on the "deviation". **The activation of an alert system of the vehicle of Ngo is equivalent to adjusting a "setting" of a vehicle as claimed**.

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to provide an output which adjusts a vehicle setting or function based on a comparison between detected biometric data of a user and baseline biometric data for the user, as taught by Ngo et al., in order to "detect driver fatigue or sleepiness in a cost effective manner" (Ngo et al.; see P[0003]).

Regarding Claim 17, Breed et al. teaches the claimed **non-transitory computer readable medium of claim 11, wherein the method further comprises:**

detecting a vehicle incident via one or more sensors associated with the vehicle ("The transmission of the information could be triggered by a signal from a crash sensor 591 that the vehicle was experiencing a crash or experienced a crash. The information transmitted could come from the occupant sensing system 600 so that the emergency response could be tailored to the status of the occupants", see col.329, particularly lines 1-18)**;**

collecting, based at least partially on the detected vehicle incident, the data associated with the at least one user ("…other occupant sensing systems can also be provided that monitor the breathing or other motion of the driver, for example, including the driver's heartbeat, eye blink rate, gestures, direction or gaze and provide

appropriate responses including the control of a vehicle component including any such components listed herein", see col.238, particularly lines 51-59 and see section "9.1 Transmission of Occupancy Information" including "**In the event of an accident**, the electronic system associated with the telematics system **interrogates the various interior monitoring system memories** in processor 20 and can arrive at a count of the number of occupants in the vehicle, if each seat is monitored, and, in more sophisticated systems, even makes a determination as to whether each occupant was wearing a seatbelt and if he or she is moving after the accident, **and/or the health state of one or more of the occupants** as described above, for example" and "FIG. 134 shows a schematic diagram of an embodiment of the invention including a system for **determining the presence and health state of any occupants of the vehicle** and a telecommunications link. This embodiment includes means for determining the presence of any occupants 150 which may take the form of a **heartbeat sensor, chemical sensor and/or motion sensor as described above and means for determining the health state of any occupants 151** as discussed above", see col.325, particularly lines 24-67 and col.326, particularly lines 1-29)**; and**

sending the…**collected data associated with the at least one user to a third party** ("The phone system or telematics communication device 34 can be coupled to the vehicle interior monitoring system in accordance with any of the embodiments disclosed herein and serves to establish a communications channel with one or more remote assistance facilities, such as an EMS facility or dispatch facility from which emergency response personnel are dispatched", see col.325, particularly lines 25-35 and "In use

after a crash, the presence determining means 150, health state determining means 151 and location determining means 152 obtain readings from the passenger compartment and direct such readings to the processor 153. The processor 153 analyzes the information and directs or controls the transmission of the information about the occupant(s) to a remote, manned facility", see col.327, particularly lines 24-48).

Breed et al. does not explicitly teach **sending the established baseline biometric profile** to a third party.

Ngo (2011/0193707) teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle (Ngo; "The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions", see P[0014]), and where an alert is activated if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; "The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication", see P[0015] and "…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate", see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range", see P[0020]). Furthermore, Ngo teaches transmitting data to a third party such

as an outside service (Ngo; "...the vehicle operator alert module 14 is configured to communicate with another device 40 supported on the vehicle 12 that is configured to communicate information to an outside service that may facilitate sending assistance to the location of the vehicle 12", see P[0021]).

Therefore, to send any information regarding a vehicle occupant to a third party, such as the baseline data of Ngo, involves no novelty or inventive step and is rendered obvious by Breed et al. in view of Ngo.

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to transmit any vehicle occupant data to a third party in the event of a vehicle incident, such as the baseline biometric data for a user, as rendered obvious by Ngo et al., in order to "detect driver fatigue or sleepiness in a cost effective manner" (Ngo et al.; see P[0003]).

Regarding Claim 18, Breed et al. teaches the claimed **non-transitory computer readable medium of claim 17, wherein wherein the data associated with the at least one user is received at a first data rate in the absence of a detected vehicle incident and collected at a higher second data rate upon detecting the vehicle incident** as the system and method where data regarding the vehicle occupants is gathered in response to a detected crash, where additional information is obtained by the system after a crash as opposed to a normal operation prior to the crash, such as data regarding the breathing of the occupants, whether or not the occupants are

conscious such as by detecting eye movements and/or whether or not the occupants are making sounds, and other data (see col.,326, particularly lines 30-42 regarding the use of the system in a state other than after a crash, and see “In use after a crash, the presence determining means 150, health state determining means 151 and location determining means 152 obtain readings from the passenger compartment and direct such readings to the processor 153. The processor 153 analyzes the information and directs or controls the transmission of the information about the occupant(s) to a remote, manned facility. Such information could include the number and type of occupants, i.e., adults, children, infants, whether any of the occupants have stopped breathing or are breathing erratically, whether the occupants are conscious (as evidenced by, e.g., eye motion), whether blood is present (as detected by a chemical sensor) and whether the occupants are making sounds (as detected by a microphone)”, see col.327, particularly lines 24-48). Therefore, because this information explicitly obtained after a crash is not explicitly obtained when the vehicle has not crashed, this teaches obtaining specific data at a "higher second data rate" after a vehicle incident such as a crash, where the "first data rate” could be a rate of zero.

Regarding Claim 19, Breed et al. teaches the claimed **vehicle control system, comprising:**

a profile identification module contained in a memory and executed by a processor of the vehicle control system (“processor 20”, see at least col.195, particularly lines 45-58)**, the profile identification module configured to detect a**

presence of at least one user in a vehicle ("The interior monitoring system is capable of detecting the presence of an object, occupying objects such as a box, an occupant or a rear facing child seat 2, determining the type of object, determining the location of the object, and/or determining another property or characteristic of the object", see col.191, particularly lines 15-34)**, determine an identity of the at least one user** ("A processor 264 is embodied with the pattern recognition algorithm thus trained to identify whether a person is the authorized individual by analysis of subsequently obtained data derived from optical images 262", see col.313, particularly lines 23-35)**, receive data associated with the at least one user, wherein the data includes biometric information** ("…other occupant sensing systems can also be provided that monitor the breathing or other motion of the driver, for example, including the driver's heartbeat, eye blink rate, gestures, direction or gaze and provide appropriate responses including the control of a vehicle component including any such components listed herein", see col.238, particularly lines 51-59 and "The obtained image, or images if multiple optical receiving units are used, plus other **biometric information**, are input into the pattern recognition algorithm 271, preferably after some image processing, and a determination is made whether the pattern recognition algorithm indicates that the image includes an authorized driver 272", see col.314, particularly lines 7-21).

Breed et al. does not explicitly recite "**an established baseline biometric profile associated with the at least one user**" as in the claimed

detect a deviation between the received data and an established baseline biometric profile associated with the at least one user, and determine, based at

least partially on the detected deviation, to provide an output configured to address the deviation.

However, Breed et al. does teach monitoring health information of a driver and determining whether or not the monitored health information requires activation of a vehicle function (“The health state determining means 151 may be used to detect whether the driver's breathing is erratic or indicative of a state in which the driver is dozing off…In this case, the health state of the driver is relayed through the processor 153 and the communications unit 154 to the remote facility and appropriate action can be taken. For example, it would be possible to transmit a command, e.g., in the form of a signal, to the vehicle to activate an alarm or illuminate a warning light or if the vehicle is equipped with an automatic guidance system and ignition shut-off, to cause the vehicle to come to a stop on the shoulder of the roadway or elsewhere out of the traffic stream", see col.327, particularly lines 1-23).

Furthermore, **Ngo (2011/0193707)** teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle (Ngo; “The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions”, see P[0014]), and where an alert is activated if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; “The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication”, see P[0015]

and "…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate", see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range", see P[0020]). Therefore, the baseline heart rate is equivalent to the claimed received "**established baseline biometric profile associated with the at least one user**", and the activation of an alarm when the monitored heart rate is outside an acceptable range is equivalent to the claimed "outputting" of a signal based on the "deviation".

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to provide an output based on a comparison between detected biometric data of a user and baseline biometric data for the user, as taught by Ngo et al., in order to "detect driver fatigue or sleepiness in a cost effective manner" (Ngo et al.; see P[0003]).

Regarding Claim 20, Breed et al. does not explicitly teach the claimed **system of claim 19, wherein prior to receiving data associated with the at least one user the profile identification module is further configured to determine the baseline biometric profile associated with the at least one user, and store the determined baseline biometric profile in a user profile memory associated with the at least one user**.

Ngo (2011/0193707) teaches a vehicle operator alertness monitoring system, where a baseline heart rate is determined for a specific driver of a vehicle using an initial heart rate which establishes the baseline heart rate and an acceptable heart rate range (Ngo; “The determined initial heart rate also provides a baseline heart rate indication. Determining a baseline or normal heart rate that is specific to each driver provides the ability to account for variations in baseline heart rates for different drivers or the same driver under different conditions”, see P[0014]), and where an alert is activated if the monitored heart rate is outside of an acceptable range based on the baseline (Ngo; “The vehicle operator alert module 14 is programmed to determine an acceptable heart rate range based on the baseline heart rate indication”, see P[0015] and “…the vehicle operator alert module 14 automatically adds a predetermined increment above and below the determined baseline heart rate to accommodate acceptable variations in heart rate”, see P[0016] and "...if the current heart rate is outside the acceptable range and provides an alert to the driver at 36 when the heart rate is outside the acceptable range”, see P[0020]). Therefore, the baseline heart rate is stored prior to receiving new heart rate data which is used to determine whether or not to activate an alarm.

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. with the teachings of Ngo et al., and to store baseline biometric data for a user suing initial data prior which is obtained prior to receiving additional data used to create an output,

as taught by Ngo et al., in order to “detect driver fatigue or sleepiness in a cost effective manner” (Ngo et al.; see P[0003]).

Claims 7 and 16 are rejected under 35 U.S.C. 103 as being unpatentable over Breed et al. (7,164,117) in view of Ngo (2011/0193707) further in view of Nakagawa et al. (JP2004284450A).

Regarding Claim 7, Breed et al. does not explicitly teach the claimed **method of claim 6, wherein the one or more settings include at least one of a vehicle interior environment, temperature, air composition, oxygen level, sound level, window position, seat position, and lighting level**.

Nakagawa et al. (JP2004284450A) teaches a system for a vehicle which measures the heart rate of a driver (which is a measurement of biometric data), and based on a determination of the deviation of the measured heart rate with respect to predetermined thresholds, an output is created which addresses the deviation, where the determination provides information on the fatigue level of the driver, and the output is a control signal outputted to an electric heater (Nakagawa et al.; “A heart beat signal is detected from an occupant seated in a driver's seat. A normal heart rate is calculated thereby, and a present heart rate is calculated at a cycle of about two minutes. The ratio of reduction of the present heart rate to the normal heart rate is calculated as a fatigue

degree TD. If the fatigue degree is ≥ 2%, it is determined that the occupant is in fatigue, and the driver's seat is temporarily heated by an electric heater", see Abstract and P[0041]-P[0044]).

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. and Ngo et al. with the teachings of Nakagawa et al., and to use biometric data to adjust a vehicle setting, such as an adjustment of a setting which affects the "vehicle interior environment" and/or temperature as rendered obvious by Nakagawa et al., in order to suppress "the fatigue increase of a seated occupant" (Nakagawa et al.; see Abstract).

Regarding Claim 16, Breed et al. does not explicitly teach the claimed **non-transitory computer readable medium of claim 15, wherein the one or more settings include at least one of a vehicle interior environment, temperature, air composition, oxygen level, sound level, window position, seat position, and lighting level**.

Nakagawa et al. (JP2004284450A) teaches a system for a vehicle which measures the heart rate of a driver (which is a measurement of biometric data), and based on a determination of the deviation of the measured heart rate with respect to predetermined thresholds, an output is created which addresses the deviation, where the determination provides information on the fatigue level of the driver, and the output is a control signal outputted to an electric heater (Nakagawa et al.; "A heart beat signal is detected from an occupant seated in a driver's seat. A normal heart rate is calculated

thereby, and a present heart rate is calculated at a cycle of about two minutes. The ratio of reduction of the present heart rate to the normal heart rate is calculated as a fatigue degree TD. If the fatigue degree is ≥ 2%, it is determined that the occupant is in fatigue, and the driver's seat is temporarily heated by an electric heater", see Abstract and P[0041]-P[0044]).

