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: July 03, 2014

Ford Ex. 1002 Page 488 of 1178

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
(Use as many sheets as necessary)				First Named Inventor	Christopher Ricci
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	1	of	2	Attorney Docket Number	6583-247-CIP-5

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	5508689	04/16/1996	Rado et al.	
	2	5890080	03/30/1999	Coverdill et al.	
	3	6678747	01/13/2004	Goossen et al.	
	4	7643913	01/05/2010	Taki et al.	
	5	7899610	03/01/2011	McClellan	
	6	8346432	01/01/2013	Van Wiemeersch et al.	
	7	8725311	05/13/2014	Breed	
	8	2003/0007227	01/09/2003	Ogino	
	9	2005/0031100	02/10/2005	Iggulden et al.	
	10	2008/0234919	09/25/2008	Ritter et al.	
	11	2009/0275321	11/05/2009	Crow	
	12	2009/0279839	11/12/2009	Nakamura et al.	
	13	2010/0202346	08/12/2010	Sitzes et al.	
	14	2010/0235042	09/16/2010	Ying	
	15	2010/0253493	10/07/2010	Szczerba et al.	
	16	2011/0195699	08/11/2011	Tadayon et al.	
	17	2012/0109446	05/03/2012	Yousefi et al.	
	18	2012/0115446	05/10/2012	Guatama et al.	
	19	2012/0238286	09/20/2012	Mallavarapu et al.	
	20	2012/0242510	09/27/2012	Choi et al.	
	21	2012/0296567	11/22/2012	Breed	
	22	2013/0179689	07/11/2013	Matsumoto et al.	

UNPUBLISHED U.S. PATENT DOCUMENTS					
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
	23	14/468055	08/25/2014	Ricci	
	24	14/485467	09/12/2014	Ricci	

FOREIGN PATENT DOCUMENTS

Examiner Signature		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.

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	Christopher Ricci
(Use as many sheets as necessary)				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	2	of	2	Attorney Docket Number	6583-247-CIP-5

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]

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.
	25	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2014/019983, mailed Aug. 18, 2014 (Attorney's Ref. No. 6583-247-CIP-PCT) 10 pages
	26	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US14/19216, mailed Jul. 25, 2014 (Attorney's Ref. No. 6583-247-CIP-6-PCT) 8 pages
	27	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US14/19201, mailed Jul. 29, 2014 (Attorney's Ref. No. 6583-247-CIP-15-PCT) 11 pages
	28	Official Action for U.S. Patent Application No. 13/679,878, mailed Sep. 26, 2014 (Attorney's Ref. No. 6583-232) 7 pages
	29	Official Action for U.S. Patent Application No. 13/679,875, mailed Jul. 17, 2014 (Attorney's Ref. No. 6583-233) 13 pages
	30	Notice of Allowance for U.S. Patent Application No. 13/679,441, mailed Jul. 22, 2014 (Attorney's Ref. No. 6583-244) 5 pages
	31	Official Action for U.S. Patent Application No. 13/828,513, mailed Sep. 04, 2014 (Attorney's Ref. No. 6583-247-CIP) 5 pages
	32	Official Action for U.S. Patent Application No. 13/828,651, mailed Jul. 29, 2014 (Attorney's Ref. No. 6583-247-CIP-2) 17 pages
	33	Notice of Allowance for U.S. Patent Application No. 13/829,157, mailed Jul. 25, 2014 (Attorney's Ref. No. 6583-247-CIP-7) 14 pages
	34	Official Action for U.S. Patent Application No. 13/829,505, mailed Jul. 23, 2014 (Attorney's Ref. No. 6583-247-CIP-8) 7 pages
	35	Official Action for U.S. Patent Application No. 13/829,718, mailed Jul. 25, 2014 (Attorney's Ref. No. 6583-247-CIP-10) 8 pages
	36	Official Action for U.S. Patent Application No. 13/830,003, mailed Jul. 25, 2014 (Attorney's Ref. No. 6583-247-CIP-13) 9 pages
	37	Official Action for U.S. Patent Application No. 13/830,133, mailed Jul. 10, 2014 (Attorney's Ref. No. 6583-247-CIP-15) 9 pages

Examiner Signature		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.

PATENT COOPERATION TREATY

ASD

RECEIVED
AUG 21 2014
SHERIDAN ROSS PC
IP 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)* 18 AUG 2014
Applicant's or agent's file reference 6583-247-CIP-PCT	**FOR FURTHER ACTION** See paragraphs 1 and 4 below
International application No. PCT/US2014/019983	International filing date *(day/month/year)* 03 March 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.

   Where? Directly to the International Bureau of WIPO, 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. 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. Following the expiration of 30 months from the priority date, these comments will also be made available to the public.

   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.

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 2010)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6583-247-CIP	**FOR FURTHER ACTION**	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US2014/019983	International filing date *(day/month/year)* 03 March 2014	(Earliest) Priority Date *(day/month/year)* 14 March 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.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/019983

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.:
1-21

Remark on Protest

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

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

☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2014/019983

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G06F 19/00 (2014.01)
USPC - 701/2
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 19/00 (2014.01)
USPC - 455/414.1, 701/2, 36, 49

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
CPC - G06F17/00, G08C 17/02, G08C 2201/93, H04L 12/66, H04L67/12 (2014.02)

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

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 2008/0065274 A1 (TAKI et al) 13 March 2008 (13.03.2008) entire document	1, 5, 6, 8, 12, 13, 15, 19, 20 ---------- 3, 4, 10, 11, 17, 18
X	US 2012/0115446 A1 (GUATAMA et al) 10 May 2012 (10.05.2012) entire document	1, 2, 7, 8, 9, 14, 15, 16, 21
Y	US 2005/0031100 A1 (IGGULDEN et al) 10 February 2005 (10.02.2005) entire document	3, 4, 10, 11, 17, 18
A	US 7,643,913 B2 (TAKI et al) 05 January 2010 (05.01.2010) abstract, figures 1-6, column 1, line 64 through column 3, line 12	1-21
A	US 8,346,432 B2 (VAN WIEMEERSCH et al) 01 January 2013 (01.01.2013) entire document	1-21

☐ 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
24 July 2014	18 AUG 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)

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 1-21, drawn to a microprocessor executable remote control module operable to receive, via a remote node, a command from a vehicle owner to configure/alter/determine a state of a selected vehicle component and, when the vehicle owner is authenticated successfully, to configure/alter/determine a state of the selected vehicle component.
Group II, claims 22-46, drawn to a microprocessor executable networking module operable to enable on board processing modules of different privately owned vehicles to wirelessly connect to exchange information.

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: as claimed therein is not present in the invention of Group II. The special technical feature of the Group II invention: as claimed therein is not present in the invention of Groups I.

Groups I and II lack unity of invention because even though the inventions of these groups require the technical feature of a vehicle having a microprocessor executable module, this technical feature is not a special technical feature as it does not make a contribution over the prior art. Specifically, US 7,643,913 B2 (TAKI et al) 05 January 2010 (05.01.2010) abstract, figures 1-6, column 1, line 64 through column 3, line 12.

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.

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)*	18 AUG 2014
Applicant's or agent's file reference 6583-247-CIP-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US2014/019983	03 March 2014	14 March 2013

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G06F 19/00 (2014.01)
USPC - 701/2

Applicant FLEXTRONICS AP, LLC

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

- [X] 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
- [X] Box No. IV Lack of unity of invention
- [X] 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	24 July 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/US2014/019983

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/US2014/019983

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 1-21, drawn to a microprocessor executable remote control module operable to receive, via a remote node, a command from a vehicle owner to configure/alter/determine a state of a selected vehicle component and, when the vehicle owner is authenticated successfully, to configure/alter/determine a state of the selected vehicle component.
Group II, claims 22-46, drawn to a microprocessor executable networking module operable to enable on board processing modules of different privately owned vehicles to wirelessly connect to exchange information.

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: as claimed therein is not present in the invention of Group II. The special technical feature of the Group II invention: as claimed therein is not present in the invention of Groups I.

Groups I and II lack unity of invention because even though the inventions of these groups require the technical feature of a vehicle having a microprocessor executable module, this technical feature is not a special technical feature as it does not make a contribution over the prior art. Specifically, US 7,643,913 B2 (TAKI et al) 05 January 2010 (05.01.2010) abstract, figures 1-6, column 1, line 64 through column 3, line 12.

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. 1-21

WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US2014/019983

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, 4, 10, 11, 17, 18	YES
	Claims	1, 2, 5-9, 12-16, 19-21	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-21	NO
Industrial applicability (IA)	Claims	1-21	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1, 5, 6, 8, 12, 13, 15, 19, 20 lack novelty under PCT Article 33(2) as being anticipated by Taki et al., hereinafter referred to as Taki.

Regarding claims 1, 8, 15, Taki discloses a vehicle (101, Fig.1, abstract), a method (see Fig. 5, para 61), and non-transient, tangible computer readable medium comprising a microprocessor executable remote control module on board a selected vehicle (method of Fig. 5, implemented in on-vehicle device, para 18, 61) comprising: a microprocessor executable remote control module operable to receive (on-vehicle device configured to perform operation with respect to the vehicle according to an operation instruction from a vehicle remote control apparatus, para 18), via a remote node (vehicle remote control apparatus, para 18; user of the vehicle uses the communication terminal 103 to cause the vehicle 101 to perform a predetermined operation, para 38, Fig. 1), a command from a vehicle owner to configure and/or alter and/or determine a state of a selected vehicle component (operation requested from vehicle user, para 18; see Fig. 6) and, when the vehicle owner is authenticated
successfully by the remote control module (confirming user authenticity, para 42), to configure and/or alter and/or determine a state of the selected vehicle component (transmit an operation instruction corresponding to the requested remote operation to the vehicle, para 18; see Fig. 6).

Regarding claims 5, 12, 19, Taki discloses wherein the command is to change a vehicle performance mode from a first performance configuration to a second performance 20 configuration and/or alter a setting of a vehicle component associated with a power unit and/or drive train of the vehicle (opening/closing of the driver-seat window and passenger-seat window [altering setting associated with power that is required to open and close window], para 67, Fig. 6).

Regarding claims 6, 13, 20, Taki discloses wherein the command is to determine a state of the selected vehicle component (detecting vehicle condition, para 18; see para 85-86).

Claims 1, 2, 7, 8, 9, 14, 15, 16, 21 lack novelty under PCT Article 33(2) as being anticipated by Gautama et al., hereinafter referred to as Gautama.

Regarding claims 1, 8, 15, Gautama discloses a vehicle (104, para 17, Fig. 1), a method (para 6), and non-transient, tangible computer readable medium comprising a microprocessor executable remote control module on board a selected vehicle (para 8) comprising: a microprocessor executable remote control module operable to receive, via a remote node (mobile communication device 102 sends remote operations to vehicle components 114 through vehicle control system 116, see Fig. 1, para 18, 20-24), a command from a vehicle owner to configure and/or alter and/or determine a state of a selected vehicle component (remote command for settings of vehicle components, para 20-24, Fig. 1) and, when the vehicle owner is authenticated successfully by the remote control module (authentication and retrieval of driver profile, para 31-32), to configure and/or alter and/or determine a state of the selected vehicle component (para 16, 24; see para 33).

Regarding claims 2, 9, 16, Gautama discloses wherein the selected vehicle component is an on board input/output system (see vehicle components 114, Fig. 1, para 21) and wherein the configuration and/or alteration is one or more of moving a graphical object to another location, removing a graphical object from the input/output system, adding a graphical object to the input/output system, adding wall paper to the input/output system, and altering a setting of the input/output system (altering a setting, see para 21-22).

Regarding claims 7, 14, 21, Gautama discloses wherein, when a vehicle occupant is identified, the remote control module automatically configures the selected vehicle component as desired by the identified occupant (remote application of vehicle control settings automates the execution of driver preferences for a vehicle, para 16, authentication and retrieval of driver profile, para 31-32).

Ford Ex. 1002 Page 499 of 1178

Supplemental Box

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

Claims 3, 4, 10, 11, 17, 18 lack an inventive step under PCT Article 33(3) as being obvious over Taki in view of Iggulden et al., hereinafter referred to as Iggulden.

Regarding claims 3, 10, 17, Gautama fails to disclose wherein the selected vehicle component is a programmable hard button and wherein the configuration and/or alteration is to assign, to the hard button, a different function.
However, Iggulden is in the field of setting preferences of a motor vehicle using a mobile device (abstract) and teaches wherein the selected vehicle component is a programmable hard button and wherein the configuration and/or alteration is to assign, to the hard button, a different function (Customize the function of "function buttons" to control selected functions of any system in the car, para 116; para 26, 63-66; see para 18-19, 263). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the programmable button features as taught in Iggulden with the invention of Gautama in order to allow the driver to assign and create individualized "function keys" (see Iggulden, para 263).

Regarding claims 4, 11, 18, Gautama fails to disclose wherein the command is to download content from the Internet and save the downloaded content in on board memory of the vehicle. However, Iggulden is in the field of setting preferences of a motor vehicle using a mobile device (abstract) and teaches wherein the command is to download content from the Internet and save the downloaded content in on board memory of the vehicle (two-way communications is that it may be used to facilitate remote troubleshooting of the motor vehicle by causing the downloading of corrective software or firmware, para 18-21). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine downloading content features as taught in Iggulden with the invention of Gautama in order to allow a user to remotely repair the motor vehicle (see Iggulden, para 21).

Claims 1-21 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.

Amy

RECEIVED
JUL 29 2014
SHERIDAN ROSS P.C.
DOCKETING DEPT

PATENT COOPERATION TREATY

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)* 25 JUL 2014
Applicant's or agent's file reference 6583-247-CIP-6-PCT	**FOR FURTHER ACTION** See paragraphs 1 and 4 below
International application No. PCT/US 14/19216	International filing date *(day/month/year)* 28 February 2014 (28.02.2014)
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.

   Where? Directly to the International Bureau of WIPO, 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. 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. Following the expiration of 30 months from the priority date, these comments will also be made available to the public.

   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.

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

Form PCT/ISA/220 (July 2010)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6583-247-CIP-6-PCT	**FOR FURTHER ACTION**	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US 14/19216	International filing date *(day/month/year)* 28 February 2014 (28.02.2014)	(Earliest) Priority Date *(day/month/year)* 14 March 2013 (14.03.2013)
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 2 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.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 14/19216

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - H04W 24/00 (2014.01)
USPC - 455/456.1
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): H04W 24/00 (2014.01)
USPC: 455/456.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
IPC(8): H04W 24/00 (2014.01)
USPC: 455/456.1 or 455/418 or 701/32.6 or 455/41.2

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
Patbase, Google (Scholar, Patent); vehicle, automobile, controller, manager, restrictions, limits, disable, law, policy, regulation, media, multimedia, player, location, phone, device, tablet

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2011/0195699 A1 (Tadayon et al.) 11 August 2011 (11.08.2011) entire document (especially para [0053], [0058]-[0068], [0096], [0125]-[0126], [01778]-[0180], [0321], [0263]-[0268], [0306]-[0307], [0321])	1-39
A	US 2012/0238286 A1 (Mallavarapu et al.) 20 September 2012 (20.09.2012) entire document	1-39

☐ 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 June 2014 (15.06.2014)	25 JUL 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: Lee W. Young 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: 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)*	25 JUL 2014
Applicant's or agent's file reference 6583-247-CIP-6-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US 14/19216	28 February 2014 (28.02.2014)	14 March 2013 (14.03.2013)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - H04W 24/00 (2014.01)
USPC - 455/456.1

Applicant FLEXTRONICS AP, LLC

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

- [X] 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
- [X] 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
- [X] 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 June 2014 (15.06.2014)	Lee W. Young 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/US 14/19216

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/US 14/19216

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	1-39	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-39	NO
Industrial applicability (IA)	Claims	1-39	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-39 lack novelty under PCT Article 33(2) as being anticipated by US 2011/0195699 A1 to Tadayon et al. (hereinafter Tadayon).

As per claims 1, 14, and 27, Tadayon teaches a vehicle (para [0041], [0061]) (and a corresponding method (abstract) and non-transient, tangible computer readable medium (para [0061]-[0065], [0215]), [0227], [0276]) comprising a microprocessor executable media controller on board the vehicle operable (a) to determine a first spatial location of an external communication device (e.g. a localized unit uses a processor/controller to perform logical and other calculations, control the transmitters/transceivers, communicate with the mobile device via transceiver(s), and receive data/status from vehicle's computer/control or sensors...localized device communicates (710) with the vehicle's computer/control (708) system or sensor, para [0061]-[0062]; e.g. mobile device location is determined by using the localized transmitters/transceivers, para [0063]-[0065]);
the external communication device being in wireless communication with the on board media controller and the first spatial location being associated with a first set of restrictions (e.g. using Bluetooth or similar technology, para [0055], [0091]; e.g. instead of driver (at 212) attempting to use a feature (e.g., SMS), the mobile device can be handed to a person on the passenger side (at 214) to perform the function. Similarly, the mobile device (e.g., at 224) can be used by a person on the back seat (216) to perform the task, para [0058]; e.g. after the mobile device receives a signal from a localized transmitter/transceiver...SMS... should be changed (e.g., to become limited or disabled), para [0045]);
the first set of restrictions being at least one of a control on connectivity access by the external communication device, a restriction on the connectivity access, and a restriction on one or more functions of the external communication device (para [0045], [0051]-[0053], [0057], [0219]) and (b), in response, to apply the first set of restrictions (e.g. event would indicate that one or more feature or functionality of the mobile device (e.g., SMS) should be changed (e.g., to become limited or disabled)...the feature (e.g., SMS) of the mobile device is changed (e.g., disabled), para [0045]).

As per claims 2, 15, and 28, Tadayon teaches as a result of applying the first set of restrictions, the media controller declines to accept connectivity access by the external communication device (para [0218]-[0219]).

As per claims 3, 16, and 29, Tadayon teaches the vehicle as a result of applying the first set of restrictions, the media controller applies a restriction on the connectivity access (para [0045], [0051]-[0053], [0057], [0219]).

As per claims 4, 17, and 30, Tadayon teaches as a result of applying the first set of restrictions, the media controller restricts the one or more functions of the external communication device (para [0045], [0051]-[0053], [0057], [0219]).

As per claims 5, 18, and 31, Tadayon teaches the media controller measures, at a plurality of connectivity access points, a respective signal strength associated with a transmission by the external communication device, and, based on the measurements, determines the first spatial location by triangulation (para [0184], [0251]; para [0058]-[0064], [0092], [0095], [0319]).

As per claims 6, 19, and 32, Tadayon teaches a second spatial location is associated with a second set of restrictions, the first and second sets of restrictions being different from one another (para [0052]-[0053], [0321]).

As per clams 7, 20, and 33, Tadayon teaches the media controller monitors the external communication for a change from the first to the second spatial locations and, upon detecting the change, applies the second set of restrictions (para [0052]-[0053], [0321]).

As per claims 8, 21, and 34, Tadayon teaches the media controller is operable to receive a media stream from a remote node, the received media stream being for an occupant associated with at least one of an on board vehicle input/output system and external communication device, identify which on board vehicle input/output systems and/or external communication devices are restricted by the first set of restrictions and provide the media stream, in compliance with the first set of restrictions, to a selected input/output system and/or external communication device associated with the occupant (para [0125]-[0126], [0321]).

-Continuation in Supplemental Box-

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.
PCT/US 14/19216

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 fu lly supported by the description, are made:

Claim 9 depends on claim 9. For examinations purposes, claims 9 depends on claim 1.
Claim 12 depends on claim 12. For examinations purposes, claims 12 depends on claim 8.
Claim 13 depends on claim 13. For examinations purposes, claims 13 depends on claim 11.

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:
Box V, 2: Citations and Explanations

As per claims 9, 22, and 35, Tadayon teaches the first set of restrictions are applied as a due to operator command and/or as a result of a governing law (para [0126]; para [0053], [0232]-[0234], [0321]).

As per claims 10, 23, and 36, Tadayon teaches the media stream is for all occupants of the vehicle but is provided only to unrestricted input/output systems and/or external communication devices, the unrestricted input/output systems and/or external communication devices being a subset of all input/output systems and/or external communication devices on board the vehicle (para [0206]; para [0058]-[0059], [0125]-[0126], [0221]-[0222]).

As per claims 11, 24, and 37, Tadayon teaches the restriction is as a result of a governing law and wherein the media controller, for a current satellite-positioning-system based position of the vehicle, current state of the vehicle, and a selected input/output system and/or external communication device determines that a law restricts the input/output system and/or external communication device from performing at least one of the following functions: texting from an on board input/output system and/or external communication device, displaying streaming video content to an on board input/output system and/or external communication device, initiating and/or continuing a cellular call, and providing a media channel of a multimedia media stream (para [0306]-[0307]; para [0053], [0125]-[0126], [01778]-[0180], [0321], [0263]-[0268]).

As per claims 12, 25, and 38, Tadayon teaches the selected input/output system and/or external communication device is associated with the vehicle operator and the current state of the vehicle is one or more of moving and in gear (para [0306]-[0307]; para [0096], [0125]-[0126]).

As per claims 13, 26, and 39, Tadayon teaches the function is providing a media channel of a multimedia media stream and wherein the media controller presents a first channel, but not a second, of the multimedia stream to the selected input/output system and/or external communication device (para [0222], [0235], para [0058], [0183], [0206], [0279]).

Claims 1-39 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

RECEIVED AUG 04 2014

Amy

PCT

To:
DOUGLAS W. SWARTZ
SHERIDAN ROSS P.C.
1560 BROADWAY
SUITE 1200
DENVER, CO 80202

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)*	29 JUL 2014
Applicant's or agent's file reference 6583-247-CIP-15-PCT	**FOR FURTHER ACTION** See paragraphs 1 and 4 below
International application No. PCT/US 14/19201	International filing date *(day/month/year)* 28 February 2014 (28.02.2014)
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.

   Where? Directly to the International Bureau of WIPO, 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. 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. Following the expiration of 30 months from the priority date, these comments will also be made available to the public.

   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.

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 Lee W. Young PCT Helpdesk: 571-272-4300 Telephone No. PCT OSP: 571-272-7774

Form PCT/ISA/220 (July 2010)

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference 6583-247-CIP-15-PCT	**FOR FURTHER ACTION**	see Form PCT/ISA/220 as well as, where applicable, item 5 below.
International application No. PCT/US 14/19201	International filing date *(day/month/year)* 28 February 2014 (28.02.2014)	(Earliest) Priority Date *(day/month/year)* 14 March 2013 (14.03.2013)
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 9 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.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 14/19201

A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - G01M 17/00 (2014.01)
USPC - 701/29.1
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)
USPC: 701/29.1

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC: 714/11, 701/29.1 (keyword limited - see search terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PatBase; Google; Google Scholar
Terms: vehicle, automobile, network, bus, module, sensor, backup, standby, replace, primary, active, main, controller, replicate, identical, redundant, state, mode, synchronize, failure, repair, arbitrate, score, threshold, monitor, manage, weight, scale, shadow, wireless, airbag.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2012/0109446 A1 (Yousefi et al.) 03 May 2012 (03.05.2012), entire document, especially abstract, Figs. 2, 3, 14, 17, para [0007], [0130], [0131], [0136], [0139], [0143], [0150], [0156], [0158], [0166], [0181], [0192], [0193], [0290], [0321], [0333], [0455].	1-39
A	US 5,508,689 A (Rado et al.) 16 April 1996 (16.04.1996), entire document.	1-39
A	US 7,899,610 B2 (McClellan) 01 March 2011 (01.03.2011), entire document.	1-39

☐ 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
16 June 2014 (16.06.2014)	29 JUL 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: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

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)*	29 JUL 2014
Applicant's or agent's file reference 6583-247-CIP-15-PCT	**FOR FURTHER ACTION** See paragraph 2 below

International application No.	International filing date *(day/month/year)*	Priority date *(day/month/year)*
PCT/US 14/19201	28 February 2014 (28.02.2014)	14 March 2013 (14.03.2013)

International Patent Classification (IPC) or both national classification and IPC
IPC(8) - G01M 17/00 (2014.01)
USPC - 701/29.1

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 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	16 June 2014 (16.06.2014)	Lee W. Young 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/US 14/19201

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/US 14/19201

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	1-39	NO
Inventive step (IS)	Claims	None	YES
	Claims	1-39	NO
Industrial applicability (IA)	Claims	1-39	YES
	Claims	None	NO

2. Citations and explanations:

Claims 1-39 lack novelty under PCT Article 33(2) as being anticipated by US 2012/0109446 A1 to Yousefi et al. (hereinafter Yousefi).

Regarding claim 1, Yousefi teaches a vehicle (Fig. 2, vehicles 10, para [0130]), comprising: a plurality of processing modules (Fig. 3, a plurality of vehicle control modules 38, para [0136]) to control a plurality of automated vehicle tasks, functions and/or operations (Fig. 3, vehicle control module 38 further includes an analog to digital converter and/or a digital to analog converter. Such devices may include a sensor, an actuator, an intelligent sensor, an intelligent actuator, an electronic control unit (ECU), and/or a control device, para [0139]), wherein a first processing module is in an active mode whereby the first processing module is in primary control of at least most automated vehicle tasks, functions and/or operations (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]) and a second processing module is in a standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]) whereby the second processing module is ready to assume primary control of the at least most automated vehicle tasks, functions and/or operations (Typically, packets will be processed via the primary link. If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 2, Yousefi further teaches wherein the first and second processing modules are in wireless communication with one another (if the processing module 44 includes more than one processing device, the processing devices may be centrally located (e.g., directly coupled together via a wired and/or wireless bus structure), para [0143]), and wherein a state of the second processing module is maintained substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 3, Yousefi further teaches wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an engine and/or power control unit (electronic engine control, para [0007]), transmission control unit (TCU) (transmission control, para [0007]), a door setting (door network node module, para [0321]), a window setting (window up/down actuator, para [0455]), a blind spot monitor (a mirror electronic control unit 162, a mirror actuator 164, a mirror sensor 166, para [0156]), an airbag deployment control unit (airbag sensor, airbag actuator, para [0166]), a collision sensor, a nearby object sensing system (collision indication, collision avoidance, para [0166]), a seat belt control unit, a sensor for a seat belt setting (a seat electronic control unit, para [0323]), a power source controller, an energy output sensor (second gauge for battery level, para [0309]), an engine temperature sensor (temperature sensors, para [0304]), oil pressure (oil level, para [0131]), hydraulic pressure, a headlight, an emergency light, a brake light (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a parking light, a fog light, an interior and/or passenger compartment light, a tail light, a vehicle control system sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a wireless network, a cellular data sensor (a cellular telephone interface, para [0160]), a steering sensor, a torque sensor (steering wheel network node module, para [0306]), an engine, power steering, a display panel, switch state control unit, and a brake control unit (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]).

---continued in supplemental box---

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:
Box No. V.2. Citations and explanations.

Regarding claim 4, Yousefi further teaches wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an emissions system (electronic modules for engine control, transmission control, antilock braking, body control, emissions control, para [0006]), a seating system controller and/or sensor (seat operation, para [0150]), an entertainment system (audio/video playback, para [0150]), monitoring an ambient (outdoor) weather sensor (a climate electronic control unit 174, a climate actuator 176, a climate sensor 178, para [0156]), an odometer reading sensor, a trip mileage reading sensor, a road condition sensor, a radar transmitter/receiver output (radio frequency sensors 800 may be used as a localized radar system for the vehicle, para [0290]), a brake wear sensor, an oxygen sensor, an ambient lighting sensor, a vision system sensor (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a ranging sensor, a parking sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a heating, venting, and air conditioning (HVAC) system and/or sensor, a water sensor, a air-fuel ratio meter (environment control (e.g., air conditioning, heater, fan speed, etc.), para [0308]), a hall effect sensor, a microphone, a radio frequency (RF) sensor, and/or an infrared (IR) sensor (infrared sensors 924, radio frequency sensors 926, and/or touch sensors 928, para [0333]).

Regarding claim 5, Yousefi further teaches wherein the first and second processing modules are duplicated and further comprising an arbitration module to arbitrate hand-off conflicts between the duplicated first and second processing modules (link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 6, Yousefi further teaches wherein the arbitration module selects one of the first and second processing modules to currently possess and/or own a token, the token indicating at least one of (i) which processing module is an active processing module and/or which processing module is a standby processing module (link manager 440 also indicates which of the links is the primary link and which is the backup link. Typically, packets will be processed via the primary link, para [0193]) and (ii) which processing module is responsible for a selected set of processing tasks, functions, and/or operations associated with the token (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 7, Yousefi further teaches wherein the first and second processing modules are duplicated (redundancy/backup modules 392, para [0175]) and further comprising a health check module to determine a corresponding state of health of each of the duplicated first and second processing modules (manager processing module determines that a communication medium coupling the active network fabric port to a corresponding active network fabric port of the other vehicle network fabric link module is broken (e.g., cable broke, HW failure, SW failure of port), para [0196]) to perform at least one of critical and non-critical tasks, functions, and operations (determining the type of packet (e.g., mission critical, network data, info-entertainment, vehicle operation, etc.). Determining the type of packet can include determining the type of content carried by the packet, i.e. the packet content type. Having identified the packet 418, and the packet content type, the local network management function 401 determines the processing for the packet 418 and then processes the packet 418 accordingly, para [0175]).

Regarding claim 8, Yousefi further teaches wherein the health check module performs a check and/or test, in response to an internally generated interrupt and/or request to determine a selected processing module's ability to perform critical and/or non-critical vehicle tasks, functions, and/or operations (link manager 440, alone or in combination with the processing module 438, monitors the "health" of the transmissions and receptions of packets via the active interconnecting port 444, para [0192]), assign a score to the selected processing module based on the check and/or test results, and/or compare the score to one or more thresholds and/or to a score of a different processing module to determine a relative and/or absolute state of health of the selected processing module (if the data rate of transmissions via the active interconnecting port 444 is lower than a desired threshold due to errors, other factors, or the cable is broken, then the link may be flagged as being in a degenerative state. If the degenerative state compares unfavorably to a threshold, the link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 9, Yousefi further teaches wherein the arbitration module, based on the relative and/or absolute state of health of each of the first and second processing modules selects one of the first and second processing modules as a primary processing module in primary control of the at least most automated vehicle tasks, functions and/or operations (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]) and the other of the first and second processing modules as a secondary processing module in standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]).

Regarding claim 10, Yousefi further teaches wherein a hand-off procedure is activated whereby primary control is passed from the first processing module to the secondary processing module and the first processing module enters the standby mode (determining whether hot standby 454 (e.g., another use mode in which a backup link is used to convey the same packets as the active link) is active. If hot standby is not active, the processing module and/or link manager activates another port and retransmits any packets that may have been lost due to the link failure 456, para [0200]).

Regarding claim 11, Yousefi further teaches wherein the relative weighting of at least some tasks, functions and/or operations in assigning the score is a function of geographic location of the vehicle (retransmit the packet or request retransmission packet by the other vehicle network fabric link module based on a sliding scale of content type and traffic conditions (e.g., retransmit everything but entertainment under normal traffic conditions, only mission critical packets when network is very busy, etc.), para [0202]).

---continued in supplemental box---

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:
Box No. V.2. Citations and explanations.

Regarding claim 12, Yousefi further teaches wherein, for a first set of tasks, functions, and/or operations, the first processing module is in primary control and the second processing module is in standby mode and, for a different second set of tasks, functions, and/or operations, the second processing module is in primary control and the first processing module is in standby mode (If hot standby is active for the link aggregation, the method continues by using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0203]).

Regarding claim 13, Yousefi further teaches wherein, in the standby mode, the second processing module at least one of (a) performs shadow processing of the at least most automated vehicle tasks, functions and/or operations (using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0230]) and (b) synchronizes stored time stamped processing state information with time-stamped processing state information regarding the at least most automated vehicle tasks, functions and/or operations (packet 704 and packet queues within a vehicle communication network. The packet 704 includes the preamble 706, start of frame 708, timestamp 710, packet type 712, para [0257]).

Regarding claim 14, Yousefi teaches a non-transient, tangible computer readable medium comprising microprocessor executable instructions that, when executed (processors executing appropriate software and the like, para [0630]), designate (a plurality of vehicle control modules 38, para [0136]) a first processing module as being in an active mode (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]) whereby the first processing module is in primary control of at least most automated vehicle tasks, functions and/or operations (Fig. 3, vehicle control module 38 further includes an analog to digital converter and/or a digital to analog converter. Such devices may include a sensor, an actuator, an intelligent sensor, an intelligent actuator, an electronic control unit (ECU), and/or a control device, para [0139]) and a second processing module as being in a standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]) whereby the second processing module is ready to assume primary control of the at least most automated vehicle tasks, functions and/or operations (Typically, packets will be processed via the primary link. If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 15, Yousefi further teaches wherein the first and second processing modules are in wireless communication with one another (if the processing module 44 includes more than one processing device, the processing devices may be centrally located (e.g., directly coupled together via a wired and/or wireless bus structure), para [0143]), and wherein a state of the second processing module is maintained substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 16, Yousefi further teaches wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an engine and/or power control unit (electronic engine control, para [0007]), transmission control unit (TCU) (transmission control, para [0007]), a door setting (door network node module, para [0321]), a window setting (window up/down actuator, para [0455]), a blind spot monitor (a mirror electronic control unit 162, a mirror actuator 164, a mirror sensor 166, para [0156]), an airbag deployment control unit (airbag sensor, airbag actuator, para [0166]), a collision sensor, a nearby object sensing system (collision indication, collision avoidance, para [0166]), a seat belt control unit, a sensor for a seat belt setting (a seat electronic control unit, para [0323]), a power source controller, an energy output sensor (second gauge for battery level, para [0309]), an engine temperature sensor (temperature sensors, para [0304]), oil pressure (oil level, para [0131]), hydraulic pressure, a headlight, an emergency light, a brake light (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a parking light, a fog light, an interior and/or passenger compartment light, a tail light, a vehicle control system sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a wireless network, a cellular data sensor (a cellular telephone interface, para [0160]), a steering sensor, a torque sensor (steering wheel network node module, para [0306]), an engine, power steering, a display panel, switch state control unit, and a brake control unit (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]).

Regarding claim 17, Yousefi further teaches wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an emissions system (electronic modules for engine control, transmission control, antilock braking, body control, emissions control, para [0006]), a seating system controller and/or sensor (seat operation, para [0150]), an entertainment system (audio/video playback, para [0150]), monitoring an ambient (outdoor) weather sensor (a climate electronic control unit 174, a climate actuator 176, a climate sensor 178, para [0156]), an odometer reading sensor, a trip mileage reading sensor, a road condition sensor, a radar transmitter/receiver output (radio frequency sensors 800 may be used as a localized radar system for the vehicle, para [0290]), a brake wear sensor, an oxygen sensor, an ambient lighting sensor, a vision system sensor (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a ranging sensor, a parking sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a heating, venting, and air conditioning (HVAC) system and/or sensor, a water sensor, a air-fuel ratio meter (environment control (e.g., air conditioning, heater, fan speed, etc.), para [0308]), a hall effect sensor, a microphone, a radio frequency (RF) sensor, and/or an infrared (IR) sensor (infrared sensors 924, radio frequency sensors 926, and/or touch sensors 928, para [0333]).

---continued in supplemental box---

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:
Box No. V.2. Citations and explanations.

Regarding claim 18, Yousefi further teaches wherein the first and second processing modules are duplicated and further comprising an arbitration module to arbitrate hand-off conflicts between the duplicated first and second processing modules (link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 19, Yousefi further teaches wherein the arbitration module selects one of the first and second processing modules to currently possess and/or own a token, the token indicating at least one of (i) which processing module is an active processing module and/or which processing module is a standby processing module (link manager 440 also indicates which of the links is the primary link and which is the backup link. Typically, packets will be processed via the primary link, para [0193]) and (ii) which processing module is responsible for a selected set of processing tasks, functions, and/or operations associated with the token (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 20, Yousefi further teaches wherein the first and second processing modules are duplicated (redundancy/backup modules 392, para [0175]) and further comprising a health check module to determine a corresponding state of health of each of the duplicated first and second processing modules (manager processing module determines that a communication medium coupling the active network fabric port to a corresponding active network fabric port of the other vehicle network fabric link module is broken (e.g., cable broke, HW failure, SW failure of port), para [0196]) to perform at least one of critical and non-critical tasks, functions, and/or operations (determining the type of packet (e.g., mission critical, network data, info-entertainment, vehicle operation, etc.). Determining the type of packet can include determining the type of content carried by the packet, i.e. the packet content type. Having identified the packet 418, and the packet content type, the local network management function 401 determines the processing for the packet 418 and then processes the packet 418 accordingly, para [0175]).

Regarding claim 21, Yousefi further teaches wherein the health check module performs a check and/or test, in response to an internally generated interrupt and/or request to determine a selected processing module's ability to perform critical and/or non-critical vehicle tasks, functions, and/or operations (link manager 440, alone or in combination with the processing module 438, monitors the "health" of the transmissions and receptions of packets via the active interconnecting port 444, para [0192]), assign a score to the selected processing module based on the check and/or test results, and/or compare the score to one or more thresholds and/or to a score of a different processing module to determine a relative and/or absolute state of health of the selected processing module (If the data rate of transmissions via the active interconnecting port 444 is lower than a desired threshold due to errors, other factors, or the cable is broken, then the link may be flagged as being in a degenerative state. If the degenerative state compares unfavorably to a threshold, the link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 22, Yousefi further teaches wherein the arbitration module, based on the relative and/or absolute state of health of each of the first and second processing modules selects one of the first and second processing modules as a primary processing module in primary control of the at least most automated vehicle tasks, functions and/or operations (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]) and the other of the first and second processing modules as a secondary processing module in standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]).