It would have been obvious to a person having ordinary skill in the art before the effective filing date of the claimed invention to modify the teachings of Breed et al. and Ngo et al. with the teachings of Nakagawa et al., and to use biometric data to adjust a vehicle setting, such as an adjustment of a setting which affects the "vehicle interior environment" and/or temperature as rendered obvious by Nakagawa et al., in order to suppress "the fatigue increase of a seated occupant" (Nakagawa et al.; see Abstract).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kameyama (2008/0119994) teaches adjusting vehicle settings based on a change in measured user biological data.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ISAAC SMITH whose telephone number is (571)272-9593. The examiner can normally be reached on Monday-Thursday, 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Helal Algahaim can be reached on (571) 270-5227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/ISAAC SMITH/
Examiner, Art Unit 3662

/TUAN C. TO/
Primary Examiner, AU 3662

Notice of References Cited	Application/Control No. 14/253,233	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ISAAC SMITH	Art Unit 3662	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-7,164,117	01-2007	Breed et al.	250/221
*	B	US-2011/0193707	08-2011	Ngo, Gordon John Hann	340/576
*	C	US-2008/0119994	05-2008	KAMEYAMA, Shougo	701/48
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N	JP 2004284450 A	10-2004	Japan	YOSHINORI et al.	
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	)	Group Art Unit: 3663
Christopher P. Ricci	)	Confirmation No.: 7690
Serial No.: 14/253,204	)	Examiner: DUNN, ALEX C
Filed: April 15, 2014	)	SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
Atty. File No.: 6583-561	)	
Entitled: "Customization of Vehicle Controls and Settings Based on User Profile Data"	)	*Electronically Submitted*

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Commissioner:

The references cited on attached Form PTO/SB08 are being called to the attention of the Examiner.

☒ Copies of the cited non-patent and/or foreign references are enclosed herewith.

☐ Copies of the cited U.S. patents and/or patent applications are enclosed herewith.

☒ Copies of the cited U.S. patents/patent application publications are not enclosed in accordance with 37 C.F.R. § 1.98(a).

☐ Copies of the cited references are not enclosed, in accordance with 37 C.F.R. § 1.98(d), because the references were cited by or submitted to the U.S. Patent and Trademark Office in prior application Serial No. _____ filed _____, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

☒ To the best of applicants' belief, the pertinence of the foreign-language references is believed to be summarized in the attached English abstracts and/or in the figures, although applicants do not necessarily vouch for the accuracy of the translation.

☐ Examiner's attention is drawn to the following related applications:

Serial No. _____ filed _____ (Attorney Ref. No. _____)

Serial No. _____ filed _____ (Attorney Ref. No. _____)

☐ Other:_____

Submission of the above information is not intended as an admission that any item is citable under the statutes or rules to support a rejection, that any item disclosed represents analogous art, or that those skilled in the art would refer to or recognize the pertinence of any reference without the benefit of hindsight, nor should an inference be drawn as to the pertinence

of the references based on the order in which they are presented. Submission of this statement should not be taken as an indication that a search has been conducted, or that no better art exists.

It is respectfully requested that the cited information be expressly considered during the prosecution of this application and the references made of record therein.

Respectfully submitted,

SHERIDAN ROSS P.C.

DWS

By: /Douglas W. Swartz/
Douglas W. Swartz
Registration No. 37739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: July 28, 2015

PRINTER RUSH

(PTO ASSISTANCE)

Application:	**14253204**	**Examiner:**	**Dunn**	**GAU:**	**3663**
From:	**Chuck Bowen**	**Location:**	**RTFM**	**Creation Date:**	**07/31/2015**

Tracking #: Week Date:

DOC CODE	DOC DATE	MISCELLANEOUS
☐ 1449		☐ Continuing Data
☐ IDS		☐ Foreign Priority
☐ CLM		☐ Document Legibility
☐ IIFW/FWCLM		☐ Fees
☐ SRFW		☐ Petition (TC)
☐ DRW		☐ Other
☐ OATH		
☒ 312	07/30/2015	
☐ SPEC		

[RUSH] Message:

Please respond to the 07/30/15 A.NA.

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CB

[XRUSH] Response:

Initials: _____

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REV: JUL 15

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UNITED STATES DEPARTMENT OF COMMERCE
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Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	6583-561	7690

7590 08/07/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER	
DUNN, ALEX C	

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
08/07/2015	ELECTRONIC

NOTICE OF NON-COMPLIANT INFORMATION DISCLOSURE STATEMENT

An Information Disclosure Statement (IDS) filed 07-31-15 in the above-identified application fails to meet the requirements of 37 CFR 1.97(d) for the reason(s) specified below. Accordingly, the IDS will be placed in the file, but the information referred to therein has not been considered.

The IDS is not compliant with 37 CFR 1.97(d) because:

☒ The IDS lacks a statement as specified in 37 CFR 1.97(e).

☐ The IDS lacks the fee set forth in 37 CFR 1.17(p).

☐ The IDS was filed after the issue fee was paid. Applicant may wish to consider filing a petition to withdraw the application from issue under 37 CFR 1.313(c) to have the IDS considered. See MPEP 1308.

Almay Gebeyehu for

571-272-4200 or 1-888-786-0101
Application Assistance Unit
Office of Data Management

To: flexpatents@sheridanross.com,edocket@sheridanross.com,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 111285

Aug 07, 2015 05:29:44 AM

Dear PAIR Customer:

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
UNITED STATES

The following USPTO patent application(s) associated with your Customer Number, 111285 , have new outgoing correspondence. This correspondence is now available for viewing in Private PAIR.

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Application	Document	Mailroom Date	Attorney Docket No.
14253204	M327	08/07/2015	6583-561

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Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

111285 7590 05/11/2015
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission
I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	6583-561	7690

TITLE OF INVENTION: CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	$960	$0	$0	$960	08/11/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
DUNN, ALEX C	3663	701-049000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).
- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list
(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,
(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Sheridan Ross P.C.
2
3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE: Flextronics AP, LLC

(B) RESIDENCE: (CITY and STATE OR COUNTRY): San Jose, CA

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:
- ☒ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): **(Please first reapply any previously paid issue fee shown above)**
- ☐ A check is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☒ The director is hereby authorized to charge the required fee(s), any deficiency, or credits any overpayment, to Deposit Account Number 19-1970 (enclose an extra copy of this form).

5. **Change in Entity Status** (from status indicated above)
- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
  NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.
- ☐ Applicant asserting small entity status. See 37 CFR 1.27
  NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.
- ☐ Applicant changing to regular undiscounted fee status.
  NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Douglas W. Swartz/ Date August 11, 2015
Typed or printed name Douglas W. Swartz Registration No. 37,739

Page 1002 of 1087 Ford Ex. 1109

Electronic Patent Application Fee Transmittal

Application Number:	14253204
Filing Date:	15-Apr-2014
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Filer:	Douglas W. Swartz/Amy Duarte
Attorney Docket Number:	6583-561

Filed as Large Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	1501	1	960	960

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**960**

Electronic Acknowledgement Receipt

EFS ID:	23173605
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	111285
Filer:	Douglas W. Swartz/Amy Duarte
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-561
Receipt Date:	11-AUG-2015
Filing Date:	15-APR-2014
Time Stamp:	12:21:14
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	$960
RAM confirmation Number	10281
Deposit Account	191970
Authorized User	SWARTZ, DOUGLAS W.

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	Issue-fee-transmittal_6583-561.pdf	100136 631246a1937b8ec7ad165dcd96d43888bba38963	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	31026 102b96bbdd4073a5eea09a832725e290de6d023f	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	131162		

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New Applications Under 35 U.S.C. 111
If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371
If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office
If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PRINTER RUSH

(PTO ASSISTANCE)

Application:	14253204	**Examiner:**	Dunn	**GAU:**	3663
From:	Chuck Bowen	**Location:**	RTFM	**Creation Date:**	07/31/2015

Tracking #: Week Date:

DOC CODE	DOC DATE	MISCELLANEOUS
[ ] 1449		[ ] Continuing Data
[ ] IDS		[ ] Foreign Priority
[ ] CLM		[ ] Document Legibility
[ ] IIFW/FWCLM		[ ] Fees
[ ] SRFW		[ ] Petition (TC)
[ ] DRW		[ ] Other
[ ] OATH		
[X] 312	07/30/2015	
[ ] SPEC		

[RUSH] Message:

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[XRUSH] Response:

Entered
/ACD/
8/14/2015

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REV: JUL 15

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	6583-561	7690

111285 7590 08/20/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3663	

NOTIFICATION DATE	DELIVERY MODE
08/20/2015	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

flexpatents@sheridanross.com
edocket@sheridanross.com

Response to Rule 312 Communication	Application No.	Applicant(s)
	14/253,204	RICCI, CHRISTOPHER P.
	Examiner	Art Unit
	ALEX C. DUNN	3663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address –

1. ☒ The amendment filed on *30 July 2015* under 37 CFR 1.312 has been considered, and has been:

   a) ☐ entered.

   b) ☒ entered as directed to matters of form not affecting the scope of the invention.

   c) ☐ disapproved because the amendment was filed after the payment of the issue fee.
   Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.

   d) ☐ disapproved. See explanation below.

   e) ☐ entered in part. See explanation below.

/THOMAS TARCZA/ Supervisory Patent Examiner, Art Unit 3663	/A. C. D./ Examiner, Art Unit 3663

Enter
/ACD/
8/13/2015

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph **[0377]** with the following amended paragraph:

[0377] In one example, a virtual personality may be represented by an avatar. The avatar may be an intelligent assistant, a virtual assistant, and/or an intelligent virtual assistant as described in application PCT/US14/34194~~PCT/US14/_____~~, filed on April 15, 2014, entitled "Intelligent Vehicle for Assisting Vehicle Occupants and Incorporating Vehicle Crate for Blade Processors~~Vehicle-Based Multimode Discovery~~" (Attorney Docket No. 6583-585-PCT), which is hereby incorporated herein by reference, in its entirety, for all that it teaches and for all purposes. The avatar may be presented as a theme, color, specific sound output, other user preference, etc., and/or combinations thereof. For instance, the avatar may be configured as one or more icons, figures, colors, and/or themes that are configured to represent the virtual personality.

To: flexpatents@sheridanross.com,edocket@sheridanross.com,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 111285

Aug 20, 2015 05:35:18 AM

Dear PAIR Customer:

Sheridan Ross P.C.
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Denver, CO 80202
UNITED STATES

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Application	Document	Mailroom Date	Attorney Docket No.
14253204	N271	08/20/2015	6583-561

To view your correspondence online or update your email addresses, please visit us anytime at https://sportal.uspto.gov/secure/myportal/privatepair.

If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov with 'e-Office Action' on the subject line or call 1-866-217-9197 during the following hours:

Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

personality may be refined (e.g., altered) when the user 216 is not being presented the virtual personality. In other words, the virtual personality may be refined in non-real-time (e.g., when the virtual personality is not being used, etc.). As provided herein, a standard personality and/or a virtual personality associated with a user 216 can be refined. The method 2100 continues at step 2124 by presenting the virtual personality and/or refined virtual personality.

[0376] The method 2100 continues by determining whether the user 216 is still present (step 2128). In some embodiments, the presence of a user 216 may include an existing association of the user 216 with a vehicle 104. For instance, the user 216 may be associated with the vehicle 104, although the user 216 may not be physically located inside the vehicle 104. An example of this association may include when the user steps outside of the vehicle 104 (e.g., to maintain the vehicle 104, refuel, temporarily visit a location outside of the vehicle 104, etc.). The detection and/or determination of whether a user 216 is present may include one or more of the detection steps described in conjunction with step 2108. Additionally or alternatively, determining whether a user 216 is present may include determining whether the user 216 is physically inside the vehicle 104. For example, a user 216 may be determined to be present inside a vehicle 140 based on information detected by at least one image sensor, such as the camera sensors 760 of the vehicle 104. In any event, when a user 216 can no longer be detected by at least one sensor (e.g., vehicle sensors 242, non-vehicle sensors 236, etc.) associated with the vehicle 104, the user 216 may be determined as not being present. If the user 216 is determined to still be present, the method 2100 may continue by collecting more profile data (step 2144). If the user is determined not to be present, the method 2100 ends at step 2132.

[0377] In one example, a virtual personality may be represented by an avatar. The avatar may be an intelligent assistant, a virtual assistant, and/or an intelligent virtual assistant as described in application PCT/US14/34194, filed on April 15, 2014, entitled "Vehicle-Based Multimode Discovery" (Attorney Docket No. 6583-585-PCT), which is hereby incorporated herein by reference, in its entirety, for all that it teaches and for all purposes. The avatar may be presented as a theme, color, specific sound output, other user preference, etc., and/or combinations thereof. For instance, the avatar may be configured as one or more icons, figures, colors, and/or themes that are configured to represent the virtual personality.

Change(s) applied to document, /M.I.G./ 6/23/2015

[0378] In some embodiments the avatar may be configured to follow a user 216 from vehicle-to-vehicle and/or from communication device-to-communication device. The

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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	09/29/2015	9147296	8283-561	7690

111285 7590 09/09/2015

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)
(application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Christopher P. Ricci, Saratoga, CA;
Flextronics AP, LLC, San Jose, CA;

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To: flexpatents@sheridanross.com,edocket@sheridanross.com,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 111285

Sep 10, 2015 05:28:36 AM

Dear PAIR Customer:

Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202
UNITED STATES

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Application	Document	Mailroom Date	Attorney Docket No.
14253204	ISSUE.NTF	09/09/2015	8283-561

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If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov with 'e-Office Action' on the subject line or call 1-866-217-9197 during the following hours:

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UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Patent of:	Serial No.: 14/253,204
Inventor(s): Christopher P. Ricci	Filed: April 15, 2014
Patent No.: 9,147,296	Conf. No. 7690
Issued: September 29, 2015	
Atty. File No.: 8283-561	***Submitted via EFS-Web***
Entitled: "CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA"	

Attn: Certificate of Corrections Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REQUEST FOR CERTIFICATE OF CORRECTION OF PATENT FOR PTO MISTAKE PURSUANT TO 37 C.F.R. § 1.322(a)

Dear Commissioner:

This Request for a Certificate of Correction of Patent for PTO Mistake is made pursuant to 37 C.F.R. § 1.322(a). Attached is Form PTO SB/44 containing the text of the corrections which are requested herein. The error in claim 14 of the patent is a typographical error and support for the correction may be found in the Response dated April 27, 2015, at page 7, claim 19.

Respectfully submitted,

SHERIDAN ROSS P.C.

By: /Douglas W. Swartz/
Douglas W. Swartz
Registration No. 37739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: January 8, 2016

PTO/SB/44 (09-07)
Approved for use through 08/31/2013. OMB 0651-0033
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(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 9,147,296

APPLICATION NO. : 14/253,204

ISSUE DATE : September 29, 2015

INVENTOR(S) : Christopher P. Ricci

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Claim 14, column 97, line 20, replace “leasst” with --least--.

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Sheridan Ross P.C.
1560 Broadway, Suite 1200
Denver, CO 80202-5141

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Electronic Acknowledgement Receipt

EFS ID:	24577383
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	111285
Filer:	Douglas W. Swartz/Amy Duarte
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	8283-561
Receipt Date:	08-JAN-2016
Filing Date:	15-APR-2014
Time Stamp:	19:11:38
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Request for Certificate of Correction	8283-561_Request-Certificate-Correction.pdf	245234 968f7d712b5713084e6d8ef09d8d2d3e9fa26dbf	no	2

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New International Application Filed with the USPTO as a Receiving Office

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UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO. : 9,147,296 B2
APPLICATION NO. : 14/253204
DATED : September 29, 2015
INVENTOR(S) : Christopher P. Ricci

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

In the Claims

Claim 14, column 97, line 20, replace "leasst" with --least--.

Signed and Sealed this
Fifteenth Day of March, 2016

Michelle K. Lee

Michelle K. Lee
Director of the United States Patent and Trademark Office

PTO/AIA/81A (02-15)
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PATENT - POWER OF ATTORNEY OR REVOCATION OF POWER OF ATTORNEY WITH A NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS

Patent Number	9,147,296
Issue Date	September 29, 2015
First Named Inventor	Christopher P. Ricci
Title	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
Attorney Docket No.	51263-00180

I hereby revoke all previous powers of attorney given in the above-identified patent.

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I am the:

☒ Applicant.

OR

☐ Patent owner.

Statement under 37 CFR 3.73(c) (Form PTO/AIA/96) submitted herewith or filed on _____.

SIGNATURE of Applicant or Patent Owner

Signature		Date	
Name	Gregg S. Hershenson	Telephone	
Title and Company	CEO - AutoConnect Holdings LLC		

NOTE: Signatures of all the applicants or patent owners of the entire interest or their representative(s) are required. If more than one signature is required, submit multiple forms, check the box below, and identify the total number of forms submitted in the blank below.

☑ A total of 1 forms are submitted.

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8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Acknowledgement Receipt

EFS ID:	29594583
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	111285
Filer:	Robert G. Crouch
Filer Authorized By:	
Attorney Docket Number:	8283-561
Receipt Date:	23-JUN-2017
Filing Date:	15-APR-2014
Time Stamp:	15:49:33
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	POA_Signed_51263-00180.pdf	264295 5950f2f81ea3c0866215cb0716177df0611e6080	no	2

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New Applications Under 35 U.S.C. 111

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National Stage of an International Application under 35 U.S.C. 371

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/253,204	04/15/2014	Christopher P. Ricci	8283-561

CONFIRMATION NO. 7690

MISCELLANEOUS NOTICE

111285
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202



Date Mailed: 06/28/2017

A communication which cannot be delivered in electronic form has been mailed to the applicant.

To: edocket@sheridanross.com,flexpatents-sr@sheridanross.com,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 111285

Jun 28, 2017 03:25:00 AM

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Suite 1200
Denver, CO 80202
UNITED STATES

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Application	Document	Mailroom Date	Attorney Docket No.
14253204	PEFN	06/28/2017	8283-561

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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/253,204	04/15/2014	Christopher P. Ricci	8283-561

CONFIRMATION NO. 7690

OC000000092379278

111285
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

Cc: MARSH, FISCHMANN & BREYFOGLE LLP
8055 EAST TUFTS AVENUE
SUITE 450
DENVER, CO 80237

Date Mailed: 06/27/2017

DENIAL OF REQUEST FOR POWER OF ATTORNEY

The request for Power of Attorney filed 06/23/2017 is acknowledged. However, the request cannot be granted at this time for the reason stated below.

- ☐ The Power of Attorney you provided did not comply with the new Power of Attorney rules that became effective on June 25, 2004. See 37 CFR 1.32.
- ☐ The revocation is not signed by the applicant, the assignee of the entire interest, or one particular principal attorney having the authority to revoke.
- ☑ The Power of Attorney is from an assignee and the Certificate required by 37 CFR 3.73 has not been received.
- ☐ The person signing for the assignee has omitted their empowerment to sign on behalf of the assignee.
- ☐ The inventor(s) is without authority to appoint attorneys since the assignee has intervened as provided by 37 CFR 3.71.
- ☐ The signature(s) of _____, a co-inventor in this application, has been omitted. The Power of Attorney will be entered upon receipt of confirmation signed by said co-inventor(s).
- ☐ The person(s) appointed in the Power of Attorney is not registered to practice before the U.S. Patent and Trademark Office.
- ☐ Only one Customer Number can be designated for the Power of Attorney in an application. The Customer Number that was captured is the first Customer Number provided on the Power of Attorney document.

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- ☐ A request under 37 CFR 1.48 to add an inventor was granted in this application, however, no power of attorney consistent with the power of attorney granted by the originally named inventive entity has been received. Thus, the addition of the inventor has resulted in the loss of power of attorney in the application. See 37 CFR 1.32(e).

- ☐ The power of attorney has not been accepted because the party who is giving power of attorney has not been identified. Power of attorney may only be signed by the applicant for patent (37 CFR 1.42) or the patent owner. A patent owner who was not the applicant must appoint any power of attorney in compliance with 37 CFR 3.71 and 3.73. See 37 CFR 1.32(b)(4).

- ☐ The power of attorney from the inventors has not been accepted because it is a copy from a prior national application for which benefit is claimed and the continuing application names an inventor who was not named as an inventor in the prior application.

- ☐ The power of attorney from the inventors has not been accepted because the power of attorney must be signed by the applicant for patent. See 37 CFR 1.32(b)(4).

- ☐ Any request to correct or update the name of the applicant must include an application data sheet (ADS) in compliance with 37 CFR 1.76 specifying the correct or updated name of the applicant in the applicant information section. Any request to change the applicant after an original applicant has been specified under 37 CFR 1.46(b) must include a new ADS in compliance with 37 CFR 1.76 specifying the applicant in the applicant information section and comply with 37 CFR 3.71 and 3.73. See 37 CFR 1.46(c).

Any inquiries regarding this notice should be directed to the Application Assistance Unit at 571-272-4200.

Application Assistance Unit
571-272-4200

PTO/AIA/81A (02-15)
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PATENT - POWER OF ATTORNEY OR REVOCATION OF POWER OF ATTORNEY WITH A NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS

Patent Number	9,147,296
Issue Date	September 29, 2015
First Named Inventor	Christopher P. Ricci
Title	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
Attorney Docket No.	51263-00180

I hereby revoke all previous powers of attorney given in the above-identified patent.

☐ A Power of Attorney is submitted herewith.

OR

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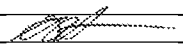
☐ Applicant.

OR

☒ Patent owner.

Statement under 37 CFR 3.73(c) (Form PTO/AIA/96) submitted herewith or filed on _____.

SIGNATURE of Applicant or Patent Owner

Signature		Date	
Name	Gregg S. Hershenson	Telephone	
Title and Company	CEO - AutoConnect Holdings LLC		

NOTE: Signatures of all the applicants or patent owners of the entire interest or their representative(s) are required. If more than one signature is required, submit multiple forms, check the box below, and identify the total number of forms submitted in the blank below.

☑ A total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.31, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public, which is to update (and by the USPTO to process) the file of a patent or reexamination proceeding. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
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Electronic Acknowledgement Receipt

EFS ID:	29708726
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	111285
Filer:	Robert G. Crouch/Lori Gerow
Filer Authorized By:	Robert G. Crouch
Attorney Docket Number:	8283-561
Receipt Date:	06-JUL-2017
Filing Date:	15-APR-2014
Time Stamp:	17:42:46
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Assignee showing of ownership per 37 CFR 3.73	373c_aia0096_51263-00180.pdf	120358 536b76d1b7a5beee7689105e080ed2b912d4aa47	no	3

Warnings:

Information:					
2	Power of Attorney	Corrected_POA_51263-00180.pdf	171618 1f6908bcaea80142695504623c0cb06416955015	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	291976		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

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New International Application Filed with the USPTO as a Receiving Office

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PTO/AIA/96 (08-12)
Approved for use through 01/31/2013. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

Applicant/Patent Owner: AUTOCONNECT HOLDINGS LLC

Application No./Patent No.: 9,147,296 Filed/Issue Date: September 29, 2015

Titled: CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA

AUTOCONNECT HOLDINGS LLC, a CORPORATION

(Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.)

states that, for the patent application/patent identified above, it is (choose **one** of options 1, 2, 3 or 4 below):

1. ☑ The assignee of the entire right, title, and interest.