Regarding claim 23, Yousefi further teaches wherein a hand-off procedure is activated whereby primary control is passed from the first processing module to the secondary processing module and the first processing module enters the standby mode (determining whether hot standby 454 (e.g., another use mode in which a backup link is used to convey the same packets as the active link) is active. If hot standby is not active, the processing module and/or link manager activates another port and retransmits any packets that may have been lost due to the link failure 456, para [0200]).

Regarding claim 24, Yousefi further teaches wherein the relative weighting of at least some tasks, functions and/or operations in assigning the score is a function of geographic location of the vehicle (retransmit the packet or request retransmission packet by the other vehicle network fabric link module based on a sliding scale of content type and traffic conditions (e.g., retransmit everything but entertainment under normal traffic conditions, only mission critical packets when network is very busy, etc.), para [0202]).

Regarding claim 25, Yousefi further teaches wherein, for a first set of tasks, functions, and/or operations, the first processing module is in primary control and the second processing module is in standby mode and, for a different second set of tasks, functions, and/or operations, the second processing module is in primary control and the first processing module is in standby mode (If hot standby is active for the link aggregation, the method continues by using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0203]).

Regarding claim 26, Yousefi further teaches wherein, in the standby mode, the second processing module at least one of (a) performs shadow processing of the at least most automated vehicle tasks, functions and/or operations (using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0230]) and (b) synchronizes stored time-stamped processing state information with time-stamped processing state information regarding the at least most automated vehicle tasks, functions and/or operations (packet 704 and packet queues within a vehicle communication network. The packet 704 includes the preamble 706, start of frame 708, timestamp 710, packet type 712, para [0257]).

---continued in supplemental box---

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:
Box No. V.2. Citations and explanations.

Regarding claim 27, Yousefi teaches a method (a vehicular communication network that includes a unified network fabric 32 (e.g., Ethernet-based), one or more communication links 34, para [0136]) comprising: designating, by a microprocessor executable arbitration module processors executing appropriate software and the like, para [0630]), a first processing module as being in an active mode (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]), whereby the first processing module is in primary control of at least most automated vehicle tasks, functions and/or operations (Fig. 3, vehicle control module 38 further includes an analog to digital converter and/or a digital to analog converter. Such devices may include a sensor, an actuator, an intelligent sensor, an intelligent actuator, an electronic control unit (ECU), and/or a control device, para [0139]), and a second processing module as being in a standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]), whereby the second processing module is ready to assume primary control of the at least most automated vehicle tasks, functions and/or operations (Typically, packets will be processed via the primary link. If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 28, Yousefi further teaches wherein the first and second processing modules are in wireless communication with one another (if the processing module 44 includes more than one processing device, the processing devices may be centrally located (e.g., directly coupled together via a wired and/or wireless bus structure), para [0143]), and further comprising: maintaining a state of the second processing module substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 29, Yousefi further teaches wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an engine and/or power control unit (electronic engine control, para [0007]), transmission control unit (TCU) (transmission control, para [0007]), a door setting (door network node module, para [0321]), a window setting (window up/down actuator, para [0455]), a blind spot monitor (a mirror electronic control unit 162, a mirror actuator 164, a mirror sensor 166, para [0156]), an airbag deployment control unit (airbag sensor, airbag actuator, para [0166]), a collision sensor, a nearby object sensing system (collision indication, collision avoidance, para [0166]), a seat belt control unit, a sensor for a seat belt setting (a seat electronic control unit, para [0323]), a power source controller, an energy output sensor (second gauge for battery level, para [0309]), an engine temperature sensor (temperature sensors, para [0304]), oil pressure (oil level, para [0131]), hydraulic pressure, a headlight, an emergency light, a brake light (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a parking light, a fog light, an interior and/or passenger compartment light, a tail light, a vehicle control system sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a wireless network, a cellular data sensor (a cellular telephone interface, para [0160]), a steering sensor, a torque sensor (steering wheel network node module, para [0306]), an engine, power steering, a display panel, switch state control unit, and a brake control unit (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]).

Regarding claim 30, Yousefi further teaches wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an emissions system (electronic modules for engine control, transmission control, antilock braking, body control, emissions control, para [0006]), a seating system controller and/or sensor (seat operation, para [0150]), an entertainment system (audio/video playback, para [0150]), monitoring an ambient (outdoor) weather sensor (a climate electronic control unit 174, a climate actuator 176, a climate sensor 178, para [0156]), an odometer reading sensor, a trip mileage reading sensor, a road condition sensor, a radar transmitter/receiver output (radio frequency sensors 800 may be used as a localized radar system for the vehicle, para [0290]), a brake wear sensor, an oxygen sensor, an ambient lighting sensor, a vision system sensor (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a ranging sensor, a parking sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a heating, venting, and air conditioning (HVAC) system and/or sensor, a water sensor, a air-fuel ratio meter (environment control (e.g., air conditioning, heater, fan speed, etc.), para [0308]), a hall effect sensor, a microphone, a radio frequency (RF) sensor, and/or an infrared (IR) sensor (infrared sensors 924, radio frequency sensors 926, and/or touch sensors 928, para [0333]).

Regarding claim 31, Yousefi further teaches wherein the first and second processing modules are duplicated and further comprising a microprocessor executable arbitration module to arbitrate hand-off conflicts between the duplicated first and second processing modules (link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 32, Yousefi further teaches wherein the arbitration module selects one of the first and second processing modules to currently possess and/or own a token, the token indicating at least one of (i) which processing module is an active processing module and/or which processing module is a standby processing module (link manager 440 also indicates which of the links is the primary link and which is the backup link. Typically, packets will be processed via the primary link, para [0193]) and (ii) which processing module is responsible for a selected set of processing tasks, functions, and/or operations associated with the token (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

---continued in supplemental box---

Supplemental Box

In case **the space in any of the preceding boxes is not sufficient.**
Continuation of:
Box No. V.2. Citations and explanations.

Regarding claim 33, Yousefi further teaches wherein the first and second processing modules are duplicated (redundancy/backup modules 392, para [0175]) and further comprising a microprocessor executable health check module to determine a corresponding state of health of each of the duplicated first and second processing modules (manager processing module determines that a communication medium coupling the active network fabric port to a corresponding active network fabric port of the other vehicle network fabric link module is broken (e.g., cable broke, HW failure, SW failure of port), para [0196]) to perform at least one of critical and non-critical tasks, functions, and operations (determining the type of packet (e.g., mission critical, network data, info-entertainment, vehicle operation, etc.). Determining the type of packet can include determining the type of content carried by the packet, i.e. the packet content type. Having identified the packet 418, and the packet content type, the local network management function 401 determines the processing for the packet 418 and then processes the packet 418 accordingly, para [0175]).

Regarding claim 34, Yousefi further teaches wherein the health check module performs a check and/or test, in response to an internally generated interrupt and/or request to determine a selected processing module's ability to perform critical and/or non-critical vehicle tasks, functions, and/or operations (link manager 440, alone or in combination with the processing module 438, monitors the "health" of the transmissions and receptions of packets via the active interconnecting port 444, para [0192]), assign a score to the selected processing module based on the check and/or test results, and/or compare the score to one or more thresholds and/or to a score of a different processing module to determine a relative and/or absolute state of health of the selected processing module (if the data rate of transmissions via the active interconnecting port 444 is lower than a desired threshold due to errors, other factors, or the cable is broken, then the link may be flagged as being in a degenerative state. If the degenerative state compares unfavorably to a threshold, the link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 35, Yousefi further teaches wherein the arbitration module, based on the relative and/or absolute state of health of each of the first and second processing modules selects one of the first and second processing modules as a primary processing module in primary control of the at least most automated vehicle tasks, functions and/or operations (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]) and the other of the first and second processing modules as a secondary processing module in standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]).

Regarding claim 36, Yousefi further teaches wherein a hand-off procedure is activated whereby primary control is passed from the first processing module to the secondary processing module and the first processing module enters the standby mode (determining whether hot standby 454 (e.g., another use mode in which a backup link is used to convey the same packets as the active link) is active. If hot standby is not active, the processing module and/or link manager activates another port and retransmits any packets that may have been lost due to the link failure 456, para [0200]).

Regarding claim 37, Yousefi further teaches wherein the relative weighting of at least some tasks, functions and/or operations in assigning the score is a function of geographic location of the vehicle (retransmit the packet or request retransmission packet by the other vehicle network fabric link module based on a sliding scale of content type and traffic conditions (e.g., retransmit everything but entertainment under normal traffic conditions, only mission critical packets when network is very busy, etc.), para [0202]).

Regarding claim 38, Yousefi further teaches wherein, for a first set of tasks, functions, and/or operations, the first processing module is in primary control and the second processing module is in standby mode and, for a different second set of tasks, functions, and/or operations, the second processing module is in primary control and the first processing module is in standby mode (If hot standby is active for the link aggregation, the method continues by using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0203]).

Regarding claim 39, Yousefi further teaches wherein, in the standby mode, the second processing module at least one of (a) performs shadow processing of the at least most automated vehicle tasks, functions and/or operations (using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0230]) and (b) synchronizes stored timestamped processing state information with time-stamped processing state information regarding the at least most automated vehicle tasks, functions and/or operations (packet 704 and packet queues within a vehicle communication network. The packet 704 includes the preamble 706, start of frame 708, timestamp 710, packet type 712, para [0257]).

Claims 1-39 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.
13/679,878	11/16/2012	Christopher P. Ricci	6583-232	6219

111285 7590 09/26/2014

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

EXAMINER	
CHERY, DADY	
ART UNIT	PAPER NUMBER
2461	

NOTIFICATION DATE	DELIVERY MODE
09/26/2014	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. 13/679,878	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner DADY CHERY	Art Unit 2461	AIA (First Inventor to File) Status No

-- 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 *11/12/2012*.

☐ 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 is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO internet Web site contains terminal disclaimer forms which may be used. Please visit http://www.uspto.gov/forms/. The filing date of the application will determine what form should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

1. Claims 1-20 are provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-20 of copending Application No. 13/679887. Although the claims at issue are not identical, they are not patentably distinct from each other because claim(s) 1-20 of copending Application No. 13/679887 contain(s) every element of claims 1-20 of the instant application and as such anticipate(s) claim(s) 1-20 of the instant application.

This is a provisional nonstatutory double patenting rejection because the patentably indistinct claims have not in fact been patented.

Claim Rejections - 35 USC § 101

3. 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 1-20 are rejected under 35 U.S.C. 101 because the specification does not exclude carrier wave from computer readable storage medium and it is known in the art that computer readable storage medium could be carrier wave, it would be reasonable

to interpret the claimed computer readable storage medium as to cover carrier wave which is considered as nonstatutory subject matter. The examiner suggests modifying the phrase “computer readable storage medium" to be “non-transitory computer readable storage medium” to overcome the rejection.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

5. Breed (US Application 2007/0057781).

6. Breed (US Patent 8,725,311).

7. Breed (US Application 2008/0129475).

8. Yakes et al. (US Application 2003/0158638).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DADY CHERY whose telephone number is (571)270-1207. The examiner can normally be reached on Monday - Thursday 8 am - 4 pm ESt.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Huy D. VU can be reached on 571-272-3155. 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.

/DADY CHERY/
Primary Examiner, Art Unit 2461

Notice of References Cited	Application/Control No. 13/679,878	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner DADY CHERY	Art Unit 2461	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2007/0057781	03-2007	Breed, David S.	340/457.1
*	B	US-8,725,311	05-2014	Breed, David S	701/1
*	C	US-2008/0129475	06-2008	Breed et al.	340/438
*	D	US-2003/0158638	08-2003	Yakes et al.	701/22
	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.
13/679,875	11/16/2012	Christopher P. Ricci	6583-233	2857

111285 7590 07/17/2014

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

EXAMINER	
RABOVIANSKI, JIVKA A	
ART UNIT	PAPER NUMBER
2426	

NOTIFICATION DATE	DELIVERY MODE
07/17/2014	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

Office Action Summary	Application No. 13/679,875	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JIVKA RABOVIANSKI	Art Unit 2426	AIA (First Inventor to File) Status No

-- 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 *06/06/2014*.

☐ 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) *1-10* is/are rejected.

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

9)☐ Claim(s) *11 - 20* 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 *11/16/2012* 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 is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

2. Applicant's election of Group I- Invention I, in the reply filed on June 06, 20014, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Priority

3. The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of 35 U.S.C. 112(a) or the first paragraph of pre-AIA 35 U.S.C. 112, except for the best mode requirement. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994)

The disclosure of the prior-filed application, Application No. 61/560509, fails to provide adequate support or enablement in the manner provided by 35 U.S.C. 112(a) or pre-AIA 35 U.S.C. 112, first paragraph for one or more claims of this application. For example, claim 1 limitations

related to:" automatically determining if the signal originates from inside the vehicle; if the signal does not originate from inside the vehicle, rejecting the signal; if the signal originates from inside the vehicle, communicatively connecting the vehicle communication system to the device;".

Specification

4. The title of the invention is not descriptive. The title is "Music streaming" which does not describe the invention included in the claims. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

5. Claim 1 is objected to because of the following informalities: Claim 1 line 10 cites: "receiving input"; line 11 cites: "available device" and "available source". Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. 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.

7. Claim 1 is 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 line 10 cites: "wherein the input multimedia" which is not clear what the applicant has intended to claim.

Claim 1 recites the limitation "the vehicle" in line 3, "the input multimedia" in line 10. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1 - 6 are rejected under pre-AIA 35 U.S.C. 102(e) as being anticipated by Choi (USPPGPub N 20120242510, referred to as Choi).

Regarding claim 1:

A method, comprising:

Choi anticipates receiving a signal at a vehicle communication system from a device (Choi, Figs. 1 and 3, [0035]);

Choi anticipates automatically determining if the signal originates from inside the vehicle (Choi, automatically establish a wireless network with a terminal (for example, a vehicle-mounted navigator) mounted in a neighboring vehicle and/or a mobile terminal with short-range wireless communication network, [0101], [0113], Fig. 3, Fig. 4B);

Choi anticipates if the signal does not originate from inside the vehicle, rejecting the signal (Choi, the communication unit receives signal only from registered devices inside vehicle otherwise the communication unit will not response to other devices, [0008], [0010], Fig. 3);

Choi anticipates if the signal originates from inside the vehicle, communicatively connecting the vehicle communication system to the device (Choi, when the detected mobile terminals are connected, a communication unit configured to receive in real time execution results, and a display unit configured to integrally display execution results of each application when execution results of a plurality of applications are provided, [0008], [0010], [0109], [0110], Fig. 3);

Choi anticipates determining one or more of available resources, available devices, and available sources (Choi, the external device interface 231 may be connected wirelessly or via a wire to an external device, such as

a Digital Versatile Disk (DVD), a Bluray, a game player, a camera, a camcorder, a computer (laptop computer) and the like, [0104], Fig. 3);

Choi anticipates determining multimedia sources associated with the available resources, available devices, and available sources (Choi, the external device interface 231 may allow transferring of image (still image or moving image), audio or data signals input from the exterior via a connected external device to the controller 212 of the vehicle communication connecting apparatus 200, [0104], [0106], [0107], Fig. 3);

Choi anticipates receiving input on a user interface of the vehicle, wherein the input multimedia (Choi, Figs. 7 - 9);

Choi anticipates routing the input to an available resource, available device, and available source (Choi, the multimedia/resource of MP3 source is presented on the communication device, [0145], Fig. 3);

Choi anticipates receiving a multimedia steam from an available resource, available device, and available source (Choi, the media was received on the screen as shown in Fig. 9, [0145], [0146]); and

Choi anticipates presenting the multimedia stream on an output of the vehicle (Choi, Fig. 9).

Regarding claim 2:

Choi anticipates the method of claim 1, further comprising caching the multimedia stream, (Choi, the media is stored in the device [0090], [0110], [0117].

Regarding claim 3:

Choi anticipates two or more multimedia streams are received from two or more sources (Choi, the images from two devices, for example, two mobile devices sends images to are stored in the communication connecting apparatus, [0118], [0151]).

Regarding claim 4:

Choi anticipates the method of claim 3, wherein all of the two or more multimedia streams are cached (Choi, the images from two devices, for example, two mobile devices are stored in the communication connecting apparatus, [0117], [0118], [0151]).

Regarding claim 5:

Choi anticipates determining multimedia sources associated with the available resources, available devices, and available sources comprises canvassing the available resources, available devices, and available sources for multimedia available at those available resources, available devices, and available sources (Choi, the communication device determines the available devices with available media as shown in Figs. 7 and 9, [0140]).

Regarding claim 6:

The method of claim 5, further comprising:

Choi anticipates consolidating the multimedia (Choi, the multimedia from two devices is combined and presented, Fig.7); and

Choi anticipates presenting the multimedia on a vehicle touch sensitive display (Choi, the display unit 201 includes the touch sensor (touch screen) illustrated in FIG. 2, [0093], [0099], [0115]).

Claim Rejections - 35 USC § 103

10. The following is a quotation of pre-AIA 35 U.S.C. 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.

11. Claims 7 and 8 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Choi (USPPGPub N 20120242510, referred to as Choi), and further in view of Ogino (USPPGPub N 20030007227, referred to as Ogino).

Regarding claim 7:

Choi does not specifically teach determining if safety parameters are met for presentation of the multimedia stream. However, Ogino teaches cheking the safety parameters including whether the vihacke is in moving state or stopping state to present the multimedia to the driver, abstract, Fig.

1, [0010], [0011], Fig. 4. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate Ogino with the teaching of determining the safety parameters of the vehicle into the invention of Choi for the purpose of making the system to present multimedia safety to the driver.

Regarding claim 8:

Choi in view of Ogino teaches if safety parameters are met for presentation of the multimedia stream, presenting the multimedia stream (Ogino, when the stopping-state detecting sensor 12 detects a stopping state of the vehicle, the display controller 18 sets the viewing angle control shutter 20 into an off state and the multimedia stream is presented to the driver, Fig. 1, [0010], [0011], Fig. 4, [0043]).

12. Claims 9 and 10 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Choi (USPPGPub N 20120242510, referred to as Choi), in view of Ogino (USPPGPub N 20030007227, referred to as Ogino) and further in view of Nakamura (USPPGPub N 20090279839, referred to as Nakamura).

Regarding claim 9:

Choi in view of Ogino does not teach if safety parameters are not met for presentation of the multimedia stream, recording the multimedia stream. However, Nakamura teaches that for safety reasons, a driver cannot watch

television while the vehicle is in motion (the safety parameters are not met). Nor can the driver watch highlight scenes of programs that are broadcasted while he/she is driving such as, for example, a homerun during a baseball game and the scoring of a goal during a soccer game; the television program to be recorded simultaneously as the television program is received and when the vehicle is stopped, the driver operates the television to view a replay of the desired highlight scene, [0007], Figs. 5 and 9.

Regarding claim 10:

Choi in view of Ogino in view of Nakamura teaches the multimedia stream is recorded in local storage (Nakamura, The HDD/local storage 331 records content and includes a highlight scene database and a stop time database that stores the time at which the vehicle stops, Fig. 3, [0081]).

Contact

13. 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) 272-3685. 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

July 8, 2014

Notice of References Cited	Application/Control No. 13/679,875	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	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-2003/0007227 A1	01-2003	Ogino, Takayuki	359/227
*	B	US-2009/0279839 A1	11-2009	Nakamura et al.	386/46
*	C	US-2012/0242510 A1	09-2012	Choi et al.	340/988
	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

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 07/22/2014

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

EXAMINER	
CAMBY, RICHARD M	
ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 07/22/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/679,441	11/16/2012	Christopher P. Ricci	6583-244	8362

TITLE OF INVENTION: UNIVERSAL BUS IN THE CAR

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	10/22/2014

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 07/22/2014
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.
13/679,441	11/16/2012	Christopher P. Ricci	6583-244	8362

TITLE OF INVENTION: UNIVERSAL BUS IN THE CAR

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	10/22/2014

EXAMINER	ART UNIT	CLASS-SUBCLASS
CAMBY, RICHARD M	3661	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. _____

Ford Ex. 1002 Page 541 of 1178

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.
13/679,441	11/16/2012	Christopher P. Ricci	6583-244	8362

111285 7590 07/22/2014

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

EXAMINER	
CAMBY, RICHARD M	

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 07/22/2014

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. 13/679,441	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner RICHARD CAMBY	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *the T.D. filed 7/9/14*.
   ☐ 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 _____.

/RICHARD CAMBY/
Primary Examiner, Art Unit 3661

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.
13/828,513	03/14/2013	Christopher P. Ricci	6583-247-CIP	2080

111285 7590 09/04/2014

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

EXAMINER	
ARTHUR JEANGLAUDE, GERTRUDE	
ART UNIT	PAPER NUMBER
3661	

NOTIFICATION DATE	DELIVERY MODE
09/04/2014	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

Office Action Summary	Application No. 13/828,513	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *8/6/14*.

☐ 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 and 22-29* 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 and 22-29* 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 *3/14/13* 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 is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Response to Amendment

Claim Objections

Claim 19 is objected to because of the following informalities: in claim 19, after the word "to" at line 2, the next connecting phrase is confusing. 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.

Claims 1-20, 22-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because the claim(s) as a whole, considering all claim elements both individually and in combination, do not amount to significantly more than an abstract idea. The claim(s) is/are directed to the abstract idea of **an idea of itself**. For instance, in Alice Corp. the court found that "intermediated settlement" was a fundamental economic practice, which is an abstract idea. The additional element(s) or combination of elements in the claim(s) other than the abstract

idea per se amount(s) to no more than: **(i) mere instructions to implement the idea on a computer, and/or (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry.** Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself. Therefore, the claim(s) are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

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 GERTRUDE ARTHUR JEANGLAUDE whose telephone number is (571)272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas 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.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

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.
13/828,651	03/14/2013	Christopher P. Ricci	6583-247-CIP-2	6650

111285 7590 07/29/2014

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

EXAMINER	
MEHRMANESH, AMIR	
ART UNIT	PAPER NUMBER
2496	

NOTIFICATION DATE	DELIVERY MODE
07/29/2014	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

Office Action Summary	Application No. 13/828,651	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner AMIR MEHRMANESH	Art Unit 2496	AIA (First Inventor to File) Status No

-- 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 *03/14/2013*.

☐ 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) *1-25* 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) *1-25* is/are rejected.

8)☒ Claim(s) *2,8,10,17,19 and 25* 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 *3/14/2013* 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 *10/18/2013 and 07/03/2014*.

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

4) ☐ Other: _____.

DETAILED ACTION

1. The following is a Non-Final Office action in response to the application filed on March 14, 2013.

This application is a Continuation In Part of Application serial number 13/679,476 filed 11/16/2012 which claims benefit of provisional application number 61/560,509 filed on 11/16/2011.

Claims 1-25 are presented for examination and are pending. The present application is being examined under the pre-AIA first to invent provisions.

Drawings

2. The drawings filed on 03/14/2013 are accepted.

Information Disclosure Statement

3. The information disclosure statements (IDS) submitted on 10/18/2013 and 07/03/2014 have been considered. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly an initialed and dated copy of Applicant's IDS forms 1449 filed 10/18/2013 and 07/03/2014 are attached to the instant Office action.

Claim Objections

4. Claims **2, 10, and 19** are objected to because of the following informalities: These claims recite the phrase “the radio transmission” in lines 3 or 4 of each claim. The Examiner suggests amending these claims in order to more clearly provide the antecedent basis for these phrases by amending the phrase to include “the short wavelength radio transmission”.

5. Claims **8, 17, and 25** are objected to because of the following informalities: These claims recite the phrase "the vehicles" in body of the claims. The Examiner suggests amending these claims in order to more clearly provide the antecedent basis for these phrases by amending the phrase to include "the privately owned vehicles".

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.

6. Independent Claims **1 and 9** 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.

As per claim 1, this claim recites the limitation "module **operable to** enable on board processing modules;" (emphasis added). This claim does not contain a positive statement of operation or functionality and relates to future acts that may never occur and there is no positive statement that the operation in fact actually occurs. This situation clearly renders the entire subject matter of claim 1 indefinite under 35 U.S.C. 112(b). See Ex parte Liebl (Appeal 2009-010624) and Ex parte Prouse (Appeal 2008-2417) for details.

As per claim 9, Claim 9 is directed to a method; however, the body of the claim does not positively recite any active steps. The claim recites a function (i.e., enabling on board processing modules) of the networking module. It's unclear as to what statutory class the claim belongs to. As a result, the claim is found indefinite under 35 U.S.C. § 112, second paragraph. *See IPXL Holdings, L.L.C. v. Amazon.com, Inc,* 430 F.3d 1377, 1384, (Fed. Cir. 2005). Also, the claim does not positively recite at least one active step, metes and bound of the claim are not clearly defined, the claim is found indefinite under 35 U.S.C. § 112, second paragraph. See MPEP 2172.01.

7. Claims **2, 3, 5, 7, 10, 11, 13, 15-16, 19, 20, 22, and 24** 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.

Claims **2-3, 10-11, and 19-20** recite the limitations "**the different networked vehicles**" and "**the networking messages**" in lines 2 and 3 of claims 2-3 and 10-11, as well as "**the different socially networked vehicles**" and "**the social networking messages**" in lines 2 and 3 of claims 19 and 20. There are insufficient antecedent basis for these limitation in the claims.

Claims **5, 13, and 22** recite the limitations "**the presence reporting module**" and "**the requirement of law**" in lines 1 and 2 of each claim. There are insufficient antecedent basis for these limitation in the claims.

Claims **7, 15, and 24** recite the limitations "**the networking session**" in lines 2 and 4-5 of claims 7 and 15 as well as "**the social networking session**" in lines 2, 4, and 5 of claim 24. There are insufficient antecedent basis for these limitation in the claims.

Claim **16** recites the limitations "**the networking session**", "**the networking participants**", and "**the networked vehicles**" in lines 1 and 2 of the claim. There are insufficient antecedent basis for these limitation in the claims.

8. Further Claims **2, 10, 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.

The terms "**about 2 to about 3 GHz**" in claims **2, 10, and 19** are relative terms which render the claims indefinite. The term "**about**" is not defined by the claims, the specification does not provide a standard of measuring for the relative term "about", and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Accordingly the limitation reciting the terms **"**about 2 to about 3 GHz" is found indefinite. Appropriate correction and clarification is required.

9. Furthermore Claims **6, 14, and 23** 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.

As per claims 6, 14, and 23, the phrase "plate number of **the vehicle**" as recited in line 4 of claims 6 and 14 and line 5 of claim 23 is indefinite. It is unclear to the Examiner which vehicle; a selected vehicle, one or more vehicles or the vehicle as disclosed by claim 1 is being referred to. Appropriate correction and clarification is required.

Claim Rejections - 35 USC § 102

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 –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims **1, 3-9, 11-18, and 20-25** are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. US 2011/0106375 A1 to Gurusamy Sundaram, (hereinafter "Guru") -IDS Provided by Applicant-.

As per claims 1 and 9, Guru teaches a vehicle and a method **(Guru Abstract, discloses a method and system that includes an in-vehicle computer residing in user's vehicle)**, comprising:

a microprocessor executable networking module operable to enable on board processing modules of different privately owned vehicles to wirelessly connect to exchange vehicle-related information **(Guru, Para. [0025] discloses in-vehicle computer enables communication and transfer of information to and from peer vehicles (i.e. different privately owned vehicles) such as car position, speed, traffic alerts (i.e. vehicle-related information). Peer vehicles 110 are cars and other transportation vehicles with which are in the vicinity of vehicle 102. Vehicle 102 is capable of interacting with peer vehicles 110 to enable the communication and data transfer, see also Para. [0039] which discloses wireless interface and wireless communication).**

As per claim 18, Guru teaches a non-transient, tangible computer readable medium (**Guru, Abstract and Para. [0068] discloses computer readable medium containing computer code that includes an in-vehicle computer residing in user's vehicle)** comprising a microprocessor executable social networking module on board a selected vehicle that, when executed, enables on board processing modules of different privately owned vehicles to wirelessly connect to exchange vehicle-related information**(Guru, Para. [0021 and 0025] discloses in-vehicle computer enables communication and transfer of information to and from peer vehicles (i.e. different privately owned vehicles) such as car position, speed, traffic alerts (i.e. vehicle-related information). Peer vehicles 110 are cars and other transportation vehicles with which are in the vicinity of vehicle 102. Vehicle 102 is capable of interacting with peer vehicles 110 to enable the communication and data transfer**.

The user of vehicle may communicate with passengers of peer vehicles by video conferencing, social networking, text messages, alerts, greetings, and games, see also Para. [0039] which discloses wireless interface and wireless communication).

As per claims 3, 11, and 20, Guru teaches the vehicle, the method and the computer readable medium of claims 1, 9, and 18 respectively, wherein the different networked vehicles are in spatial proximity to one another **(Guru, Para. [0025] discloses Peer vehicles (i.e. different networked vehicles) are cars and other transportation vehicles with which are in the vicinity (i.e. spatial proximity) of vehicle 102. Vehicle 102 is capable of interacting with peer vehicles 110 to enable the communication and data transfer),** wherein the networking messages are exchanged over a short-range wireless technology forming a personal area network and wherein the information is not exchanged over the Internet **(Guru, Para. [0023] discloses Network communication 106 enables in-vehicle computer 104 to communicate with application servers 108 and peer vehicles 110. Network communication 106 includes without limitation, Wi-Fi, Bluetooth (i.e. a short-range wireless technology), and radio frequency communication).**

As per claims 4, 12, and 21, Guru teaches the vehicle, the method and the computer readable medium of claims 1, 9, and 18 respectively, wherein the vehicle-related information exchanged comprises fuel usage, speed, acceleration, geographic location of the vehicle, map information, inter-occupant game information, vehicle

occupant information, media, and on board vehicle sensor output **(Guru, Para. [0021 and 0025] discloses in-vehicle computer 104 enables communication and transfer of information to and from peer vehicles 110 such as car position, speed, traffic alerts etc. Further, in-vehicle computer 104 may act as a platform on which various applications for and related to games, network games, GPS navigations, video conferencing, social networking, driver identification by finger print reading or visual confirmation, fuel efficiency calculator, location based services, news feeds and the likes may be developed).**

As per claims 5, 13, and 22, Guru teaches the vehicle, the method and the computer readable medium of claims 1, 9, and 18 respectively, wherein the presence reporting module determines, based on the requirement of law applicable to a current geographic location of the vehicle **(Guru, Para. [0019 and 0041] discloses The vehicle's response may include preventing the user from going outside the bounds such as preventing the user from exceeding a specified speed limit (i.e. requirement of law) and alerting the user that he is attempting to go (or is going) outside the bounds).**

As per claim 6, 14, and 23, Guru teaches the vehicle, the method and the computer readable medium of claims 1, 9, and 18 respectively, wherein the networking module identifies one or more vehicles in wireless communication with a selected vehicle and wherein an occupant selects one of the one or more of the vehicles in wireless communication with which to initiate a networking session by identifying a

license plate number of the vehicle and/or by identifying one or more vehicle occupants in which the occupant of the selected vehicle has a preexisting networking relationship **(Guru, Para. [0025 and 0190-0192] discloses the user of vehicle 102 may communicate with passengers of peer vehicles (i.e. identifying one or more vehicle occupants) by video conferencing, voice call, text messages, alerts, greetings, games information is shared only with other users of vehicles within a social network or social circle (i.e. preexisting networking relationship), see also Para. [0223] discloses the predetermined group of vehicles constitutes a contact list of vehicles).**

As per claim 7, 15, and 24, Guru teaches the vehicle, the method and the computer readable medium of claims 6, 14, and 23 respectively, wherein the networking module determines whether the networking session can be initiated based on one or more operator restrictions and/or one or more legal restrictions applicable to a current location of the selected vehicle and wherein, when the networking session cannot be initiated, the networking module blocks the networking session from being initiated and/or continuing **(Guru, Para. [0115] discloses external conditions may dictate which commands are followed. Touch screen display or other feathers (i.e. networking session) may be disabled (i.e. blocked) if there are bad road conditions and it would be dangerous for the user (i.e. operator restrictions) to take his eyes off the road (i.e. current location) to touch the screen or communicate with other vehicles, see also Para. [0210-0212 and 0225] discloses detect the availability of a second wireless network; initiate a second wireless**

connection over the second wireless network, in which the second wireless connection supports the same voice call and terminate the first wireless connection (i.e. blocks the networking session from being initiated and/or continuing)).

As per claim 8, 17, and 25, Guru teaches the vehicle, the method and the computer readable medium of claims 1, 9, and 18 respectively, wherein the vehicles have different owners **(Guru, Para. [0025] discloses Peer vehicles (i.e. vehicles have different owners) are cars and other transportation vehicles with which are in the vicinity of vehicle 102. Vehicle 102 is capable of interacting with peer vehicles 110 to enable the communication and data transfer. The user of vehicle 102 may communicate with passengers of peer vehicles (i.e. different owners) by video conferencing, voice call, text messages, alerts, greetings, games).**

As per claim 16, Guru teaches the method of claim 9, wherein the networking session is a social networking session and wherein the networking participants in each of the networked vehicles are members of a preexisting online community, e-community, and/or virtual community **(Guru, Para. 0025 and 0190-0192] discloses Peer vehicles 110 are cars and other transportation vehicles with which are in the vicinity of vehicle 102. Vehicle 102 is capable of interacting with peer vehicles 110 to enable the communication and data transfer. The user of vehicle may communicate with passengers of peer vehicles by video conferencing, social networking, text messages, alerts, greetings, and games. Information is shared**

only with other vehicles within a social network or social circle (i.e. members of a preexisting online community).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 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.

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(a) 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.

11. Claims **2, 10, and 19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Guru as applied above for claims 1, 9, and 18, in view of U.S. Pub. No. US 2008/0129475 A1 to Breed et al., (hereinafter "Breed") –IDSs Provided by Applicant-.

As per claims 2, 10, and 19, Guru teaches the vehicle, the method and the computer readable medium of claims 1, 9, and 18 respectively, wherein the different networked vehicles are in spatial proximity to one another **(Guru, Para. [0025] discloses Peer vehicles (i.e. different networked vehicles) are cars and other transportation vehicles with which are in the vicinity (i.e. spatial proximity) of vehicle 102. Vehicle 102 is capable of interacting with peer vehicles 110 to enable**

the communication and data transfer), wherein the networking messages are exchanged using a short wavelength radio transmission having a limited range **(Guru, Para. [0023] discloses Network communication 106 enables in-vehicle computer 104 to communicate with application servers 108 and peer vehicles 110. Network communication 106 includes without limitation, Wi-Fi, Bluetooth (i.e. a short-range wireless technology), and radio frequency communication)**,

However Guru fails to explicitly disclose the radio transmission uses a frequency band ranging from about 2 to about 3 GHz, but Breed teaches:

wherein the radio transmission uses a frequency band ranging from about 2 to about 3 GHz **(Breed, Para. [0388] discloses RF circuit such as in an RFID could operate with directional antennas at a relatively high frequency such as 2.4 GHz).**

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the Breed's system for In-Vehicle Communications, into Guru's system for providing an integrated platform for entertainment, information, communication, control and computing applications in a vehicle with a motivation to provide a stronger and signal and for boosting the signal from the sensor (Breed Para. [0388]). Also Both Guru and Breed are directed toward the in-vehicle communication system which is capable of communicating with other vehicle in close distances (see Guru, Para. 0025 discloses communication with peer vehicles and Breed Para. [0290] discloses vehicle-to-vehicle communication).

Conclusion

12. Prior arts made of record, not relied upon:

US 20100202346 A1 to Sitzes et al., discloses a method of wireless inter-vehicle communication. The method includes storing a message packet in a shared memory location of a first communication device. The shared memory location is wirelessly accessible by one or more other communication devices. The method also includes assessing, at a second communication device, whether or not the message packet stored in the shared memory location of the first communication device is intended to be received at the second communication device and assessing, at the second communication device, whether or not to accept the message packet from the shared memory location of the first communication device.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMIR MEHRMANESH whose telephone number is (571)270-3351. The examiner can normally be reached on Mon-Thru 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Nalven can be reached on 571-272-3839. 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.

/AMIR MEHRMANESH/
Examiner, Art Unit 2496

Notice of References Cited	Application/Control No. 13/828,651	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner AMIR MEHRMANESH	Art Unit 2496	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2010/0202346 A1	08-2010	Sitzes et al.	370/328
	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

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 07/25/2014

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

EXAMINER
NGUYEN, PHILLIP H

ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 07/25/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/829,157	03/14/2013	Christopher P. Ricci	6583-247-CIP-7	1000

TITLE OF INVENTION: ON BOARD VEHICLE INSTALLATION SUPERVISOR

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	10/27/2014

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 07/25/2014
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.
13/829,157	03/14/2013	Christopher P. Ricci	6583-247-CIP-7	1000

TITLE OF INVENTION: ON BOARD VEHICLE INSTALLATION SUPERVISOR

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	10/27/2014

EXAMINER	ART UNIT	CLASS-SUBCLASS
NGUYEN, PHILLIP H	2191	717-174000

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. _____

Ford Ex. 1002 Page 568 of 1178

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.
13/829,157	03/14/2013	Christopher P. Ricci	6583-247-CIP-7	1000

111285 7590 07/25/2014

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

EXAMINER	
NGUYEN, PHILLIP H	

ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 07/25/2014

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.