2. ☐ An assignee of less than the entire right, title, and interest (check applicable box):

   ☐ The extent (by percentage) of its ownership interest is _____%. Additional Statement(s) by the owners holding the balance of the interest must be submitted to account for 100% of the ownership interest.

   ☐ There are unspecified percentages of ownership. The other parties, including inventors, who together own the entire right, title and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

3. ☐ The assignee of an undivided interest in the entirety (a complete assignment from one of the joint inventors was made). The other parties, including inventors, who together own the entire right, title, and interest are:

   Additional Statement(s) by the owner(s) holding the balance of the interest must be submitted to account for the entire right, title, and interest.

4. ☐ The recipient, via a court proceeding or the like (*e.g.*, bankruptcy, probate), of an undivided interest in the entirety (a complete transfer of ownership interest was made). The certified document(s) showing the transfer is attached.

The interest identified in option 1, 2 or 3 above (not option 4) is evidenced by either (choose **one** of options A or B below):

A. ☐ An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the United States Patent and Trademark Office at Reel _____, Frame _____, or for which a copy thereof is attached.

B. ☑ A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as follows:

1. From: CHRISTOPHER P. RICCI To: FLEXTRONICS AP, LLC

   The document was recorded in the United States Patent and Trademark Office at

   Reel 033226, Frame 0643, or for which a copy thereof is attached.

2. From: FLEXTRONICS AP, LLC To: AUTOCONNECT HOLDINGS LLC

   The document was recorded in the United States Patent and Trademark Office at

   Reel 036503, Frame 0062, or for which a copy thereof is attached.

This collection of information is required by 37 CFR 3.73(b). The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

STATEMENT UNDER 37 CFR 3.73(c)

3. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

4. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

5. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

6. From: _____ To: _____

The document was recorded in the United States Patent and Trademark Office at

Reel _____, Frame _____, or for which a copy thereof is attached.

☐ Additional documents in the chain of title are listed on a supplemental sheet(s).

☑ As required by 37 CFR 3.73(c)(1)(i), the documentary evidence of the chain of title from the original owner to the assignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.

[NOTE: A separate copy (i.e., a true copy of the original assignment document(s)) must be submitted to Assignment Division in accordance with 37 CFR Part 3, to record the assignment in the records of the USPTO. See MPEP 302.08]

The undersigned (whose title is supplied below) is authorized to act on behalf of the assignee.

/ROBERT G. CROUCH/

Signature

Date

ROBERT G. CROUCH

Printed or Typed Name

34,806

Title or Registration Number

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

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3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
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UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/253,204	04/15/2014	Christopher P. Ricci	51263-00180

CONFIRMATION NO. 7690

25231
MARSH, FISCHMANN & BREYFOGLE LLP
8055 East Tufts Avenue
Suite 450
Denver, CO 80237

POA ACCEPTANCE LETTER

OC000000092702687

Date Mailed: 07/12/2017

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/06/2017.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/qnguyen/

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/253,204	04/15/2014	Christopher P. Ricci	8283-561

CONFIRMATION NO. 7690

POWER OF ATTORNEY NOTICE

111285
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

OC00000092702675

Date Mailed: 07/12/2017

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 07/06/2017.

- The Power of Attorney to you in this application has been revoked by the assignee who has intervened as provided by 37 CFR 3.71. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/qnguyen/

To: PTOMail@mfblaw.com,,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 25231

Jul 12, 2017 04:17:10 AM

Dear PAIR Customer:

MARSH, FISCHMANN & BREYFOGLE LLP
8055 East Tufts Avenue
Suite 450
Denver, CO 80237
UNITED STATES

The following USPTO patent application(s) associated with your Customer Number, 25231 , have new outgoing correspondence. This correspondence is now available for viewing in Private PAIR.

The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

Disclaimer:
The list of documents shown below is provided as a courtesy and is not part of the official file wrapper. The content of the images shown in PAIR is the official record.

Application	Document	Mailroom Date	Attorney Docket No.
14253204	N570	07/12/2017	51263-00180
	N570	07/12/2017	51263-00180

To view your correspondence online or update your email addresses, please visit us anytime at https://sportal.uspto.gov/secure/myportal/privatepair.

If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov with 'e-Office Action' on the subject line or call 1-866-217-9197 during the following hours:

Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

PTO/AIA/80 (07-12)
Approved for use through 11/30/2014. OMB 0651-0035
U.S. Patent and Trademark Office; U.S DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

POWER OF ATTORNEY TO PROSECUTE APPLICATIONS BEFORE THE USPTO

I hereby revoke all previous powers of attorney given in the application identified in the attached statement under 37 CFR 3.73(c).

I hereby appoint:

☒ Practitioners associated with Customer Number: 153965

OR

☐ Practitioner(s) named below (if more than ten patent practitioners are to be named, then a customer number must be used):

Name	Registration Number	Name	Registration Number

As attorney(s) or agent(s) to represent the undersigned before the United States Patent and Trademark Office (USPTO) in connection with any and all patent applications assigned only to the undersigned according to the USPTO assignment records or assignments documents attached to this form in accordance with 37 CFR 3.73(c).

Please change the correspondence address for the application identified in the attached statement under 37 CFR 3.73(c) to:

☒ The address associated with Customer Number: 153965

OR

☐

Firm or Individual Name			
Address			
City		State	Zip
Country			
Telephone		Email	

Assignee Name and Address: AutoConnect Holdings LLC
75 High Road
Newbury, MA 01951

A copy of this form, together with a statement under 37 CFR 3.73(c) (Form PTO/AIA/96 or equivalent) is required to be Filed in each application in which this form is used. The statement under 37 CFR 3.73(c) may be completed by one of The practitioners appointed in this form, and must identify the application in which this Power of Attorney is to be filed.

SIGNATURE of Assignee of Record

The individual whose signature and title is supplied below is authorized to act on behalf of the assignee

Signature		Date	2-28-2019
Name	Gregg Hershenson	Telephone	978.462.1287
Title	CEO		

This collection of information is required by 37 CFR 1.31, 1.32 and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Electronic Acknowledgement Receipt

EFS ID:	35842970
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	25231
Filer:	Unisha Patel
Filer Authorized By:	
Attorney Docket Number:	51263-00180
Receipt Date:	26-APR-2019
Filing Date:	15-APR-2014
Time Stamp:	12:48:43
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Power of Attorney	POASigned.pdf	74574 10a88179b84bc774445edb87cb7742f6cbad0cc4	no	2

Warnings:

Information:	
Total Files Size (in bytes):	74574

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

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UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/253,204	04/15/2014	Christopher P. Ricci	51263-00180

CONFIRMATION NO. 7690

153965
Patent Ventures, LLC
700 Uccelli Drive
7204
Redwood City, CA 94063

POA ACCEPTANCE LETTER

OC000000107800120

Date Mailed: 05/01/2019

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/26/2019.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/sleutchit/

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/253,204	04/15/2014	Christopher P. Ricci	51263-00180

CONFIRMATION NO. 7690

25231
Marsh Fischmann & Breyfogle LLP
8055 East Tufts Avenue, Suite 450
Denver, CO 80237

POWER OF ATTORNEY NOTICE

OC000000107800088

Date Mailed: 05/01/2019

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/26/2019.

- The Power of Attorney to you in this application has been revoked by the applicant. Future correspondence will be mailed to the new address of record(37 CFR 1.33).

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/sleutchit/

To: mo@patvent.com,unisha@patvent.com,USPTO@dockettrak.com
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 153965

May 01, 2019 04:42:27 AM

Dear PAIR Customer:

Patent Ventures, LLC
700 Uccelli Drive
7204
Redwood City, CA 94063
UNITED STATES

The following USPTO patent application(s) associated with your Customer Number, 153965 , have new outgoing correspondence. This correspondence is now available for viewing in Private PAIR.

The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

Disclaimer:
The list of documents shown below is provided as a courtesy and is not part of the official file wrapper. The content of the images shown in PAIR is the official record.

Application	Document	Mailroom Date	Attorney Docket No.
14253204	N570	05/01/2019	51263-00180
	N570	05/01/2019	51263-00180

To view your correspondence online or update your email addresses, please visit us anytime at https://sportal.uspto.gov/secure/myportal/privatepair.

If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov with 'e-Office Action' on the subject line or call 1-866-217-9197 during the following hours:

Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY.DOCKET NO./TITLE	REQUEST ID
14/253,204	04/15/2014	Christopher P. Ricci	51263-00180	170495

Acknowledgement of Change to Small Entity Status

The entity status change request below filed through Private PAIR on 07/20/2022 has been accepted.

CERTIFICATIONS:

Change of Entity Status:

X Applicant asserting small entity status. See 37 CFR 1.27.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

This portion must be completed by the signatory or signatories making the entity status change in accordance with 37 CFR 1.4(d)(4).

Signature:	/Unisha Patel/
Name:	Unisha Patel
Registration Number:	72449

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Inventor: Christopher P. Ricci

Confirmation Number: 7690

Application No.: 14/253,204

Filed: April 15th, 2016

Title: CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA

Petition under 37 CFR 1.378

Mail Stop Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam/Sir:

Patent Owner, AutoConnect Holdings LLC, hereby requests that the Office reinstate the issued patent associated with the above-referenced application. The patent expired in September 2019 due to an unintentional delay in the payment of the required maintenance fee. As this Petition is filed more than two years after the expiration for failure to pay maintenance fees, Patent Owner has attached herewith a declaration from Gregg Hershenson, the Chief Executive Officer of Patent Owner, in which Mr. Hershenson provides additional information concerning the unintentional failure to pay the required maintenance fee.

Filed along with this additional statement are Petition Form SB66 and the associated USPTO fees.

The maintenance fees are paid via PTO-SB45 and PTO-2038. The forms PTO-SB45 and PTO-2038 are faxed to the USPTO.

Patent Owner requests that the Office consider the above explanation and reinstate the patent.

Respectfully submitted,

/Unisha Patel/
Unisha Patel
Registration No.: 72449

PTO/SB/66 (11-21)
Approved for use through 11/30/2024. OMB 0651-0016
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))

Docket Number (Optional)
51263-00180

Mail to: **Mail Stop Petition**
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450
Fax: (571) 273-8300

NOTE: If information or assistance is needed in completing this form, please contact the Office of Petitions at (571) 272-3282.

Patent No. 9,147,296 Application Number 14/253,204

Issue Date 09-29-2015 Filing Date 04-15-2014

CAUTION: Maintenance fee payment must correctly identify: (1) the patent number (or reissue patent number, if a reissue) and (2) the application number of the actual U.S. application (or reissue application) leading to issuance of that patent to ensure the fee(s) is/are associated with the correct patent. 37 CFR 1.366(c) and (d).

Also complete the following information, if applicable.

The above-identified patent

☐ is a reissue of original Patent No. _____ original issue date _____

original application number _____

original filing date _____.

☐ resulted from the entry into the U.S. under 35 U.S.C. 371 of international application _____

filed on _____.

NOTE: A grantable petition requires the following items:

(1) Petition fee;
(2) Maintenance fee; and
(3) Statement that the delay in payment of the maintenance fee was unintentional.

CERTIFICATE OF MAILING OR TRANSMISSION (37 CFR 1.8(a))

I hereby certify that this paper (* along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service on the date shown below with sufficient postage as first class mail in an envelope addressed to Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, or being transmitted to the U.S. Patent and Trademark Office by EFS-Web, or by facsimile to (571) 273-8300, on the date shown below.

_____ Date

_____ Signature

_____ Typed or Printed Name of Person Signing Certificate

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a currently valid OMB Control Number. The OMB Control Number for this information collection is 0651-0016. Public burden for this form is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO/SB/66 (11-21)
Approved for use through 11/30/2024. OMB 0651-0016
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))

1. SMALL ENTITY

☑ Patentee asserts, or has previously asserted, small entity status. See 37 CFR 1.27.

2. LOSS OF ENTITLEMENT TO SMALL ENTITY STATUS

☐ Patentee is no longer entitled to small entity status. See 37 CFR 1.27(g).

3. MICRO ENTITY

☐ Patentee certifies, or has previously certified, micro entity status. See 37 CFR 1.29
Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.

4. LOSS OF ENTITLEMENT TO MICRO ENTITY STATUS

☐ Patentee is no longer entitled to micro entity status. See 37 CFR 1.29(i).

5. MAINTENANCE FEE (37 CFR 1.20(e)-(g))

The appropriate maintenance fee must be submitted with this petition, unless it was paid earlier.

Undiscounted			Small Entity			Micro Entity		
Amount	Fee	(Code)	Amount	Fee	(Code)	Amount	Fee	(Code)
☐ $ _____	3½ yr fee	(1551)	☑ $ 1000	3½ yr fee	(2551)	☐ $ _____	3½ yr fee	(3551)
☐ $ _____	7½ yr fee	(1552)	☐ $ _____	7½ yr fee	(2552)	☐ $ _____	7½ yr fee	(3552)
☐ $ _____	11½ yr fee	(1553)	☐ $ _____	11½ yr fee	(2553)	☐ $ _____	11½ yr fee	(3553)

MAINTENANCE FEE BEING SUBMITTED $ 1000

6. PETITION FEE

The petition fee required by 37 CFR 1.17(m) of:

$ _____ Undiscounted (Fee Code 1558); or
$ 1050 Small Entity (Fee Code 2558); or
$ _____ Micro Entity (Fee Code 3558)

must be paid as a condition of accepting an unintentionally delayed payment of a maintenance fee.

PETITION FEE BEING SUBMITTED $ 1050

7. MANNER OF PAYMENT

☐ Enclosed is a check for the sum of $ _____
☐ Please charge Deposit Account No. _____ the sum of $ _____
☑ Payment by credit card. Form PTO-2038 is attached.
☑ Payment made via EFS-Web.

8. AUTHORIZATION TO CHARGE ANY FEE DEFICIENCY

☐ The Director is hereby authorized to charge any maintenance fee or petition deficiency to Deposit Account No. _____

PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))

9. OVERPAYMENT

As to any overpayment made, please

☐ Credit to Deposit Account No. _____

OR

☐ Send refund check

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information, such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form (PTO-2038) submitted for payment purposes), is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioner/applicant should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms (PTO-2038) submitted for payment purposes are not retained in the application file and therefore are not publicly available.

10. STATEMENT

The delay in payment of the maintenance fee for this patent was unintentional.

Petitioner is reminded that a delay resulting from a deliberately chosen course of action or a change in circumstance is not an unintentional delay.

Petitioner is further reminded that a person seeking reinstatement of an expired patent should not make a statement that the delay in payment of the maintenance fee was unintentional unless the entire delay was unintentional, including the period from discovery that the maintenance fee was not timely paid until payment of the maintenance fee. For example, a statement that the delay in payment of the maintenance fee was unintentional would not be proper when the patentee becomes aware of an unintentional failure to timely pay the maintenance fee and then intentionally delays filing a petition for reinstatement of the patent under 37 CFR 1.378. See MPEP 2590.

NOTE: Where the petition under 37 CFR 1.378 is filed more than two years after the date the patent expired for nonpayment of the maintenance fee, the United States Patent and Trademark Office requires an additional explanation of the circumstances surrounding the delay that establishes the entire delay was unintentional. This requirement is in addition to the requirement to provide a statement that the entire delay was unintentional. See *Clarification of the Practice for Requiring Additional Information in Petitions Filed in Patent Applications and Patents Based on Unintentional Delay*, 85 FR 12222 (March 2, 2020). See MPEP 711.03(c)(II)(C)-(F) for additional guidance on the information required to establish that the entire delay was unintentional.

☑ Because this petition under 37 CFR 1.378 is being filed more than two years after the date the patent expired for nonpayment of the maintenance fee, additional explanation of the circumstances surrounding the delay that establishes the entire delay was unintentional is enclosed herewith.

PTO/SB/66 (11-21)
Approved for use through 11/30/2024. OMB 0651-0016
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION TO ACCEPT UNINTENTIONALLY DELAYED PAYMENT OF MAINTENANCE FEE IN AN EXPIRED PATENT (37 CFR 1.378(b))

11. PETITIONER REQUESTS THAT THE DELAYED PAYMENT OF THE MAINTENANCE FEE BE ACCEPTED AND THE PATENT BE REINSTATED.

8-2-2022
Date

/Unisha Patel/
Signature(s) of Petitioner

72449
Registration Number, if applicable

Unisha Patel
Typed or Printed Name

9088126409
Telephone Number

1655 Delano Street, Unit 32 Milpitas CA 95035
Address

Address

37 CFR 1.378(c) states: "Any petition under this section must be signed in compliance with § 1.33(b)."

12. ENCLOSURES

- [x] Maintenance Fee Payment
- [x] Petition fee under 37 CFR 1.17(m) (fee for filing the maintenance fee petition)
- [x] Additional sheet(s) containing statement establishing unintentional delay
- [ ] Other: _____

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. The United States Patent and Trademark Office (USPTO) collects this information under authority of 5 CFR 1.290. The information in this system of records is used to manage all records of applicant including name, citizenship, residence, post office address and other information with respect to inventors and their legal representatives pertaining to the applicant's activities in connection with the invention for which a patent is sought. This information is protected from disclosure to third parties in accordance with the Privacy Act.

However, routine uses of this information may include disclosure to the following: to law enforcement and investigation in the event that the system of records indicates a violation or potential violation of law; to a Federal, state, local, or international agency, in response to its request; to an agency, organization, or individual for the purpose of performing audit or oversight operations as authorized by law; to non-federal personnel under contract to the agency; to a court for adjudication and litigation; to the Department of Justice for Freedom of Information Act (FOIA) assistance; to members of congress working on behalf of an individual; to the Office of Personnel Management (OPM) for personnel research purposes; to National Archives and Records Administration for inspection of records; and to the Office of Management and Budget (OMB)for legislative coordination and clearance. Failure to provide any part of the requested information may result in an inability to process requests for access and information. The applicable Privacy Act System of Records Notice for this information is COMMERCE/PAT-TM-7 Patent Application Files, available at Federal Register / Vol. 78, No. 61 / Friday, March 29, 2013 /Notices 19243. https://www.govinfo.gov/content/pkg/FR-2013-03-29pdf/2013-07341.pdf

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applications of

Inventor: Christopher P. Ricci

Petition under 37 CFR 1.378

Mail Stop Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF GREGG HERSHENSON
IN SUPPORT OF PETITION UNDER 37 CFR 1.378

I, Gregg Hershenson, hereby declare and state as follows:

1. I am the Chief Executive Officer of AutoConnect Holdings, LLC, and have held that role since the company's inception.

2. AutoConnect focuses on the development of technology for improving vehicular connectivity, including through mobile device integration, remote configuration, formation of vehicle-to-vehicle safety networks, and improved infotainment platforms. AutoConnect's patent portfolio, which currently includes over 70 issued patents in the United States, is a key asset of the company. I have been responsible for ensuring that maintenance fees have been paid on AutoConnect's patent portfolio, which includes **Patent Nos. 9,140,560; 9,142,071; 9,142,072; 9,147,296; 9,147,297; 9,147,298; 9,153,084; 9,159,232; 9,173,100; 9,176,924;** and **9,183,685** ("the Subject Patents").

3. On May 15, 2019, AutoConnect entered into a Patent Purchase Agreement ("PPA") with IP Optimum Limited, under which title to AutoConnect's patent portfolio, including the Subject Patents, was assigned to IP Optimum. The agreement included provisions

governing the payment of maintenance fees and, specifically, required that IP Optimum pay any maintenance fees due and payable on the Subject Patents for the period commencing after the closing date for the PPA on May 15, 2019. Based on this provision, it was AutoConnect's understanding that IP Optimum was required to pay maintenance fees for the Subject Patents.

4. The PPA was structured so that AutoConnect had various ongoing interests in the assigned patents, including the Subject Patents. Specifically, AutoConnect had a reversionary right to reacquire the patents for no compensation if certain conditions were not satisfied.

5. On March 27, 2020, AutoConnect exercised its right to reacquire the patents, including the Subject Patents.

6. The Subject Patents all expired during the period between September 23, 2019, and November 12, 2019. This was several months after the execution of the PPA and before AutoConnect required the patents. Maintenance fees for AutoConnect patents that were due after this time frame were timely paid and those patents remain in effect.

7. IP Optimum never requested nor did AutoConnect ever authorize, IP Optimum to abandon any patents for any reason, including through a failure to pay maintenance fees.

8. At no point in time, either before or after execution of the PPA, did AutoConnect intend, or otherwise elect, to abandon the Subject Patents. At all times it was AutoConnect's belief and understanding that all maintenance fees had been paid and the Subject Patents (as with all other patents that were the subject of the PPA) remained in full force and effect.

9. Recently, it was brought to our attention that, despite our belief that the Subject Patents remained in full force and effect, that they had expired due to failure to pay maintenance fees. After learning that the Subject Patents had expired, I promptly undertook efforts to confirm that this was not an intentional decision.

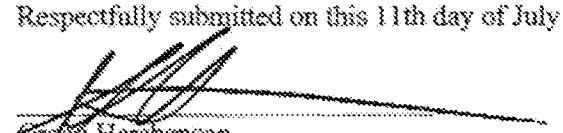
10. My investigation included discussions with my AutoConnect colleagues, who confirmed there was never any decision or intent to allow the Subject Patents to expire. The investigation also included discussions with AutoConnect's patent counsel to confirm there was never an instruction to let the Subject Patents expire. In addition, working with our legal counsel, we received confirmation from persons associated with IP Optimum, including those responsible for the payment of maintenance fees, that IP Optimum was not aware the Subject Patents had expired and never made any decisions to allow any patents, including the Subject Patents, to expire. This was further confirmed by IP Optimum's patent counsel.

11. The expiration of all the Subject Patents during the September through November 2019 time frame is consistent with the fact the neither AutoConnect nor IP Optimum intended for the Subject Patents to expire. Instead, upon information and belief, it appears that the failure to pay maintenance fees was an accident resulting from a misunderstanding between AutoConnect and IP Optimum about who was responsible for paying the maintenance fees for the assigned patents during the September to November 2019 time frame under the PPA.

12. I prepared this declaration immediately upon completion of my investigation.

13. I declare that all statements made herein are true to the best of my knowledge, or if made upon information and belief, are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted on this 11th day of July 2022,



Gregg Hershenson
CEO
AutoConnect Holdings, LLC

Electronic Patent Application Fee Transmittal

Application Number:	14253204
Filing Date:	15-Apr-2014
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Filer:	Unisha Patel
Attorney Docket Number:	51263-00180

Filed as Small Entity

Filing Fees for Utility under 35 USC 111(a)

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
PET. REVIVE ABANDON APP, DELAY PYMT-RESP	2453	1	1050	1050
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD($)
Extension-of-Time:				
Miscellaneous:				
			Total in USD ($)	**1050**

Electronic Acknowledgement Receipt

EFS ID:	46322282
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	153965
Filer:	Unisha Patel
Filer Authorized By:	
Attorney Docket Number:	51263-00180
Receipt Date:	02-AUG-2022
Filing Date:	15-APR-2014
Time Stamp:	12:42:16
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	CARD
Payment was successfully received in RAM	$1050
RAM confirmation Number	E202282C42542059
Deposit Account	
Authorized User	
The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:	

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Petition for review by the PCT legal office	Petitiontorevive51263-00180.pdf	24623 d9538d6be5b79c0a344d2b254202f02f3ca3e8c6	no	1
Warnings:					
Information:					
2	Petition for review by the PCT legal office	SB6651263-00180.pdf	318105 b973237683e8f7098bb80682afa51b965378f39e	no	5
Warnings:					
Information:					
3	Miscellaneous Incoming Letter	GreggDeclaration7-12-2022.pdf	328398 33717391aa7932814140f724998b1bc0edc4cced	no	4
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	37815 5b12498ea3a041647d32c1c160cb2f25a5d8f5fb	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	708941		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

PTO/SB/92 (05-22)
Approved for use through 05/31/2024. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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Certificate of Mailing or Transmission under 37 CFR 1.8

I hereby certify that this correspondence is being:

1. ☐ Deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

   Commissioner for Patents
   P.O. Box 1450
   Alexandria, VA 22313-1450

   on _____ ,
   Date

2. ☑ Facsimile transmitted to the United States Patent and Trademark Office, or

   OR

3. ☐ Transmitted via the USPTO's patent electronic filing system (Patent Center or EFS-Web).