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	13/829,157	RICCI, CHRISTOPHER P.	
	Examiner	Art Unit	
	PHILLIP H. NGUYEN	2191	

All participants (applicant, applicant's representative, PTO personnel):

(1) *PHILLIP H. NGUYEN*. (3)_____.

(2) *Douglas Swartz (Reg. #37,739)*. (4)_____.

Date of Interview: *01 July 2014*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☒101 ☐112 ☐102 ☐103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1 and 17*.

Identification of prior art discussed: _____.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

During the telephone interview with the applicant's representative, the independent claims 1 and 17 were discussed. Examiner has suggested to amend claims 1 and 17 to overcome the 35 U.S.C. 101 issue. An agreement was reached.

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/PHILLIP H NGUYEN/ Primary Examiner, Art Unit 2191	

Notice of Allowability	Application No. 13/829,157	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner PHILLIP H. NGUYEN	Art Unit 2191	AIA (First Inventor to File) Status No

-- 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 *3/14/2013*.
   ☐ 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 *1-24*. 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 10182013,07032014
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 _____.

/PHILLIP H NGUYEN/
Primary Examiner, Art Unit 2191

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

2. This Office Action is in response to the filing date of 3/14/2013.

3. Claims 1-24 are pending and have been considered below.

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Douglas Swartz (Reg. #37,739) on 7/1/2014. The examiner's amendment is necessitated to avoid 35 U.S.C. 101 non-statutory.

Claims 1 and 17 are amended as follows:

1. (Currently Amended) A vehicle, comprising:

a processor configured to execute:

a microprocessor executable installation supervisor operable to determine, for a selected computational component to be installed in the vehicle, whether the selected computational component satisfies a requirement and/or restriction associated with the selected computational component, when installed, and, when the selected computational component can satisfy the requirement and/or restriction, create a set of data structures in the selected computational component and/or a computer readable medium on board the vehicle to bind the selected computational component to the vehicle, thereby preventing the selected computational component, after installation in the vehicle, from communicating openly with a processing module in a different vehicle.

17. (Currently Amended) A **non-transitory** ~~**non-transient**~~, tangible computer readable medium comprising a microprocessor executable installation supervisor on board a selected vehicle that, when executed, (a) determine, for the selected computational component to be installed in a selected vehicle, whether the selected computational component satisfies a requirement and/or restriction associated with the selected computational component, when installed, and (b), when the selected computational component can satisfy the requirement and/or restriction, create a set of data structures in the selected computational component and/or a computer readable medium on board the selected vehicle to bind the selected computational component to

the selected vehicle, thereby prohibiting the selected computational component, after installation in the selected vehicle, from communicating restricted vehicle information to a processing module in a different vehicle.

Examiner's Statement of Reason for Allowance

5. The following is an examiner's statement of reasons for allowance:

Claims 1-24 are considered allowable when reading the claims in light of the specification. The cited prior arts fail to teach or reasonably suggest the combination of limitations specified in the independent claims.

The closet prior arts are:

Ritter et al. (US 2008/0234919) teaches a method for performing application review validation testing for an engine as installed in a n application, the engine having production sensors and a production electronic control unit (ECU) for controlling the engine using the production sensors, includes running the engine, reading an output of the production sensors with the production ECU during the running of the engine, and determining with the production ECU whether the engine as installed in the application is in compliance with at least one requirement of the application review validation testing based on the output (see at least the Abstract).

Coverdill et al. (US 5,890,080) teaches a method for determining installed electronic devices on a truck and for providing a centralized reset to clear faults in the installed electronics. An instrumentation control unit in the cab of a truck determines installed electronics by requesting electronics on a shared data link to transmit data on the data link. The control unit identifies the installed devices from the transmitted data. Data describing the installed devices including manufacturer, model, and installed software can be obtained and displayed for diagnostic purposes. The instrumentation control unit provides a centralized reset for resetting the electronic devices on the data link (see at least the Abstract).

Goossen et al. (US 6,678,747) teaches a method and apparatus for collecting and distributing information to and from a computing element that is quickly scalable at the installation to varying types and numbers of signals. Standard sized modules containing a generalized set of computation, discrete I/O, analog I/O, serial I/O, adaptable I/O, etc. or any combination thereof, provide the building blocks that can be attached to each other to provide the desired combination of functions. These modular components are mated to each other through a simple serial interface providing the inter-module communication interface and local power requirements. The modules are quickly stacked together snapped in place in a manner supporting sever environment (see at least the Abstract).

However, Ritter, Coverdill and Goossen taken alone or in any reasonable combination fail to teach:

"…*create a set of data structures in the selected computational component and/or a computer readable medium on board the vehicle to bind the selected computational component to the vehicle, thereby preventing the selected computational component, after installation in the vehicle, from communicating openly with a processing module in a different vehicle*" as recited in claim 1.

Independent claims 9 and 17 recited similar features and therefore are allowed for the same reason.

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

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILLIP H. NGUYEN whose telephone number is

(571)270-1070. The examiner can normally be reached on Monday - Thursday 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Y. Zhen can be reached on (571) 272-3708. 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.

/PHILLIP H NGUYEN/
Primary Examiner, Art Unit 2191

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	13/829,157	RICCI, CHRISTOPHER P.	
	Examiner	Art Unit	
	PHILLIP H. NGUYEN	2191	

All participants (applicant, applicant's representative, PTO personnel):

(1) *PHILLIP H. NGUYEN*. (3)_____.

(2) *Douglas Swartz (Reg. #37,739)*. (4)_____.

Date of Interview: *01 July 2014*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☒101 ☐112 ☐102 ☐103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1 and 17*.

Identification of prior art discussed: _____.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

During the telephone interview with the applicant's representative, the independent claims 1 and 17 were discussed. Examiner has suggested to amend claims 1 and 17 to overcome the 35 U.S.C. 101 issue. An agreement was reached.

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/PHILLIP H NGUYEN/ Primary Examiner, Art Unit 2191	

Notice of References Cited	Application/Control No. 13/829,157	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner PHILLIP H. NGUYEN	Art Unit 2191	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2013/0179689	07-2013	MATSUMOTO et al.	713/171
*	B	US-2008/0234919	09-2008	Ritter et al.	701/114
*	C	US-5,890,080	03-1999	Coverdill et al.	701/31.4
*	D	US-6,678,747	01-2004	Goossen et al.	710/2
	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.
13/829,505	03/14/2013	Christopher P. Ricci	6583-247-CIP-8	3596

111285 7590 07/23/2014

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

EXAMINER	
LIPMAN, JACOB	
ART UNIT	PAPER NUMBER
2434	

NOTIFICATION DATE	DELIVERY MODE
07/23/2014	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

Office Action Summary	Application No. 13/829,505	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JACOB LIPMAN	Art Unit 2434	AIA (First Inventor to File) Status No

-- 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 *14 March 2013*.

☐ 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) *1-31* 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) *1-31* 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 *10/18/13 & 7/3/14*.

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

4) ☐ Other: _____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements (IDSs) submitted on 18 October 2013 and 3 July 2014 have been considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 8-11, 16-19, and 24-31, are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Crowe, USPN 2009/0275321.

With regard to claims 1, 8, 9, 16, 17, 24-28, 30, and 31, Crowe discloses a vehicle (0006), including a microprocessor executable media controller (0030) operable to receive a media stream from a remote node (), the received media stream being for an occupant associated with an on board vehicle input/output system (0031), identify which on board vehicle input/output systems are restricted due to operator command and/or as a result of a governing law (0035, 0018), and provide the media stream, in compliance with any restriction, to a selected input/output system associated with the occupant (0031).

With regard to claims 2, 10, and 18, Crowe discloses the vehicle of claim 1, as outlined above, and further discloses only providing the signal to unrestricted input/output systems (0031, 0035).

With regard to claims 3, 11, and 19, Crowe discloses the vehicle of claim 1, as outlined above, and further discloses the input/output systems are in a dependent mode (0030).

With regard to claim 29, Crowe discloses the vehicle of claim 1, as outlined above, and further discloses using GPS (0021).

Claim Rejections - 35 USC § 103

4. The following is a quotation of pre-AIA 35 U.S.C. 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.

5. Claims 4-7, 12-15, and 20-23 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Crowe in view of examiner's official notice.

With regard to claims 4, 12, and 20, Crowe discloses the vehicle of claim 1, as outlined above, but does not mention a passenger phone which would be independent of the vehicle system. The examiner takes official notice that it is well known in the art that a vehicle passenger might also have a mobile phone. It would have been obvious for one of ordinary skill in the art to not restrict the mobile device of a passenger in the system of Crowe for the motivation that a passenger may not be restricted by law from using his device in any way.

With regard to claims 5, 6, 13, 14, 21, and 22, Crowe discloses that the law prevents texting while driving (0003) and checking if the vehicle is moving (0034).

With regard to claims 7, 15, and 23, Crowe discloses the vehicle system of claim 1, as outlined above, and further discloses limiting a multimedia signal (0003), but does not disclose allowing one media of the multimedia signal. The examiner takes official notice that it is well known in the art that sometimes watching video while driving is restricted while listening to audio is not. It would have been obvious for one of ordinary skill in the art to allow the listening of audio while restricting the watching of video while a vehicle is in motion for the stated motivation of Crowe to enforce the law (0002).

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACOB LIPMAN whose telephone number is (571)272-3837. The examiner can normally be reached on M-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. 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.

/JACOB LIPMAN/
Primary Examiner, Art Unit 2434

Notice of References Cited	Application/Control No. 13/829,505	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner JACOB LIPMAN	Art Unit 2434	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2009/0275321	11-2009	Crowe, Tracy J.	455/418
	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.
13/829,718	03/14/2013	Christopher P. Ricci	6583-247-CIP-10	1406

111285 7590 07/25/2014

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

EXAMINER	
ARTHUR JEANGLAUDE, GERTRUDE	
ART UNIT	PAPER NUMBER
3661	

NOTIFICATION DATE	DELIVERY MODE
07/25/2014	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

Office Action Summary	Application No. 13/829,718	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *7/10/14*.

☐ 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) *1-24* 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) *1-24* 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 *3/14/13* 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: _____.

Ford Ex. 1002 Page 589 of 1178

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Response to Amendment

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 1-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because the claim(s) as a whole, considering all claim elements both individually and in combination, do not amount to significantly more than an abstract idea. The claim(s) is/are directed to the abstract idea of **an idea of itself**. For instance, in Alice Corp. the court found that "intermediated settlement" was a fundamental economic practice, which is an abstract idea. The additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than: **(i) mere instructions to implement the idea on a computer, and/or (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry.** Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to transform the abstract idea into a

patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself. Therefore, the claim(s) are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

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 pre-AIA 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 –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-24 are rejected under pre-AIA 35 U.S.C. 102 (b) as being anticipated by over Breed et al. (U.S. Pub No. 20080129475).

Regarding claims 1,9, 17, Breed et al. disclose a vehicle, comprising: a microprocessor executable diagnostic module operable to receive, from a vehicle component, a signal regarding a warning and/or error and select a destination for the signal from a plurality of destinations, the plurality of destinations comprising one or

more of a vehicle input/output system to present the warning and/or error to a vehicle occupant, an emergency service provider, an emergency responder, a manufacturer of the vehicle, a service facility located in proximity to a current vehicle location, and a remotely located diagnostic service to diagnose a cause of the warning and/or error signal (See paragraph 0946, 0949, 1201). Breed et al. also disclose perform one or more of the following operations such as contact a repair facility to schedule an appointment to repair the potential fault, malfunction, and/or problem (See paragraph 0948).

Regarding claims 2, 10, 18, Breed et al. disclose the diagnostic module queries one or more of an on board sensor, on board monitor, critical system controller, and non-critical system controller to determine a corresponding state, determines a diagnosis of the warning and/or error using locally and/or remotely stored pre\-determined logic, and generates repair advice and/or a warning and/or an instruction and/or a recommendation to a vehicle operator (See paragraph 1201).

Regarding claims 3, 11, 19, Breed et al. disclose the diagnostic module locates and/or determines and/or identifies a part and/or component required to repair the vehicle and a source for the replacement part and/or component and orders the replacement part and/or component (See paragraph 1201).

Regarding claims 4, 12, 20, Breed et al. disclose the diagnostic module locates and/or determines and/or identifies, based on a current satellite-based location of the vehicle, the service facility, provides the diagnosis of the warning and/or error, and

obtains from the service facility one or more of an estimated charge to repair the vehicle, an earliest available appointment to repair the vehicle, and an estimated time required to repair the vehicle (See paragraph 1202).

Regarding claims 5, 13, 21, Breed et al. disclose the diagnostic module contacts plural service facilities, provides, by way of comparison, the one or more of an estimated charge to repair the vehicle, an earliest available appointment to repair the vehicle, and the estimated time required to repair the vehicle received from each service facility, and recommends a preferred service facility for repairing the vehicle (See 0741, 0257).

Regarding claims 6, 14, 22, Breed et al. disclose the diagnostic module forwards the signal to one or more of the manufacturer and service facility that compares the warning and/or error and vehicle-specific parameters to a maintenance and/or fault history for a model of the vehicle and provides, to a vehicle operator, the result of the comparison along with a probability of the diagnosis being correct (See paragraph 0741, 0257, 0219).

Regarding claims 7, 15, 23, Breed et al. disclose the forwarded signal comprises a current physical location of the vehicle, an identity of the vehicle and/or vehicle owner or occupant, and diagnostic information and/or a diagnosed cause of the warning and/or error signal and wherein the one or more of the manufacturer and service facility one or more of dispatches an emergency service provider and/or a first responder to the physical location of the vehicle, schedules the vehicle to be repaired by the service

facility, and pre-orders a replacement part and/or component required to repair a diagnosed source of the warning and/or error signal (See paragraph 0741, 1202).

Regarding claims 8, 16, 24, Breed et al. disclose the diagnostic module at least one of forwards at least part of the warning and/or error signal to the remotely located diagnostic service to diagnose a cause of the warning and/or error signal and performs local diagnosis of the cause of the warning and/or error signal and interactively engages in a conversational interaction with the vehicle operator regarding the diagnosed cause of the warning and/or error, wherein the responses in the interactive conversational interaction are based on a menu-type structure (See 1202, 1204).

Response to Arguments

Applicant's arguments filed 7/10/14 have been fully considered but they are not persuasive. The prior art of Breed et al. disclose one or more of the italics as shown in the office action. Applicant's representative is also aware that such limitation is taught by Breed et al. as stated on page 3 of argument submitted 7/10/14.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERTRUDE ARTHUR JEANGLAUDE whose telephone number is (571)272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas 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.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

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.
13/830,003	03/14/2013	Christopher P. Ricci	6583-247-CIP-13	7921

111285 7590 07/25/2014

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

EXAMINER	
ARTHUR JEANGLAUDE, GERTRUDE	
ART UNIT	PAPER NUMBER
3661	

NOTIFICATION DATE	DELIVERY MODE
07/25/2014	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

Office Action Summary	Application No. 13/830,003	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *7/18/14*.

☐ 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) *2-8,10-16 and 18-27* 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) *2-8,10-16 and 18-27* 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 is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Response to Amendment

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 2-8, 10-16, 18-27 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because the claim(s) as a whole, considering all claim elements both individually and in combination, do not amount to significantly more than an abstract idea. The claim(s) is/are directed to the abstract idea of **an idea of itself**. For instance, in Alice Corp. the court found that "intermediated settlement" was a fundamental economic practice, which is an abstract idea. The additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than: **(i) mere instructions to implement the idea on a computer, and/or (ii) recitation of generic computer structure that serves to perform generic computer functions that are well-understood, routine, and conventional activities previously known to the pertinent industry.** Viewed as a whole, these additional claim element(s) do not provide meaningful limitation(s) to

transform the abstract idea into a patent eligible application of the abstract idea such that the claim(s) amounts to significantly more than the abstract idea itself. Therefore, the claim(s) are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

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 pre-AIA 35 U.S.C. 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 2-8, 10-16, 18-27 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Breed (U.S. Pub No. 20070057781) in view of Szczerba et al. (U.S. Pub No. 20100253493).

Regarding claims 25-27, Breed et al. disclose a method, a non-transient, tangible computer readable medium and a vehicle, comprising: a microprocessor executable object movement module operable to (a) receive, from a source vehicle occupant, (i) a selected target vehicle display associated with a target vehicle

occupant and/or (ii) an identification of the target vehicle occupant to share an object currently displayed on a source vehicle display of the source vehicle occupant but not currently displayed on the selected target vehicle display and/or a portable computational device currently located within the vehicle and associated with the target vehicle occupant and (b) forward, in substantial real time with the receipt from the source vehicle occupant of (i) the selected target vehicle display and/or (ii) the identification of the target vehicle occupant, the object to be shared to the selected target vehicle display and/or the portable computational device for display to the target vehicle occupant (See paragraph 0016, 0017, 0019, 0261). In an analogous art, Szczerba et al. more specifically disclose sharing displayed objects between vehicle occupants (See paragraph 0169). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Breed et al. with that of Szczerba et al. by sharing a display since it would allow the tracking movement of the target vehicle.

Regarding claims 2, 10, 18, Breed discloses the displayed object is one or more of streaming video, a web page, an icon, a window, and an application and wherein the currently displayed object is directed by a media controller on board the vehicle to the selected target vehicle display of the target vehicle occupant, and/or a computational device associated with the target vehicle occupant and currently located within the vehicle and is not transmitted by a network component located physically outside of the vehicle (See 0017 for remote transmission,0222, 0784, 0806,0965).

Regarding claims 3, 11, 19, Breed discloses the selected target vehicle display and/or target vehicle occupant is selected by the source vehicle occupant by one or more of a gesture received by the source vehicle display, the gesture indicating a position and/or orientation of the target vehicle display and/or target vehicle occupant relative to the source vehicle display, a selection, received by the source vehicle display, of the target vehicle display, and a selection, received by the source vehicle display, of an identifier associated with the target vehicle occupant and wherein the displayed object is one or more of streaming video, a web page, an icon, a window, and an application (See paragraph 0222, 1012).

Regarding claims 4, 12, 20, Breed discloses gestures used (See paragraph 1011) wherein the selected target vehicle display and/or target vehicle occupant is selected by the source vehicle occupant by the gesture being received by the source vehicle display and wherein the gesture indicates a vector originating substantially at a seating position of the source vehicle occupant and pointing towards a seating position of the target vehicle occupant (See paragraph 0989).

Regarding claims 5, 13, 21, Breed discloses the selected target vehicle display and/or target vehicle occupant is selected by the source vehicle occupant by the selection, received by the source vehicle display, of the target vehicle display and wherein the selection is made by the source vehicle occupant selecting a seating position of the target vehicle occupant on a displayed seating diagram of the vehicle (See 0989).

Regarding claims 6, 14, 22, Breed discloses wherein the source vehicle occupant selects multiple target vehicle occupants and wherein the displayed object is provided, substantially simultaneously, to the selected multiple target vehicle occupants (See paragraph 0981).

Regarding claims 7, 15, 23, Breed discloses the displayed object movement module determines whether the target vehicle display is activated and, when not activated, causes the target vehicle display to be activated to receive the displayed object (See paragraph 0977).

Regarding claims 8, 16, 24, Breed discloses the displayed object movement module determines whether the target vehicle display is activated and, when not activated, causes the displayed object to be transmitted to the computational device associated with the target vehicle occupant (See paragraph 0993, 0776, 0946, 0949).

Response to Arguments

Applicant's arguments with respect to claims 2-8, 10-16, 18-27 have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERTRUDE ARTHUR JEANGLAUDE whose telephone

number is (571)272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas 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.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

Notice of References Cited	Application/Control No. 13/830,003	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner GERTRUDE ARTHUR JEANCLAUDE	Art Unit 3661	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2010/0253493	10-2010	Szczerba et al.	340/435
	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.
13/830,133	03/14/2013	Christopher P. Ricci	6583-247-CIP-15	1012

111285 7590 07/10/2014

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

EXAMINER	
ARTHUR JEANGLAUDE, GERTRUDE	
ART UNIT	PAPER NUMBER
3661	

NOTIFICATION DATE	DELIVERY MODE
07/10/2014	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

Office Action Summary	Application No. 13/830,133	Applicant(s) RICCI ET AL.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *3/14/13*.

☐ 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) *1-39* 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) *1-39* 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 *3/14/13* 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 is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

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 pre-AIA 35 U.S.C. 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 1-39 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Breed (U.S Pub No. 20120296567) in view of Ying (U.S. Pub No. 20100235042).

Regarding claims 1, 14, 27, Breed et al. disclose a vehicle, comprising: a plurality of processing modules to control a plurality of automated vehicle tasks, functions and/or operations (See Fig. 13A, 13B), wherein a first processing module is in an active mode whereby the first processing module is in primary control of at least most automated

vehicle tasks, functions and/or operations (See paragraph 0029, 0464). Though Breed discloses processors, it does not specifically disclose a second processing module is in a standby mode whereby the second processing module is ready to assume primary control of the at least most automated vehicle tasks, functions and/or operations. In an analogous art, Ying discloses a second processor wherein the second processing module would be in a standby mode whereby the second processing module is ready to assume primary control of the at least most automated vehicle tasks, functions and/or operations (See paragraph 0094). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the processing modules of Breed with that of Ying by having a first and a second processor to assume primary control of the at least most automated vehicle tasks, functions and/or operations in order to facilitate diagnosis and maintenance of the mobile.

Regarding claims 2, 15, 28, Breed discloses the processors but does not specifically disclose that the first and second processing modules are in wireless communication with one another, and wherein a state of the second processing module is maintained substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module. In an analogous art, Ying discloses the first and second processing modules are in wireless communication with one another, and wherein a state of the second processing module is maintained substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module (See abstract; figs. 9, 11; paragraph 0008, 0094).

Regarding claims 3-9, 16-22, 29-35, Breed discloses the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an engine and/or power control unit, transmission control unit (TCU), a door setting, a window setting, a blind spot monitor, an airbag deployment control unit, a collision sensor, a nearby object sensing system, a seat belt control unit, a sensor for a seat belt setting, a power source controller, an energy output sensor, an engine temperature sensor, oil pressure, hydraulic pressure, a headlight, an emergency light, a brake light, a parking light, a fog light, an interior and/or passenger compartment light, a tail light, a vehicle control system sensor, a wireless network, a cellular data sensor, a steering sensor, a torque sensor, an engine, power steering, a display panel, switch state control unit, and a brake control unit; and wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an emissions system, a seating system controller and/or sensor, an entertainment system, monitoring an ambient (outdoor) weather sensor, an odometer reading sensor, a trip mileage reading sensor, a road condition sensor, a radar transmitter/receiver output, a brake wear sensor, an oxygen sensor, an ambient lighting sensor, a vision system sensor, a ranging sensor, a parking sensor, a heating, venting, and air conditioning (HVAC); a health check module is also used to determine a corresponding state of health of each of the first and second processing modules (See paragraph 0030-0041, 0104).

Regarding claims 10-13, 23-26, 36-39, Breed discloses all but fails to specifically disclose a hand-off procedure is activated whereby primary control is passed from the

first processing module to the secondary processing

module and the first processing module enters the standby mode; and wherein the relative weighting of at least some tasks, functions and/or operations in assigning the score is a function of geographic location of the vehicle; wherein, for a first set of tasks, functions, and/or operations, the first processing module is in primary control and the second processing module is in standby mode and, for a different second set of tasks, functions, and/or operations, the second processing module is in primary control and the first processing module is in standby mode; wherein, in the standby mode, the second processing module at least one of (a) performs shadow processing of the at least most automated vehicle tasks, functions and/or operations and (b) synchronizes stored time-stamped processing state information with time-stamped processing state information regarding the at least most automated vehicle tasks, functions and/or operations. In an analogous art, Ying disclose a first processing module and second processing module the first processing module enters the standby mode; and wherein the relative weighting of at least some tasks, functions and/or operations in assigning the score is a function of geographic location of the vehicle; wherein, for a first set of tasks, functions, and/or operations, the first processing module is in primary control and the second processing module is in standby mode and, for a different second set of tasks, functions, and/or operations, the second processing module is in primary control and the first processing module is in standby mode; wherein, in the standby mode, the second processing module at least one of (a) performs shadow processing of the at least most automated vehicle tasks, functions and/or operations and (b) synchronizes

stored time-stamped processing state information with time-stamped processing state information regarding the at least most automated vehicle tasks, functions and/or operations (See Figs. 9, 11, 24, 25; paragraph 0015, 0021, 0025).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERTRUDE ARTHUR JEANGLAUDE whose telephone number is (571)272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas 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.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

Notice of References Cited	Application/Control No. 13/830,133	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner GERTRUDE ARTHUR JEAN-CLAUDE	Art Unit 3661	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2012/0296567	11-2012	Breed, David S.	701/468
*	B	US-2010/0235042	09-2010	Ying, Jeffrey	701/33
	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.

Electronic Acknowledgement Receipt

EFS ID:	20459156
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
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:	6583-247-CIP-5
Receipt Date:	20-OCT-2014
Filing Date:	14-MAR-2013
Time Stamp:	13:48:16
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		6583-247-CIP-5_IDS_03.pdf	225369 730a336801c8cf62f18ecc8767292893d0fe99d8	yes	5

	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Transmittal Letter		1	3	
	Information Disclosure Statement (IDS) Form (SB08)		4	5	
Warnings:					
Information:					
2	Non Patent Literature	6583-247-CIP-PCT_ISR-WO_08-18-2014.pdf	1000794 4692d14fdad0a2cf30c001289e76027da04b58db	no	10
Warnings:					
Information:					
3	Non Patent Literature	6583-247-CIP-6-PCT_ISR-WO_07-25-2014.pdf	782570 cdec0f41192af33e03197b2a851c1f04a28ee16b	no	8
Warnings:					
Information:					
4	Non Patent Literature	6583-247-CIP-15-PCT_ISR-WO_07-29-2014.pdf	1686355 04b68e1192d8dbe3091df153783ff626875c549d	no	11
Warnings:					
Information:					
5	Non Patent Literature	6583-232_OA_09-26-2014.pdf	231935 8271af3f8a4f6909a272cbdbb7e3b4940730bf10	no	7
Warnings:					
Information:					
6	Non Patent Literature	6583-233_OA_07-17-2014.pdf	414632 6e0c5c666bad11eef8feb685b35c3a333eb37273	no	13
Warnings:					
Information:					
7	Non Patent Literature	6583-244_NOA_07-22-2014.pdf	352604 ca6eed24933e209f1404f0c852a038f2673837f0	no	5
Warnings:					
Information:					
8	Non Patent Literature	6583-247-CIP_OA_09-04-2014.pdf	185220 78f7b2390e812dfcfa6ff075e4e8d2df6fa62f25	no	5
Warnings:					
Information:					

9	Non Patent Literature	6583-247-CIP-2_OA_07-29-2014.pdf	595864 1b27d7e601bcb5cb0111cab67853a63901d3a792	no	17
Warnings:					
Information:					
10	Non Patent Literature	6583-247-CIP-7_NOA_07-25-2014.pdf	623725 816bd4d0391610e29db027812cf176ef310a76b1	no	14
Warnings:					
Information:					
11	Non Patent Literature	6583-247-CIP-8_OA_07-23-2014.pdf	228939 301d06cff02846d3e9b86414c12973de7c86ba73	no	7
Warnings:					
Information:					
12	Non Patent Literature	6583-247-CIP-10_OA_07-25-2014.pdf	290071 44b8cb92011f5b2185328bbb4e00d1b1bb66960a	no	8
Warnings:					
Information:					
13	Non Patent Literature	6583-247-CIP-13_OA_07-25-2014.pdf	317647 8e4494b52ad0945e3b00ca3de68356c65460beec	no	9
Warnings:					
Information:					
14	Non Patent Literature	6583-247-CIP-15_OA_07-10-2014.pdf	314828 33cdca8ca2b9bf854acd6159bccf97f9aca49a28	no	9
Warnings:					
Information:					
		Total Files Size (in bytes):	7250553		

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: 2496
Christopher Ricci	)	Confirmation No.: 1085
Serial No.: 13/828,960	)	Examiner: Amir Mehrmanesh
Filed: March 14, 2013	)	SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
Atty. File No.: 6583-247-CIP-5	)	
Entitled: "On Board Vehicle Network Security"	)	*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/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. 14/485,467 filed 09/12/2014 (Attorney's Ref. No. 6583-247-CIP-7-CON)
- Serial No. 14/468,055 filed 08/25/2014 (Attorney's Ref. No. 6583-315-CON)

☐ 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

Ford Ex. 1002 Page 618 of 1178

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: October 20, 2014

Ford Ex. 1002 Page 620 of 1178

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.
13/828,960	03/14/2013	Christopher P. Ricci	6583-247-CIP-5	1085

111285 7590 01/05/2015

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

EXAMINER
MEHRMANESH, AMIR

ART UNIT	PAPER NUMBER
2496	

NOTIFICATION DATE	DELIVERY MODE
01/05/2015	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. 13/828,960	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner AMIR MEHRMANESH	Art Unit 2496	AIA (First Inventor to File) Status No

-- 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 *03/14/2013*.

☐ 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) *1-24* 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) *1-24* 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 *03/14/2013* 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 *10/18/2013, 07/03/2014, and 10/20/2014*.

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

4) ☐ Other: _____.

DETAILED ACTION

1. The following is a Non-Final Office action in response to the application filed on March 14, 2013.

This application is a Continuation In Part of Application serial number 13/679,476 filed 11/16/2012 which claims benefit of provisional application number 61/560,509 filed on 11/16/2011.

Claims 1-24 are presented for examination and are pending. The present application is being examined under the pre-AIA first to invent provisions.

Drawings

2. The drawings filed on 03/14/2013 are accepted.

Oath/Declaration

3. For the record, the Examiner acknowledges that the Oath/Declaration submitted on 03/14/2013 has been accepted.

Information Disclosure Statement

4. The information disclosure statements (IDS) submitted on 10/18/2013, 07/03/2014, and 10/20/2014 have been considered. The submissions are in compliance with the provisions of 37 CFR 1.97. Accordingly an initialed and dated copy of Applicant's IDS forms 1449 filed 10/18/2013, 07/03/2014, and 10/20/2014 are attached to the instant Office action.

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.

5. Claims **3, 5, 8, 11, 13, 16, 19, 21, and 24** 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.

As per claims 3, 11, and 19, these claims dependent on claims 2, 10, and 18, further limiting the component (i.e. at least one other board computational component) with is not recited on claims 2, 10, and 18. (see MPEP 2173.05(f)). Appropriate correction and clarification is required.

As per claims 5, 13, and 21, the phrase “the network controller” in line 1 of the claims lacks proper antecedent basis because the preceding phrase recites “microprocessor executable network controller”. Appropriate correction and clarification is required.

As per claims 8, 16, and 24, the phrase “the DMZ” in line 5 of the claims lacks proper antecedent basis. Appropriate correction and clarification is required.

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

(d) REFERENCE IN DEPENDENT FORMS.—Subject to subsection (e), a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), fourth paragraph:

Subject to the [fifth paragraph of 35 U.S.C. 112 (pre-AIA)], a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

6. Claim **4, 12, and 20** is rejected under 35 U.S.C. 112(d) or 35 U.S.C. 112 (pre-AIA), 4th paragraph, as being of improper dependent form for failing to further limit the subject matter of the claim upon which it depends, or for failing to include all the limitations of the claim upon which it depends. Claims 4, 12, and 20 depends upon claims 3, 11, and 19 respectively, but they are broader than 3, 11, and 19 because the computational component can be more items in claims 4, 12, and 20 than in claims 3, 11, and 19 and therefore are broader because of the one or more language. Applicant may cancel the claim(s), amend the claim(s) to place the claim(s) in proper dependent form, rewrite the claim(s) in independent form, or present a sufficient showing that the dependent claim(s) complies with the statutory requirements.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 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.

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(a) 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.

7. Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Pub. No. US 2013/0212659 A1 to Maher et al., (hereinafter “Maher”), in view of U.S. Pat. No. 7,891,004 B1 to Gelvin et al., (hereinafter “Gelvin”).

As per claims 1, 9, and 17, Maher teaches A vehicle, method, and a non-transient tangible computer readable medium comprising: a microprocessor executable network controller operable to at least one of (a) **[**isolate**]** at least one other on board computational component in a vehicular wireless network not affected by a security breach event from a computational component affected by the security breach event and (b) **[**isolate**]** an on board computational component in the vehicular wireless network and affected by the security breach event from the at least one other on board

computational component not affected by the security breach event **(Maher, Para. [0071 and 0156] discloses A connected vehicle may be designed such that control signals can be sent from services and/or devices external or internal to the vehicle and/or an Electronic Control Unit (ECU)(i.e. on board computational component) in the vehicle. An external device may interface with the vehicle via the network and control certain vehicle functions remotely. Such services, their associated network connections, and transmitted control information or messages may be exposed to either malicious or coincidental tampering (i.e. a security breach event), resulting in unauthorized control messages being sent to the vehicle and/or an ECU in the vehicle. The system may, further, include a secure processing unit ("SPU") that is protected from tampering by a user of system or other entities by utilizing secure physical and/or virtual security techniques).**

While Maher discloses certain vehicle systems (e.g., safety-related systems) may be isolated on their own communication bus (Maher Para. [0053]), it fails to explicitly disclose isolate an on board computational component, but Gelvin teaches:

isolate an on board computational component **(Gelvin, Col. 8 lines 10-45 and Col. 21 lines 1-10 discloses isolation of essential functions of the vehicle from consumer applications and remote operation. The protocol violation detector interprets commands from the gateway to isolate the two sides when necessary, as in response to a device that is flooding the network with access requests, or which is sending unauthorized messages. Additionally, the protocol violation**

detector includes circuitry to recognize that insistent use of the bus is being demanded by the device that is attached, so that it can command physical isolation).

It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the Gelvin's system for Vehicle internetworks, into Maher's system security and trust architecture in connected vehicles with a motivation to provide a system that enables the secure and convenient addition of devices and software to a vehicle network. Among the functions supported are formation of sub-networks, authentication of new devices added to the network, bridging between heterogeneous networks, routing and security for multimedia traffic, and control of traffic based on priorities and security level (Gelvin, Col. 4 lines 15-25).

As per claims 2, 10, and 18, the combination of Maher-Gelvin teaches the vehicle, method, and the non-transient tangible computer readable medium of claims 1, 9, and 17, wherein the security breach event is one or more of an instance of a virus, malware, unauthorized access, misuse, modification, denial-of-service attack, spoofing, man-in-the-middle attack, ARP poisoning, smurf attack, buffer overflow, heap overflow, format string attack, SQL injection, identity theft (or MAC spoofing), network injection, caffe latte attack, or denial of a computer network and/or network-accessible resource and wherein the network controller receives a warning signal associated with the security breach event from a gateway, a firewall, a honeypot, a network node impacted by the security breach event, and a network probe **(Maher, Para. [0071] discloses**

Malicious attacks on the vehicle 100 may include, without limitation, denial of service attacks, manipulation of climate controls, eavesdropping via microphones internal to the vehicle, attacks directed to draining battery systems, introduction of malware, and/or any other attack launched against the vehicle 100 or its constituent systems. Additional attacks may include direct tampering with intra-vehicle information systems designed to place the vehicle 100 in an unsafe condition).

As per claims 3, 11, and 19, the combination of Maher-Gelvin teaches the vehicle, method, and the non-transient tangible computer readable medium of claims 2, 10, and 18, wherein the at least one other board computational component is one or more of an on-board sensor, processing module, software application, expansion module, critical device, non-critical device, and cellular upgrade module **(Maher, Para. [0047] discloses ECUs included in the vehicle may be associated with one or more sensor systems configured to measure operating information and/or parameters related to the vehicle).**

As per claims 4, 12, and 20, the combination of Maher-Gelvin teaches the vehicle, method, and the non-transient tangible computer readable medium of claims 3, 11, and 18, wherein the at least one other board computational component is one or more of an on board sensor, a media controller, a gateway, a firewall, a processing module, a network controller, an input/output system, a display controller, an audio controller, an arbitration module, a health check module, a critical system controller, a

non-critical system controller, an on board sensor monitor, a displayed object movement module, a diagnostic module, a media filter, a network selector, a remote control module, a computational module selector, an expansion module, an application, and a plug-in module **(Maher, Para. [0047 and 0053] discloses ECUs included in the vehicle may be associated with one or more sensor systems configured to measure operating information and/or parameters related to the vehicle and The communication busses may be interconnected using one or more communication gateways facilitating communication across the busses).**

As per claims 5, 13, and 21, the combination of Maher-Gelvin teaches the vehicle, method, and the non-transient tangible computer readable medium of claims 1, 9, and 17, wherein the network controller analyzes the security breach event by one or more of reviewing historical behavior and comparing the behavior to templates characteristic of differing types of attacks and/or applying rules to the historical behavior **(Maher, Para. [0133] discloses collected data to determine a security tampering include driving habits of a driver of a vehicle, usage information regarding content, applications, and usage history of one or more vehicle systems (e.g., an IVI's purchasing history, browsing history, content rendering history), data generated by a device associated with the user (e.g., a smartphone), usage information generated by a trusted third party (e.g., a telematics service provider), and/or any other type of personal information relating to a vehicle owner, occupant, or user. In certain embodiments, PII may be volunteered by a user).**

As per claims 6, 14, and 22, the combination of Maher-Gelvin teaches the vehicle, method, and the non-transient tangible computer readable medium of claims 1, 9, and 17, wherein the computational component affected by the security breach event is an external computational device and wherein the at least one other on board computational component not affected by the security breach event is isolated from the external computational device by the vehicular wireless network denying vehicular wireless network access by the external computational component **(Maher, Para. [0071 and 0156] discloses A connected vehicle may be designed such that control signals can be sent from services and/or devices external or internal to the vehicle and/or an Electronic Control Unit (ECU) (i.e. on board computational component) in the vehicle. An external device may interface with the vehicle via the network and control certain vehicle functions remotely. Such services, their associated network connections, and transmitted control information or messages may be exposed to either malicious or coincidental tampering (i.e. a security breach event), resulting in unauthorized control messages being sent to the vehicle and/or an ECU in the vehicle. The system may, further, include a secure processing unit ("SPU") that is protected from tampering by a user of system or other entities by utilizing secure physical and/or virtual security techniques).**

As per claims 7, 15, and 23, the combination of Maher-Gelvin teaches the vehicle, method, and the non-transient tangible computer readable medium of claims 1, 9, and 17, wherein at least one of the following is true about the isolation: (a)

communications between the at least one other on board computational component in a vehicular wireless network not affected by the security breach event and the computational component affected by the security breach event, the communications not normally passing through a gateway and/or firewall are redirected through and filtered by the gateway and/or firewall and (b) communications between the at least one other on board computational component in a vehicular wireless network not affected by the security breach event and the computational component affected by the security breach event are blocked in whole or part **(Gelvin, Col. 2 line 65 to Col. 21 line 15 discloses The safety connector includes circuitry for detecting a physical fault such as a short on the exterior side of the safety connector, but is not so limited. This circuitry activates the control circuit to command physical isolation across the connector, e.g., by opening a switch. The protocol violation detector interprets commands from the gateway to isolate the two sides when necessary, as in response to a device that is flooding the network with access requests, or which is sending unauthorized messages. Additionally, the protocol violation detector 1208 includes circuitry to recognize that insistent use of the bus is being demanded by the device that is attached, so that it can command physical isolation).**

As per claims 8, 16, and 24, the combination of Maher-Gelvin teaches the vehicle, method, and the non-transient tangible computer readable medium of claims 1, 9, and 17, wherein the at least one other on board computational component in a vehicular wireless network not affected by the security breach event is a critical

component, wherein the computational component affected by the security breach event is a node on the vehicular wireless network and physically and/or logically positioned outside of but interiorly and/or internally to the DMZ, and wherein isolation is effected by enabling a critical communication security mechanism that is one or more of (a) encryption of access restrictions in the at least one other on board computational component in a vehicular wireless network, (b) disabling ESSID broadcasting, (c) hiding the SSID, (d) performing MAC ID filtering, (e) performing static IP addressing, (f) implementing IEEE 802.11, 802.11i, and/or 802.1x security, (g) using wired equivalent privacy encryption, (h) using one or more of TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, and (i) using end-to-end encryption **(Maher, Para. [0056 and 0107] discloses the intra-vehicle and/or inter-vehicle wireless networks may use IEEE's 802.11 standards, ultra-wide band ("UWB"), near-field communication ("NFC") technology, and or any other suitable standard or technologies. the connected vehicle ecosystem map may articulate, among other things, which entities are authorized to access which resources and for what purposes (e.g., read only access, write access, software update access, etc.), what entity or entities authorize such access, how communication between entities and resources can be protected (e.g., encrypted, authenticated, confidentiality protected, etc.)).**

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMIR MEHRMANESH whose telephone number is (571)270-3351. The examiner can normally be reached on Mon-Thru 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Nalven can be reached on 571-272-3839. 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.

/AMIR MEHRMANESH/
Examiner, Art Unit 2496

Notice of References Cited	Application/Control No. 13/828,960	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner AMIR MEHRMANESH	Art Unit 2496	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2003/0182435 A1	09-2003	Redlich et al.	709/229
*	B	US-7,891,004 B1	02-2011	Gelvin et al.	726/26
*	C	US-2013/0212659 A1	08-2013	Maher et al.	726/6
*	D	US-8,583,292 B2	11-2013	Preston et al.	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.

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13828960	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	AMIR MEHRMANESH	2496

✓	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	12/29/2014								
	1	✓								
	2	✓								
	3	✓								
	4	✓								
	5	✓								
	6	✓								
	7	✓								
	8	✓								
	9	✓								
	10	✓								
	11	✓								
	12	✓								
	13	✓								
	14	✓								
	15	✓								
	16	✓								
	17	✓								
	18	✓								
	19	✓								
	20	✓								
	21	✓								
	22	✓								
	23	✓								
	24	✓								

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13828960	RICCI, CHRISTOPHER P.
	Examiner	Art Unit
	AMIR MEHRMANESH	2496

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
726	6-26	12/29/2014	AM
701	1,24,31.4,31.5	12/29/2014	AM
709	227-232	12/29/2014	AM

SEARCH NOTES		
Search Notes	Date	Examiner
inventor and assignee search via Palm and EAST	12/29/2014	AM
Consulted with Tod Swann regarding 112 2nd and 4th rejection	7/11/2014	AM
EASt keyword search combined with class/subclass search	12/29/2014	AM

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

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L4	177	((Christopher) near2 (Ricci)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/12/29 09:54
L5	510	((flextronics) near2 (AP)).as.	US-PGPUB; USPAT; USOCR	OR	ON	2014/12/29 09:55
L6	24	4 and (security near5 breach)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 09:55
L7	3	4 and ((security near5 breach).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 09:55
L8	166	("20030158638" | "20040024502" | "20050149752" | "20060042846" | "20060125631" | "20060250272" | "20080140278" | "20080148374" | "20080174451" | "20080212215" | "20080253613" | "20090180668" | "20090278750" | "20100090817" | "20100097239" | "20100144284" | "20100222939" | "20100295676" | "20110053506" | "20110105097" | "20110106375" | "20110112969" | "20110117933" | "20120081267" | "20120081311" | "20120084542" | "20120110356" | "20120173900" | "20120173905" | "20130134730" | "20130135118" | "20130138591" | "20130138714" | "20130141247" | "20130141252" | "20130143495" | "20130143546" | "20130143601" | "20130144459" | "20130144460" | "20130144461" | "20130144462" | "20130144463" | "20130144469" | "20130144470" | "20130144474" | "20130144486" | "20130144520" | "20130144657" | "20130145065" | "20130145279" | "20130145297" | "20130145360" | "20130145401" | "20130145482" | "20130147638" | "20130151031" | "20130151065" | "20130151088" | "20130152003" | "20130154298" | "20130158821" | "20130166097" | "20130167159"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 09:59

		"20130198737" | "20130198802" | "20130200991" | "20130203400" | "20130204466" | "20130204484" | "20130204493" | "20130204943" | "20130205026" | "20130205412" | "20130218412" | "20130219039" | "20130241720" | "20130245882" | "20130250933" | "5794164" | "6484082" | "6681176" | "6724920" | "7295921" | "7548815" | "7606660" | "7738462" | "7891004" | "RE41449").PN.				
L10	3	"20100312433"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 10:02
L11	0	8 and 10	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 10:02
L12	32	("7891004").URPN.	USPAT	OR	ON	2014/12/29 10:07
L13	221	Gelvin.inv.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 10:14
L14	49	13 and vehicle	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 10:15
L15	22	14 and (isolat$4 restrict$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 10:16
L16	4	"7313825".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 10:19
L17	3	"20030182435"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/12/29 10:20

			IBM_TDB			
L18	5	"2013123057"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 10:21
L19	2	"20130212659"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 10:22
L21	2	"7891004".pn.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 11:52
L22	1	21 and (gateway same isolat$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/12/29 11:53
S1	1	"13828960"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:27
S2	166	("20030158638" | "20040024502" | "20050149752" | "20060042846" | "20060125631" | "20060250272" | "20080140278" | "20080148374" | "20080174451" | "20080212215" | "20080253613" | "20090180668" | "20090278750" | "20100090817" | "20100097239" | "20100144284" | "20100222939" | "20100295676" | "20110053506" | "20110105097" | "20110106375" | "20110112969" | "20110117933" | "20120081267" | "20120081311" | "20120084542" | "20120110356" | "20120173900" | "20120173905" | "20130134730" | "20130135118" | "20130138591" | "20130138714" | "20130141247" | "20130141252" | "20130143495" | "20130143546" | "20130143601" | "20130144459" | "20130144460" | "20130144461" | "20130144462" | "20130144463" | "20130144469" | "20130144470" | "20130144474" | "20130144486" | "20130144520" | "20130144657" | "20130145065" | "20130145279" | "20130145297" |	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:28

Ford Ex. 1002 Page 640 of 1178

		"20130145360" | "20130145401" | "20130145482" | "20130147638" | "20130151031" | "20130151065" | "20130151088" | "20130152003" | "20130154298" | "20130158821" | "20130166097" | "20130167159" | "20130198737" | "20130198802" | "20130200991" | "20130203400" | "20130204466" | "20130204484" | "20130204493" | "20130204943" | "20130205026" | "20130205412" | "20130218412" | "20130219039" | "20130241720" | "20130245882" | "20130250933" | "5794164" | "6484082" | "6681176" | "6724920" | "7295921" | "7548815" | "7606660" | "7738462" | "7891004" | "RE41449").PN.				
S3	0	S2 and (isolat$4 restrict$4 block$4) same (affect$4 near10 security)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:30
S4	0	S2 and (isolat$4 restrict$4 block$4) and (affect$4 near10 security)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:31
S5	47	S2 and (isolat$4 restrict$4 block$4) and (security)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:31
S6	27	S2 and (isolat$4 restrict$4 block$4) and (virus malware miuse apoofing attack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:34
S7	2	"20130227648"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:36
S8	27	S2 and (isolat$4 restrict$4) and (virus malware miuse apoofing attack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:53
S9	99	((Christopher) near2 (Ricci)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/07/10 11:56

Ford Ex. 1002 Page 641 of 1178

S10	16	S9 and (security near5 breach)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:57
S11	3	S9 and ((security near5 breach).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:58
S12	117	S2 not S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:01
S13	0	S12 and ((security near5 breach).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:01
S14	4	S12 and ((security).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:01
S15	17	("7891004").URPN.	USPAT	OR	ON	2014/07/10 12:06
S16	9	S15 and ((security).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:07
S17	1	S15 and (isolat$4 restrict$4 block$4) and (virus malware miuse apoofing attack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:08
S18	1	S15 and (isolat$4 restrict$4) and (virus malware misuse apoofing attack) and security	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:08
S19	2	S16 and (isolat$4 restrict$4)	US-PGPUB; USPAT;	OR	ON	2014/07/10 12:09

			USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S20	4	S15 and (isolat$4 restrict$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:10

EAST Search History (Interference)

< This search history is empty>

12/29/2014 12:18:49 PM
C:\Users\amehrmanesh\Documents\EAST\Workspaces\13828960.wsp

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
(Use as many sheets as necessary)				First Named Inventor	Christopher Ricci
				Art Unit	2432
				Examiner Name	Gilberto Barron Jr.
Sheet	1	of	4	Attorney Docket Number	6583-247-CIP-5

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	5794164	08/11/1998	Beckert et al.	
	2	6484082	11/19/2002	Millsap et al.	
	3	6681176	01/20/2004	Funk et al.	
	4	6724920	04/20/2004	Berenz et al.	
	5	7295921	11/13/2007	Spencer et al.	
	6	7548815	06/16/2009	Watkins et al.	
	7	7606660	10/20/2009	Diaz et al.	
	8	RE41449	07/20/2010	Krahnstoever et al.	
	9	7891004	02/15/2011	Gelvin et al.	
	10	2005/0149752	07/07/2005	Johnson et al.	
	11	2006/0042846	03/02/2006	Kojori et al.	
	12	2006/0125631	06/15/2006	Sharony	
	13	2006/0250272	11/09/2006	Puamau	
	14	2008/0140278	06/12/2008	Breed	
	15	2008/0148374	06/19/2008	Spaur et al.	
	16	2008/0212215	09/04/2008	Schofield et al.	
	17	2008/0253613	10/16/2008	Jones et al.	
	18	2009/0180668	07/16/2009	Jones et al.	
	19	2009/0278750	11/12/2009	Man et al.	
	20	2010/0090817	04/15/2010	Yamaguchi et al.	
	21	2010/0097239	04/22/2010	Campbell et al.	
	22	2010/0144284	06/10/2010	Chutorash et al.	
	23	2010/0222939	09/02/2010	Namburu et al.	
	24	2010/0295676	11/25/2010	Khachaturov et al.	
	25	2011/0053506	03/03/2011	Lemke et al.	
	26	2011/0105097	05/05/2011	Tadayon et al.	
	27	2011/0106375	05/05/2011	Sundaram et al.	
	28	2011/0112969	05/12/2011	Zaid et al.	
	29	2011/0117933	05/19/2011	Andersson	
	30	2012/0081267	04/05/2012	Sirpal et al.	
	31	2012/0081311	04/05/2012	Sirpal et al.	
	32	2012/0084542	04/05/2012	Reeves et al.	

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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.M./

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
(Use as many sheets as necessary)				First Named Inventor	Christopher Ricci
				Art Unit	2432
				Examiner Name	Gilberto Barron Jr.
Sheet	2	of	4	Attorney Docket Number	6583-247-CIP-5

	33	2013/0134730	05/30/2013	Ricci	
	34	2013/0135118	05/30/2013	Ricci	
	35	2013/0138591	05/30/2013	Ricci	
	36	2013/0138714	05/30/2013	Ricci	
	37	2013/0141247	06/06/2013	Ricci	
	38	2013/0141252	06/06/2013	Ricci	
	39	2013/0143495	06/06/2013	Ricci	
	40	2013/0143546	06/06/2013	Ricci	
	41	2013/0143601	06/06/2013	Ricci	
	42	2013/0144459	06/06/2013	Ricci	
	43	2013/0144460	06/06/2013	Ricci	
	44	2013/0144461	06/06/2013	Ricci	
	45	2013/0144462	06/06/2013	Ricci	
	46	2013/0144463	06/06/2013	Ricci et al.	
	47	2013/0144469	06/06/2013	Ricci	
	48	2013/0144470	06/06/2013	Ricci	
	49	2013/0144474	06/06/2013	Ricci	
	50	2013/0144486	06/06/2013	Ricci	
	51	2013/0144520	06/06/2013	Ricci	
	52	2013/0144657	06/06/2013	Ricci	
	53	2013/0145065	06/06/2013	Ricci	
	54	2013/0145279	06/06/2013	Ricci	
	55	2013/0145297	06/06/2013	Ricci et al.	
	56	2013/0145360	06/06/2013	Ricci	
	57	2013/0145401	06/06/2013	Ricci	
	58	2013/0145482	06/06/2013	Ricci et al.	
	59	2013/0147638	06/13/2013	Ricci	
	60	2013/0151031	06/13/2013	Ricci	
	61	2013/0151065	06/13/2013	Ricci	
	62	2013/0151088	06/13/2013	Ricci	
	63	2013/0152003	06/13/2013	Ricci et al.	
	64	2013/0154298	06/20/2013	Ricci	
	65	2013/0158821	06/20/2013	Ricci	
	66	2013/0166097	06/27/2013	Ricci	
	67	2013/0167159	06/27/2013	Ricci et al.	
	68	2013/0198737	08/01/2013	Ricci	

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

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

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	Christopher Ricci
(Use as many sheets as necessary)				Art Unit	2432
				Examiner Name	Gilberto Barron Jr.
Sheet	3	of	4	Attorney Docket Number	6583-247-CIP-5

	69	2013/0198802	08/01/2013	Ricci	
	70	2013/0200991	08/08/2013	Ricci et al.	
	71	2013/0203400	08/08/2013	Ricci	
	72	2013/0204466	08/08/2013	Ricci	
	73	2013/0204484	08/08/2013	Ricci	
	74	2013/0204493	08/08/2013	Ricci et al.	
	75	2013/0204943	08/08/2013	Ricci	
	76	2013/0205026	08/08/2013	Ricci	
	77	2013/0205412	08/08/2013	Ricci	
	78	2013/0218412	08/22/2013	Ricci	
	79	2013/0219039	08/22/2013	Ricci	
	80	2013/0241720	09/19/2013	Ricci et al.	
	81	2013/0245882	09/19/2013	Ricci	
	82	7738462	06/15/2010	HWANG	
	83	2003/0158638	08/21/2003	Yakes et al.	
	84	2008/0174451	07/24/2008	Harrington et al.	
	85	2012/0173905	07/05/2012	Diab et al.	
	86	2012/0173900	07/05/2012	Diab et al.	
	87	2012/0110356	05/03/2012	Yousefi et al.	
	88	2013/0250933	09/26/2013	Yousefi et al.	
	89	2004/0024502	02/05/2004	Squires et al.	

UNPUBLISHED U.S. PATENT DOCUMENTS

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
	90	13/462593	05/02/2012	Ricci et al.	
	91	13/462596	05/02/2012	Ricci et al.	
	92	13/829605	03/14/2013	Ricci	
	93	13/830066	03/14/2013	Ricci et al.	
	94	13/840240	03/15/2013	Ricci	

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]

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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.M./

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	Christopher Ricci
(Use as many sheets as necessary)				Art Unit	2432
				Examiner Name	Gilberto Barron Jr.
Sheet	4	of	4	Attorney Docket Number	6583-247-CIP-5

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.
	95	"Cadillac: 2013 XTS Full-Size Luxury Sedan," Cadillac.com, 4 pages, Jun. 2012 internet archive, found at: (web.archive.org/web/20120606185204/http://www.cadillac.com/xts-luxury-sedan.html)
	96	LEE "Cadillac revamps the instrument panel with CUE," CNET Reviews, Oct. 11, 2011, 5 pages, found at: (reviews.cnet.com/8301-12261_7-20118807-10356022/cadillac-revamps-the-instrument-panel-with-cue/)
	97	MARTURANO "General Motors Takes a CUE from Customers," InContext, Nov. 08, 2011, 3 pages, found at: (incontextdesign.com/blog/general-motors-takes-a-cue-from-customers/)
	98	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US12/65510, mailed May 06, 2013 (Attorney's Ref. No. 6583-244-PCT) 17 pages
	99	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US12/65613, mailed Feb. 15, 2013 (Attorney's Ref. No. 6583-247-PCT) 9 pages
	100	Official Action for U.S. Patent Application No. 13/679,441, mailed Sep. 05, 2013 (Attorney's Ref. No. 6583-244) 6 pages
	101	Official Action for U.S. Patent Application No. 6583-315, mailed Jul. 09, 2013 (Attorney's Ref. No. 6583-315) 10 pages
	102	"Time-triggered CAN," CIA, © 2001-2013, 4 pages, found at: (www.can-cia.org/index.php?id+166)
	103	DAVIS et al. "Controller Area Network (CAN) schedulability analysis: Refuted, revisited and revised," Real-Time Systems, Apr. 2007, Vol. 35, No. 3, pages 239-272
	104	DI NATALE "Controller Area Network," Dec. 2009, 54 pages
	105	FONSECA et al. "Scheduling for a TTCAN network with a stochastic optimization algorithm," Proceedings 8th Internatioanl CAN Conference, Jan. 2002, 7 pages
	106	HARTWICH et al. "CAN Network with Time Triggered Communication," Robert Bosch GmbH Proceedings 7th International CAN Conference, Jul. 2000, 7 pages
	107	IDSTEIN et al. "Using the Controller Area Network for Communication Between Prostesis Sensors and Control Systems," Proceedings of the 2011 MyoElectric Controls/Powered Prostetics Symposium Fredericton, New Brunswick, Canada, Aug. 14-19, 2011, 4 pages
	108	Official Action for U.S. Patent Application No. 13/679,476, mailed Oct. 11, 2013 (Attorney's Ref. No. 6583-247) 13 pages

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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.M./

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
(Use as many sheets as necessary)				First Named Inventor	Christopher Ricci
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	1	of	3	Attorney Docket Number	6583-247-CIP-5

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	5363306	11/08/1994	Kuwahara et al.	
	2	5648769	07/15/1997	Sato et al.	
	3	5710702	01/20/1998	Hayashi et al.	
	4	5838251	11/17/1998	Brinkmeyer et al.	
	5	7493140	02/17/2009	Michmerhuizen et al.	
	6	8432260	04/30/2013	Talty et al.	
	7	8532574	09/10/2013	Kirsch	
	8	2002/0105968	08/08/2002	Pruzan et al.	
	9	2006/0047386	03/02/2006	Kanevsky et al.	
	10	2006/0274829	12/07/2006	Siemens et al.	
	11	2007/0057781	03/15/2007	Breed	
	12	2008/0051957	02/28/2008	Breed et al.	
	13	2008/0090522	04/17/2008	Oyama	
	14	2008/0129475	06/05/2008	Breed et al.	
	15	2009/0278806	11/12/2009	Duarte et al.	
	16	2011/0267204	11/03/2011	Chuang et al.	
	17	2012/0006610	01/12/2012	Wallace et al.	
	18	2012/0089299	04/12/2012	Breed	
	19	2012/0116609	05/10/2012	Jung et al.	
	20	2012/0084792	04/05/2012	Benedek et al.	
	21	2012/0084735	04/05/2012	Sirpal	
	22	2012/0259951	10/11/2012	Schalk et al.	
	23	2011/0035098	04/24/2012	Goto et al.	
	24	2012/0284292	11/08/2012	Rechsteiner et al.	
	25	2012/0313771	12/13/2012	Wottlifff, III	
	26	2013/0099940	04/25/2013	Protopapas	
	27	2013/0190978	07/25/2013	Kato et al.	
	28	2013/0231800	09/05/2013	Ricci	
	29	2013/0288606	10/31/2013	Kirsch	
	30	2013/0295901	11/07/2013	Abramson et al.	
	31	2013/0309977	11/21/2013	Heines et al.	
	32	2014/0066014	03/06/2014	Nicholson et al.	

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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.M./

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	Christopher Ricci
(Use as many sheets as necessary)				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	2	of	3	Attorney Docket Number	6583-247-CIP-5

	33	2014/0088798	03/27/2014	Himmelstein	
	34	2014/0120829	05/01/2014	Bhamidipati et al.	
	35	2014/0125802	05/08/2014	Beckert et al.	

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]

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.
	36	"A8: Technology as standard," Screen-shots from Audi.co.uk, 2014 [retrieved on 4/16/2014], 1 page. Retrieved from: www.audi.co.uk/new-cars/a8/a8/technology-as-standard/mmi-touch.html
	37	"Audi A8 MMI Touch," Audi of America, Jan. 7, 2011, [retrieved on 4/16/2014], 2 pages. Retrieved from: www.youtube.com/watch?v=O2nZ-WHo9IA
	38	DIAZ, "Audi New MMI Touch Input System Makes Perfect Sense," Gizmodo.com, Dec. 1, 2009 [retrieved on 4/16/2014], 12 pages. Retrieved from: http://gizmodo.com/5416342/audi-new-mmi-touch-input-system-makes-perfect-sense
	39	PURCHER "Apple Invents In-Vehicle Holistic ID for "iOS in the Car"," Patently Apple, Dec. 2013, 8 pages [retrieved on 12/12/2013 from: www.patentlyapple.com/patently-apple/2013/12/apple-invents-in-vehicle-holistic-id-for-ios-in-the-car.html]
	40	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2012/065510, mailed May 30, 2014 (Attorney's Ref. No. 6583-244-PCT) 14 pages
	41	International Preliminary Report on Patentability for International (PCT) Patent Application No. PCT/US2012/065613, mailed May 30, 2014 (Attorney's Ref. No. 6583-247-PCT) 8 pages
	42	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US14/19209, mailed Apr. 25, 2014 (Attorney's Ref. No. 6583-247-CIP-13-PCT)
	43	Official Action for U.S. Patent Application No. 13/679,857, mailed Jun. 27, 2014 (Attorney's Ref. No. 6583-231) 5 pages
	44	Official Action for U.S. Patent Application No. 13/679,875, mailed Apr. 07, 2014 (Attorney's Ref. No. 6583-233) 7 pages RESTRICTION REQUIREMENT
	45	Official Action for U.S. Patent Application No. 13/679,441, mailed Jan. 16, 2014 (Attorney's Ref. No. 6583-244) 6 pages

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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.M./

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	Christopher Ricci
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	3	of	3	Attorney Docket Number	6583-247-CIP-5

	46	Official Action for U.S. Patent Application No. 13/679,441, mailed May 09, 2014 (Attorney's Ref. No. 6583-244) 6 pages
	47	Official Action for U.S. Patent Application No. 13/679,476, mailed May 20, 2014 (Attorney's Ref. No. 6583-247) 19 pages
	48	Official Action for U.S. Patent Application No. 13/828,513, mailed May 06, 2014 (Attorney's Ref. No. 6583-247-CIP) 7 pages
	49	Official Action for U.S. Patent Application No. 13/829,718, mailed Apr. 10, 2014 (Attorney's Ref. No. 6583-247-CIP-10) 7 pages
	50	Official Action for U.S. Patent Application No. 13/830,003, mailed Apr. 15, 2014 (Attorney's Ref. No. 6583-247-CIP-13) 9 pages
	51	Official Action for U.S. Patent Application No. 13/678,773, mailed Dec. 30, 2013 (Attorney's Ref. No. 6583-315) 9 pages
	52	Notice of Allowance for U.S. Patent Application No. 13/678,773, mailed Apr. 02, 2014 (Attorney's Ref. No. 6583-315) 5 pages
	53	Official Action for U.S. Patent Application No. 13/679,887, mailed Jun. 30, 2014 (Attorney's Ref. No. 6583-316) 6 pages

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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.M./

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

BIB DATA SHEET

CONFIRMATION NO. 1085

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/828,960	03/14/2013 RULE	726	2496	6583-247-CIP-5

APPLICANTS

FLEXTRONICS AP, LLC, San Jose, CA

INVENTORS

Christopher P. Ricci, Saratoga, CA;

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

This application is a CIP of 13/679,476 11/16/2012
which claims benefit of 61/560,509 11/16/2011
and claims benefit of 61/637,164 04/23/2012
and claims benefit of 61/663,335 06/22/2012
and claims benefit of 61/646,747 05/14/2012
and claims benefit of 61/653,275 05/30/2012
and claims benefit of 61/653,264 05/30/2012
and claims benefit of 61/653,563 05/31/2012
and claims benefit of 61/672,483 07/17/2012
and claims benefit of 61/714,016 10/15/2012
and claims benefit of 61/715,699 10/18/2012

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

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

05/10/2013

Foreign Priority claimed ☐ Yes ☑ No 35 USC 119(a-d) conditions met ☐ Yes ☑ No Verified and Acknowledged /AMIR MEHRMANESH/ Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
		CA	31	24	3

ADDRESS

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

TITLE

ON BOARD VEHICLE NETWORK SECURITY

FILING FEE RECEIVED		
1508	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

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
(Use as many sheets as necessary)				First Named Inventor	Christopher Ricci
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	1	of	2	Attorney Docket Number	6583-247-CIP-5

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	5508689	04/16/1996	Rado et al.	
	2	5890080	03/30/1999	Coverdill et al.	
	3	6678747	01/13/2004	Goossen et al.	
	4	7643913	01/05/2010	Taki et al.	
	5	7899610	03/01/2011	McClellan	
	6	8346432	01/01/2013	Van Wiemeersch et al.	
	7	8725311	05/13/2014	Breed	
	8	2003/0007227	01/09/2003	Ogino	
	9	2005/0031100	02/10/2005	Iggulden et al.	
	10	2008/0234919	09/25/2008	Ritter et al.	
	11	2009/0275321	11/05/2009	Crow	
	12	2009/0279839	11/12/2009	Nakamura et al.	
	13	2010/0202346	08/12/2010	Sitzes et al.	
	14	2010/0235042	09/16/2010	Ying	
	15	2010/0253493	10/07/2010	Szczerba et al.	
	16	2011/0195699	08/11/2011	Tadayon et al.	
	17	2012/0109446	05/03/2012	Yousefi et al.	
	18	2012/0115446	05/10/2012	Guatama et al.	
	19	2012/0238286	09/20/2012	Mallavarapu et al.	
	20	2012/0242510	09/27/2012	Choi et al.	
	21	2012/0296567	11/22/2012	Breed	
	22	2013/0179689	07/11/2013	Matsumoto et al.	

UNPUBLISHED U.S. PATENT DOCUMENTS

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
	23	14/468055	08/25/2014	Ricci	
	24	14/485467	09/12/2014	Ricci	

FOREIGN PATENT DOCUMENTS

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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.M./

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	Christopher Ricci
(Use as many sheets as necessary)				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	2	of	2	Attorney Docket Number	6583-247-CIP-5

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]

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.
	25	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US2014/019983, mailed Aug. 18, 2014 (Attorney's Ref. No. 6583-247-CIP-PCT) 10 pages
	26	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US14/19216, mailed Jul. 25, 2014 (Attorney's Ref. No. 6583-247-CIP-6-PCT) 8 pages
	27	International Search Report and Written Opinion for International (PCT) Patent Application No. PCT/US14/19201, mailed Jul. 29, 2014 (Attorney's Ref. No. 6583-247-CIP-15-PCT) 11 pages
	28	Official Action for U.S. Patent Application No. 13/679,878, mailed Sep. 26, 2014 (Attorney's Ref. No. 6583-232) 7 pages
	29	Official Action for U.S. Patent Application No. 13/679,875, mailed Jul. 17, 2014 (Attorney's Ref. No. 6583-233) 13 pages
	30	Notice of Allowance for U.S. Patent Application No. 13/679,441, mailed Jul. 22, 2014 (Attorney's Ref. No. 6583-244) 5 pages
	31	Official Action for U.S. Patent Application No. 13/828,513, mailed Sep. 04, 2014 (Attorney's Ref. No. 6583-247-CIP) 5 pages
	32	Official Action for U.S. Patent Application No. 13/828,651, mailed Jul. 29, 2014 (Attorney's Ref. No. 6583-247-CIP-2) 17 pages
	33	Notice of Allowance for U.S. Patent Application No. 13/829,157, mailed Jul. 25, 2014 (Attorney's Ref. No. 6583-247-CIP-7) 14 pages
	34	Official Action for U.S. Patent Application No. 13/829,505, mailed Jul. 23, 2014 (Attorney's Ref. No. 6583-247-CIP-8) 7 pages
	35	Official Action for U.S. Patent Application No. 13/829,718, mailed Jul. 25, 2014 (Attorney's Ref. No. 6583-247-CIP-10) 8 pages
	36	Official Action for U.S. Patent Application No. 13/830,003, mailed Jul. 25, 2014 (Attorney's Ref. No. 6583-247-CIP-13) 9 pages
	37	Official Action for U.S. Patent Application No. 13/830,133, mailed Jul. 10, 2014 (Attorney's Ref. No. 6583-247-CIP-15) 9 pages

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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.M./

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 05, 2015 05:21:03 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.
13828960	CTNF	01/05/2015	6583-247-CIP-5
	892	01/05/2015	6583-247-CIP-5
	1449	01/05/2015	6583-247-CIP-5
	1449	01/05/2015	6583-247-CIP-5
	1449	01/05/2015	6583-247-CIP-5

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

Appl. No.:	13/828,960	Confirmation No.:	**1085**
Applicant:	Ricci	TC/A.U.	2496
Filed:	3/14/2013	Examiner:	Mehrmanesh
Docket No.:	6583-247-CIP-5		
For:	ON BOARD VEHICLE NETWORK SECURITY		

AMENDMENT AND RESPONSE

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

Madam:

Applicants submit this Amendment and Response to address the Office Action having a mailing date of January 5, 2015. Please credit any overpayment or charge any underpayment 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 **4** of this paper.

Remarks begin on page **13** of this paper.

Ford Ex. 1002 Page 655 of 1178

Amendments to the Specification:

Please amend the paragraph on page 1, line 16 as follows:

Cross reference is made to U.S. Patent Application Nos. 13/420,236, filed on March 14, 2012, entitled, "Configurable Vehicle Console"; 13/420,240, filed on March 14, 2012, entitled "Removable, Configurable Vehicle Console"; 13/462,593, filed on May 2, 2012, entitled "Configurable Dash Display"; 13/679,459, filed on November 16, 2012, entitled "Vehicle Comprising Multi-Operating System"; 13/679,234, filed on November 16, 2012, entitled "Gesture Recognition for On-Board Display"; 13/679,412, filed on November 16, 2012, entitled "Vehicle Application Store for Console"; 13/679,857, filed on November 16, 2012, entitled "Sharing Applications/Media Between Car and Phone (Hydroid)"; 13/679,878, filed on November 16, 2012, entitled "In-Cloud Connection for Car Multimedia"; 13/679,875, filed on November 16, 2012, entitled "Music Streaming"; 13/679,676, filed on November 16, 2012, entitled "Control of Device Features Based on Vehicle State"; 13/678,673, filed on November 16, 2012, entitled "Insurance Tracking"; 13/678,691, filed on November 16, 2012, entitled "Law Breaking/Behavior Sensor"; 13/678,699, filed on November 16, 2012, entitled "Etiquette Suggestion"; 13/678,710, filed on November 16, 2012, entitled "Parking Space Finder Based on Parking Meter Data"; 13/678,722, filed on November 16, 2012, entitled "Parking Meter Expired Alert"; 13/678,726, filed on November 16, 2012, entitled "Object Sensing (Pedestrian Avoidance/Accident Avoidance)"; 13/678,735, filed on November 16, 2012, entitled "Proximity Warning Relative to Other Cars"; 13/678,745, filed on November 16, 2012, entitled "Street Side Sensors"; 13/678,753, filed on November 16, 2012, entitled "Car Location"; 13/679,441, filed on November 16, 2012, entitled "Universal Bus in the Car"; 13/679,864, filed on November 16, 2012, entitled "Mobile Hot Spot/Router/Application Share Site or Network"; 13/679,815, filed on November 16, 2012, entitled "Universal Console Chassis for the Car"; 13/679,476, filed on November 16, 2012, entitled "Vehicle Middleware"; 13/679,306, filed on November 16, 2012, entitled "Method and System for Vehicle Data Collection Regarding Traffic"; 13/679,369, filed on November 16, 2012, entitled "Method and System for Vehicle Data Collection"; 13/679,680, filed on November 16, 2012, entitled "Communications Based on Vehicle Diagnostics and Indications"; 13/679,443, filed on November 16, 2012, entitled "Method and System for Maintaining and Reporting Vehicle Occupant Information"; 13/678,762, filed on November 16, 2012, entitled "Behavioral Tracking and Vehicle Applications"; 13/679,292, filed November 16,

Ford Ex. 1002 Page 656 of 1178

2012, entitled "Branding of Electrically Propelled Vehicles Via the Generation of Specific Operating Output"; 13/679,400, filed November 16, 2012, entitled "Vehicle Climate Control"; ~~__/___,___~~13/840,240, filed on ~~_____~~, March 15, 2013, entitled "~~Improvements to~~ Controller Area Network Bus"; 13/678,773, filed on November 16, 2012, entitled "Location Information Exchange Between Vehicle and Device"; 13/679,887, filed on November 16, 2012, entitled "In Car Communication Between Devices"; 13/679,842, filed on November 16, 2012, entitled "Configurable Hardware Unit for Car Systems"; 13/679,204, filed on November 16, 2012, entitled "Feature Recognition for Configuring a Vehicle Console and Associated Devices"; 13/679,350, filed on November 16, 2012, entitled "Configurable Vehicle Console"; 13/679,358, filed on November 16, 2012, entitled "Configurable Dash Display"; 13/679,363, filed on November 16, 2012, entitled "Configurable Heads-Up Dash Display"; and 13/679,368, filed on November 16, 2012, entitled "Removable, Configurable Vehicle Console". 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.

Ford Ex. 1002 Page 657 of 1178

Amendments to the Claims:

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

Listing of Claims:

1. (Currently Amended) A vehicle, comprising:

a plurality of on board computational components;

a first security mechanism to enforce security measure and form a perimeter network logically including the plurality of on board computational components; and

a microprocessor executable network controller operable to (i) detect an instance of a breach of the security measure, (ii) determine whether a computational component affected by the breach of the security measure can be isolated from at least one on board computational component not affected by or potentially affected by the breach of the security measure, and (ii) when the computational component affected by the breach of the security measure can be isolated from the at least one on board computational component not affected by or potentially affected by the breach of the security measure, at least one of (a) isolate the at least one ~~other~~ on board computational component ~~in a vehicular wireless network~~ not affected by or potentially affected by [[a]]the security breach ~~event~~ instance from [[a]]the computational component affected by the security breach ~~event~~ instance and (b) isolate the [[an]] ~~on board~~ computational component ~~in the vehicular wireless network and~~ affected by the security breach ~~event~~ instance from the at least one ~~other~~ on board computational component not affected by or potentially affected by the security breach ~~event~~instance, wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the security breach instance, (2) directing communications to and from the computational component affected by the security breach instance to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the security breach instance, and (4) activating a second security mechanism in response to the security breach instance.