/Unisha Patel/	8-2-2022
Signature	Date
Unisha Patel	9088126409
Typed or printed name	Telephone number

Note: Each paper must have its own certificate of mailing or transmission, or this certificate must identify each submitted paper:

PTO-2038

PTO-SB45

A Federal agency may not conduct or sponsor, and a person is not required to respond to, nor shall a person be subject to a penalty for failure to comply with an information collection subject to the requirements of the Paperwork Reduction Act of 1995, unless the information collection has a currently valid OMB Control Number. The OMB Control Number for this information collection is 0651-0031. Public burden for this form is estimated to average 1.8 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the information collection. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden to the Chief Administrative Officer, United States Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 or email InformationCollection@uspto.gov. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

PTO-2038 (06-2021)
United States Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Credit Card Payment Form

(Do not submit this form electronically via EFS-Web)

Please Read Instructions before Completing this Form

Credit Card Information

Credit Card Type: ☐ Visa ☐ MasterCard ☒ American Express ☐ Discover

Credit Card Account #: [redacted]

Credit Card Expiration Date (mm/yyyy): 06/2024

Name as it Appears on Credit Card: Unisha Patel

Payment Amount (US Dollars): $1000

Cardholder Signature: /Unisha Patel/ | Date (mm/dd/yyyy): 08-02-2022

The USPTO accepts a handwritten signature or an s-signature under 37 CFR 1.4(d).
Refund Policy: The USPTO may refund a fee paid by mistake or in excess of that required. A change of purpose after the payment of a fee will not entitle a party to a refund of such fee. The USPTO will not refund amounts of $25.00 or less unless a refund is specifically requested and will not notify the payor of such amounts (37 CFR 1.26). Refund of a fee paid by credit card will be issued as a credit to the credit card account to which the fee was charged.
Maximum Daily Limit: There is a $24,999.99 daily limit per credit card account effective June 1, 2015. There is no daily limit for debit cards.

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Request and Payment Information

Description of Request and Payment Information:

☐ Patent Fee	☒ Patent Maintenance Fee	☐ Trademark Fee	☐ Other Fee
Application No.	Application No. 14/253,204	Application No.	IDON Customer No.
Patent No.	Patent No. 9,147,296	Registration No.	
Attorney Docket No.		Identify or Describe Mark	

If the cardholder includes a credit card number on any form or document other than the Credit Card Payment Form or submits this form electronically via EFS-Web, the United States Patent and Trademark Office will not be liable in the event that the credit card number becomes public knowledge.

Fee code 1599

PTO/SB/45 (05-22)

MAINTENANCE FEE TRANSMITTAL FORM

(Do not submit this form electronically via USPTO's patent electronic filing system (Patent Center or EFS-Web))

Address to:
Mail Stop Maintenance Fee
Director of the United States
Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

– OR –

Fax to: 571-273-6500

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the "Mail Stop Maintenance Fee" address displayed on the left, or being transmitted to the USPTO by facsimile to 571-273-6500, on the date below.

Date 8-2-2022

Signature /Unisha Patel/

Typed or printed name Unisha Patel

Enclosed herewith is the payment of the maintenance fee(s) for the listed patent(s).

1. ☐ A check for the amount of $ _____ for the full payment of the maintenance fee(s) and any necessary surcharge is enclosed.
2. ☑ Payment by credit card. Form PTO-2038 is enclosed.
3. ☐ The Director is hereby authorized to charge $ _____ to cover the payment of the fee(s) indicated below to Deposit Account No. _____.
4. ☐ The Director is hereby authorized to charge any deficiency in the payment of the required fee(s) or credit any overpayment to Deposit Account No. _____.

Item	Patent Number* Column 1	U.S. Application Number* (e.g., 08/555,555) Column 2	Maintenance Fee Amount (37 CFR 1.20(e)-(g)) Column 3	Surcharge Amount (37 CFR 1.20(h)) Column 4	Payment Year (select one below) Column 5		
					3.5 yrs	7.5 yrs	11.5 yrs
1	9,147,296	14/253,204	$1000		X		
2							
3							
4							
5							
	Subtotals: Columns 3 & 4				☐ _____ additional sheets attached for listing additional patents.		
	Total Payment		1000				

* Information required by 37 CFR 1.366(c) (columns 1 & 2). Information requested under 37 CFR 1.366(d) (columns 3, 4, & 5).

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on Form PTO-2038.

Respectfully submitted,**

Customer's Signature /Unisha Patel/

Customer's Name Unisha Patel

Registration Number, if applicable: 72449

Telephone: 9088126409

Fax: _____

Note: All correspondence will be forwarded to the "Fee Address" or to the "Correspondence Address" if no "Fee Address" has been provided. See 37 CFR 1.363.

Payment of small entity fee is appropriate if small entity status still exists, see 37 CFR 1.27(g). To establish small entity status or to notify of a loss of entitlement to small entity status, a written assertion is required. See 37 CFR 1.27 and 1.33(b). Payment of micro entity fee is appropriate if patent owner certifies micro entity status. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously. To notify of a loss of entitlement to micro entity status, a written assertion is required. See 37 CFR 1.29 and 1.33(b).

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UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	51263-00180	7690

153965 7590 12/22/2022

Patent Ventures, LLC
1655 Delano Street, 32
Milpitas, CA 93035

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3667	

NOTIFICATION DATE	DELIVERY MODE
12/22/2022	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@dockettrak.com
mo@patvent.com
unisha@patvent.com

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

In re Patent No. 9,147,296	:	
Issued: September 29, 2015	:	
Application No. 14/253,204	:	
Filed: 15 Apr 2014	:	DECISION ON PETITION
For: CUSTOMIZATION OF VEHICLE	:	
CONTROLS AND SETTINGS BASED ON	:	
USER PROFILE DATA	:	

This is a decision on the petition under 37 CFR 1.378(b), filed August 2, 2022, to accept the delayed payment of a maintenance fee for the above-identified patent.

The petition under 37 CFR 1.378(b) is **DISMISSED**.

If reconsideration of this decision is desired, a petition for reconsideration under 37 CFR 1.378(d) must be filed within TWO (2) MONTHS from the mail date of this decision. No extension of this two-month time limit can be granted under 37 CFR 1.136(a) or (b). This is **not** a final agency action within the meaning of 5 U.S.C. § 704.

The petition for reconsideration must include the lacking item(s) noted below, since, after a decision on the petition for reconsideration, no further reconsideration or review of the matter will be undertaken by the Director.

This patent expired on September 1, 2019 for failure to pay the 3.5-year maintenance fee. A petition to accept the unintentionally delayed payment of a maintenance fee under 35 U.S.C. 41(c) and 37 CFR 1.378(b) must be accompanied by: (1) a statement that the delay was unintentional; (2) payment of the appropriate maintenance fee, unless previously submitted; (3) payment of the petition fee forth in 37 CFR 1.17(m).

The petition fails to satisfy requirement (1) set forth above as the petition does not satisfy 37 CFR 1.378(b)(3). Petitioner has submitted the required statement of unintentional delay. However, this petition was filed more than two years after the patent expired for nonpayment of a maintenance fee.

With respect to the delay, the declaration of Gregg Hershenson asserts *inter alia*:

- He the Chief Executive Officer of AutoConnect Holdings, LLC.

- Petitioner has been responsible for ensuring that maintenance fees have been paid on AutoConnect's patent portfolio, which includes Patent Nos. 9,140,560; 9,142,071; 9,142,072; 9,147,296; 9,147,297; 9,147,298; 9,153,084; 9,159,232; 9,173,100; 9,176,924; and 9,183,685 ("the Subject Patents").

- On May 15, 2019, AutoConnect entered into a Patent Purchase Agreement ("PPA") with IP Optimum Limited, under which title to AutoConnect's patent portfolio, including the Subject Patents, was assigned to IP Optimum. Effective May 5, 2019, the agreement required IP Optimum to pay any maintenance fees due and payable on the Subject Patents. In view of the purchase agreement, AutoConnect's understanding that IP Optimum was required to pay maintenance fees for the Subject Patents.

- AutoConnect had a reversionary right to reacquire the patents for no compensation if certain conditions were not satisfied.

- On March 27, 2020, AutoConnect exercised its right to reacquire the patents, including the Subject Patents.

- The Subject Patents all expired during the period between September 23, 2019, and November 12, 2019. This was several months after the execution of the PPA and before AutoConnect reacquired the patents. Maintenance fees for AutoConnect patents that were due after this time frame were timely paid and those patents remain in effect.

- IP Optimum never requested nor did AutoConnect ever authorize, IP Optimum to abandon any patents for any reason, including through a failure to pay maintenance fees.

- At no point in time, either before or after execution of the PPA, did AutoConnect intend, or otherwise elect, to abandon the Subject Patents. At all times it was AutoConnect's belief and understanding that all maintenance fees had been paid and the Subject Patents (as with all other patents that were the subject of the PPA) remained in full force and effect.

- Recently, it was brought to our attention that, despite our belief that the Subject Patents remained in full force and effect, that they had expired due to failure to pay maintenance fees. After learning that the Subject Patents had expired, I promptly undertook efforts to confirm that this was not an intentional decision.

- My investigation included discussions with my AutoConnect colleagues, who confirmed there was never any decision or intent to allow the Subject Patents to expire. The investigation also included discussions with AutoConnect's patent counsel to confirm there was never an instruction to let the Subject Patents expire. In addition, working with

our legal counsel, we received confirmation from persons associated with IP Optimum, including those responsible for the payment of maintenance fees, that IP Optimum was not aware the Subject Patents had expired and never made any decisions to allow any patents, including the Subject Patents, to expire. This was further confirmed by IP Optimum's patent counsel.

- The expiration of all the Subject Patents during the September through November 2019 time frame is consistent with the fact the neither AutoConnect nor IP Optimum intended for the Subject Patents to expire. Instead, upon information and belief, it appears that the failure to pay maintenance fees was an accident resulting from a misunderstanding between AutoConnect and IP Optimum about who was responsible for paying the maintenance fees for the assigned patents during the September to November 2019 time frame under the PPA.

- Petitioner's declaration was prepared immediately upon completion of his investigation.

The USPTO requires additional information concerning whether a delay in seeking acceptance of a delayed maintenance fee payment was unintentional where the petition to accept such maintenance fee payment was filed more than two years after the date the patent expired for nonpayment. See, Clarification of the Practice for Requiring Additional Information in Petitions Filed in Patent Applications and Patents Based on Unintentional Delay, 85 FR 12222 (March 2, 2020). Therefore, additional information that provides an explanation of the circumstances surrounding the delay that establishes the entire delay was unintentional is required.

The USPTO is concerned with three periods of delay. Petitioner is reminded the burden of proof to establish that the delay from the due date for the payment of the maintenance fee until the filing of a grantable petition was unintentional within the meaning of 35 U.S.C. 41(c)(1) and 37 CFR 1.378 rests with the petitioner.

The first period of delay petitioner must address on renewed petition is the delay in payment of the maintenance fee that resulted in the expiration of this patent. Petitioner must explain the delay between when the maintenance fee was due and when the maintenance fee was paid.

Hershenson asserts that AutoConnect was responsible for timely submitting the maintenance fee for the instant patent. The petition, however, provides no explanation for why AutoConnect did not timely submit the maintenance fee. Accordingly, it cannot be found that the entire period of time, from the time that the maintenance fee was due until the filing of a grantable petition, was unintentional.

Petitioner should note that the party whose delay is relevant is the party having the right or authority to make the timely maintenance fee payment in the above-identified patent. When the entire right, title, and interest in patent have been assigned to a third party (and thus does not retain any legal or equitable interest in the invention), the delay of the patentee to whom the

patent was issued is irrelevant in evaluating whether the delay was unintentional. See, Kim v. Quigg, 718 F. Supp. 1280, 1284, 12 USPQ2d 1604, 1607-08 (E.D. Va. 1989). See, MPEP 711.03(c)(II)(C)-(F) for additional guidance on the information required to establish that the entire delay was unintentional.

Any request for reconsideration of this decision must establish that the failure to timely submit the maintenance, from the time that the maintenance fee was due until the filing of a grantable petition, has been unintentional.

The second period of delay petitioner must address on renewed petition is the delay in filing the initial petition pursuant to 37 CFR 1.78. Petitioner must explain why the initial petition was not filed until August 2, 2022.

Hershenson declares that it was "recently" brought to his attention that the patent was expired. Hershenson does not set forth the circumstances surrounding the discovery that the patent was expired.

The petitioner does not indicate when it was discovered that the patent was expired or indicate who made the discovery that the patent was expired. The petition has provided no details of the circumstances surrounding the discovery that the patent was expired. It is noted that Hershenson references an investigation into the circumstances surrounding the expiration of various patents, including that which is the subject of the instant petition. However, neither petitioner nor Hershenson indicate when this investigation commenced and ended.

As it is not known when or how it became known that the patent was expired and when and what action commenced thereafter to seek reinstatement of the patent, it cannot be found that the filing of the instant petition has been unintentionally delayed.

Any request for further consideration of this matter must establish that the delay in filing the initial petition to reinstate the patent was unintentional.

The third period of delay petitioner must address on renewed petition is the delay in filing a *grantable* petition pursuant to 37 CFR 1.378(b). Petitioner is reminded that the burden of establishing that the entire period of delay, from the time that the maintenance fee was due until the filing of a grantable petition, remains with patentee.

When addressing each of these three periods of delay, petitioner is reminded that an intentional course of action is not rendered unintentional when, upon reconsideration, the petitioner changes his or her mind as to the course of action that should have been taken. See, In re Maldague, 10 USPQ2d 1477, 1478 (Comm'r Pat. 1988). Petitioner's failure to carry the burden of proof to establish that the "entire" delay was "unintentional" may lead to the denial of a petition under 37 CFR 1.378, regardless of the circumstances that originally resulted in the failure to timely pay the maintenance fee.

When seeking reinstatement of an expired patent, a petitioner should not make a statement that the delay in payment of the maintenance fee was unintentional unless the entire delay was unintentional, including the period from discovering the maintenance fee was not timely paid until payment of the maintenance fee. For example, a statement that the delay in payment of the maintenance fee was unintentional would not be proper when the petitioner becomes aware of an unintentional failure to timely pay the maintenance fee and then intentionally delays filing a petition for reinstatement of the patent under 37 CFR 1.378. See, MPEP 2590(I).

Further correspondence with respect to this matter should be addressed as follows:

By Mail:
Mail Stop PETITION
Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450

By hand:
U. S. Patent and Trademark Office
Customer Service Window, Mail Stop Petitions
Randolph Building
401 Dulany Street
Alexandria, VA 22314

The centralized facsimile number is (571) 273-8300.

Via EFS-Web

Telephone inquiries should be directed to the undersigned at (571) 272-3205.

/ALESIA M. BROWN/

Alesia M. Brown
Attorney Advisor
Office of Petitions

To: mo@patvent.com,unisha@patvent.com,USPTO@dockettrak.com
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 153965

Dec 22, 2022 03:24:13 AM

Dear PAIR Customer:

Patent Ventures, LLC
1655 Delano Street, 32
Milpitas, CA 93035
UNITED STATES

The following USPTO patent application(s) associated with your Customer Number, 153965 , have new outgoing correspondence. This correspondence is now available for viewing in Private PAIR.

The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

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Application	Document	Mailroom Date	Attorney Docket No.
14253204	PETDEC	12/22/2022	51263-00180

To view your correspondence online or update your email addresses, please visit us anytime at https://sportal.uspto.gov/secure/myportal/privatepair.

If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov with 'e-Office Action' on the subject line or call 1-866-217-9197 during the following hours:

Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent No. 9,147,296

Inventor: Christopher P. Ricci

Confirmation Number: 6219

Application No.: 14/253,204

Filed: November 16, 2012

Title: CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA

Renewed Petition Under 37 CFR 1.378(b)

Mail Stop Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Madam/Sir:

This Renewed Petition is filed in response to the December 22, 2022, Decision on Patent Owner's Petition under 37 CFR 1.378 to revive Patent No. 9,147,296 for the unintentional failure to pay maintenance fees. Patent Owner respectfully submits that this Petition should be granted because the delayed payment of maintenance fees was unintentional and Petitioner has diligently worked to resolve the mistake since it was first discovered. At no time did anyone with an ownership interest in the patent intend to abandon the patent for failure to pay maintenance fees. This Request for Reconsideration is supported by (1) the December 28, 2022 Declaration from Mr. Gregg Hershenson, CEO of AutoConnect, and (2) the January 27, 2023 Declaration from Mr. Pascal Asselot, the person responsible for managing the commercialization of the AutoConnect patent portfolio while it was held by IP Optimum.

1. Patent Owner Discovered that the Patent Expired for Failure to Pay Maintenance Fees on About May 6, 2022

As confirmed in the December 28, 2022 Hershenson Declaration, on about May 6, 2022, Patent Owner learned from outside legal counsel that the patent had been declared abandoned for failure to pay the 3.5 year maintenance fees. Outside counsel notified AutoConnect immediately after discovering the patent had expired. Thereafter, Patent Owner diligently investigated the facts surrounding the untimely payment of maintenance fees and filed a renewed petition to revive without delay.

2. Patent Owner Conducted an Investigation Immediately Upon Discovery of the Expiration of the Patent, Which Confirmed that the Failure to Pay Maintenance Fees Was Unintentional

Mr. Hershenson immediately started his investigation after learning from outside counsel about the expiration of the patent on about May 6, 2022. He completed that investigation on about July 11, 2022, when he signed a declaration summarizing the results of his investigation.

As part of Mr. Hershenson's investigation, he looked into activities at AutoConnect as well as activities that occurred at IP Optimum. IP Optimum held title to the AutoConnect patent portfolio, including the patent at issue, from May 15, 2019, until March 27, 2020. Specifically, on May 15, 2019, AutoConnect and IP Optimum entered into a Patent Purchase Agreement ("PPA"), under which AutoConnect's patent portfolio, including the patent at issue, was assigned to IP Optimum. The parties structured the PPA so that AutoConnect had various ongoing interests in the patent at issue, including the right to reacquire its patents under certain conditions. On March 27, 2020, AutoConnect exercised its right to reacquire the patents, including the patent at issue.[1]

During his investigation, Mr. Hershenson confirmed with his AutoConnect co-owners that no one ever intentionally failed to pay maintenance fees or otherwise intended to let the patent lapse. As for IP Optimum, Mr. Hershenson spoke with three different people who supported IP Optimum's efforts to commercialize the AutoConnect patent portfolio, including the patent at issue. He spoke with IP Optimum's outside patent counsel, Darrin Auito, Esq., who confirmed that he never received an instruction not to pay the patent's maintenance fees (or any instruction to otherwise abandon the patent). He also spoke with Kathy Grubbs, Esq., who was involved with IP Optimum in the relevant time frame, and she too was unaware of any decisions or instructions not to pay maintenance fees. In addition, Mr. Hershenson spoke with Pascal Asselot, who was involved with the commercialization of the patent portfolio while held by IP Optimum, and he was also unaware of intention or any decision to abandon the patent, whether to avoid paying maintenance fees or for any other reason. Mr. Asselot's Declaration confirms this fact and further explains that there would not "have been any reason to abandon those applications because we were actively trying to commercialize them."

3. The Failure to Pay Maintenance Fees Was A Mistake

Patent Owner's investigation confirmed that the failure to pay maintenance fees was not an intentional decision but instead the result of a mistaken application of a contract.

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[1] Patent Owner understands that IP Optimum is no longer a going concern.

AutoConnect and IP Optimum included provisions in the PPA to ensure payment of any maintenance fees due and payable on the assigned patents. AutoConnect, however, misapplied the provisions in the PPA governing the parties' respective obligations to pay maintenance fees. Section 5.5 of the agreement states that "[IP Optimum] will pay any maintenance fees, annuities, and the like due and payable on the Patents for the period commencing after the [May 20, 2019] Closing Date." Based on this provision, AutoConnect understood that IP Optimum was required to pay maintenance fees for the Subject Patents. But in its investigation, AutoConnect discovered another provision, Section 6.11, which states that AutoConnect, as the Seller, agreed it has paid all maintenance fees "due or payable . . . within ninety (90) days following the [May 20, 2019] Closing Date" which "includes payment of . . . maintenance . . . fees for which the fee payment window has opened even if the surcharge date is in the future." AutoConnect misapplied the terms of the PPA, using the *deadline for payment of maintenance fees* as the operative date for determining which of Seller and Purchaser was responsible for paying maintenance fees while it appears that the *date on which the window for payment first opened* was the operative date. It was this misunderstanding that appears to have caused the failure to timely pay the maintenance fees.

Thus, as established by the December 28, 2022 Hershenson Declaration and the January 27, 2023 Asselot Declaration, (1) there was no intentional failure or delay in paying the 3.5 year maintenance fee or submitting a petition to revive, and (2) promptly upon discovering the fact the patent had expired for failure to pay maintenance fees, Patent Owner thoroughly investigated the issue and confirmed there was no intent to allow the patent to go abandoned for failure to pay maintenance fees, and (3) promptly prepared and submitted a renewed petition to revive. For this reason, Applicant requests that the Office revive the patent.

4. Patent Owner Diligently Completed and Filed the Petition to Revive

Petitioner filed its original petition to revive promptly after the completion of Mr. Hershenson's investigation and the preparation of the petition and supporting documents for submission to PTO.

5. Patent Owner Diligently Completed and Filed the Request for Reconsideration

The decision denying the petition to revive was mailed on December 22, 2022 and sets forth requests for additional information. This Renewed Petition is being filed within the two-month deadline identified therein.

6. No Further Payment of Fees Required

The Decision on Petition indicates that the appropriate fees have been paid and that "no further fees are due on renewed petition."

In view of the foregoing, Patent Owner respectfully requests that the Office deem the identified patent revived.

Respectfully submitted,

/Unisha Patel/
Unisha Patel
Registration No.: 72449

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applications of

Inventor: Christopher P. Ricci

Petition under 37 CFR 1.378

Mail Stop Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF GREGG HERSHENSON
IN SUPPORT OF PETITION UNDER 37 CFR 1.378

I, Gregg Hershenson, hereby declare and state as follows:

1. I am the Chief Executive Officer of AutoConnect Holdings, LLC, and have held that role since the company's inception. On June 15, 2022, AutoConnect submitted petitions under 37 CFR 1.378(b) to accept unintentionally delayed payments of the 3 ½ year maintenance fee for several patents owned by AutoConnect. An October 28, 2022, communication dismissed one of the petitions relating to U.S. Patent No. 9,123,058 (application 13/678,710) and requested additional information regarding the delay in a renewed petition. Additional facts concerning when AutoConnect discovered maintenance fees were not paid and the filing of petitions to revive are addressed herein.

2. AutoConnect focuses on the development of technology for improving vehicular connectivity, including through mobile device integration, remote configuration, formation of vehicle-to-vehicle safety networks, and improved infotainment platforms. AutoConnect's patent portfolio, which currently includes over 70 issued patents in the United States, is a key asset of the company. I have been responsible for ensuring that maintenance

fees have been paid on AutoConnect's patent portfolio, which includes **Patent Nos. 9,140,560; 9,142,071; 9,142,072; 9,147,296; 9,147,297; 9,147,298; 9,153,084; 9,159,232; 9,173,100; 9,176,924;** and **9,183,685**
("the Subject Patents").