2. (Currently Amended) The vehicle of claim 1, wherein the security breach ~~event~~instance is one or more of an instance of a virus, malware, unauthorized access, misuse, modification, denial-of-service attack, spoofing, man-in-the-middle attack, ARP poisoning, smurf attack, buffer overflow, heap overflow, format string attack, SQL injection, identity theft

Ford Ex. 1002 Page 658 of 1178

(or MAC spoofing), network injection, caffe latte attack, or denial of a computer network and/or network-accessible resource, ~~and~~ wherein the network controller receives a warning signal associated with the security breach ~~event~~instance from a gateway, a firewall, a honeypot, a network node impacted by the security breach ~~event~~instance, and a network probe, and wherein the first security mechanism is one or more of: encryption, checks on MAC addresses, disabling ESSID broadcasting, isolating the vehicular network by a firewall and/or gateway, hiding the SSID (Service Set Identifier), MAC ID filtering, static IP addressing , IEEE 802.11, 802.11i, and/or 802.1x security, use of the wired equivalent privacy encryption, TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, end-to-end encryption, and RF shielding substantially surrounding an interior of the vehicle to attenuate signals and prevent wireless signals from propagating outside the vehicle.

3. (Currently Amended) The vehicle of claim 2, wherein the computational component affected by the security breach instance is an on board computational component, wherein the at least one ~~other~~ board computational component is one or more of an on-board sensor, processing module, software application, expansion module, critical device, non-critical device, and cellular upgrade module, and wherein the computational component affected by the security breach instance and the at least one on board computational component are both within a perimeter network of the vehicle.

4. (Currently Amended) The vehicle of claim [[3]]2, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the at least one ~~other~~ board computational component is one or more of an on board sensor, a media controller, a gateway, a firewall, a processing module, a network controller, an input/output system, a display controller, an audio controller, an arbitration module, a health check module, a critical system controller, a non-critical system controller, an on board sensor monitor, a displayed object movement module, a diagnostic module, a media filter, a network selector, a remote control module, a computational module selector, an expansion module, an application, and a plug-in module.

5. (Currently Amended) The vehicle of claim 1, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the

Ford Ex. 1002 Page 659 of 1178

microprocessor executable network controller analyzes the security breach ~~event~~instance by one or more of reviewing historical behavior and comparing the behavior to templates characteristic of differing types of attacks and/or applying rules to the historical behavior and updating firewall settings to protect against a further security breach instance.

6. (Currently Amended) The vehicle of claim 1, wherein the computational component affected by the security breach ~~event~~instance is an external computational device and wherein the at least one ~~other~~ on board computational component not affected by the security breach ~~event~~instance is isolated from the external computational device by the vehicular wireless network denying vehicular wireless network access by the external computational component.

7. (Currently Amended) The vehicle of claim 1, wherein at least one of the following is true about the isolation: ~~(a)~~ communications between the at least one ~~other~~ on board computational component in a vehicular wireless network not affected by the security breach ~~event~~instance and the computational component affected by the security breach ~~event~~instance, the communications not normally passing through a gateway and/or firewall are redirected through and filtered by the gateway and/or firewall and ~~(b)~~ communications between the at least one ~~other~~ on board computational component in a vehicular wireless network not affected by the security breach ~~event~~instance and the computational component affected by the security breach ~~event~~instance are blocked in whole or part.

8. (Currently Amended) The vehicle of claim 1, wherein the at least one computational component is inside of a perimeter network of the vehicle, wherein the at least one ~~other~~ on board computational component in a vehicular wireless network not affected by the security breach ~~event~~instance is a critical component, wherein the computational component affected by the security breach ~~event~~instance is a node on the vehicular wireless network and physically and/or logically positioned outside of but interiorly and/or internally to the ~~DMZ~~perimeter network, and wherein isolation is effected by enabling a critical communication security mechanism that is one or more of ~~(a)~~ encryption of access restrictions in the at least one ~~other~~ on board computational component in a vehicular wireless network, ~~(b)~~ disabling ESSID broadcasting, ~~(c)~~ hiding the SSID, ~~(d)~~ performing MAC ID filtering, ~~(e)~~ performing static IP addressing, ~~(f)~~ implementing IEEE 802.11, 802.11i, and/or 802.1x security, ~~(g)~~ using wired equivalent privacy encryption, ~~(h)~~ using one or more of TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, and ~~(i)~~ using end-to-end encryption.

Ford Ex. 1002 Page 660 of 1178

9. (Currently Amended) A method, comprising:

in a vehicle comprising a plurality of on board computational components, a first security mechanism to enforce security measure and form a perimeter network logically including the plurality of on board computational components, and a microprocessor executable network controller, [[a]]the microprocessor executable network controller identifying a possible security breach ~~event~~instance; ~~and~~

in response, the microprocessor executable network controller determining whether a computational component affected by the breach of the security measure can be isolated from at least one on board computational component not affected by or potentially affected by the breach of the security measure; and

when the computational component affected by the breach of the security measure can be isolated from the at least one on board computational component not affected by or potentially affected by the breach of the security measure, the microprocessor executable network controller at least one of (a) isolating the at least one ~~other~~ on board computational component ~~in a vehicular wireless network~~ not affected by or potentially affected by the security breach ~~event~~instance from [[a]]the computational component affected by the security breach ~~event~~instance and (b) isolating ~~an on board~~the computational component ~~in the vehicular wireless network and~~ affected by the security breach ~~event~~instance from the at least one ~~other~~ on board computational component not affected by or potentially affected by the security breach ~~event~~instance, wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the security breach instance, (2) directing communications to and from the computational component affected by the security breach instance to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the security breach instance, and (4) activating a second security mechanism in response to the security breach instance.

10. (Currently Amended) The method of claim 9, wherein the security breach ~~event~~instance is one or more of an instance of a virus, malware, unauthorized access, misuse, modification, denial-of-service attack, spoofing, man-in-the-middle attack, ARP poisoning, smurf attack, buffer overflow, heap overflow, format string attack, SQL injection, identity theft (or MAC spoofing), network injection, caffe latte attack, or denial of a computer network and/or network-accessible resource, ~~and~~ wherein the network controller receives a warning signal

Ford Ex. 1002 Page 661 of 1178

associated with the security breach ~~event~~instance from a gateway, a firewall, a honeypot, a network node impacted by the security breach ~~event~~instance, and a network probe, and wherein the first security mechanism is one or more of: encryption, checks on MAC addresses, disabling ESSID broadcasting, isolating the vehicular network by a firewall and/or gateway, hiding the SSID (Service Set Identifier), MAC ID filtering, static IP addressing , IEEE 802.11, 802.11i, and/or 802.1x security, use of the wired equivalent privacy encryption, TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, end-to-end encryption, and RF shielding substantially surrounding an interior of the vehicle to attenuate signals and prevent wireless signals from propagating outside the vehicle.

11. (Currently Amended) The method of claim 10, wherein the computational component affected by the security breach instance is an on board computational component, wherein the at least one ~~other~~ board computational component is one or more of an on-board sensor, processing module, software application, expansion module, critical device, non-critical device, and cellular upgrade module, and wherein the computational component affected by the security breach instance and the at least one on board computational component are both within a perimeter network of the vehicle.

12. (Currently Amended) The method of claim [[11]]10, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the at least one ~~other~~ board computational component is one or more of an on board sensor, a media controller, a gateway, a firewall, a processing module, a network controller, an input/output system, a display controller, an audio controller, an arbitration module, a health check module, a critical system controller, a non-critical system controller, an on board sensor monitor, a displayed object movement module, a diagnostic module, a media filter, a network selector, a remote control module, a computational module selector, an expansion module, an application, and a plug-in module.

13. (Currently Amended) The method of claim 9, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the microprocessor executable network controller detects a possible security breach ~~event~~instance by one or more of reviewing historical behavior and comparing the behavior to templates

Ford Ex. 1002 Page 662 of 1178

characteristic of differing types of attacks and/or applying rules to the historical behavior and updating firewall settings to protect against a further security breach instance.

14. (Currently Amended) The method of claim 9, wherein the computational component affected by the security breach ~~event~~instance is an external computational device and wherein the at least one ~~other~~ on board computational component not affected by the security breach ~~event~~instance isolation is isolated from the external computational device by the vehicular wireless network denying vehicular wireless network access by the external computational component.

15. (Currently Amended) The method of claim 9, wherein at least one of the following is true about the isolation: ~~(a)~~ communications between the at least one ~~other~~ on board computational component in a vehicular wireless network not affected by the security breach ~~event~~instance and the computational component affected by the security breach ~~event~~instance, the communications not normally passing through a gateway and/or firewall are redirected through and filtered by the gateway and/or firewall and ~~(b)~~ communications between the at least one ~~other~~ on board computational component in a vehicular wireless network not affected by the security breach ~~event~~instance and the computational component affected by the security breach ~~event~~instance are blocked in whole or part.

16. (Currently Amended) The method of claim 9, wherein the at least one computational component is inside of a perimeter network of the vehicle, wherein the at least one ~~other~~ on board computational component in a vehicular wireless network not affected by the security breach ~~event~~instance is a critical component, wherein the computational component affected by the security breach ~~event~~instance is a node on the vehicular wireless network and physically and/or logically positioned outside of but interiorly and/or internally to the ~~DMZ~~perimeter network, and wherein isolation is effected by enabling a critical communication security mechanism that is one or more of ~~(a)~~ encryption of access restrictions in the at least one ~~other~~ on board computational component in a vehicular wireless network, ~~(b)~~ disabling ESSID broadcasting, ~~(c)~~ hiding the SSID, ~~(d)~~ performing MAC ID filtering, ~~(e)~~ performing static IP addressing, ~~(f)~~ implementing IEEE 802.11, 802.11i, and/or 802.1x security, ~~(g)~~ using wired equivalent privacy encryption, ~~(h)~~ using one or more of TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, and ~~(i)~~ using end-to-end encryption.

Ford Ex. 1002 Page 663 of 1178

17. (Currently Amended) In a vehicle comprising a plurality of on board computational components, [[A]]a non-transient, tangible computer readable medium comprising a first security mechanism to enforce security measure and form a perimeter network logically including the plurality of on board computational components and a microprocessor executable network controller on board a selected vehicle that, when executed, detects an instance of a breach of the security measure, determines whether a computational component affected by the breach of the security measure can be isolated from at least one on board computational component not affected by or potentially affected by the breach of the security measure, and, when the computational component affected by the breach of the security measure can be isolated from the at least one on board computational component not affected by or potentially affected by the breach of the security measure, ~~(a) identifies a possible security breach event~~ and ~~(b) in response,~~ at least one of ~~(i)~~ isolates the at least one ~~other~~ on board computational component ~~in a vehicular wireless network~~ not affected by or potentially affected by the security breach ~~event~~instance from [[a]]the computational component affected by the security breach ~~event~~instance ~~and (ii)~~ isolates [[an]]the ~~on board~~ computational component ~~in the vehicular wireless network and~~ affected by the security breach ~~event~~instance from the at least one ~~other~~ on board computational component not affected by or potentially affected by the security breach ~~event~~instance, wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the security breach instance, (2) directing communications to and from the computational component affected by the security breach instance to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the security breach instance, and (4) activating a second security mechanism in response to the security breach instance.

18. (Currently Amended) The computer readable medium of claim 17, wherein the security breach ~~event~~instance is one or more of an instance of a virus, malware, unauthorized access, misuse, modification, denial-of-service attack, spoofing, man-in-the-middle attack, ARP poisoning, smurf attack, buffer overflow, heap overflow, format string attack, SQL injection, identity theft (or MAC spoofing), network injection, caffe latte attack, or denial of a computer network and/or network-accessible resource and wherein the network controller receives a warning signal associated with the security breach ~~event~~instance from a gateway, a firewall, a honeypot, a network node impacted by the security breach ~~event~~instance, and a network probe,

Ford Ex. 1002 Page 664 of 1178

and wherein the first security mechanism is one or more of: encryption, checks on MAC addresses, disabling ESSID broadcasting, isolating the vehicular network by a firewall and/or gateway, hiding the SSID (Service Set Identifier), MAC ID filtering, static IP addressing , IEEE 802.11, 802.11i, and/or 802.1x security, use of the wired equivalent privacy encryption, TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, end-to-end encryption, and RF shielding substantially surrounding an interior of the vehicle to attenuate signals and prevent wireless signals from propagating outside the vehicle.

19. (Currently Amended) The computer readable medium of claim 18, wherein the computational component affected by the security breach instance is an on board computational component, wherein the at least one ~~other~~ on board computational component is one or more of an on-board sensor, processing module, software application, expansion module, critical device, non-critical device, and cellular upgrade module, and wherein the computational component affected by the security breach instance and the at least one on board computational component are both within a perimeter network of the vehicle.

20. (Currently Amended) The computer readable medium of claim [[19]]18, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the at least one ~~other~~ on board computational component is one or more of an on board sensor, a media controller, a gateway, a firewall, a processing module, a network controller, an input/output system, a display controller, an audio controller, an arbitration module, a health check module, a critical system controller, a non-critical system controller, an on board sensor monitor, a displayed object movement module, a diagnostic module, a media filter, a network selector, a remote control module, a computational module selector, an expansion module, an application, and a plug-in module.

21. (Currently Amended) The computer readable medium of claim 17, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the microprocessor executable network controller detects a possible security breach ~~event~~instance by one or more of reviewing historical behavior and comparing the behavior to templates characteristic of differing types of attacks and/or applying rules to the historical behavior and updating firewall settings to protect against a further security breach instance.

Ford Ex. 1002 Page 665 of 1178

22. (Currently Amended) The computer readable medium of claim 17, wherein the computational component affected by the security breach ~~event~~instance is an external computational device and wherein the at least one ~~other~~ on board computational component not affected by the security breach ~~event~~instance is isolated from the external computational device by the vehicular wireless network denying vehicular wireless network access by the external computational component.

23. (Currently Amended) The computer readable medium of claim 17, wherein at least one of the following is true about the isolation: ~~(a)~~ communications between the at least one ~~other~~ on board computational component in a vehicular wireless network not affected by the security breach ~~event~~instance and the computational component affected by the security breach ~~event~~instance, the communications not normally passing through a gateway and/or firewall are redirected through and filtered by the gateway and/or firewall and ~~(b)~~ communications between the at least one ~~other~~ on board computational component in a vehicular wireless network not affected by the security breach ~~event~~instance and the computational component affected by the security breach ~~event~~instance are blocked in whole or part.

24. (Currently Amended) The computer readable medium of claim 17, wherein the at least one computational component is inside of a perimeter network of the vehicle, wherein the at least one ~~other~~ on board computational component in a vehicular wireless network not affected by the security breach ~~event~~instance is a critical component, wherein the computational component affected by the security breach ~~event~~instance is a node on the vehicular wireless network and physically and/or logically positioned outside of but interiorly and/or internally to the ~~DMZ~~perimeter network, and wherein isolation is effected by enabling a critical communication security mechanism that is one or more of ~~(a)~~ encryption of access restrictions the at least one ~~other~~ on board computational component in a vehicular wireless network, ~~(b)~~ disabling ESSID broadcasting, ~~(c)~~ hiding the SSID, ~~(d)~~ performing MAC ID filtering, ~~(e)~~ performing static IP addressing, ~~(f)~~ implementing IEEE 802.11, 802.11i, and/or 802.1x security, ~~(g)~~ using wired equivalent privacy encryption, ~~(h)~~ using one or more of TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, and ~~(i)~~ using end-to-end encryption.

Ford Ex. 1002 Page 666 of 1178

REMARKS

Applicant has canceled claims 1-23. Support for the amendments includes page 56, line 17, to page 58, line 29, and Fig. 24.

The Examiner rejects claims 3, 5, 8, 11, 13, 16, 19, 21, and 24 under 35 U.S.C.§112, second paragraph, as being indefinite and claims 4, 12, and 20 under 35 U.S.C.§112, fourth paragraph, as being of improper dependent form. The claims have been amended to overcome these rejections.

The Examiner rejects claims 1-24 under 35 U.S.C.§103(a) as being unpatentable over Maher (US 2013/0212659) in view of Gelvin (U.S. 7,891,004).

Independent claims 1, 9, and 17 include at least the following italicized features that are neither taught nor suggested by Maher or Gelvin:

> 1. A vehicle, comprising:
> a plurality of on board computational components;
> a first security mechanism to enforce security measure and form a perimeter network logically including the plurality of on board computational components; and
> a microprocessor executable network controller operable to (i) detect an instance of a breach of the security measure, (ii) determine whether a computational component affected by the breach of the security measure can be isolated from at least one on board computational component not affected by or potentially affected by the breach of the security measure, and (ii) when the computational component affected by the breach of the security measure can be isolated from the at least one on board computational component not affected by or potentially affected by the breach of the security measure, at least one of (a) isolate the at least one on board computational component not affected by or potentially affected by the security breach instance from the computational component affected by the security breach instance and (b) isolate the computational component affected by the security breach instance from the at least one on board computational component not affected by or potentially affected by the security breach instance, *wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the security breach instance, (2) directing communications to and from the computational component affected by the security breach instance to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the security breach instance, and (4) activating a second security mechanism in response to the security breach instance.*

> 9. A method, comprising:
> in a vehicle comprising a plurality of on board computational components, a first security mechanism to enforce security measure and form a perimeter network logically including the plurality of on board computational components, and a microprocessor

Ford Ex. 1002 Page 667 of 1178

executable network controller, the microprocessor executable network controller identifying a possible security breach instance;

in response, the microprocessor executable network controller determining whether a computational component affected by the breach of the security measure can be isolated from at least one on board computational component not affected by or potentially affected by the breach of the security measure; and

when the computational component affected by the breach of the security measure can be isolated from the at least one on board computational component not affected by or potentially affected by the breach of the security measure, the microprocessor executable network controller at least one of (a) isolating the at least one on board computational component not affected by or potentially affected by the security breach instance from the computational component affected by the security breach instance and (b) isolating the computational component affected by the security breach instance from the at least one on board computational component not affected by or potentially affected by the security breach instance, *wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the security breach instance, (2) directing communications to and from the computational component affected by the security breach instance to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the security breach instance, and (4) activating a second security mechanism in response to the security breach instance.*

17. In a vehicle comprising a plurality of on board computational components, a non-transient, tangible computer readable medium comprising a first security mechanism to enforce security measure and form a perimeter network logically including the plurality of on board computational components and a microprocessor executable network controller on board a selected vehicle that, when executed, detects an instance of a breach of the security measure, determines whether a computational component affected by the breach of the security measure can be isolated from at least one on board computational component not affected by or potentially affected by the breach of the security measure, and, when the computational component affected by the breach of the security measure can be isolated from the at least one on board computational component not affected by or potentially affected by the breach of the security measure, at least one of isolates the at least one on board computational component not affected by or potentially affected by the security breach instance from the computational component affected by the security breach instance and isolates the computational component affected by the security breach instance from the at least one on board computational component not affected by or potentially affected by the security breach instance, *wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the security breach instance, (2) directing communications to and from the computational component affected by the security breach instance to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the security breach instance, and (4) activating a second security mechanism in response to the security breach instance.*

Ford Ex. 1002 Page 668 of 1178

Maher is directed to systems and methods for facilitating a security and trust architecture in connected vehicles. A method for creating a trusted architecture in a connected vehicle may include generating a connected vehicle ecosystem map including information relating to a plurality of electronic control units and network connections included in the connected vehicle. Based on the vehicle ecosystem map, trusted relationships involving electronic control units may be identified. Trusted credentials may be generated and issued to electronic control units that meet one or more trust requirements. Using the trusted credentials, trusted communication within the connected vehicle may be achieved.

There are a number of claimed features not taught by Maher. The Examiner admits that "[w]hile Maher discloses certain vehicle systems (e.g., safety-related systems) may be isolated on their own communication bus . . ., it fails to explicitly disclose isolate an on board computational component . . ." (Office Action at page 6.) In addition, Maher says nothing about what to do after a security breach instance is detected. Maher is directed only to preventing security breaches.

The Examiner further relies on Gelvin to overcome the deficiencies of Maher.

Maher is directed to vehicle internetworks providing for communications among diverse electronic devices within a vehicle, and for communications among these devices and networks external to the vehicle. The vehicle internetwork comprises specific devices, software, and protocols, and provides for security for essential vehicle functions and data communications, ease of integration of new devices and services to the vehicle internetwork, and ease of addition of services linking the vehicle to external networks such as the Internet.

The Examiner relies on col. 8, lines 10-45, and col. 21, lines 1-10, in the rejection.

This passage states as follows:

> FIG. 12 is a safety connector 1200 of an embodiment. The safety connector 1200 is provided in furtherance of passenger safety and the avoidance of consequences associated with malfunctioning devices flooding the bus 1299 with spurious data. As such, this safety connector 1200 avoids having to directly attach network devices to the terminals of a bus 1299. Thus, while port nodes can be used that directly attach to the bus 1299, for the passenger side of a network these can be supplemented by a simple connector that shields the bus 1299 and vehicle passengers from danger.
>
> The safety connector 1200 includes circuitry 1202 for detecting a physical fault such as a short on the exterior side of the safety connector 1200, but is not so limited. *This circuitry 1202 activates the control circuit 1204 to command physical isolation 1206 across the connector, e.g., by opening a switch. The protocol violation detector 1208 interprets*

Ford Ex. 1002 Page 669 of 1178

commands from the gateway to isolate the two sides when necessary, as in response to a device that is flooding the network with access requests, or which is sending unauthorized messages. Additionally, the protocol violation detector 1208 includes circuitry to recognize that insistent use of the bus is being demanded by the device that is attached, so that it can command physical isolation.

(Emphasis added.)

The above language fails to teach or suggest *"wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the security breach instance, (2) directing communications to and from the computational component affected by the security breach instance to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the security breach instance, and (4) activating a second security mechanism in response to the security breach instance*."

The newly added dependent claims provide further reasons for allowability.

By way of example, dependent claim 2 requires the security breach instance to be one or more of an instance of a virus, malware, unauthorized access, misuse, modification, denial-of-service attack, spoofing, man-in-the-middle attack, ARP poisoning, smurf attack, buffer overflow, heap overflow, format string attack, SQL injection, identity theft (or MAC spoofing), network injection, caffe latte attack, or denial of a computer network and/or network-accessible resource, wherein the network controller receives a warning signal associated with the security breach instance from a gateway, a firewall, a honeypot, a network node impacted by the security breach instance, and a network probe, and wherein the first security mechanism is one or more of: encryption, checks on MAC addresses, disabling ESSID broadcasting, isolating the vehicular network by a firewall and/or gateway, hiding the SSID (Service Set Identifier), MAC ID filtering, static IP addressing , IEEE 802.11, 802.11i, and/or 802.1x security, use of the wired equivalent privacy encryption, TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, end-to-end encryption, and RF shielding substantially surrounding an interior of the vehicle to attenuate signals and prevent wireless signals from propagating outside the vehicle. *See also* claims 10 and 18.

Dependent claim 3 requires the computational component affected by the security breach instance to be an on board computational component, wherein the at least one board computational component is one or more of an on-board sensor, processing module, software application, expansion module, critical device, non-critical device, and cellular upgrade module, and wherein the computational component affected by the security breach instance and the at least one on board computational component are both within a perimeter network of the vehicle. *See also* claims 11 and 19. Neither reference distinguishes between security breach instances by a device outside of as opposed to one within a perimeter network.

Dependent claim 4 requires the computational component affected by the security breach instance to be outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the at least one board computational component is one or more of an on board sensor, a media controller, a gateway, a firewall, a processing module, a network controller, an input/output system, a display controller, an audio controller, an arbitration module, a health check module, a critical system controller, a non-critical system controller, an on board sensor monitor, a displayed object movement module, a diagnostic module, a media filter, a network selector, a remote control module, a computational module selector, an expansion module, an application, and a plug-in module. *See also* claims 12 and 20. Neither reference distinguishes between security breach instances by a device outside of as opposed to one within a perimeter network.

Dependent claim 5 is directed to the computational component affected by the security breach instance being outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the microprocessor executable network controller analyzes the security breach instance by one or more of reviewing historical behavior and comparing the behavior to templates characteristic of differing types of attacks and/or applying rules to the historical behavior and updating firewall settings to protect against a further security breach instance. *See also* claims 13 and 21. Neither reference distinguishes between security breach instances by a device outside of as opposed to one within a perimeter network let alone updating firewall settings based on analysis of the security breach instance.

Ford Ex. 1002 Page 671 of 1178

Dependent claim 6 is directed to the computational component affected by the security breach instance being an external computational device, wherein the at least one on board computational component not affected by the security breach instance is isolated from the external computational device by the vehicular wireless network denying vehicular wireless network access by the external computational component. *See also* claims 14 and 22. As noted, neither reference teaches this type of isolation.

Dependent claim 7 requires at least one of the following to be true about the isolation: communications between the at least one on board computational component in a vehicular wireless network not affected by the security breach instance and the computational component affected by the security breach instance, the communications not normally passing through a gateway and/or firewall are redirected through and filtered by the gateway and/or firewall and communications between the at least one on board computational component in a vehicular wireless network not affected by the security breach instance and the computational component affected by the security breach instance are blocked in whole or part. *See also* claims 15 and 23. As noted, neither reference teaches these types of isolation.

Dependent claim 8 requires the at least one computational component to be inside of a perimeter network of the vehicle, wherein the at least one on board computational component in a vehicular wireless network not affected by the security breach instance is a critical component, wherein the computational component affected by the security breach instance is a node on the vehicular wireless network and physically and/or logically positioned outside of but interiorly and/or internally to the perimeter network, and wherein isolation is effected by enabling a critical communication security mechanism that is one or more of encryption of access restrictions in the at least one on board computational component in a vehicular wireless network, disabling ESSID broadcasting, hiding the SSID, performing MAC ID filtering, performing static IP addressing, implementing IEEE 802.11, 802.11i, and/or 802.1x security, using wired equivalent privacy encryption, using one or more of TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, and using end-to-end encryption. Neither reference distinguishes between security breach instances by a device outside of as opposed to one within a perimeter network let alone updating firewall settings based on analysis of the security breach instance. *See also* claims 16 and 24.

Ford Ex. 1002 Page 672 of 1178

Based on the foregoing, Applicants believe that all pending claims are in condition for allowance and such disposition is respectfully requested. In the event that a telephone conversation would further prosecution and/or expedite allowance, the Examiner is invited to contact the undersigned.

Respectfully submitted,

SHERIDAN ROSS P.C.

Date: April 6, 2015

By: /Douglas W. Swartz/

Douglas W. Swartz
Reg. No. 37,739
1560 Broadway, Suite 1200
Denver, Colorado 80202
Telephone: 303-863-9700

Ford Ex. 1002 Page 673 of 1178

Electronic Acknowledgement Receipt

EFS ID:	21981120
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	111285
Filer:	Douglas W. Swartz/Christine Jacquet
Filer Authorized By:	Douglas W. Swartz
Attorney Docket Number:	6583-247-CIP-5
Receipt Date:	06-APR-2015
Filing Date:	14-MAR-2013
Time Stamp:	16:19:03
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		AMEND_DUE_4-5-2015.pdf	160481 4f883864ca7385d662d8cd6124e63f7500548d5b	yes	19

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment/Req. Reconsideration-After Non-Final Reject	1	1
	Specification	2	3
	Claims	4	12
	Applicant Arguments/Remarks Made in an Amendment	13	19
Warnings:			
Information:			
	Total Files Size (in bytes):	160481	

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.

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
(Use as many sheets as necessary)				First Named Inventor	RICCI, Christopher P.
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	1	of	4	Attorney Docket Number	6583-247-CIP-5

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	5296840	03/22/1994	Gieffers	
	2	6302438	10/16/2001	Stopper, Jr. et al.	
	3	6502022	12/31/2002	Chastain et al.	
	4	6690940	02/10/2004	Brown et al.	
	5	6782240	08/24/2004	Tabe	
	6	7019641	03/28/2006	Lakshmanan et al.	
	7	7343148	03/11/2008	O'Neil	
	8	7474264	01/06/2009	Bolduc et al.	
	9	7506375	03/17/2009	Kanda et al.	
	10	7549041	06/16/2009	Wang	
	11	7734315	06/08/2010	Rathus et al.	
	12	8527143	09/03/2013	Tan	
	13	8644165	02/04/2014	Saarimaki et al.	
	14	8683496	03/25/2014	Reeves et al.	
	15	8706143	04/22/2014	Elias	
	16	8761673	06/24/2014	Sakata	
	17	8774842	07/08/2014	Jones et al.	
	18	8817761	08/26/2014	Gruberman et al.	
	19	8819180	08/26/2014	Reeves et al.	
	20	8819705	08/26/2014	Reeves et al.	
	21	8838088	09/16/2014	Henn et al.	
	22	8868899	10/21/2014	Galicia et al.	
	23	8933949	01/13/2015	Reeves et al.	
	24	8957905	02/17/2015	Reeves et al.	
	25	8963939	02/24/2015	Yusupov et al.	
	26	2002/0023010	02/21/2002	Rittmaster et al.	
	27	2002/0045484	04/18/2002	Eck et al.	
	28	2004/0255123	12/16/2004	Noyama et al.	
	29	2005/0042999	02/24/2005	Rappaport	
	30	2005/0130744	06/16/2005	Eck et al.	
	31	2005/0153760	07/14/2005	Varley	
	32	2007/0015485	01/18/2007	DeBiasio et al.	
	33	2007/0103328	05/10/2007	Lakshmanan et al.	

Examiner Signature		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.

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	RICCI, Christopher P.
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	2	of	4	Attorney Docket Number	6583-247-CIP-5

	34	2007/0120697	05/31/2007	Ayoub et al.	
	35	2007/0156317	07/05/2007	Breed	
	36	2008/0305780	12/11/2008	Williams et al.	
	37	2009/0082951	03/26/2009	Graessley	
	38	2009/0224931	09/10/2009	Dietz et al.	
	39	2010/0042498	02/18/2010	Schalk	
	40	2011/0021234	01/27/2011	Tibbitts et al.	
	41	2011/0021213	01/27/2011	Carr	
	42	2011/0092159	04/21/2011	Park et al.	
	43	2011/0137520	06/09/2011	Rector et al.	
	44	2012/0071097	03/22/2012	Matsushita et al.	
	45	2012/0116678	05/10/2012	Witmer	
	46	2012/0274459	11/01/2012	Jaisimha et al.	
	47	2012/0289217	11/15/2012	Reimer et al.	
	48	2013/0035063	02/07/2013	Fisk et al.	
	49	2013/0157640	06/20/2013	Aycock	
	50	2014/0032014	01/30/2014	DeBiasio et al.	

UNPUBLISHED U.S. PATENT DOCUMENTS

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
	51	14/657934	03/13/2015	Ricci	
	52	14/657829	03/13/2015	Ricci	
	53	14/659255	03/16/2015	Ricci	

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]

Examiner Signature		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.

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	RICCI, Christopher P.
(Use as many sheets as necessary)				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	3	of	4	Attorney Docket Number	6583-247-CIP-5

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.
	54	Official Action for U.S. Patent Application No. 13/679,459, mailed Oct. 28, 2014 (Attorney's Ref. No. 6583-228) 17 pages
	55	Official Action for U.S. Patent Application No. 13/679,459, mailed Mar. 17, 2015 (Attorney's Ref. No. 6583-228) 30 pages
	56	Notice of Allowance for U.S. Patent Application No. 13/679,857, mailed Dec. 3, 2014 (Attorney's Ref. No. 6583-231) 5 pages
	57	Notice of Allowance for U.S. Patent Application No. 13/679,878, mailed Feb. 2, 2015 (Attorney's Ref. No. 6583-232) 5 pages
	58	Official Action for U.S. Patent Application No. 13/679,875, mailed Dec. 26, 2014 (Attorney's Ref. No. 6583-233) 14 pages
	59	Official Action for U.S. Patent Application No. 13/679,676, mailed Feb 25, 2015 (Attorney's Ref. No. 6583-234) 14 pages
	60	Notice of Allowance for U.S. Patent Application No. 13/679,441, mailed Oct. 29, 2014 (Attorney's Ref. No. 6583-244) 5 pages
	61	Official Action for U.S. Patent Application No. 13/679,864, mailed Nov. 03, 2014 (Attorney's Ref. No. 6583-245) 9 pages
	62	Notice of Allowance for U.S. Patent Application No. 13/679,864, mailed Mar. 03, 2015 (Attorney's Ref. No. 6583-245) 8 pages
	63	Official Action for U.S. Patent Application No. 13/679,476, mailed Jan. 16, 2015 (Attorney's Ref. No. 6583-247) 23 pages
	64	Official Action for U.S. Patent Application No. 13/828,513, mailed Dec. 24, 2014 (Attorney's Ref. No. 6583-247-CIP) 7 pages
	65	Notice of Allowance for U.S. Patent Application No. 13/828,513, mailed Apr. 3, 2015 (Attorney's Ref. No. 6583-247-CIP) 5 pages
	66	Notice of Allowance for U.S. Patent Application No. 13/828,651, mailed Feb. 2, 2015 (Attorney's Ref. No. 6583-247-CIP-2) 10 pages
	67	Official Action for U.S. Patent Application No. 13/828,758, mailed Feb. 12, 2015 (Attorney's Ref. No. 6583-247-CIP-3) 10 pages
	68	Official Action for U.S. Patent Application No. 13/828,860, mailed Feb. 27, 2015 (Attorney's Ref. No. 6583-247-CIP-4) 16 pages
	69	Notice of Allowance for U.S. Patent Application No. 13/829,505, mailed Nov. 26, 2014 (Attorney's Ref. No. 6583-247-CIP-8) 8 pages
	70	Notice of Allowance for U.S. Patent Application No. 13/829,718, mailed Nov. 21, 2014 (Attorney's Ref. No. 6583-247-CIP-10) 5 pages

Examiner Signature		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.

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	RICCI, Christopher P.
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	4	of	4	Attorney Docket Number	6583-247-CIP-5

	71	Notice of Allowance for U.S. Patent Application No. 13/830,003, mailed Nov. 21, 2014 (Attorney's Ref. No. 6583-247-CIP-13) 7 pages
	72	Official Action for U.S. Patent Application No. 13/830,133, mailed Oct. 29, 2014 (Attorney's Ref. No. 6583-247-CIP-15) 31 pages
	73	Notice of Allowance for U.S. Patent Application No. 13/830,133, mailed Mar. 3, 2015 (Attorney's Ref. No. 6583-247-CIP-15) 5 pages
	74	Official Action for U.S. Patent Application No. 14/468,055, mailed Apr. 8, 2015 (Attorney's Ref. No. 6583-315-CON) 6 pages
	75	Notice of Allowance for U.S. Patent Application No. 13/679,887, mailed Nov. 13, 2014 (Attorney's Ref. No. 6583-316) 5 pages

Examiner Signature		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.

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.
13/679,459	11/16/2012	Christopher P. Ricci	6583-228	1765

111285 7590 10/28/2014

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

EXAMINER	
SURYAWANSHI, SURESH	
ART UNIT	PAPER NUMBER
2118	

NOTIFICATION DATE	DELIVERY MODE
10/28/2014	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. 13/679,459	Applicant(s) RICCI ET AL.	
	Examiner SURESH SURYAWANSHI	Art Unit 2118	AIA (First Inventor to File) Status No

-- 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 *11/16/12*.

☐ 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) *1-24* 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) *1-24* 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 *11/16/12* 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 *10/17/13,1/28/14,7/2/14,10/16/14*.

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

4) ☐ Other: _____.

1. The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

2. Claims 1-24 are presented for examination.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with

this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO internet Web site contains terminal disclaimer forms which may be used. Please visit http://www.uspto.gov/forms/. The filing date of the application will determine what form should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

4. Claims 1-14 and 17-20 are provisionally rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-14 and 17-20 of copending Application No. 13/217108 (under condition for allowance). Although the claims at issue are not identical, they are not patentably distinct from each other because both claim similar invention. Though worded differently, they are not different. Moreover, the independent claims of the current application are broader than the copending application. For example, claim 1 in the current application recites "a first operating system" and "a second operating system" instead of "a mobile operating system" and "a desktop operating system" as claimed in claim 1 of copending application.

This is a provisional nonstatutory double patenting rejection because the patentably indistinct claims have not in fact been patented.

Claim Rejections - 35 USC § 112

5. 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.

6. Claim 13 is 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 13 recites the limitation of "a second execution environment" in line 9. It is unclear if the claimed "a second execution environment" was intended to say "the second execution environment" to refer to "the second execution environment" found in the parent claim 1 or if it is intended to recite a different execution environment.

Claim Rejections - 35 USC § 102

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 the appropriate paragraphs of pre-AIA 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 –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 1-5, 10-12, 14, 17 and 19-24 rejected under pre-AIA 35 U.S.C. 102(e) as being anticipated by Galicia et al [US PGPUB 2011/0093691[1]; hereinafter Galicia].

10. As per claim 1, Galicia discloses a system, comprising:

a computing device [Fig. 1; paragraph 0011; a mobile computing device], comprising:

a first operating system running in a first execution environment on a shared kernel, the first operating system having a first application framework supporting a first application [Fig. 2; paragraphs 0009, 0011, 0030-0032, 0034; the first environment is the Android environment and the second environment is in accordance with the standard GNU/Linux distribution]; and

a second operating system running concurrently with the first operating system in a second execution environment on the shared kernel, the second operating system having a second application framework supporting a second application, wherein the second application is

[1] Prior art cited by applicants.

incompatible with the first application framework [Fig. 2; paragraphs 0009, 0011, 0028-0032, 0034, 0041, 0045-0046, 0056, 0060, 0065; each of the environment operates on the shared, single kernel 18].

11. As per claim 14, Galicia discloses a method of providing multiple operating systems on a single physical processor of a computing device, the method comprising:

running a first application on a first operating system, the first operating system running on a shared kernel and having a first application framework [Fig. 2; paragraphs 0009, 0011, 0028-0032, 0034, 0041, 0045-0046, 0056, 0060, 0065; the first environment is the Android environment and the second environment is in accordance with the standard GNU/Linux distribution; each of the environment operates on the shared, single kernel 18]; and

running a second application on a second operating system, the second operating system running concurrently with the first operating system on the shared kernel and having a second application framework, wherein the second application is incompatible with the first application framework [Fig. 2; paragraphs 0009, 0011, 0028-0032, 0034, 0041, 0045-0046, 0056, 0060, 0065; the first environment is the Android environment and the second environment is in accordance with the standard GNU/Linux distribution; each of the environment operates on the shared, single kernel 18].

12. As per claim 17, Galicia discloses a computing device including a computer-readable medium storing instructions for a physical processor, the instructions, when executed, causing the processor to perform steps comprising:

running a first operating system in a first execution environment on a shared kernel, the first operating system having a first application framework supporting a first application [Fig. 2; paragraphs 0009, 0011, 0028-0032, 0034, 0041, 0045-0046, 0056, 0060, 0065; the first environment is the Android environment and the second environment is in accordance with the standard GNU/Linux distribution; each of the environment operates on the shared, single kernel 18]; and

running a second operating system concurrently with the first operating system in a second execution environment on the shared kernel, the second operating system having a second application framework supporting a second application, wherein the second application is incompatible with the first application framework [Fig. 2; paragraphs 0009, 0011, 0028-0032, 0034, 0041, 0045-0046, 0056, 0060, 0065; the first environment is the Android environment and the second environment is in accordance with the standard GNU/Linux distribution; each of the environment operates on the shared, single kernel 18].

13. As per claim 24, Galicia discloses a method, comprising:

selecting a processing resource from among a plurality of processing resources to execute first and second operating systems, the first operating system being a native operating system of the selected processing resource and the second operating system being a native operating system of a second processing resource [Fig. 2, 6; paragraphs 0009, 0011, 0028-0032, 0034, 0041, 0045-0046, 0056, 0060, 0065; the first environment is the Android environment and the second environment is in accordance with the standard GNU/Linux distribution; each of the environment operates on the shared, single kernel 18; one of two operating system become a native operating system upon mode state decision 82]; and

executing, by the second operating system, an application on the selected processing resource and providing the results to the second processing resource for presentation to a user [Fig. 2, 6, 13; paragraphs 0009, 0011, 0028-0032, 0034, 0041, 0045-0046, 0056, 0060, 0065; the first environment is the Android environment and the second environment is in accordance with the standard GNU/Linux distribution; each of the environment operates on the shared, single kernel 18].

14. As per claim 2, Galicia discloses that the first operating system includes a first set of user libraries in the first execution environment, and wherein the second application is incompatible with the first set of user libraries [paragraphs 0042, 0073; Bionic C library for Android and glibc library for GNU].

15. As per claim 3, Galicia discloses that the shared kernel is running on a first processor of the computing device and wherein the computing device is one of a mobile computing device, a tablet computer, a laptop computer, a personal computer, and a processing module of a vehicle [Fig. 1; paragraphs 0024-0025].

16. As per claim 4, Galicia discloses that the computing device is in a vehicle and further including a secondary terminal environment, wherein the second operating system is associated with the secondary terminal environment [paragraph 0003; car navigation system; paragraph 0052; claims 2-3].

17. As per claim 5, Galicia discloses including a secondary terminal environment, wherein the computing device and the secondary terminal environment are connected with a single dock connector that includes a display interface and serial communications interface [paragraph 0025, 0052; inherent to the system utilizing a docking station].

18. As per claim 10, Galicia discloses that the computing device further including a physical storage device, wherein the second execution environment is logically isolated from the first execution environment on the physical storage device [paragraph 0033].

19. As per claim 11, Galicia discloses including an input device connected to the computing device, wherein input commands from the input device are available to the first operating system in the first execution environment and to the second operating system in the second execution environment [paragraph 0025, 0052; a docking station implies that another input device like a keyboard can be used].

20. As per claim 12, Galicia discloses that the first operating system is one of a mobile operating system and a desktop operating system, wherein the second operating system is the other of a mobile operating system and desktop operating system and wherein the second operating system accesses input commands from the input device through the shared kernel [paragraph 0036; both operating systems can access input commands from an input device via the shared kernel].

21. As per claim 19, Galicia discloses comprising mobile telephony capabilities [paragraph 0025; a mobile telephone].

22. As per claim 20, Galicia discloses that the computing device comprises a smartphone [paragraph 0025; a smart phone].

23. As per claim 21, Galicia discloses that the computing device comprises a personal computer [paragraph 0025; a laptop computer].

24. As per claim 22, Galicia discloses that the computing device comprises a processing module of a vehicle [paragraph 0003; car navigation system].

25. As per claim 23, Galicia discloses that at least one of the first and second applications is one of the following: a vehicle control application, application associated with at least one vehicle function, application related to handicap and accessibility graphical user interfaces, email client, web browser, communications application, game, entertainment application, satellite positioning system receiver applications, automotive navigation applications, medical information application, emergency service application, noise suppression application, news-related application, weather information-related application, biometric application, travel application, and utility application [paragraph 0003; car navigation system; paragraph 0025; a laptop computer, a smart phone, a mobile phone, etc.].

Claim Rejections - 35 USC § 103

26. 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.

27. The following is a quotation of pre-AIA 35 U.S.C. 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.

28. Claims 6-9 and 15-16 rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Galicia et al [US PGPUB 2011/0093691[1]; hereinafter Galicia] in view of Kim et al [US PGPUB 2010/0097386[2]; hereinafter Kim].

29. As per claims 6-9 and 15-16, Galicia discloses the invention substantially. Galicia does not expressly disclose about having a first and second frame buffers associated with each of the first and second operating systems. But Galicia discloses that the operating systems share a common frame buffer [paragraph 0052]. However, Kim clearly discloses providing each operating system with its own frame buffer which is selected from to output the operating system image to a display [Fig. 1; paragraphs 0013, 0040]. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to try including and selecting between a frame buffer for each operating system for presenting to a display rather than having the

[2] Prior art cited by applicants.

operating systems share a single frame buffer because both variants allow selection of operating system image data to be presented to a display and a person with ordinary skill has good reason to pursue the known options within his or her technical grasp. In addition, because Galicia associates a first OS (Android) with a first display (Smartphone display available while undocked) and the second OS (Linux) with a second display (external display available while docked) it is interpreted that the first frame buffer assigned to the first OS would be associated with the first display and the second frame buffer assigned to the second OS would be associated with the second display. Thus, an application being run on the second OS (i.e., second application) would be displayed on the second display via second frame buffer.

30. Claim 13 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Galicia et al [US PGPUB 2011/0093691[1]; hereinafter Galicia] in view of NexusOneHacks.net [How to Install Ubuntu on Your Nexus One/Android[3]; hereinafter Nexus].

31. As per claim 13, Galicia discloses starting a boot loader, starting a first execution environment, shared kernel, a first operating system, a first application framework associated with the first operating system and monitoring service to determine if the device is docked [Fig. 2; paragraphs 0009, 0011, 0028-0032, 0034, 0041, 0045-0046, 0056, 0060, 0065]. Galicia discloses the invention substantially. But it appears that both operating systems are loaded in parallel. However, Nexus clearly discloses running Ubuntu from within Android rather than

[3] Prior art cited by applicants.

running in parallel because both variants allow one to run both a mobile and desktop operating system from a mobile phone and a person with ordinary skill has good reason to pursue the known options within his or her technical grasp.

32. As per claim 18, Nexus discloses that the second execution environment comprises a chrooted environment [page 2; using the chroot command to launch the Ubuntu operating environment].

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SURESH SURYAWANSHI whose telephone number is (571)272-3668. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. 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.

/SURESH SURYAWANSHI/
Primary Examiner, Art Unit 2118

Notice of References Cited	Application/Control No. 13/679,459	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner SURESH SURYAWANSHI	Art Unit 2118	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,764,984	06-1998	Loucks, Larry Keith	719/319
*	B	US-8,868,899	10-2014	Galicia et al.	713/100
*	C	US-7,549,041	06-2009	Wang, Szu-Chung	713/2
*	D	US-7,506,375	03-2009	Kanda et al.	726/25
*	E	US-2006/0010314	01-2006	Xu, Yongyong	713/002
	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.
13/679,459	11/16/2012	Christopher P. Ricci	6583-228	1765

111285 7590 03/17/2015

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

EXAMINER
SURYAWANSHI, SURESH

ART UNIT	PAPER NUMBER
2118	

NOTIFICATION DATE	DELIVERY MODE
03/17/2015	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. 13/679,459	Applicant(s) RICCI ET AL.	
	Examiner SURESH SURYAWANSHI	Art Unit 2118	AIA (First Inventor to File) Status No

-- 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 *3/3/15 amendments*.

☐ 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) *1-36* 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) *1-36* 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 *3/9/15*.

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

4) ☐ Other: _____.

1. The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

2. Claims 1-36 are presented for examination.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with

this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO internet Web site contains terminal disclaimer forms which may be used. Please visit http://www.uspto.gov/forms/. The filing date of the application will determine what form should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

4. Claims 1-14 and 17-20 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-14 and 17-20 of U.S. Patent No. 8,898,443. Although the claims at issue are not identical, they are not patentably distinct from each other because both claim similar invention. Though worded differently, they are not different. Moreover, the independent claims of the current application are broader than the patented application. For example, claim 1 of the current application recites “a first operating system" and "a second operating system” instead of “a mobile operating system” and "a desktop operating system” as claimed in claim 1 of the patented application 8,898,443.

Specification

5. The disclosure is objected to because of the following informalities: applicants should provide missing information (blanks) on page 1, line 21 – page 3, line 5.

Appropriate correction is required.

Claim Rejections - 35 USC § 101

6. 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.

7. Claims 17-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter because “a computer-readable medium” is not limited to a non-transitory medium as defined in the provided specification by applicants.

8. Applicants disclosed definition of "a computer-readable medium" (page 8, line 14, and amended now) is reproduced below with emphasis added (bolded).

The term "computer-readable medium" as used herein refers to any storage and/or transmission medium that participate in providing instructions to a processor for execution. Such a computer-readable medium is commonly tangible and non-transient and can take many forms, including but not limited to, non-volatile media, volatile media, and **transmission media** and includes without limitation random access memory ("RAM"), read only memory ("ROM"), and the like.

Non-volatile media includes, for example, NVRAM, or magnetic or optical disks. Volatile media includes dynamic memory, such as main memory. Common forms of computer- readable media include, for example, a floppy disk (including without limitation a Bernoulli cartridge, ZIP drive, and JAZ drive), a flexible disk, hard disk, magnetic tape or cassettes, or any other magnetic medium, magneto-optical medium, a digital video disk (such as CD-ROM), any other optical medium, punch cards, paper tape, any other physical medium with patterns of holes, a RAM, a PROM, and EPROM, a FLASH-EPROM, a solid state medium like a memory card, any other memory chip or cartridge, **a carrier wave as described hereinafter**, or any other medium from which a computer can read. A digital file attachment to e-mail or other self-contained information archive or set of archives is considered a distribution medium equivalent to a tangible storage medium. When the computer-readable media is configured as a database, it is to be understood that the database may be any type of database, such as relational, hierarchical, object-oriented, and/or the like. Accordingly, the disclosure is considered to include a tangible storage medium or distribution medium and prior art-recognized equivalents and successor media, in which the software implementations of the present disclosure are stored. Computer-readable storage medium commonly excludes transient storage media, particularly electrical, magnetic, electromagnetic, optical, magneto-optical signals.

Examiner kindly suggests to applicants to overcome this rejection, they must delete "transmission media" and "a carrier wave as described hereinafter" form the paragraph.

Claim Rejections - 35 USC § 102

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 the appropriate paragraphs of pre-AIA 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 –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-36 are rejected under pre-AIA 35 U.S.C. 102(e) as being anticipated by Reeves et al (US Patent 8,898,443; hereinafter Reeves).

The applied reference has a common assignee and inventors with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under pre-AIA 35 U.S.C. 102(e). This rejection under pre-AIA 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131(a).

12. As per claim 1, Reeves discloses a system, comprising:

a computing device [Fig. 1; a mobile computing device], comprising:

a first operating system running in a first execution environment on a shared kernel, the first operating system having a first application framework supporting a first application [Fig. 1, 3; MOBILE OS; col. 2, lines 35-44; col. 5, lines 21-59; a first OS 130; col. 10, line 15 -- col. 11, line 47; mobile OS 130 running in first execution environment on a shared kernel and having a first application framework supporting a first application]; and

a second operating system running concurrently with the first operating system in a second execution environment on the shared kernel, the second operating system having a second application framework supporting a second application [Fig. 1, 3; MOBILE OS; col. 5, lines 21-59; a second OS 160; col. 10, line 15 -- col. 11, line 47; desktop OS 160 running concurrently with the operating system in a second execution environment on the shared kernel and having a second application framework supporting a second application], wherein the second application is incompatible with the first application framework [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47], wherein the first operating system is based on the shared kernel and the second operating system is not based on the shared kernel, and wherein the first and second operating systems run independently on the shared kernel [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47; "In various embodiments of the present disclosure, desktop OS 160 runs in a separate execution environment from mobile OS 130. For example, mobile OS 130 may run in a

root execution environment and desktop OS 160 may run in a secondary execution environment established under the root execution environment."; "Generally applications developed for mobile OS 130 do not run directly on desktop OS 160, and applications developed for desktop OS 160 do not run directly on mobile OS 130."; please also read the abstract that clearly says "A mobile computing device with a mobile operating system and desktop operating system running concurrently and independently on a shared kernel without virtualization."; col. 14, line 32 – col. 15, line 26; col. 16, lines 8-27; col. 17, line 1 – col. 18, line 61].

13. As per claim 14, Reeves discloses a method of providing multiple operating systems on a single physical processor of a computing device [Fig. 1; a mobile computing device], the method comprising:

running a first application on a first operating system, the first operating system running on a shared kernel and having a first application framework [Fig. 1, 3; MOBILE OS; col. 2, lines 35-44; col. 5, lines 21-59; a first OS 130; col. 10, line 15 -- col. 11, line 47; mobile OS 130 running in first execution environment on a shared kernel and having a first application framework supporting a first application]; and

running a second application on a second operating system, the second operating system running concurrently with the first operating system on the shared kernel and having a second application framework [Fig. 1, 3; MOBILE OS; col. 5, lines 21-59; a second OS 160; col. 10,

line 15 -- col. 11, line 47; desktop OS 160 running concurrently with the operating system in a second execution environment on the shared kernel and having a second application framework supporting a second application], wherein the second application is incompatible with the first application framework [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47], wherein the first operating system is based on the shared kernel and the second operating system is not based on the shared kernel, and wherein the first and second operating systems run independently on the shared kernel [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47; “In various embodiments of the present disclosure, desktop OS 160 runs in a separate execution environment from mobile OS 130. For example, mobile OS 130 may run in a root execution environment and desktop OS 160 may run in a secondary execution environment established under the root execution environment.”; “Generally applications developed for mobile OS 130 do not run directly on desktop OS 160, and applications developed for desktop OS 160 do not run directly on mobile OS 130."; please also read the abstract that clearly says "A mobile computing device with a mobile operating system and desktop operating system running concurrently and independently on a shared kernel without virtualization."; col. 14, line 32 – col. 15, line 26; col. 16, lines 8-27; col. 17, line 1 – col. 18, line 61].

14. As per claim 17, Reeves discloses a computing device including a computer-readable medium storing instructions for a physical processor, the instructions, when executed, causing the processor to perform steps comprising:

running a first operating system in a first execution environment on a shared kernel, the first operating system having a first application framework supporting a first application [Fig. 1, 3; MOBILE OS; col. 2, lines 35-44; col. 5, lines 21-59; a first OS 130; col. 10, line 15 -- col. 11, line 47; mobile OS 130 running in first execution environment on a shared kernel and having a first application framework supporting a first application]; and

running a second operating system concurrently with the first operating system in a second execution environment on the shared kernel, the second operating system having a second application framework supporting a second application [Fig. 1, 3; MOBILE OS; col. 5, lines 21-59; a second OS 160; col. 10, line 15 -- col. 11, line 47; desktop OS 160 running concurrently with the operating system in a second execution environment on the shared kernel and having a second application framework supporting a second application], wherein the second application is incompatible with the first application framework [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47 col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47], wherein the first operating system is based on the shared kernel and the second operating system is not based on the shared kernel, and wherein the first and second operating systems run independently on the shared kernel [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47; "In various embodiments of the present disclosure, desktop OS 160 runs in a separate execution environment from mobile OS 130. For example, mobile OS 130 may run in a root execution environment and desktop OS 160 may run in a secondary execution environment established under the root execution environment."; "Generally applications developed for mobile OS 130 do not run directly on desktop OS 160, and applications developed for desktop OS 160 do not run directly on mobile

OS 130."; please also read the abstract that clearly says "A mobile computing device with a mobile operating system and desktop operating system running concurrently and independently on a shared kernel without virtualization."; col. 14, line 32 – col. 15, line 26; col. 16, lines 8-27; col. 17, line 1 – col. 18, line 61].

15. As per claim 24, Reeves discloses a method, comprising:

selecting a processing resource from among a plurality of processing resources to execute simultaneously first and second operating systems [col. 7, line 16 – col. 8, lines 5; the kernel of an operating system refers to the core OS layer that manages the computing devices resources such as the CPU(s)(CPU Scheduling), memory, and I/O (including peripheral and file system access); Fig. 4; RESOURCE MANAGER 442], the first operating system being a native operating system of the selected processing resource and the second operating system not being a native operating system of selected processing resource, wherein the first operating system is one of MAC operating system, a Window operating system, and a vehicle operating system and the second operating system is one of a mobile device operating system selected from an Android operating system, an Apple operating system, a Microsoft Windows operating system, a Nokia Symbian operating system, a Palm operating system, and an HP web operating system [col. 7, line 16 – col. 8, lines 5; the first operating system (desktop OS) includes distributions of Linux, Mac OS, and Windows 7, among many others; the second operating system (mobile OS)

includes Android, Apple's iOS, Microsoft's Windows Mobile, Nokia's Symbian, and Palm's Palm OS and HP webOS]; and

executing, by the second operating system, an application on the selected processing resource and providing the results to the second processing resource for presentation to a user [Fig. 1; DISPLAY 116; here the second operating system being the mobile OS and after executing an application on the selected processing resource it provides the results to the display 116].

16. As per claim 28, Reeves discloses a method, comprising:

starting, in response to a power on event, a boot loader [Fig. 7; power on 702; boot loader 704];

establishing, by the boot loader, a first execution environment, wherein a first operating system runs in the first execution environment on a shared kernel, the first operating system having a first application framework supporting a first application [Fig. 7; kernel initialization of mobile OS 714; start mobile OS framework 716];

starting, by the boot loader, the shared kernel [Fig. 7; start kernel 710];

initializing, by the shared kernel, the first application framework [start mobile OS framework 716];

starting, in the first operating system, a first monitor service [Fig. 7; start mobile OS services 718];

establishing, by the first monitor service, a second execution environment within the first execution environment, wherein a second operating system runs concurrently with the first operating system in the second execution environment on the shared kernel, the second operating system having a second application framework supporting a second application, wherein the second application is incompatible with the first application framework [Fig. 7; initialize desktop OS; start desktop monitor service 722; establish desktop OS execution environment 724; col. 2, lines 35-44; the desktop OS includes a second application framework supporting a second application that is incompatible with the first application framework]; and

starting, by the first monitor service, the second application framework [Fig. 7, 1; col. 14, line 32 – col. 15, line 26].

17. As per claim 32, Reeves discloses a system, comprising:

a computing device [Fig. 1; a mobile computing device], comprising:

a first operating system running in a first execution environment on a shared kernel, the first operating system having a first application framework supporting a first application [Fig. 1, 3; MOBILE OS; col. 2, lines 35-44; col. 5, lines 21-59; a first OS 130; col. 10, line 15 -- col. 11, line 47; mobile OS 130 running in first execution environment on a shared kernel and having a first application framework supporting a first application];

a second operating system running concurrently with the first operating system in a second execution environment on the shared kernel, the second operating system having a second application framework supporting a second application []Fig. 1, 3; MOBILE OS; col. 5, lines 21-59; a second OS 160; col. 10, line 15 -- col. 11, line 47; desktop OS 160 running concurrently with the operating system in a second execution environment on the shared kernel and having a second application framework supporting a second application], wherein the second application is incompatible with the first application framework [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47 col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47]; and

a physical memory device, wherein the first operating system is associated with a first flame buffer in the physical memory device and the second operating system is associated with a second flame buffer in the physical memory device, each of the first and second flame buffers

being associated with respective first and second flame buffer devices in the shared kernel [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63], wherein the first operating system renders an associated first graphical user interface by writing graphics data to the first flame buffer device and an external display driver of the shared kernel then writes the graphics data to the first operating system flame buffer for output by the computing device [col. 2, lines 45-61; col. 3, lines 34-43; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63], and wherein the second operating system renders an associated second graphical user interface by writing the graphics data to the second flame buffer device and an external display driver of the shared kernel then writes the graphics data to the second operating system flame buffer for output by the computing device [col. 2, lines 45-61; col. 3, lines 34-43; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63].

18. As per claim 2, Reeves discloses that the first operating system includes a first set of user libraries in the first execution environment, wherein each of the first and second operating systems have access to memory and system resources of the computing device, and wherein the second application is incompatible with the first set of user libraries [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47 col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47].

19. As per claim 3, Reeves discloses that the shared kernel is running on a first processor of the computing device, wherein the first and second operating systems run on the shared kernel without virtualization, and wherein the computing device is one of a mobile computing device, a tablet computer, a laptop computer, a personal computer, and a processing module of a vehicle [Abstract; col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47].

20. As per claim 4, Reeves discloses that the computing device is in a vehicle, wherein the first execution environment is one of a personal computing device operating system and mobile device operating system, wherein the second execution environment is vehicle processing system operating system, and further including a secondary terminal environment, wherein the second operating system is associated with the secondary terminal environment [Abstract; col. 2, lines 19-22; col. 5, lines 8-15; in-dash car console].

21. As per claim 5, Reeves discloses including a secondary terminal environment, wherein the computing device and the secondary terminal environment are connected with a single dock connector that includes a display interface and serial communications interface [Fig. 8].

22. As per claim 6, Reeves discloses that the computing device further including a physical memory device, wherein the first operating system is associated with a first frame buffer in the physical memory device and the second operating system is associated with a second frame buffer in the physical memory device, each of the first and second frame buffers being associated with respective first and second frame buffer devices in the shared kernel, wherein the first

operating system renders an associated first graphical user interface by writing graphics data to the first frame buffer device, an external display driver of the shared kernel then writes the graphics data to the first operating system frame buffer for output by the computing device, wherein the second operating system renders an associated second graphical user interface by writing the graphics data to the second frame buffer device, an external display driver of the shared kernel then writes the graphics data to the second operating system frame buffer for output by the computing device [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63].

23. As per claim 7, Reeves discloses that the computing device further includes a first display device, and wherein the first frame buffer is associated with and output to the first display device [Fig. 1; Display 116].

24. As per claim 8, Reeves discloses including a secondary terminal environment, wherein the secondary terminal environment includes a second display device, and wherein the second frame buffer is associated with and output to the second display device [Fig. 8].

25. As per claim 9, Reeves discloses that the second application is displayed on the second display device through the second frame buffer and wherein the computing device selects one of the first and second operating systems as a primary operating system based on whether or not the computing device is docked to another computing device [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63].

26. As per claim 10, Reeves discloses that the computing device further including a physical storage device, wherein the second execution environment is logically isolated from the first execution environment on the physical storage device [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63].

27. As per claim 11, Reeves discloses including an input device connected to the computing device, wherein input commands from the input device are available to the first operating system in the first execution environment and to the second operating system in the second execution environment [Fig. 1, 8; col. 3, lines 3-7].

28. As per claim 12, Reeves discloses that the first operating system is one of a mobile operating system and a desktop operating system, wherein the second operating system is the other of a mobile operating system and desktop operating system, wherein graphics data from an application executing in the first operating system is accessed directly by an application executing in the second operating system, whereby a surface of the application in the first operating system is maintained in a shared memory space and passed to the application in the second operating system by passing file descriptors to the shared memory, and wherein the second operating system accesses input commands from the input device through the shared kernel [col. 17, lines 37-53; col. 22, line 64 – col. 23, line 8].

29. As per claim 13, Reeves discloses that the computing device is configured using a boot process that includes the steps of: starting, in response to a power on event, a boot loader [Fig. 7;

col. 14, line 32 – col. 15, line 26]; establishing, by the boot loader, the first execution environment [Fig. 7; col. 14, line 32 – col. 15, line 26]; starting, by the boot loader, the shared kernel; initializing, by the shared kernel, the first operating system [Fig. 7; col. 14, line 32 – col. 15, line 26]; starting, by the shared kernel, the first application framework; starting, in the first operating system, a first monitor service [Fig. 7; col. 14, line 32 – col. 15, line 26]; establishing, by the first monitor service, the second execution environment within the first execution environment [Fig. 7; col. 14, line 32 – col. 15, line 26]; and starting, by the first monitor service, the second application framework [Fig. 7; col. 14, line 32 – col. 15, line 26].

30. As per claim 15, Reeves discloses that wherein each of the first and second operating systems have access to memory and system resources of the computing device, wherein the first and second operating systems run on the shared kernel without virtualization, wherein the first operating system is one of a mobile operating system and a desktop operating system, wherein the second operating system is the other of a mobile operating system and desktop operating system [Abstract; col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47], and further comprising: allocating, by the shared kernel, a first frame buffer memory associated with the first operating system [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63]; and allocating, by the shared kernel, a second frame buffer memory associated with the second operating system [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63].

31. As per claim 16, Reeves discloses rendering, by the first operating system, the first application in the first frame buffer memory through the shared kernel [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63]; and rendering, by the second operating system, the second application in the second frame buffer memory through the shared kernel, each of the first and second frame buffer memories being associated with respective first and second frame buffer devices in the shared kernel, wherein the first operating system renders an associated first graphical user interface by writing graphics data to the first frame buffer device, an external display driver of the shared kernel then writes the graphics data to the first operating system frame buffer memory for output by the computing device, wherein the second operating system renders an associated second graphical user interface by writing the graphics data to the second frame buffer device, an external display driver of the shared kernel then writes the graphics data to the second operating system frame buffer memory for output by the computing device [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63].

32. As per claim 18, Reeves discloses that the second execution environment comprises a chrooted environment [col. 3, lines 56-60; col. 14, lines 20-31].

33. As per claim 19, Reeves discloses wherein each of the first and second operating systems have access to memory and system resources of the computing device, wherein the first and second operating systems run on the shared kernel without virtualization, and further comprising mobile telephony capabilities [Abstract; col. 2, lines 35-44; col. 3, lines 58-60; col. 10, line 15 -- col. 11, line 47].

34. As per claim 20, Reeves discloses wherein the computing device comprises a smartphone [Abstract; col. 2, lines 19-22] and further comprising: rendering, by the first operating system, the first application in the first frame buffer memory through the shared kernel [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63]; and rendering, by the second operating system, the second application in the second frame buffer memory through the shared kernel, each of the first and second frame buffer memories being associated with respective first and second frame buffer devices in the shared kernel, wherein the first operating system renders an associated first graphical user interface by writing graphics data to the first frame buffer device, an external display driver of the shared kernel then writes the graphics data to the first operating system frame buffer memory for output by the computing device, wherein the second operating system renders an associated second graphical user interface by writing the graphics data to the second frame buffer device, an external display driver of the shared kernel then writes the graphics data to the second operating system frame buffer memory for output by the computing device [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63].

35. As per claim 21, Reeves discloses that the computing device comprises a personal computer [col. 4, lines 29-32] and further comprising: rendering, by the first operating system, the first application in the first frame buffer memory through the shared kernel [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63]; and rendering, by the second operating system, the second application in the second frame buffer memory through the shared kernel, each of the first and second frame buffer memories being associated with respective first and second frame buffer devices in the shared kernel, wherein the first operating system renders an

associated first graphical user interface by writing graphics data to the first frame buffer device, an external display driver of the shared kernel then writes the graphics data to the first operating system frame buffer memory for output by the computing device, wherein the second operating system renders an associated second graphical user interface by writing the graphics data to the second frame buffer device, an external display driver of the shared kernel then writes the graphics data to the second operating system frame buffer memory for output by the computing device [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63].

36. As per claim 22, Reeves discloses wherein the computing device comprises a processing module of a vehicle [col. 5, lines 8-20; in-dash car console] and further comprising: rendering, by the first operating system, the first application in the first frame buffer memory through the shared kernel [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63]; and rendering, by the second operating system, the second application in the second frame buffer memory through the shared kernel, each of the first and second frame buffer memories being associated with respective first and second frame buffer devices in the shared kernel, wherein the first operating system renders an associated first graphical user interface by writing graphics data to the first frame buffer device, an external display driver of the shared kernel then writes the graphics data to the first operating system frame buffer memory for output by the computing device, wherein the second operating system renders an associated second graphical user interface by writing the graphics data to the second frame buffer device, an external display driver of the shared kernel then writes the graphics data to the second operating system frame

buffer memory for output by the computing device [col. 2, lines 45-61; col. 16, lines 8-35; col. 20, line 44 – col. 21, line 63].

37. As per claim 23, Reeves discloses wherein at least one of the first and second applications is one of the following: a vehicle control application, application associated with at least one vehicle function, application related to handicap and accessibility graphical user interfaces, email client, web browser, communications application, game, entertainment application, satellite positioning system receiver applications, automotive navigation applications, medical information application, emergency service application, noise suppression application, news-related application, weather information-related application, biometric application, travel application, and utility application [Fig. 1, 6; col. 5, lines 21-42; col. 4, lines 29-40; col. 13, lines 41-44].

38. As per claim 25, Reeves discloses wherein the computing device is installed in a vehicle, wherein the first execution environment is a personal computing device operating system, wherein the second execution environment is vehicle processing system operating system, and further including a secondary terminal environment, wherein the second operating system is associated with the secondary terminal environment [col. 5, lines 8-20; in-dash car console].

39. As per claim 26, Reeves discloses wherein the computing device selects one of the first and second operating systems as a primary operating system based on whether or not the computing device is docked to another computing device [Fig. 8, 9].

40. As per claim 27, Reeves discloses wherein the selection of the processing resource is based on one or more of where a user selected software application is located, by which output device a user desires to access the selected software application, the application and operating system requirements of the selected software application as compared to the capabilities of each of the processing resources, and power levels in each of the processing resources [col. 7, lines 16-37].

41. As per claim 29, Reeves discloses wherein the first operating system is one of a MAC operating system, a Windows operating system, a Linux operating system, and a vehicle operating system and the second operating system is one of a mobile device operating system selected from an Android operating system, an Apple operating system, a Microsoft Windows operating system, a Nokia Symbian operating system, a Palm operating system, and an HP web operating system [col. 7, line 16 – col. 8, lines 5; the first operating system (desktop OS) includes distributions of Linux, Mac OS, and Windows 7, among many others; the second operating system (mobile OS) includes Android, Apple's iOS, Microsoft's Windows Mobile, Nokia's Symbian, and Palm's Palm OS and HP webOS].

42. As per claim 30, Reeves discloses wherein the first operating system is based on the shared kernel and the second operating system is not based on the shared kernel and wherein the first and second operating systems run independently on the shared kernel [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47; “In various embodiments of the present disclosure, desktop OS 160 runs in a separate execution environment from mobile OS 130. For example, mobile OS 130

may run in a root execution environment and desktop OS 160 may run in a secondary execution environment established under the root execution environment."; "Generally applications developed for mobile OS 130 do not run directly on desktop OS 160, and applications developed for desktop OS 160 do not run directly on mobile OS 130."; please also read the abstract that clearly says "A mobile computing device with a mobile operating system and desktop operating system running concurrently and independently on a shared kernel without virtualization."; col. 14, line 32 – col. 15, line 26; col. 16, lines 8-27; col. 17, line 1 – col. 18, line 61].

43. As per claim 31, Reeves discloses wherein the shared kernel is Linux-based and the second operating system is an Android operating system [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47; col. 14, line 32 – col. 15, line 26; col. 16, lines 8-27; col. 17, line 1 – col. 18, line 61].

44. As per claim 33, Reeves discloses wherein the first operating system is based on the shared kernel and the second operating system is not based on the shared kernel and wherein the first and second operating systems run independently on the shared kernel [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47; col. 14, line 32 – col. 15, line 26; col. 16, lines 8-27; col. 17, line 1 – col. 18, line 61].

45. As per claim 34, Reeves discloses wherein the first operating system is one of a MAC operating system, a Windows operating system, a Linux operating system, and a vehicle operating system and the second operating system is one of a mobile device operating system selected from an Android operating system, an Apple operating system, a Microsoft Windows operating system, a Nokia Symbian operating system, a Palm operating system, and an HP web operating system [col. 7, line 16 – col. 8, lines 5; the first operating system (desktop OS) includes distributions of Linux, Mac OS, and Windows 7, among many others; the second operating system (mobile OS) includes Android, Apple's iOS, Microsoft's Windows Mobile, Nokia's Symbian, and Palm's Palm OS and HP webOS].

46. As per claim 35, Reeves discloses wherein the first operating system is based on the shared kernel and the second operating system is not based on the shared kernel and wherein the first and second operating systems run independently on the shared kernel [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47; col. 14, line 32 – col. 15, line 26; col. 16, lines 8-27; col. 17, line 1 – col. 18, line 61].

47. As per claim 36, Reeves discloses wherein the shared kernel is Linux-based and the second operating system is an Android operating system [col. 2, lines 35-44; col. 10, line 15 -- col. 11, line 47; col. 14, line 32 – col. 15, line 26; col. 16, lines 8-27; col. 17, line 1 – col. 18, line 61].

Conclusion

48. 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 SURESH SURYAWANSHI whose telephone number is (571)272-3668. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. 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.

/SURESH SURYAWANSHI/
Primary Examiner, Art Unit 2118

Notice of References Cited	Application/Control No. 13/679,459	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner SURESH SURYAWANSHI	Art Unit 2118	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-8,898,443	11-2014	Reeves et al.	713/1
*	B	US-8,683,496	03-2014	Reeves et al.	719/319
*	C	US-8,819,180	08-2014	Reeves et al.	709/218
*	D	US-8,957,905	02-2015	Reeves et al.	345/541
*	E	US-8,963,939	02-2015	Yusupov et al.	345/541
*	F	US-8,726,294	05-2014	Benedek et al.	719/313
*	G	US-8,819,705	08-2014	Reeves et al.	719/318
*	H	US-8,933,949	01-2015	Reeves et al.	345/522
	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

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 12/03/2014

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

EXAMINER	
MITCHELL, NATHAN A	
ART UNIT	PAPER NUMBER
2641	

DATE MAILED: 12/03/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/679,857	11/16/2012	Christopher P. Ricci	6583-231	3691

TITLE OF INVENTION: SHARING APPLICATIONS/MEDIA BETWEEN CAR AND PHONE (HYDROID)

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	03/03/2015

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 12/03/2014
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.
13/679,857	11/16/2012	Christopher P. Ricci	6583-231	3691

TITLE OF INVENTION: SHARING APPLICATIONS/MEDIA BETWEEN CAR AND PHONE (HYDROID)

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	03/03/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
MITCHELL, NATHAN A	2641	455-420000

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. _____

Ford Ex. 1002 Page 728 of 1178

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.
13/679,857	11/16/2012	Christopher P. Ricci	6583-231	3691

111285 7590 12/03/2014

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

EXAMINER	
MITCHELL, NATHAN A	

ART UNIT	PAPER NUMBER
2641	

DATE MAILED: 12/03/2014

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. 13/679,857	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner NATHAN MITCHELL	Art Unit 2641	AIA (First Inventor to File) Status No

-- 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 *amendment filed 9/26/2014*.
   ☐ 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).
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 _____.

/NATHAN MITCHELL/
Primary Examiner, Art Unit 2641

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 02/02/2015

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

EXAMINER	
CHERY, DADY	
ART UNIT	PAPER NUMBER
2461	

DATE MAILED: 02/02/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/679,878	11/16/2012	Christopher P. Ricci	6583-232	6219

TITLE OF INVENTION: IN-CLOUD CONNECTION FOR CAR MULTIMEDIA

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	05/04/2015

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 02/02/2015
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.
13/679,878	11/16/2012	Christopher P. Ricci	6583-232	6219

TITLE OF INVENTION: IN-CLOUD CONNECTION FOR CAR MULTIMEDIA

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	05/04/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
CHERY, DADY	2461	709-201000

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. _____

Ford Ex. 1002 Page 733 of 1178

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.
13/679,878	11/16/2012	Christopher P. Ricci	6583-232	6219

111285 7590 02/02/2015

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

EXAMINER	
CHERY, DADY	

ART UNIT	PAPER NUMBER
2461	

DATE MAILED: 02/02/2015

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. 13/679,878	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner DADY CHERY	Art Unit 2461	AIA (First Inventor to File) Status No

-- 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 *01/21/2015*.
   ☐ 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 _____.

/DADY CHERY/
Primary Examiner, Art Unit 2461

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.
13/679,875	11/16/2012	Christopher P. Ricci	6583-233	2857

111285 7590 12/26/2014

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

EXAMINER
RABOVIANSKI, JIVKA A

ART UNIT	PAPER NUMBER
2426	

NOTIFICATION DATE	DELIVERY MODE
12/26/2014	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. 13/679,875	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JIVKA RABOVIANSKI	Art Unit 2426	AIA (First Inventor to File) Status No

-- 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 *10/17/2014*.