3. On May 15, 2019, before any of the Subject Patents had expired for failure to pay maintenance fees, AutoConnect entered into a Patent Purchase Agreement ("PPA") with IP Optimum Limited, under which title to AutoConnect's patent portfolio, including the Subject Patents, was assigned to IP Optimum. AutoConnect and IP Optimum included provisions in the PPA to ensure the payment of any maintenance fees due and payable on the Subject Patents for the period commencing after the closing date for the PPA on May 20, 2019. Specifically, Section 5.5 of the agreement states that "Purchaser will pay any maintenance fees, annuities, and the like due and payable on the Patents for the period commencing after the [May 20, 2019] Closing Date." Based on this provision, AutoConnect understood that IP Optimum was required to pay maintenance fees for the Subject Patents.

4. The PPA was structured so that AutoConnect had various ongoing interests in the assigned patents, including the Subject Patents. Specifically, AutoConnect secured a reversionary right to reacquire the patents for no compensation if certain conditions were not satisfied. On March 27, 2020, AutoConnect exercised its right to reacquire the patents, including the Subject Patents.

5. The Subject Patents all expired during the period between September 23, 2019, and November 12, 2019. This was several months after the execution of the PPA and before AutoConnect required the patents. Maintenance fees for AutoConnect patents that were due after this time frame were timely paid and those patents remain in effect.

6. Earlier this year, around May 6, 2022, outside counsel discovered and brought to our attention that the Subject Patents had expired due to failure to pay maintenance fees. Until this date, AutoConnect was unaware that any the Subject Patents had expired as a result of a failure to pay maintenance fees, and so had no reason to pay the outstanding maintenance fees or file a petition under 37 CFR 1.378(b) seeking to revive them. After learning that the Subject Patents had expired, I immediately undertook efforts to investigate the missing maintenance fee payments. Consistent with the provisions in the PPA where both AutoConnect and IP Optimum agreed that all maintenance fees on the patent should be paid, I have confirmed that the failure to pay maintenance fees on the Subject Patents was unintentional.

7. During my investigation, I confirmed with the co-owners of AutoConnect, Christopher Ricci and Peter Sousa, that there was never any decision or intent to allow the Subject Patents to expire. Similarly, I confirmed that AutoConnect never authorized or instructed IP Optimum to abandon any patents for any reason, including through a failure to pay maintenance fees.

8. My investigation also included discussions with AutoConnect's patent counsel, who confirmed there was never an intention or instruction to let the Subject Patents expire.

9. In addition, upon learning of the expiration of the Subject Patents, I contacted several persons that were either employed by or associated with IP Optimum during the relevant time frame, including those who would have been knowledgeable about decisions to pay maintenance fees. I confirmed that IP Optimum's outside patent counsel, Darrin Auito, Esq., never received instructions not to pay maintenance fees or any instruction to otherwise abandon the Subject Patents. I also spoke with Kathy Grubbs, Esq., who was also involved

with IP Optimum in the relevant time frame. Ms. Grubbs also confirmed she was unaware of any decisions or instructions not to pay maintenance fees. More recently, I contacted Pascal Asselot and Erich Spangenberg, who were also involved with IP Optimum during the relevant time frame. Both confirmed they were unaware of intention or any decision to abandon patents. These discussions with individuals formerly associated with IP Optimum are consistent with the requirement to pay maintenance fees by the PPA and further confirm that the nonpayment of maintenance fees was unintentional.

10. In summary, at no point in time, either before or after execution of the PPA, did AutoConnect or IP Optimum intend, or otherwise elect, to abandon the Subject Patents. At all times it was AutoConnect's belief and understanding that all maintenance fees had been paid and the Subject Patents (as with all other patents that were the subject of the PPA) remained in full force and effect.

11. Based on our investigation, the failure to pay maintenance fees was accidental and appears to have resulted from confusion over provisions of the PPA that covered the payment of maintenance fees with a final deadline in the September to November 2019 time frame. For example, in addition to Section 5.5 of the agreement, which states that "Purchaser will pay any maintenance fees, annuities, and the like due and payable on the Patents for the period commencing after the [May 20, 2019] Closing Date," Section 6.11 of the PPA also addressed the payment of maintenance fees:

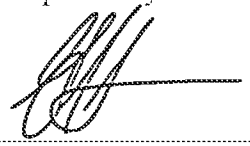
6.11 Prosecution Obligations; Fees. No undisclosed actions must be taken by Seller before any governmental entity (including the United States Patent and Trademark Office or equivalent authority anywhere in the world) within ninety (90) days of the Closing Date with respect to any of the Assigned Patent Rights. All maintenance fees, annuities, and the like due or payable on the Patents until the lapse of ninety (90) days following the Closing Date have been timely paid. For the avoidance of doubt, such timely payment includes payment of registration, maintenance, and renewal fees for which the fee payment window has opened even if the surcharge date is in the future. Notwithstanding the forgoing, responsibility for obligation to respond to prosecution matters, and associated expenses, will transfer to Purchaser immediately upon closing. At least sixty (60) days prior to the date by which action must be taken to avoid abandonment of a pending application, Purchaser shall provide Seller with notice if it intends to abandon such application and provide Seller an opportunity to reacquire the application at no cost ("Reacquired Applications"). Purchaser shall retain a non-exclusive license to Reacquired Applications with the right to grant a sublicense to any third party who receives a license to part or all of the remaining Patents.

Under Section 6.11, AutoConnect (Seller) agreed it has paid all maintenance fees "due or payable . . . within ninety (90) days following the [May 20, 2019] Closing Date." The agreement then states that "For the avoidance of doubt, such timely payment includes payment of . . . maintenance . . . fees for which the fee payment window has opened even if the surcharge date is in the future." AutoConnect misapplied this Section of the PPA and used *the deadline* for payment of maintenance fees as the operative date for determining which of Seller and Purchaser was responsible for paying maintenance fees. Section 6.11 appears to indicate that the operative date for payment by AutoConnect was when *the window for the payment of maintenance fees first opened*, not the payment deadline, which was several months after the parties executed the PPA.

12. My investigation began immediately after May 6, 2022, when I first learned that the Subject Patents had expired and finished just before our original petition to revive on July 11, 2022. I completed my investigation and AutoConnect filed its petition to revive as diligently as possible. The only reason for the passage of time between May 6, 2022, and the date AutoConnect filed petitions to revive under 37 CFR 1.378 was to perform an investigation into the issue and prepare the paperwork necessary to support the petition.

13. I declare that all statements made herein are true to the best of my knowledge, or if made upon information and belief, are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted on this 28th day of December 2022.



Gregg Hershenson
CEO
AutoConnect Holdings, LLC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Applications of

Inventor: Christopher P. Ricci

Petition under 37 CFR 1.378

Mail Stop Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION OF PASCAL ASSELOT
IN SUPPORT OF PETITION UNDER 37 CFR 1.378

I, Pascal Asselot, hereby declare and state as follows:

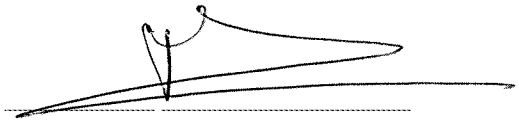
1. I co-founded IPwe in January 2018 and served as Managing Director from then until September 2021. I was responsible for the commercialization of patent portfolios. In particular, I managed the commercialization of a vehicular technology patent portfolio brought by an entity called IP Optimum and acquired from AutoConnect Holdings, LLC. I understand that IP Optimum is no longer a going concern.

2. In my role commercializing the patent portfolio, I am unaware of any decisions to abandon any patents in the AutoConnect patent portfolio, whether to avoid paying maintenance fees or for any other reason. Nor would there have been any reason to abandon those applications because we were actively trying to commercialize them.

3. I declare that all statements made herein are true to the best of my knowledge, or if made upon information and belief, are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United

States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Respectfully submitted on this 27th day of January 2023.



Pascal Asselot
69B, boulevard de Courcelles
75008 Paris
FRANCE

Electronic Acknowledgement Receipt

EFS ID:	47536587
Application Number:	14253204
International Application Number:	
Confirmation Number:	7690
Title of Invention:	CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	153965
Filer:	Unisha Patel
Filer Authorized By:	
Attorney Docket Number:	51263-00180
Receipt Date:	15-FEB-2023
Filing Date:	15-APR-2014
Time Stamp:	11:40:44
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Petition for review by the Office of Petitions	Petition1378B51263-001802-15-2023.pdf	45638 276b6514b4ca07098a7432c89eab36cd366b4719	no	4

Warnings:

Information:					
2	Miscellaneous Incoming Letter	HershensonDeclaration1.pdf	1589742 040907e726635e679ce8c8535fd97663b11b8ffc	no	6
Warnings:					
Information:					
3	Miscellaneous Incoming Letter	AsselotDeclaration.pdf	89393 b0f8c816adbfb44488a91680f695fba8c8f6cde9	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	1724773	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/253,204	04/15/2014	Christopher P. Ricci	51263-00180	7690

153965 7590 04/13/2023

Patent Ventures, LLC
1655 Delano Street, 32
Milpitas, CA 93035

EXAMINER
DUNN, ALEX C

ART UNIT	PAPER NUMBER
3667	

NOTIFICATION DATE	DELIVERY MODE
04/13/2023	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@dockettrak.com
mo@patvent.com
unisha@patvent.com

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

In re Patent No. 9,147,296	:	
Issued: September 29, 2015	:	
Application No. 14/253,204	:	
Filed: 15 Apr 2014	:	DECISION ON PETITION
For: CUSTOMIZATION OF VEHICLE CONTROLS AND SETTINGS BASED ON USER PROFILE DATA	:	

This is a decision on the petition under 37 CFR 1.378(b), filed February 15, 2023, to accept the delayed payment of a maintenance fee for the above-identified patent.

The petition is **GRANTED**.

This patent expired on September 29, 2019 for failure to pay the 3.5-year maintenance fee. A petition to accept the unintentionally delayed payment of a maintenance fee under 35 USC 41(c) and 37 CFR 1.378(b) must be accompanied by: (1) a statement that the delay was unintentional; (2) payment of the appropriate maintenance fee, unless previously submitted; (3) payment of the petition fee forth in 37 CFR 1.17(m).

The petition has been carefully considered and found in compliance with the provisions set forth above. The required petition fee, 3.5-year maintenance fee, and statement, including explanation, of unintentional delay have been provided.

In view thereof, the maintenance fee is hereby accepted and the above-identified patent is reinstated as of the mail date of this decision.

Patentee is advised as a courtesy that the window for timely submission of the 7.5-year maintenance fee opened September 29, 2022. Timely submission of the 7.5-year maintenance fee is required to avoid expiration of the patent.

Telephone inquiries should be directed to the undersigned at (571) 272-3205.

/ALESIA M. BROWN/

Alesia M. Brown
Attorney Advisor
Office of Petition

To: mo@patvent.com,unisha@patvent.com,USPTO@dockettrak.com
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 153965

Apr 13, 2023 03:59:46 AM

Dear PAIR Customer:

Patent Ventures, LLC
1655 Delano Street, 32
Milpitas, CA 93035
UNITED STATES

The following USPTO patent application(s) associated with your Customer Number, 153965 , have new outgoing correspondence. This correspondence is now available for viewing in Private PAIR.

The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

Disclaimer:
The list of documents shown below is provided as a courtesy and is not part of the official file wrapper. The content of the images shown in PAIR is the official record.

Application	Document	Mailroom Date	Attorney Docket No.
14253204	PETDEC	04/13/2023	51263-00180

To view your correspondence online or update your email addresses, please visit us anytime at https://sportal.uspto.gov/secure/myportal/privatepair.

If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov with 'e-Office Action' on the subject line or call 1-866-217-9197 during the following hours:

Monday - Friday 6:00 a.m. to 12:00 a.m.

Thank you for prompt attention to this notice,

UNITED STATES PATENT AND TRADEMARK OFFICE

PATENT APPLICATION INFORMATION RETRIEVAL SYSTEM