☐ 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) *21-30* 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) *21-30* 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 is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

2. This Office Action is in response to an AMENDMENT entered 10/17/2014 for the patent application 13/679875 filed on 10/16/2012.

Status of Claims

3. Claims 1 – 10 are canceled.

Claims 11 – 20 have been withdrawn.

Claims 21 – 30 are new added claims.

Drawings

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the limitations of claim 21 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the

replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. 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.

6. Claim 29 is 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. Claim 29 cites: "the first multimedia stream is cached while a second multimedia stream provided by a second multimedia source of the two or more multimedia sources is presented to the output of the vehicle". The specification does not describe the subject matter in the way was claimed in accordance to paragraph [0165] from the specification.

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.

7. Claims 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.

Claim 21 cites: "assigning, based on the determined type of multimedia content, multimedia sources having identical types of multimedia content to a specific category". It is not clear from the claim and from the specification how the process of assigning multimedia sources having identical types of multimedia content to a specific category is performed.

Claim 21 cites: "receiving an input selecting the specific category for the type of multimedia content". It is not clear from the claim and from the specification what "the specific category" is, and how the input selecting the specific category for the type of multimedia content is performed. For examination purposes, Examiner assumed that if the user selects radio then the type of the multimedia is audio.

Claim 21 cites: "automatically and based on rules stored in a memory … provide multimedia content to the output of the vehicle". It is not clear from the claim and from the specification what "rules" stored in a memory is applied to the output of the vehicle haw this process is automatized.

Claim 23 cites: "the specific category is presented to the user interface of the vehicle along with at least one other category presented to the user interface of the vehicle". It is not clear from the claim and from the specification how the specific category is presented to the user interface of the vehicle along with at least one other category. No drawings and explanation in the specification.

Claim 23 cites: "two or more multimedia sources are assigned to the specific category". It is not clear from the claim and from the specification what the specific category is and how the multimedia sources are assigned to the specific category.

Claim Rejections - 35 USC § 102

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 21 -30 are rejected under pre-AIA 35 U.S.C. 102(e) as being anticipated by Choi (USPPGPubN 20120242510, referred to as Choi).

Regarding claim 21:

Choi anticipates determining an availability of multimedia sources, wherein each of the multimedia sources is configured to provide multimedia content to an output of a vehicle (Choi, a vehicle communication connecting apparatus Fig. 3/ item 200 has a multiple sources: broadcast receiving module, external device, network interface, camera that can be output in the vehicle communication connecting apparatus, Fig. 3, [0090] – [0100], [0104]);

Choi anticipates receiving multimedia information from each of the multimedia sources determined to be available (Choi, the vehicle communication connecting apparatus receives signals from different sources which are available to the vehicle communication connecting apparatus he vehicle communication connecting apparatus, [0104] – [0109], Fig. 3);

Choi anticipates determining, based on the received multimedia information, a type of multimedia content provided by each of the multimedia sources (Choi, receiving of contents, such as movie, advertisement, game, VOD, broadcasting signal, [0111] and determining their type, Fig. 9, [0076]);

Choi anticipates assigning, based on the determined type of multimedia content, multimedia sources having identical types of multimedia content to a specific category (Choi, the media content "audio", "media", "cell phone" are assign to a specific category as shown in Figs. 5A, 5B – 9);

Choi anticipates presenting the specific category to a user interface of the vehicle, wherein the specific category identifies the type of multimedia content associated therewith (Choi, if the user selects media then the type of the multimedia is audio or video as shown in Figs. 4A - 9);

Choi anticipates receiving, via the user interface of the vehicle, an input selecting the specific category for the type of multimedia content

(Choi, if the user selects radio then the type of the multimedia is broadcast as shown in Figs. 4A - 9); and

Choi anticipates selecting, automatically and based on rules stored in a memory, a specific multimedia source from the multimedia sources associated with the specific category to provide multimedia content to the output of the vehicle (Choi, the selected content automatically is presented to the vehicle communication connecting apparatus as shown in Fig. 9 based on the rule related to the appropriate format or screen size, volume and speed, [0136], [0145], [0156], [0161]).

Regarding claim 22:

Choi anticipates the specific category is presented to the user interface of the vehicle as a user-selectable icon on a touch-sensitive display (Choi, Figs. 4A – 9, [0093], [0099], [0148]).

Regarding claim 23:

Choi anticipates the specific category is presented to the user interface of the vehicle along with at least one other category presented to the user interface of the vehicle (Choi, presenting a plurality of categories, Figs. 4A - 9).

Regarding claim 24:

Choi anticipates presenting a multimedia stream associated with the selected specific multimedia source on the output of the vehicle (Choi, MP3

player that is a source of multimedia is connected to the vehicle communication connecting apparatus, [0145], Fig. 9).

Regarding claim 25:

Choi anticipates two or more multimedia sources are assigned to the specific category (Choi, a plurality of connectable mobile terminals in forms of images and text-type identification information is displayed on the screen wherein the user can easily quickly find and select a device among the connectable, [0116], Fig. 4B).

Regarding claim 26:

Choi anticipates two or more multimedia streams are received from the two or more multimedia sources (Choi, a vehicle communication connecting apparatus Fig. 3/ item 200 has a multiple sources from which the streams are received: broadcast receiving module, external device, network interface, camera that can be output in the vehicle communication connecting apparatus, Fig. 3, [0090] – [0100], [0104]).

Regarding claim 27:

Choi anticipates the specific multimedia source is selected from the two or more multimedia sources based on at least one of signal strength, signal quality, signal-to-noise ratio, and channel quality associated with each of the two or more multimedia sources (Choi, selecting one or more mobile device sources based on a Wi-Fi signal strength, [0125], [0151], Fig. 5A).

Regarding claim 28:

Choi anticipates caching, a first multimedia stream provided by a first multimedia source of the two or more multimedia sources assigned to the specific category (Choi, the memory 213 for storing a program for processing, [0090], [0117]).

Regarding claim 29:

Choi anticipates the first multimedia stream is cached while a second multimedia stream provided by a second multimedia source of the two or more multimedia sources is presented to the output of the vehicle (Choi, the audio board includes a radio antenna configured to receive a radio signal/media, and a tape deck 221 configured to play an audio tape/cached media, [0094] – [0097]).

Regarding claim 30:

Choi anticipates determining, based on a change in signal information associated with the second multimedia source, to automatically present the cached first multimedia stream from the first multimedia source to the output of the vehicle (Choi, if the Wi-Fi signal strength is relatively strong the AP is typically be locatable by the vehicle communication connecting apparatus 200 and the information from the AP source can be presented [0125], Fig. 5B).

Response to Arguments

9. Applicant's arguments filed 10/17/2014 related to claims 21 -30 have been fully considered but are moot in view of the new ground of rejection. Amendment to the specification is acknowledged.

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 Moazzami 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

December 16, 2014

Notice of References Cited	Application/Control No. 13/679,875	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	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-2012/0242510 A1	09-2012	Choi et al.	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.
13/679,676	11/16/2012	Christopher P. Ricci	6583-234	7365

111285 7590 02/25/2015

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

EXAMINER
MISIURA, BRIAN THOMAS

ART UNIT	PAPER NUMBER
2111	

NOTIFICATION DATE	DELIVERY MODE
02/25/2015	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. 13/679,676	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner BRIAN MISIURA	Art Unit 2111	AIA (First Inventor to File) Status No

-- 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 *11/16/2012*.

☐ 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 *11/16/2012* 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 *10/17/13, 1/28/14, 7/2/14, 10/16/14*.

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

4) ☐ Other: _____.

The present application is being examined under the pre-AIA first to invent provisions.

Detailed Action

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.

Claim 19 recites the limitation “the communication network”. There is insufficient antecedent basis for this limitation in the claim.

Claim 19 is further 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 19 introduces “a feature control module” in line 3, and the subsequently introduces “a microprocessor executable feature control module” in line 6. Both instances of the “feature control module” will be treated as the same module.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 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 –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before

> the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-9, 11, 16, and 18-20 are rejected under pre-AIA 35 U.S.C. 102(e) as being anticipated by **Rector** et al. U.S. Patent No. 8,706,349.

Per Claim 1, Rector discloses a method of controlling access to one or more features of a communication device associated with a vehicle, comprising: establishing, by a microprocessor executable feature control module (**Col. 6 lines 20-35; CPU 202**), a connection with the communication device (**Col. 6 lines 36-60**), wherein the feature control module is configured to receive input from at least one sensor (**Col. 6 last paragraph – Col. 7 first paragraph; Col. 9 lines 6-36 discloses biometric and weight sensors.**); determining, by the feature control module, a location of the communication device relative to the vehicle (**Col. 6 last paragraph – Col. 7 first paragraph**); and controlling, via the feature control module and based at least partially on the location of the communication device, user access to one or more features of the communication device (**Col. 5 lines 31-43 discloses an example of restricting features of the drivers wireless communication device, Col. 8 lines 4-60 and Figure 4**).

Per Claim 2, Rector discloses the method of claim 1, wherein the connection between the communication device and feature control module is established via manually registering the communication device with the feature control module (**Col. 6 lines 12-17**).

Per Claim 3, Rector discloses the method of claim 1, wherein the connection between the communication device and feature control module is established via automatically registering the communication device with the feature control module (**Col. 4 lines 42-52**).

Per Claim 4, Rector discloses the method of claim 3, wherein automatically registering the communication device further comprises storing in a memory an identifier associated with the communication device (**Col. 6 lines 36-60**).

Per Claim 5, Rector discloses the method of claim 1, wherein the location of the communication device is determined to be inside the vehicle (**Col. 6 lines 39-41; Figure 4**).

Per Claim 6, Rector discloses the method of claim 5, wherein the inside of the vehicle is arranged into one or more areas, and wherein the communication device is located in a specific area of the one or more areas (**Figure 4 discloses different areas where communication devices are present. Numeral 420 represents a communication device in a first area that represents the vehicle driver. Numerals 424 and 426 represent an area that could be labelled passenger areas.**).

Per Claim 7, Rector discloses the method of claim 6, wherein the specific area is associated with an operating area of the vehicle (**Col. 7 line 63 – Col. 8 line 1**), and wherein the feature control module restricts access to the one or more features of the communication device (**Col. 8 lines 4-18; The driver settings for a specific driver can include the restricted feature access as described in Col. 5 lines 31-43.**).

Per Claim 8, Rector discloses the method of claim 6, wherein the specific area is associated with a passenger area of the vehicle (**Col. 8 lines 1-3; Figure 4 numerals 424 and 426**), and wherein the feature control module allows unrestricted access to the one or more features of the communication device (**Col. 8 discloses that the number and/or identity of a passenger may be used as input for determining the settings to apply to the vehicle/driver's communication device. However, the use of features on the passenger's communication devices is not restricted**).

Per Claim 9, Rector discloses the method of claim 1, further comprising: referring to one

or more rules relating to operating the communication device while operating the vehicle; and wherein user access to the one or more features of the communication device is controlled based at least partially on the one or more rules (**Col. 4 lines 59-63; Col. 6 lines 5-19; The settings represent a set of "rules" that can be implemented by a parent/guardian of a vehicle driver.**).

Per Claim 11, Rector discloses the method of claim 1, further comprising: referring to one or more settings associated with the communication device (**Col. 4 line 53 – Col. 5 line 6**); and wherein user access to the one or more features of the communication device is controlled based at least partially on the one or more settings (**Col. 5 lines 31-43**).

Per Claim 16, please refer to the rejection of claim 1 as the limitations are substantially similar. Additionally, Rector discloses a non-transitory computer readable medium embodiment (**Col. 14 lines 18-23**).

Per Claim 18, please refer to the rejection of claim 11 as the limitations are substantially similar.

Per Claim 19, Rector discloses a system for controlling access to one or more features of a communication device associated with a vehicle (**Col. 5 lines 31-43**), comprising: a feature control module (**CPU 202**), wherein the feature control module is configured to control the communication device via communication across the communication network (**Col. 6 lines 20-60**); at least one sensor (**Col. 6 last paragraph – Col. 7 first paragraph; Col. 9 lines 6-36 discloses biometric and weight sensors.**); and a microprocessor executable feature control module operable to: establish a connection with the communication device (**Col. 6 lines 36-60**), wherein the feature control module is configured to receive input from the at least one sensor (**Col. 6 last paragraph – Col. 7 first paragraph; Col. 9 lines 6-36 discloses biometric and weight sensors.**); determine a location of the communication device relative to the vehicle (**Col. 6 last**

paragraph – Col. 7 first paragraph); and control, based at least partially on the location of the communication device, user access to one or more features of the communication device (**Col. 5 lines 31-43 discloses an example of restricting features of the drivers wireless communication device, Col. 8 lines 4-60 and Figure 4**).

Per Claim 20, Rector discloses the system of claim 19, further comprising: a rules management server (**settings server 130**), wherein the rules management server is configured to control access to one or more rules relating to operating the communication device while operating the vehicle (**Col. 4 line 53 – Col. 5 line 6**); and wherein the method further comprises: referring to one or more rules relating to operating the communication device while operating the vehicle; and wherein user access to the one or more features of the communication device is controlled based at least partially on the one or more rules (**Col. 4 line 64 – Col. 5 line 6; Col. 5 lines 31-43**).

* * * * * * * *

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 9, 10, 19, and 20 rejected under pre-AIA 35 U.S.C. 102b as being anticipated by **O'Neil**, U.S. Patent No. 7,343,148.

Per Claim 1, O'Neil discloses a method of controlling access to one or more features of a communication device associated with a vehicle, comprising: establishing, by a microprocessor executable feature control module (**processor 2210**), a connection with

the communication device (**Col. 13 lines 28-43, Figure 22**), wherein the feature control module is configured to receive input from at least one sensor (**Col. 15 lines 9-25; processor 2210 receives input from the anti-skid sensor 2240**); determining, by the feature control module, a location of the communication device relative to the vehicle (**Col. 15 lines 26-38; Seat occupancy sensor 2250 provides input to processor 2210.**); and controlling, via the feature control module and based at least partially on the location of the communication device, user access to one or more features of the communication device (**Col. 15 lines 26-38; Restriction of phone use is performed by processor 2210 based at least partially on the input from seat occupancy sensor 2250.**).

Per Claim 9, O'Neil discloses the method of claim 1, further comprising: referring to one or more rules relating to operating the communication device while operating the vehicle (**Col. 8 line 12 – Col. 10 line 5; Figures 4-7**); and wherein user access to the one or more features of the communication device is controlled based at least partially on the one or more rules (**Figures 9-17 show the steps taken to implement the restrictions of the restriction tables.**).

Per Claim 10, O'Neil discloses the method of claim 9, wherein the one or more rules correspond to laws associated with a geographical region (**Col. 8 lines 15-53 teach determining a geographic region, which is then combined with the legal/customer restrictions of Figures 6 and 7 to determine the restriction applied to the communication device.**), and wherein the laws are stored in a memory (**tables 420, 425, 470**).

Per Claim 19, O'Neil discloses a system for controlling access to one or more features of a communication device associated with a vehicle, comprising: a feature control module (**processor 2210**), wherein the feature control module is configured to control the communication device via communication across the communication network (**Col. 12 line 57 – Col. 13 line 2**); at least one sensor (**Col. 15 lines 9-25; processor 2210**

receives input from the anti-skid sensor 2240); and a microprocessor executable feature control module operable to: establish a connection with the communication device (**Col. 13 lines 28-43, Figure 22**), wherein the feature control module is configured to receive input from the at least one sensor (**Col. 15 lines 9-25; processor 2210 receives input from the anti-skid sensor 2240**); determine a location of the communication device relative to the vehicle (**Col. 15 lines 26-38; Seat occupancy sensor 2250 provides input to processor 2210.**); and control, based at least partially on the location of the communication device, user access to one or more features of the communication device (**Col. 15 lines 26-38; Restriction of phone use is performed by processor 2210 based at least partially on the input from seat occupancy sensor 2250.**).).

Per Claim 20, O'Neil discloses the system of claim 19, further comprising: a rules management server (**legal restrictions server 150**), wherein the rules management server is configured to control access to one or more rules relating to operating the communication device while operating the vehicle (**Col. 5 first paragraph**); and wherein the method further comprises: referring to one or more rules relating to operating the communication device while operating the vehicle; and wherein user access to the one or more features of the communication device is controlled based at least partially on the one or more rules (**Col. 6 lines 6-21, Col. 12 lines 11-47**).

* * * * * * * * *

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 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.

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 pre-AIA 35 U.S.C. 103(a) 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 12-17 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over **O'Neil**, U.S. Patent No. 7,343,148 in view of **Fisk** et al. U.S. PGPUB No. 2013/0035063.

Per Claim 12, O'Neil discloses determining the vehicle state in the form of the anti-skid sensor 2240, which may indicate a need for heightened attention to driving conditions necessitating a termination of any ongoing call, and/or blocking further call originations until the anti-skid device reports changed circumstances (**Col. 15 lines 9-25**).

The findings of the anti-skid sensor may indicate an emergency situation in which increased attention by the driver is necessary, but it is not specifically a state of the vehicle.

However, Fisk similarly teaches limiting the functionality of a mobile device during the operation of a vehicle (**Paragraph 4**). Additionally, Fisk teaches detecting that an emergency situation has occurred, such as the deployment of one of the vehicle's airbags, and subsequently restoring some of the mobile device's functionalities that had previously been revoked (**Paragraph 33**).

- It would have been obvious to one having ordinary skill in the art at the time of the applicants claimed invention to implement the emergency state detection of Fisk with the communication device restriction system of O'Neil because a driver of a vehicle

in such an emergency state may need to contact emergency authorities to respond to an accident.

Per Claim 13, Fisk further teaches wherein the vehicle is determined to be in an emergency state, and wherein unrestricted user access to the one or more features of the communication device is allowed (**Paragraph 33**).

Per Claim 14, O'Neil teaches the method of claim 12, wherein the vehicle is determined to be in a parked state, and wherein unrestricted user access to the one or more features of the communication device is allowed (**Col. 14 lines 48-51**).

Per Claim 15, O'Neil teaches the method of claim 12, wherein the vehicle is determined to be in a moving state, and wherein user access to the one or more features of the communication device is restricted (**Col. 14 lines 48-51**).

Per Claim 16, please refer to the above rejection of claim 1 over O'Neil (102b rejection above) as the limitations are substantially similar. Additionally, Fisk discloses a computer readable medium embodiment for limiting the functionality of a mobile device during the operation of a vehicle (**Paragraphs 4, 6, 8, and 17**).

- It would have been obvious to one having ordinary skill in the art at the time of the applicants claimed invention to implement the teachings of O'Neil as a computer readable medium embodiment as taught by Fisk because it is well known in the art that hardware and software are logically equivalent (i.e. any instruction executed by hardware can also be simulated in software).

Per Claim 17, please refer to the above rejection of claims 9 and 10 over O'Neil (102b rejection above) as the limitations are substantially similar.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian T. Misiura whose telephone number is (571) 272-0889 - (Direct Fax: 571-273-0889). The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo can be reached on (571) 272-3642. 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).

/Brian T Misiura/
Primary Examiner, Art Unit 2111

Notice of References Cited	Application/Control No.	Applicant(s)/Patent Under Reexamination	
	Examiner	Art Unit	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-8,838,088	09-2014	Henn et al.	455/419
*	B	US-8,817,761	08-2014	Gruberman et al.	370/338
*	C	US-8,774,842	07-2014	Jones et al.	455/456.4
*	D	US-8,750,853	06-2014	Abramson et al.	455/418
*	E	US-8,706,349	04-2014	Rector et al.	701/36
*	F	US-8,706,143	04-2014	Elias, John Greer	455/456.4
*	G	US-8,644,165	02-2014	Saarimaki et al.	370/241
*	H	US-8,527,143	09-2013	Tan, Adrian	701/36
*	I	US-8,315,617	11-2012	Tadayon et al.	455/418
*	J	US-7,734,315	06-2010	Rathus et al.	455/569.2
*	K	US-7,474,264	01-2009	Bolduc et al.	342/463
*	L	US-7,343,148	03-2008	O'Neil, Joseph Thomas	455/404.2
*	M	US-6,690,940	02-2004	Brown et al.	455/456.4

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.	Applicant(s)/Patent Under Reexamination	
	Examiner	Art Unit	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,502,022	12-2002	Chastain et al.	701/36
*	B	US-2013/0157640	06-2013	Aycock, William Edward	455/418
*	C	US-2013/0035063	02-2013	FISK et al.	455/410
*	D	US-2011/0021213	01-2011	CARR, Jeffrey Thomas	455/456.4
*	E	US-2009/0224931	09-2009	Dietz et al.	340/670
*	F	US-2009/0082951	03-2009	Graessley, Joshua V.	701/200
*	G	US-2008/0305780	12-2008	Williams et al.	455/414.1
	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
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 10/29/2014

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

EXAMINER
CAMBY, RICHARD M

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 10/29/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/679,441	11/16/2012	Christopher P. Ricci	6583-244	8362

TITLE OF INVENTION: UNIVERSAL BUS IN THE CAR

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	01/29/2015

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 10/29/2014
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.
13/679,441	11/16/2012	Christopher P. Ricci	6583-244	8362

TITLE OF INVENTION: UNIVERSAL BUS IN THE CAR

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	01/29/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
CAMBY, RICHARD M	3661	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. _____

Ford Ex. 1002 Page 766 of 1178

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.
13/679,441	11/16/2012	Christopher P. Ricci	6583-244	8362

111285 7590 10/29/2014

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

EXAMINER	
CAMBY, RICHARD M	

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 10/29/2014

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. 13/679,441	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner RICHARD CAMBY	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *the RCE filed 10/21/14*.
   ☐ 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 _____.

/RICHARD CAMBY/
Primary Examiner, Art Unit 3661

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.
13/679,864	11/16/2012	Christopher P. Ricci	6583-245	5041

111285 7590 11/03/2014

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

EXAMINER	
TRINH, SONNY	
ART UNIT	PAPER NUMBER
2647	

NOTIFICATION DATE	DELIVERY MODE
11/03/2014	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. 13/679,864	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner SONNY TRINH	Art Unit 2647	AIA (First Inventor to File) Status No

-- 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 *10/21/14*.

☐ 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) *11-15* is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-4 and 16-20* is/are rejected.

8)☒ Claim(s) *5-10* 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 *11/16/12* 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

Election/Restrictions

1. Applicant's election of Group I (claims 1-10 and 16-20) in the reply filed on 10/21/2014 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 101

2. 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.

3. **Claims 16-20** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 16 discloses a computer readable medium product, however the specification indicates that said computer readable medium contain software implementations ([0023]), thus rendering said computer readable medium non-statutory. **Claims 17-20**, dependent from base claim 16, fail to resolve the deficiency of claim 16, thus the dependent claims are also rejected.

Claim Rejections - 35 USC § 103

4. The following is a quotation of pre-AIA 35 U.S.C. 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.

5. **Claims 1-4** are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Choi et al. (hereinafter "Choi"; US 20120242510).

Regarding **claim 1**, with reference to figures 1, 3 and corresponding text, Choi anticipates a method of receiving a signal at a vehicle communication system from a device (Choi, Figs. 1 and 3, [0035]); Choi anticipates automatically determining if the signal originates from inside the vehicle (Choi, automatically establish a wireless network with a terminal (for example, a vehicle-mounted navigator) mounted in a neighboring vehicle and/or a mobile terminal with short-range wireless communication network, [0101], [0113], Fig. 3, Fig. 4B); Choi anticipates if the signal originates from inside the vehicle, communicatively connecting the vehicle communication system to the device (Choi, when the detected mobile terminals are connected, a communication unit configured to receive in real time execution results, and a display unit configured to integrally display execution results of each application when execution results of a plurality of applications are provided, [0008], [0010], [0109], [0110], Fig. 3); receiving a request for a function (Choi, [0041], [0118]), Choi anticipates determining one or more of available resources, available devices, and available sources (Choi, the external

device interface 231 may be connected wirelessly or via a wire to an external device, such as a Digital Versatile Disk (DVD), a Bluray, a game player, a camera, a camcorder, a computer (laptop computer) and the like, [0104], Fig. 3), determining load (Choi, [0161]); selecting a device or source to provide the function; commanding the device or source to provide the function; and receiving the function (Choi, [0039]). Choi discloses the invention but does not explicitly disclose if the signal does not originate from inside the vehicle, rejecting the signal. However, since Choi discloses "…an input unit configured to receive a request for searching for mobile terminals present within a vehicle, a sensing unit configured to detect one or more mobile terminals allowed for a wired or wireless communication based on identification data of the mobile terminals in response to the request…" (Choi, [0008], please also see [0150]), it would have been obvious that if the signal does not originate from inside the vehicle then the system rejects the signal.

Regarding **claim 2**, Choi further discloses wherein the vehicle communication system includes a communication system in communication with one or more devices (Choi, [0049]).

Regarding **claim 3**, Choi further discloses wherein the device is a computing system (Choi, figure 2, [0047], "cellular phone, smart phone, laptop computer").

Regarding **claim 4**, Choi further discloses the method of claim 3, wherein the function is one of playing of multimedia data (Choi, [0054]), provisioning of access to the internet (Choi, [0055]), or providing access to e-mail (Choi, [0134]).

6. **Claims 16-17** are also rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Choi et al. (hereinafter "Choi"; US 20120242510).

Regarding **claim 16**, Choi discloses a computer readable medium having stored thereon computer-executable instructions (Choi, [0087]), the computer executable instructions causing a processor to execute a method for providing a universal bus (Choi, [0040]), the computer-executable instructions comprising: instructions to receive a request for a function; instructions to determine one or more of available resources, available devices (Choi, [0041], [0114]-[0115], [0118]), and available sources (such as road guidance, multimedia etc. [0046]); instructions to determine load on the one or more available resources, available devices, and available sources (such as map, video [0046] or Email, [0134]); instructions to select a device or source to provide the function [0046]). Choi discloses the invention but does not explicitly disclose the instructions to command the device or source to provide the function; and instructions to receive the function. However, since Choi discloses "…a sensing unit configured to detect one or more mobile terminals allowed for a wired or wireless communication based on identification data of the mobile terminals in response to the request…a communication unit configured to receive in real time execution results of applications being executed in the respective connected mobile terminals, and a display unit configured to integrally display execution results of each application when execution results of a plurality of applications are provided…" (Choi, [0010]), it would have been obvious that the system includes the instructions to command the device or source to provide the function; and instructions to receive the function.

Regarding **claim 17**, Choi further discloses wherein the vehicle communication system includes: at least one wireless LAN component (Choi, [0055], [0109]) and wherein at least one device connects through the wireless LAN component ([0109]; two or more BLUETOOTH transceivers (Choi, [0040], two transceivers are inherent for the Bluetooth device to connect and communicate); a communication system comprising: two or more communication modules (Choi, [0049]); a signal processor (Choi, [0087]).

Allowable Subject Matter

7. **Claims 5-10** 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.

Regarding **claim 5,** the applied reference(s) fail(s) to disclose or render obvious the method of claim 4, wherein determining the load comprises one of: determining a number of input/output messages sent between a device and vehicle communication system; or analyzing information sent to the vehicle communication system by the device.

Claims 6-10 depend on claim 5 and are similarly objected.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny TRINH whose telephone number is 571-272-7927 (M-F from 7:00 Am to 3:30 Pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay MAUNG can be reached on 571-272-7882. 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.

/Sonny TRINH/
Primary Examiner, Art Unit 2647

10/30/14

Notice of References Cited	Application/Control No. 13/679,864	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner SONNY TRINH	Art Unit 2647	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2012/0242510	09-2012	Choi et al.	340/988
*	B	US-2014/0032014	01-2014	DeBiasio et al.	701/2
*	C	US-8,761,673	06-2014	Sakata, Ryuuji	455/41.2
*	D	US-2012/0071097	03-2012	Matsushita et al.	455/41.2
*	E	US-2007/0015485	01-2007	DeBiasio et al.	455/345
	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

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 03/03/2015

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

EXAMINER
TRINH, SONNY

ART UNIT	PAPER NUMBER
2647	

DATE MAILED: 03/03/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/679,864	11/16/2012	Christopher P. Ricci	6583-245	5041

TITLE OF INVENTION: MOBILE HOT SPOT/ROUTER/APPLICATION SHARE SITE OR NETWORK

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	06/03/2015

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 03/03/2015
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.
13/679,864	11/16/2012	Christopher P. Ricci	6583-245	5041

TITLE OF INVENTION: MOBILE HOT SPOT/ROUTER/APPLICATION SHARE SITE OR NETWORK

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	06/03/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
TRINH, SONNY	2647	455-041200

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. _____

Ford Ex. 1002 Page 780 of 1178

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.
13/679,864	11/16/2012	Christopher P. Ricci	6583-245	5041

111285 7590 03/03/2015

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

EXAMINER	
TRINH, SONNY	
ART UNIT	PAPER NUMBER
2647	

DATE MAILED: 03/03/2015

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. 13/679,864	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner SONNY TRINH	Art Unit 2647	AIA (First Inventor to File) Status No

-- 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 *amendment, Arguments/Remarks filed 02/03/15*.
   ☐ 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 *1-10 and 16-20*. 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 _____.

/SONNY TRINH/
Primary Examiner, Art Unit 2647

DETAILED ACTION

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

This application is in condition for allowance except for the presence of claims 11-15 directed to inventions non-elected without traverse. Accordingly, claims 11-15 have been cancelled.

Examiner's Amendment

2. The application has been amended as follows:

In the claims:

Please cancel **claims 11-15.**

This Examiner's amendment was necessary to cancel non-elected claims.

(End of Examiner's Amendment)

Allowable Subject Matter

3. **Claims 1-10, and 16-20** are allowed.

The following is an examiner's statement of reasons for allowance:

Regarding the sole independent claims 1-10, 16-20 the cited prior art fails to teach or suggest the claimed limitations with the reasons set forth in the Applicant's Remarks filed on 02/03/15.

CONCLUSION

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."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sonny TRINH whose telephone number is 571-272-7927.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay MAUNG can be reached on 571-272-7882. 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).

/Sonny TRINH/

Primary Examiner, Art Unit 2647

02/23/15

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.
13/679,476	11/16/2012	Christopher P. Ricci	6583-247	2650

111285 7590 01/16/2015

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

EXAMINER
WILLIAMS, JEFFERY L

ART UNIT	PAPER NUMBER
2495	

NOTIFICATION DATE	DELIVERY MODE
01/16/2015	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

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/679,476	RICCI ET AL.	
	Examiner	Art Unit	
	JEFFERY WILLIAMS	2495	

All participants (applicant, applicant's representative, PTO personnel):

(1) *JEFFERY WILLIAMS*. (3)_____.

(2) *RICHARD ZELENKA*. (4)_____.

Date of Interview: *02 July 2014*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☐ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☒112 ☒102 ☐103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1*.

Identification of prior art discussed: *Yakes*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Examiner and applicant's representative discussed amendments to overcome the rejections under 35 USC 112. No agreement was reached regarding the patentability of the claims over the prior art.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/JEFFERY WILLIAMS/ Primary Examiner, Art Unit 2495	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Office Action Summary	Application No. 13/679,476	Applicant(s) RICCI ET AL.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	AIA (First Inventor to File) Status No

-- 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* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, 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 *10/20/14*.

☐ 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 – 6, 8 – 18, and 21 – 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 – 6, 8 – 18, and 21 – 23* 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 *11/16/12* 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/08) Paper No(s)/Mail Date *10/20/14*.

3) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *7/2/14* .

4) ☐ Other: _____.

DETAILED ACTION

This action is in response to the communication filed on 7/31/14.

All objections and rejections not set forth below have been withdrawn.

Claims 1 – 6, 8 – 18, and 21 – 23 are pending.

Any references to applicant's specification are made by way of applicant's U.S. pre-grant printed patent publication.

The present application is being examined under the pre-AIA first to invent provisions.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/31/14 has been entered.

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.

Claim 15 is 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.

Specifically, claim 15 is indefinite in scope because the terms "station" and “movement” appear ambiguous within the context of the claim and the terms "authorized" and "unauthorized" appear to be arbitrary and relative without a clear standard for interpretation. The examiner points out that it is unclear as to what kind of "station" the claims are referencing. A "station” could represent physical devices such as workstations and base stations or logical locations/signals such as listening/viewing stations/channels. Furthermore, different interpretations of "station” would require different interpretations of “movement” and how such movement is “detected”. For example, movement from station to station could represent physical displacement or could represent a logical channel switching or selection. Finally, the claims are unclear as any reference point for characterizing a station as "authorized" and "unauthorized". The examiner points out that the applicant's disclosure fails to provide any clear basis for interpreting the claim language.

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 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 1 – 5, 8 – 14, and 18 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Yakes et al. (Yakes), US 2003/0158638 A1.

Regarding claim 1, as best understood in light of the above rejections, Yakes discloses:

a computational module selector to select a computational module form among plural computation modules in communication with the computational module selector to perform a selected task, operation, and/or function (e.g. Yakes, fig. 2:14, 16 - CPU). Herein, Yakes discloses a means, comprising a cpu with a control program, which selects between and operates a plurality of programmed instructions, i.e. modules.

Yakes does not explicitly state that *the selected computational module being the most current version or release of the selected computational module*.

However, Yakes teaches that the system components of the vehicle should be updated and upgraded when new ones become available (e.g. Yakes, par. 5, 400).

Thus, the examiner points out that it would have been obvious to one of ordinary skill in the art, in view of the teachings of Yakes in combination with logic and common sense, to realize that updated or “the current” versions of components should be used within the system.

Furthermore, Yakes discloses:

wherein the vehicle further comprises a network selector module to select one of plural communication networks local to the vehicle for transmitting a selected signal and wherein the network selector module selects one of plural communication networks local to the vehicle for transmitting a selected signal based on one or more of network/node status, signal/noise ratio, type of signal, available and/or unavailable bandwidth, network performance parameter(s), and quality of service, wherein the network selector module configures the selected signal in accordance with the selected network's transmission protocol (e.g. Yakes, fig. 2:16 – control program; par. 102, 103). Herein, Yates discloses a stored software program, i.e. “network selector module”, that enables the CPU to select and properly communicate between different communication networks based upon protocol (e.g. “type of signal”).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 2, Yakes discloses:

a plurality of processing modules, a first processing module being in an active mode whereby the first processing module is in primary control of at least most vehicle

functions and a second processing module being in a standby mode whereby the second processing module is ready to assume primary control of at least most vehicle functions, wherein the first and second processing modules are in wireless communication with one another, and wherein a state of the second processing module is maintained substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module (e.g. Yakes, fig. 2:14; par. 184, 185). Herein, the CPU may execute at least one module (i.e. primary control). Furthermore, information transfer for at least some of the modules is accomplished wirelessly.

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 3, Yakes discloses:

wherein the vehicle comprises an arbitration module to arbitrate hand-off conflicts between duplicated first and second processing modules and wherein the arbitration module selects one of the first and second processing modules to currently possess and/or own a token, the token indicating which processing module is an active processing module and/or which processing module is a standby processing module (e.g. Yakes, fig. 2:14, 16 - CPU). CPU's arbitrate the execution of tasks such as by semaphore.

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 4, Yakes discloses:

wherein the vehicle further comprises a health check module to determine a corresponding state of health of each of the duplicated first and second processing modules to perform at least one of critical and non-critical tasks, functions, and operations and wherein the health check module performs a check and/or test, in response wherein the health check module performs a check and/or test, in response to an internally generated interrupt and/or request to determine a selected processing module's ability to perform critical and/or non-critical vehicle tasks, functions, and/or operations, assign a score to the selected processing module based on the check and/or test results, and compare the score to one or more thresholds and/or to a score of a different processing module to determine a state of health to determine a state of health of the selected processing module (e.g. Yakes, par. 336).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 5, Yakes discloses:

wherein the vehicle further comprises a displayed object movement module to move displayed objects from a source input/output system to a target input/output system, the source and target input/output systems corresponding to different vehicle occupants and wherein the displayed object movement module selects the and wherein

the displayed object movement module selects the target input/output system from among plural input/output systems on board the vehicle based on input from a user of the source input/output system (e.g. Yakes, par. 357).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 8, Yakes discloses:

and wherein the diagnostic module provides the warning and/or error signal to the vehicle occupant and interactively communicates a likely cause of the warning and/or error signal to the occupant and receives a command from the occupant to contact one or more of an emergency service provider, an emergency responder, and a remotely located diagnostic service (e.g. Yakes, par. 91).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 9, Yakes discloses:

and wherein the remote control module is associated with one or more of the vehicle owner, a law enforcement authority, a lender associated with a loan having the vehicle as collateral, and a vehicle manufacturer and wherein the requested vehicle function, is executed or caused to be executed notwithstanding a contrary command from the vehicle operator (e.g. Yakes, par. 281).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 10, Yakes discloses:

and wherein the media controller, in a dependent mode, provides common content synchronously to each of the input/output systems and, in an independent mode, provides different content to different ones of the input/output systems (e.g. Yakes, par. 184).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 11, Yakes discloses:

and wherein the newly installed software and/or hardware and/or other component is one or more of an on-board sensor, a processing module or component thereof, a software application, a circuit board, an expansion module or component thereof, a critical or non-critical device, and a cellular upgrade module (e.g. Yakes, fig. 2).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 12, Yakes discloses:

wherein the computational module is selected from among plural computational modules, and wherein the plural computational modules comprise one or more vehicle processing devices and one or more occupant computational devices, the one or more occupant computational devices comprising one or more of a mobile phone, personal digital assistant, tablet computer, and laptop computer (e.g. Yakes, fig. 2; par. 297).

Regarding claim 13, Yakes discloses:

wherein the computational module is selected from among plural computational modules, and wherein the plural computational modules comprise multiple software applications corresponding to different versions, releases, and/or vendors of a common type of software application (e.g. Yakes, fig. 2; par. 5, 400). The software modules comprise different types of functions and times of release (i.e. different versions).

Regarding claim 14, Yakes discloses:

wherein the vehicle further comprises a network security module to isolate a component encountering a security breach and/or isolate a primary processing module from one or more other components in a local vehicle network and wherein the network security module filters and/or prohibits communications between the isolated one of the component and/or processing module with other network components, wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, fig. 19; par. 277, 403, 404). The system comprises software

means for detecting failures and isolating processing modules by turning off inputs and outputs and replicating the failed modules elsewhere within the system.

Regarding claim 18, Yakes discloses:

wherein the vehicle further comprises a social networking module to enable processing modules of different vehicles to wirelessly connect to exchange vehicle information, wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, fig. 34, 35; par. 185).

Claims 6, 16, and 21 – 23 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Yakes in view of Yousefi et al. (Yousefi), US 2012/0110356 A1.

Regarding claim 6, Yakes discloses a vehicle software system for monitoring a vehicle and receiving media signals from outside sources. However, Yakes does not appear to disclose a media filter module.

Yousefi also discloses a vehicle software system for monitoring a vehicle and for receiving media signals. Furthermore Yousefi discloses:

a media filter module to apply a selected rule to filter third party sourced signals received by a vehicle processing module for presentation to a vehicle occupant via a corresponding input/output system and wherein the selected rule is one or more of a whitelist, blacklist, user preference, sensed occupant context, and/or governing federal,

state, provincial, and/or local law and/or regulation applicable to a current sensed spatial location of the vehicle, wherein each of the afore-mentioned modules are stored in a non- transient, tangible computer readable memory (e.g. Yousefi, fig. 107:1752; par. 572, 576, 577).

It would have been obvious to one of skill in the art to employ the media filter teachings of Yousefi within the vehicle software system of Yakes. This would have been obvious because one of ordinary skill in the art would have been motivated by the advantages of flexibility in considering the preferences or requirements of the vehicle and/or vehicle occupants when receiving media.

Regarding claim 21, it is rejected, at least, for the same reasons noted above, and furthermore because Yakes discloses:

a computational module selector to select a computational module form among plural computation modules in communication with the computational module selector to perform a selected task, operation, and/or function (e.g. Yakes, fig. 2:14, 16 - CPU). Herein, Yakes discloses a means, comprising a cpu with a control program, which selects between and operates a plurality of programmed instructions, i.e. modules.

wherein the vehicle further comprises a network selector module to select one of plural communication networks local to the vehicle for transmitting a selected signal and wherein the network selector module selects one of plural communication networks local to the vehicle for transmitting a selected signal based on one or more of

network/node status, signal/noise ratio, type of signal, available and/or unavailable bandwidth, network performance parameter(s), and quality of service; wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, fig. 2:16 – control program; par. 102, 103). Herein, Yates discloses a stored software program, i.e. "network selector module", that enables the CPU to select between different communication networks based upon protocol (e.g. "type of signal").

wherein the vehicle further comprises a social networking module to enable processing modules of different vehicles to wirelessly connect to exchange vehicle information (e.g. Yakes, fig. 34; par. 179, 185, 205). Herein, Yates discloses a stored software element, i.e. "social networking module", which enables the vehicle modules to exchange, over a wireless network, information with other vehicle modules.

Yakes discloses a system of software modules for monitoring a vehicle, such as by video from a camera (e.g. Yakes, par. 180, 184). However, Yakes does not appear to disclose caching streaming media within the system.

Yousefi also discloses a system for monitoring a vehicle using video from a camera. Furthermore Yousefi discloses:

wherein the vehicle further comprises a network controller module to cache automatically streaming media in response to a vehicle state change, function, and/or operation … (e.g. Yousefi, fig. 60, 61; par. 155, 320, 342 - 345). Herein, Yousefi discloses that automatically steaming media, such as camera footage, may be cached in the event of a change in vehicle state or operation.

and wherein the network controller module caches automatically streaming media in response to the vehicle state changing from a parked state to an unparked state (e.g. Yousefi, fig. 60, 61; par. 346, 347). Herein, Yousefi discloses that automatically steaming media, such as camera footage, may be cached in the event a parked vehicle becomes unsettled or otherwise involved within a collision (i.e. unparked). Furthermore, the examiner notes that while Yousefi does not explicitly state that a collision results in movement or motion, one of ordinary skill will logically recognize in light of physical principle that a collision may result in motion of the parked vehicle.

It would have been obvious to one of ordinary skill in the art to employ the teachings of media recording methods of Yousefi within the system of Yakes. This would have been obvious because one of ordinary skill in the art would have been motivated by the advantages of security and evidence gathering.

wherein each of the computational module selector, computation modules, network controller module, social networking module and the network selector module are stored in non-transient, tangible computer readable memory (e.g. Yakes, par. 419, 420).

Regarding claim 23, the examiner notes that the applicant's recitations of a "selector module", "network controller module" and "social networking module" invoke the 35 USC 112, 6th paragraph because the terms do not apply to any specific structure and the applicant does further define their structure within the claim by the recitation of

"implemented substantially in software". However, for the applicant's benefit, the examiner notes that if the applicant had intended for the claim language to be interpreted as reciting software modules, and not according to any specific means disclosed within the applicant's specification, then the examiner finds claim 23 to be rejected, at least, for the same reasons as claim 21.

Yakes discloses a system of software modules for monitoring a vehicle, such as by video from a camera (e.g. Yakes, par. 180, 184). However, Yakes fails to disclose software that checks for available processing power among computation modules and external devices and offloads tasks, operations, and/or functions.

Yousefi also discloses a system for monitoring a vehicle using video from a camera. Furthermore Yousefi discloses software that checks for available processing power among computation modules and external devices and offloads tasks, operations, and/or functions (e.g. Yousefi, fig. 20, fig. 21; par. 208, 209, 610 – 613).

It would have been obvious to one of ordinary skill in the art to incorporate the load balancing teachings of Yousefi within the system of Yates because one of skill would have been motivated by the advantages of increased processing flexibility.

Regarding claims 16 and 22, they comprises essentially similar recitations as found within claims 6, 21 and 23, and they are rejected, at least, for the same reasons.

Claim 17 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Yakes in view of Breed et al. (Breed), US 2007/0156317 A1.

Regarding claim 17, Yakes discloses a vehicle software system for monitoring a vehicle. However, Yakes does not appear to disclose a presence reporting module to determine the presence or lack of presence of operators and occupants within the vehicle while the vehicle is in motion.

Breed also discloses a vehicle software system for monitoring a vehicle. Furthermore Breed discloses a presence reporting module that utilizes a selected communication channel to determine the presence or lack of presence of operators and occupants within the vehicle while the vehicle is in motion (e.g. Breed, fig. 1 – 4; par. 99, 145, 212).

It would have been obvious to one of skill in the art to employ the presence reporting teachings of Breed within the system of Yakes. This would have been obvious because one of skill in the art would have been motivated by the advantages of vehicle and occupant safety.

Response to Arguments

Applicant's arguments filed 7/31/14 have been fully considered but they are not persuasive.

Applicant argues or alleges essentially that:

…

For example, Yakes requires two on more communication networks, e.g. "each of the communication networks 1661-1663 may be formed of two or more communication networks to provide redundancy within each control system." See [0236]. In contrast, amended Claim 1 requires a "network selector module to select one of plural communication networks." …

…

(Remarks, pg. 10 – 12)

Examiner respectfully responds:

The examiner respectfully disagrees. Specifically, applicant's remarks are unpersuasive, at least, for the reason that Yakes discloses that each network **may** be formed of two or more networks, however, such is clearly not a requirement.

Applicant argues or alleges essentially that:

…

The dependent claims provide further reasons for allowance. For example, each a Claims 16 and 22 require "wherein the computational module selector continuously checks if excess processing power is available from at least among the plural computation modules, an expansion module and an external computational device." In

contrast, primary reference Yakes assigns computational resources based on vehicle operating mode …

…

(Remarks, pg. 12, 13)

Examiner respectfully responds:

The examiner respectfully disagrees. Specifically, applicant's remarks are unpersuasive, at least, for the reason that the claimed features have been rejected in view of the teachings of Yousefi.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFERY WILLIAMS whose telephone number is (571)272-7965. The examiner can normally be reached on 9:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Farid Homayounmerhr can be reached on 571-272-3739. 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.

/JEFFERY WILLIAMS/
Primary Examiner, Art Unit 2495

Notice of References Cited	Application/Control No. 13/679,476	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2007/0156317 A1	07-2007	Breed, David S.	701/045
*	B	US-2007/0103328 A1	05-2007	Lakshmanan et al.	340/686.6
*	C	US-6,302,438 B1	10-2001	Stopper et al.	280/735
*	D	US-7,019,641 B1	03-2006	Lakshmanan et al.	340/538
*	E	US-2010/0042498 A1	02-2010	Schalk, Thomas Barton	705/14.52
	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

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 04/03/2015

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

EXAMINER
ARTHUR JEANGLAUD, GERTRUDE

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 04/03/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/828,513	03/14/2013	Christopher P. Ricci	6583-247-CIP	2080

TITLE OF INVENTION: ON BOARD VEHICLE NETWORKING MODULE

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 04/03/2015
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.
13/828,513	03/14/2013	Christopher P. Ricci	6583-247-CIP	2080

TITLE OF INVENTION: ON BOARD VEHICLE NETWORKING MODULE

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
ARTHUR JEANGLAUD, GERTRUDE	3661	701-002000

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. _____

Ford Ex. 1002 Page 811 of 1178

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.
13/828,513	03/14/2013	Christopher P. Ricci	6583-247-CIP	2080

111285 7590 04/03/2015

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

EXAMINER	
ARTHUR JEANGLAUD, GERTRUDE	

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 04/03/2015

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. 13/828,513	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *The amendment filed on 3/19/15*.
   ☐ 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 and 22-29*. 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 _____.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

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 02/02/2015

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

EXAMINER
ESKANDARNIA, ARVIN

ART UNIT	PAPER NUMBER
2453	

DATE MAILED: 02/02/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/828,651	03/14/2013	Christopher P. Ricci	6583-247-CIP-2	6650

TITLE OF INVENTION: ON BOARD VEHICLE NETWORKING MODULE

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	05/04/2015

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 02/02/2015
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.
13/828,651	03/14/2013	Christopher P. Ricci	6583-247-CIP-2	6650

TITLE OF INVENTION: ON BOARD VEHICLE NETWORKING MODULE

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	05/04/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
ESKANDARNIA, ARVIN	2453	709-229000

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. _____

Ford Ex. 1002 Page 816 of 1178

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.
13/828,651	03/14/2013	Christopher P. Ricci	6583-247-CIP-2	6650

111285 7590 02/02/2015

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

EXAMINER	
ESKANDARNIA, ARVIN	

ART UNIT	PAPER NUMBER
2453	

DATE MAILED: 02/02/2015

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. 13/828,651	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner ARVIN ESKANDARNIA	Art Unit 2453	AIA (First Inventor to File) Status No

-- 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 *amendments filed on October 29, 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 *1-25*. 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 10/16/2014
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 _____.

/ARVIN ESKANDARNIA/
Primary Examiner, Art Unit 2453

1. The present application is being examined under the pre-AIA first to invent provisions.

This communication is responsive to the communication filed on 10/29/2014.

Information Disclosure Statement filed on 10/16/2014 has been considered by the examiner.

Claims 1-25 are allowed.

REASONS FOR ALLOWANCE

2. The following is an examiner's statement of reasons for allowance:

Witmer U.S. Publication No. 20120116678 A1 discloses a method for creating a digital representation of a transportation network, acquired probe traces are refined based on characteristics of the transportation network. Geographic objects associated with the transportation network are identified based on the refined probe traces. A digital geographic network is built based on the refined probe traces and identified geographic objects, and the digital representation of the transportation network is created by linking the identified geographic objects in the digital geographic network.

Gurusamy Sundaram U.S. Publication No. 20110106375 A1 discloses that various embodiments include a method and system for providing an integrated platform for entertainment, information, communication, control and computing applications in a vehicle. The system includes an in-vehicle computer residing in user's vehicle. The in-vehicle computer is used for user's entertainment and transfer of information between user's vehicle and other application servers such as original equipment manufacturers of the vehicle, online stores, toll booths, gas stations, etc. Information transfer and communication can also take place between the user's vehicles and other peer vehicles in its vicinity. The in-vehicle computer can further control vehicles' behavior by utilizing its

computing applications and interacting with vehicle's engine, engine controlling unit, air conditioning regulator, speedometer, fuel meter, gyrometer etc. so as to personalize the vehicle according to its user's needs and requirements. The in-vehicle computer also provides a platform to application developers for developing various applications such as games, user identification, GPS, traffic alerts, finger print scanning, voice conferencing social networking, blogging and the likes for the vehicles.

Prior arts taken alone or in combination fail to teach or suggest, satellite positioning system receiver in a selected vehicle to determine spatial position data to locate a current spatial position of the selected vehicle, a display panel to receive input from and provide output to an operator of the selected vehicle, at least one of an internal wireless network and/or bus-type network in the selected vehicle to convey messages between a microprocessor executable networking module and the display panel, a wireless interface in the selected vehicle to exchange wireless signals with one or more remote signal sources, a plurality of sensors in the selected vehicle to determine selected vehicle-related information;, a microprocessor in the selected vehicle; a computer readable medium in the selected vehicle, the computer readable medium comprising [[a]]the microprocessor executable networking module operable to that enables an on board processing modules module of the selected vehicle to wirelessly connect to a different privately owned vehicles vehicle to wirelessly connect to exchange wirelessly in a networking session vehicle-related information, wherein the networking module identifies one or more vehicles in wireless communication with the selected vehicle via the wireless interface and wherein an occupant selects one of the one or more of the

vehicles with which to initiate the networking session by identifying a license plate number of the different privately owned vehicle and/or by identifying one or more vehicle occupants of the different privately owned with which the occupant of the selected vehicle has a preexisting social networking relationship.

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

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See form 892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ARVIN ESKANDARNIA whose telephone number is (571)270-3205. The examiner can normally be reached on Monday - Thursday, 8:00AM-6:00PM (EST),.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Krista Zele can be reached on (571)272-7288. 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.

/ARVIN ESKANDARNIA/
Primary Examiner, Art Unit 2453
Date: January 26, 2015

Notice of References Cited	Application/Control No. 13/828,651	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner ARVIN ESKANDARNIA	Art Unit 2453	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2002/0023010 A1	02-2002	Rittmaster et al.	705/26
*	B	US-2002/0045484 A1	04-2002	Eck et al.	463/42
*	C	US-2004/0255123 A1	12-2004	Noyama et al.	713/176
*	D	US-2005/0130744 A1	06-2005	Eck et al.	463/043
*	E	US-2005/0153760 A1	07-2005	Varley, John A.	463/001
*	F	US-2011/0106375 A1	05-2011	Gurusamy Sundaram, Vishnu	701/33
*	G	US-2012/0116678 A1	05-2012	Witmer, James Alan	702/5
	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.
13/828,860	03/14/2013	Christopher P. Ricci	6583-247-CIP-4	1055

111285 7590 02/27/2015

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

EXAMINER
AFRIFA-KYEI, ANTHONY D

ART UNIT	PAPER NUMBER
2682	

NOTIFICATION DATE	DELIVERY MODE
02/27/2015	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. 13/828,860	Applicant(s) RICCI ET AL.	
	Examiner ANTHONY D. AFRIFA-KYEI	Art Unit 2682	AIA (First Inventor to File) Status No

-- 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 *11/16/2011*.

☐ 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) *1-33* 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) *1-33* 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 *See Continuation Sheet*.

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

4) ☐ Other: _____.

Continuation of Attachment(s) 2). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :07/03/2014,10/18/2013,10/20/2014.

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

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 11, 22, and 33 recite the limitation "the media controller" in these dependent claims. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 3-5, 7-10, 12,14-16,18-21, 23, 25-27, and 29-32 are rejected under pre-AIA 35 U.S.C. 102(b) based upon a public use or sale of the invention. Tabe (US 6782240 B1)

In regards to claim 1, Tabe discloses a system for a vehicle, with a microprocessor executable network controller that is operable to store media intended for a vehicle occupant in response to a vehicle function (Column 3, lines 52-56; Column 5, lines 8-10; Column 12, lines 8-9).

In regards to claim 3, Tabe discloses the media being stored in response to the vehicle function wherein the function is executing a request from an on board input/output system corresponding to the vehicle occupant to store media on a first channel while the input/output is providing media on a second channel to the vehicle occupant and the input/output changing from the first channel to the second channel causing auto automatically the media of the first channel to be stored while the input/output system providing media on the second channel to the second channel to the vehicle occupant (Column 9, lines 9-14; Column 11, lines 44-47). This is done by the Megtel system broadcast regular radio/internet media via I/O system corresponding to the occupant, as an incoming call arrives to the megtel system, the radio/internet media is bypassed and replaced by the incoming call to the occupant/driver and taken upon acceptance.

In regards to claim 4, Tabe discloses the media being stored in response to the change in vehicle location wherein the vehicle location changes from a first vehicle location corresponding to a first set of laws to a second vehicle location corresponding to a set of second laws, wherein the second set of laws restrict media and/or communication session type that maybe provided to the vehicle occupant (Column 5, line 60-Column 6, line 6). This is done when the vehicle is in an area for example

Maryland and makes/receives local calls using local phone numbers, the calls will be billed and received accordingly as local calls. However, when the vehicle is moved to a new location such as New Jersey, the Megtel restricts the method of calling/ receiving numbers by eliminating phone company numbers and implementing a tag number plus ID-code dialing in order to avoid long distance billing.

In regards to claim 5, Tabe discloses the media being audio, and the occupant being the vehicle operator (Column 3, lines 63-65)

In regards to claim 7, Tabe discloses the media being stored in response to the vehicles occupant, wherein the media is from a first media source, while a second media from a second media source is presented to the vehicle occupant(Column 3, line 2-Column 4, line 2). The driver may enable an incoming call from a second media via an I/O system, while media from another source such as radio may be temporarily put on hold.

In regards to claim 8, Tabe discloses the media being stored in response to the request of the vehicle occupant the media source of the first media, while the second media is provided to the vehicle occupant by an on-board I/O system, the first and the second media being from a common media source (Column 11, lines 42-49; Column 12, lines 1-9). This protocol is done in one instance an incoming call may be ignored by the occupant of which a message is stored for later retrieval. Simultaneously, an incoming call may be received right after the message is stored of which the occupant may request to receive. Both the received call and the stored message are both from the same source being telephonic frequency protocol.

In regards to claim 9, Tabe discloses the media being stored for a first I/O system associated with a first occupant, but not for a second I/O system associated with a second vehicle occupant (Column 9, lines 6-9; Column 18, lines14-25). This is done by one driver inputting their cellphone into a slot in the vehicle Megtel system and uploading the phones settings to cater to one driver. Furthermore if a second driver enters the vehicle, their cell phone will have settings designated specifically to their phone.

In regards to claim 10, Tabe discloses the on board I/O system corresponding to the vehicle occupant receives a multimedia stream and wherein a first media channel but not a second media channel of the multimedia channel is stored while the second media channel is provided to selected I/O system (Column 11, lines 42-47). This protocol is done when the occupant's vehicle is streaming a radio broadcast, wherein an incoming internet message is received; the radio broadcast is put on hold whilst the internet message is displayed to the user.

In regards to claim 12, Tabe discloses a system for a vehicle, with a microprocessor executable network controller that is operable to store media intended for a vehicle occupant in response to a vehicle function (Column 3, lines 52-56; Column 5, lines 8-10; Column 12, lines 8-9).

In regards to claim 14, Tabe discloses the media being stored in response to the vehicle function wherein the function is executing a request from an on board input/output system corresponding to the vehicle occupant to store media on a first channel while the input/output is providing media on a second channel to the vehicle

occupant and the input/output changing from the first channel to the second channel causing auto automatically the media of the first channel to be stored while the input/output system providing media on the second channel to the second channel to the vehicle occupant (Column 9, lines 9-14; Column 11, lines 44-47). This is done by the Megtel system broadcast regular radio/internet media via I/O system corresponding to the occupant, as an incoming call arrives to the megtel system, the radio/internet media is bypassed and replaced by the incoming call to the occupant/driver and taken upon acceptance.

In regards to claim 16, Tabe discloses the media being audio, and the occupant being the vehicle operator (Column 3, lines 63-65).

In regards to claim 18, Tabe discloses the media being stored in response to the vehicles occupant, wherein the media is from a first media source, while a second media from a second media source is presented to the vehicle occupant (Column 3, line 2-Column 4, line 2). The driver may enable an incoming call from a second media via an I/O system, while media from another source such as radio may be temporarily put on hold.

In regards to claim 19, Tabe discloses the media being stored in response to the request of the vehicle occupant the media source of the first media, while the second media is provided to the vehicle occupant by an on-board I/O system, the first and the second media being from a common media source (Column 11, lines 42-49; Column 12, lines 1-9). This protocol is done in one instance an incoming call may be ignored by the occupant of which a message is stored for later retrieval. Simultaneously, an

incoming call may be received right after the message is stored of which the occupant may request to receive. Both the received call and the stored message are both from the same source being telephonic frequency protocol.

In regards to claim 20, Tabe discloses the media being stored for a first I/O system associated with a first occupant, but not for a second I/O system associated with a second vehicle occupant (Column 9, lines 6-9; Column 18, lines14-25). This is done by one driver inputting their cellphone into a slot in the vehicle Megtel system and uploading the phones settings to cater to one driver. Furthermore if a second driver enters the vehicle, their cell phone will have settings designated specifically to their phone.

In regards to claim 21, Tabe discloses the on board I/O system corresponding to the vehicle occupant receives a multimedia stream and wherein a first media channel but not a second media channel of the multimedia channel is stored while the second media channel is provided to selected I/O system (Column 11, lines 42-47). This protocol is done when the occupant's vehicle is streaming a radio broadcast, wherein an incoming internet message is received; the radio broadcast is put on hold whilst the internet message is displayed to the user.

In regards to claim 23, Tabe discloses a system for a vehicle, with a microprocessor executable network controller that is operable to store media intended for a vehicle occupant in response to a vehicle function (Column 3, lines 52-56; Column 5, lines 8-10; Column 12, lines 8-9).

In regards to claim 25, Tabe discloses the media being stored in response to the vehicle function wherein the function is executing a request from an on board input/output system corresponding to the vehicle occupant to store media on a first channel while the input/output is providing media on a second channel to the vehicle occupant and the input/output changing from the first channel to the second channel causing auto automatically the media of the first channel to be stored while the input/output system providing media on the second channel to the second channel to the vehicle occupant (Column 9, lines 9-14; Column 11, lines 44-47). This is done by the Megtel system broadcast regular radio/internet media via I/O system corresponding to the occupant, as an incoming call arrives to the megtel system, the radio/internet media is bypassed and replaced by the incoming call to the occupant/driver and taken upon acceptance.

In regards to claim 26, Tabe discloses the media being stored in response to the change in vehicle location wherein the vehicle location changes from a first vehicle location corresponding to a first set of laws to a second vehicle location corresponding to a set of second laws, wherein the second set of laws restrict media and/or communication session type that maybe provided to the vehicle occupant (Column 5, line 60-Column 6, line 6). This is done when the vehicle is in an area for example Maryland and makes/receives local calls using local phone numbers, the calls will be billed and received accordingly as local calls. However, when the vehicle is moved to a new location such as New Jersey, the Megtel restricts the method of calling/ receiving

numbers by eliminating phone company numbers and implementing a tag number plus ID-code dialing in order to avoid long distance billing.

In regards to claim 27, Tabe discloses the media being audio, and the occupant being the vehicle operator (Column 3, lines 63-65).

In regards to claim 29, Tabe discloses the media being stored in response to the vehicles occupant, wherein the media is from a first media source, while a second media from a second media source is presented to the vehicle occupant(Column 3, line 2-Column 4, line 2). The driver may enable an incoming call from a second media via an I/O system, while media from another source such as radio may be temporarily put on hold.

In regards to claim 30, Tabe discloses the media being stored in response to the request of the vehicle occupant the media source of the first media, while the second media is provided to the vehicle occupant by an on-board I/O system, the first and the second media being from a common media source (Column 11, lines 42-49; Column 12, lines 1-9). This protocol is done in one instance an incoming call may be ignored by the occupant of which a message is stored for later retrieval. Simultaneously, an incoming call may be received right after the message is stored of which the occupant may request to receive. Both the received call and the stored message are both from the same source being telephonic frequency protocol.

In regards to claim 31, Tabe discloses the media being stored for a first I/O system associated with a first occupant, but not for a second I/O system associated with a second vehicle occupant (Column 9, lines 6-9; Column 18, lines14-25). This is done

by one driver inputting their cellphone into a slot in the vehicle Megtel system and uploading the phones settings to cater to one driver. Furthermore if a second driver enters the vehicle, their cell phone will have settings designated specifically to their phone.

In regards to claim 32, Tabe discloses the on board I/O system corresponding to the vehicle occupant receives a multimedia stream and wherein a first media channel but not a second media channel of the multimedia channel is stored while the second media channel is provided to selected I/O system (Column 11, lines 42-47). This protocol is done when the occupant's vehicle is streaming a radio broadcast, wherein an incoming internet message is received; the radio broadcast is put on hold whilst the internet message is displayed to the user.

Claim Rejections - 35 USC § 103

6. The following is a quotation of pre-AIA 35 U.S.C. 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.

7. Claims 2,13 and 24 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Tabe (US 6782240 B1) in view of Nakamura et al. (US 20090279839 A1).

Tabe fails to disclose the media is stored in response the vehicle state change from park to drive. Nakamura on the other hand discloses a driver not being able to view a given multimedia whilst the vehicle is in motion (drive), and can only view the multimedia when the vehicle is no longer capable of moving (park) (Paragraph 7). It is therefore obvious to one of ordinary skill in the art to combine Nakamura modified with Tabe in order to further ensure driver safety.

8. Claims 6, 17, and 28 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Tabe (US 6782240 B1) in view of Jaisimha et al. (US 20120274459 A1).

Tabe fails to disclose a response with respect to a signal parameter falling below a selected signal-to-noise ratio. Jaisimha on the other hand discloses adjusting signal-to-noise ratio being adjusted as to how the signal is broadcast to user (Paragraphs 31-34). It is therefore obvious to one of ordinary skill in the art to combine Tabe with Jaisimha in order to have consistent broadcast to a driver.

9. Claims 11, 22 and 33 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Tabe (US 6782240 B1) in view of Rappaport (US 20050042999 A1).

Tabe fails to disclose the media controller determining whether the media being cached as SPAM. However Rappaport discloses a vehicle network system recognizing any filtering any spam media being broadcast to the given vehicle (Paragraph 46). It is therefore obvious to one of ordinary skill in the art to combine Tabe with Rappaport in order to filter unwanted media efficiently.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTHONY D. AFRIFA-KYEI whose telephone number is (571)270-7826. The examiner can normally be reached on MON-FRI 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Bugg can be reached on 5712722998. 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.

/ANTHONY D AFRIFA-KYEI/
Examiner, Art Unit 2682

/GEORGE BUGG/

Supervisory Patent Examiner, Art Unit 2682

Notice of References Cited	Application/Control No. 13/828,860	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner ANTHONY D. AFRIFA-KYEI	Art Unit 2682	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,782,240	08-2004	Tabe, Joseph A	455/66.1
*	B	US-2005/0042999	02-2005	Rappaport, Theodore S.	455/307
*	C	US-2012/0274459	11-2012	Jaisimha et al.	340/438
*	D	US-2009/0279839	11-2009	Nakamura et al.	386/46
	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

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 11/26/2014

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

EXAMINER
LIPMAN, JACOB

ART UNIT	PAPER NUMBER
2434	

DATE MAILED: 11/26/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/829,505	03/14/2013	Christopher P. Ricci	6583-247-CIP-8	3596

TITLE OF INVENTION: ON BOARD VEHICLE MEDIA CONTROLLER

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	02/26/2015

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 11/26/2014
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.
13/829,505	03/14/2013	Christopher P. Ricci	6583-247-CIP-8	3596

TITLE OF INVENTION: ON BOARD VEHICLE MEDIA CONTROLLER

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	02/26/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
LIPMAN, JACOB	2434	726-001000

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. _____

Ford Ex. 1002 Page 842 of 1178

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.
13/829,505	03/14/2013	Christopher P. Ricci	6583-247-CIP-8	3596

111285 7590 11/26/2014

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

EXAMINER	
LIPMAN, JACOB	

ART UNIT	PAPER NUMBER
2434	

DATE MAILED: 11/26/2014

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. 13/829,505	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JACOB LIPMAN	Art Unit 2434	AIA (First Inventor to File) Status No

-- 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 *the amendments filed 23 October 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 *1-33*. 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 7/3/14 & 10/16/14
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 _____.

/JACOB LIPMAN/
Primary Examiner, Art Unit 2434

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) submitted on 16 October 2014 has been considered by the examiner.

Allowable Subject Matter

2. Claims 1-33 are allowed following the examiner's amendment.

3. The examiner's amendment is as follows: Claim 16 is amended to depend on claim 9 instead of claim 1. Permission for this amendment was given by Douglas W. Swartz on 3 November 2014.

4. The following is an examiner's statement of reasons for allowance:

5. Several references were found that teach restricting data received by an IO system depending on its location within a vehicle, such as Tadayon et al., USPN 2011/0195699, Crowe, USPN 2009/0275321, Ayoub et al., USPN 2007/0120697, and others. After close review of these references, none discloses that manner of restriction as claimed, and there is no seen motivation to change the methods of the references to the instant method, it is not seen as being obvious to one of ordinary skill in the art.

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

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACOB LIPMAN whose telephone number is (571)272-3837. The examiner can normally be reached on M-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. 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.

/JACOB LIPMAN/
Primary Examiner, Art Unit 2434

Notice of References Cited	Application/Control No. 13/829,505	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner JACOB LIPMAN	Art Unit 2434	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2007/0120697	05-2007	Ayoub et al.	340/686.1
*	B	US-2011/0195699	08-2011	Tadayon et al.	455/418
	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

NOTICE OF ALLOWANCE AND FEE(S) DUE

111285 7590 11/21/2014

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

EXAMINER
ARTHUR JEANGLAUDE, GERTRUDE

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 11/21/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/829,718	03/14/2013	Christopher P. Ricci	6583-247-CIP-10	1406

TITLE OF INVENTION: ON BOARD VEHICLE DIAGNOSTIC MODULE

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	02/23/2015

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 11/21/2014
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.
13/829,718	03/14/2013	Christopher P. Ricci	6583-247-CIP-10	1406

TITLE OF INVENTION: ON BOARD VEHICLE DIAGNOSTIC MODULE

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	02/23/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
ARTHUR JEANGLAUDE, GERTRUDE	3661	701-029400

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. _____

Ford Ex. 1002 Page 850 of 1178

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.
13/829,718	03/14/2013	Christopher P. Ricci	6583-247-CIP-10	1406

111285 7590 11/21/2014

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

EXAMINER	
ARTHUR JEANGLAUDE, GERTRUDE	
ART UNIT	**PAPER NUMBER**
3661	

DATE MAILED: 11/21/2014

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. 13/829,718	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *the amendment filed on 10/27/14*.
   ☐ 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 *1-24*. 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 _____.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

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 11/21/2014

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

EXAMINER
ARTHUR JEANGLAUDE, GERTRUDE

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 11/21/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/830,003	03/14/2013	Christopher P. Ricci	6583-247-CIP-13	7921

TITLE OF INVENTION: OCCUPANT SHARING OF DISPLAYED CONTENT IN 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	02/23/2015

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 11/21/2014
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.
13/830,003	03/14/2013	Christopher P. Ricci	6583-247-CIP-13	7921

TITLE OF INVENTION: OCCUPANT SHARING OF DISPLAYED CONTENT IN 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	02/23/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
ARTHUR JEANGLAUDE, GERTRUDE	3661	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. _____

Ford Ex. 1002 Page 855 of 1178

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.
13/830,003	03/14/2013	Christopher P. Ricci	6583-247-CIP-13	7921

111285 7590 11/21/2014

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

EXAMINER	
ARTHUR JEANGLAUDE, GERTRUDE	
ART UNIT	**PAPER NUMBER**
3661	

DATE MAILED: 11/21/2014

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. 13/830,003	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *the amendment filed on 10/27/14*.
   ☐ 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 *28-72*. 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 _____.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

The present application is being examined under the pre-AIA first to invent provisions.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Douglas W. Swartz (Reg # 37,739) on November 5, 2014.

The application has been amended as follows: In claim 28, line 10, change the word "the" to - - a - - before the word "source" first occurence.

In claim 43, line 12, change the word "the" to - - a - - before the word "source".

In claim 58, line 10, change the word "the" to - - a - - before the word "source".

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERTRUDE ARTHUR JEANGLAUDE whose telephone number is (571)272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas 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.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

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.
13/830,133	03/14/2013	Christopher P. Ricci	6583-247-CIP-15	1012

111285 7590 10/29/2014

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

EXAMINER	
ARTHUR JEANGLAUDE, GERTRUDE	
ART UNIT	PAPER NUMBER
3661	

NOTIFICATION DATE	DELIVERY MODE
10/29/2014	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

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/830,133	RICCI ET AL.	
	Examiner	Art Unit	
	GERTRUDE ARTHUR JEANGLAUDE	3661	

All participants (applicant, applicant's representative, PTO personnel):

(1) *GERTRUDE ARTHUR JEANGLAUDE*. (3)_____.

(2) *DOUGLAS W. SWARTZ Reg# 37,739*. (4)_____.

Date of Interview: *22 October 2014*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☒103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: _____.

Identification of prior art discussed: *YING U.S. PUB 20100235042*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Applicant argues that the prior art of Ying can not be combined since it does not teach duplicate processor in a vehicle wherein the first and second processors are in active and standby modes and that the second processor does not perform the full monitoring duties of the first processor when the first processor malfunctions or fails.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/GERTRUDE ARTHUR JEANGLAUDE/ Primary Examiner, Art Unit 3661	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

Office Action Summary	Application No. 13/830,133	Applicant(s) RICCI ET AL.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *10/10/14*.

☐ 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) *1-45* 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) *1-45* 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 *3/14/13* 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: _____.

Ford Ex. 1002 Page 864 of 1178

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Response to Amendment

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 pre-AIA 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 –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-45 are rejected under pre-AIA 35 U.S.C. 102(e) as being anticipated by Yousefi et al. (U.S. Pub No. 20120109446).

Regarding claim 1, Yousefi et al. disclose a vehicle (Fig. 2, vehicles 10, para [0130]), comprising: a plurality of processing modules (Fig. 3, a plurality of vehicle

control modules 38, para [0136]) to control a plurality of automated vehicle tasks, functions and/or operations (Fig. 3, vehicle control module 38 further includes an analog to digital converter and/or a digital to analog converter. Such devices may include a sensor, an actuator, an intelligent sensor, an intelligent actuator, an electronic control unit (ECU), and/or a control device, para [0139]), wherein a first processing module is in an active mode whereby the first processing module is in primary control of at least most automated vehicle tasks, functions and/or operations (Fig. 17, link manager 440 also indicates which of the links is the primary link and
which is the backup link, para [0193]) and a second processing module is in a standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]) whereby the second processing module is ready to assume primary control of the at least most automated vehicle tasks, functions and/or operations (Typically, packets will be processed via the primary link. if, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 2, Yousefi et al. disclose wherein the first and second processing modules, the processing modules are in disparate and spaced apart locations in the vehicle to provide redundancy in the event of a vehicle collision or a catastrophic event the processing modules are in wireless communication with one another (if the processing module 44 includes more than one processing device, the processing devices may be centrally located (e.g., directly coupled together via a wired and/or wireless bus structure), para [0143, 0174, 0153]), and wherein a state of the

second processing module is maintained substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 3, Yousefi et al. disclose wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an engine and/or power control unit (electronic engine control, para [0007]), transmission control unit (TCU) (transmission control, para [0007]), a door setting (door network node module, para [0321]), a window setting (window up/down actuator, para [0455]), a blind spot monitor (a mirror electronic control unit 162, a mirror actuator 164, a mirror sensor 166, para [0156]), an airbag deployment control unit (airbag sensor, airbag actuator, para [0166]), a collision sensor, a nearby object sensing system (collision indication, collision avoidance, para [0166]), a seat belt control unit, a sensor for a seat belt setting (a seat electronic control unit, para [0323]), a power source controller, an energy output sensor (second gauge for battery level, para[0309]), an engine temperature sensor (temperature sensors, para [0304]), oil pressure (oil level, para [0131]), hydraulic pressure, a headlight, an emergency light, a brake light (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the

break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a parking light, a fog light, an interior and/or passenger compartment light, a tail light, a vehicle control system sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a wireless network, a cellular data sensor (a cellular telephone interface, para [0160]), a steering sensor, a torque sensor (steering wheel network node module, para [0306]), an engine, power steering, a display panel, switch state control unit, and a brake control unit (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]).

Regarding claim 4, Yousefi et al. disclose the first and second processing modules are in disparate and spaced apart locations in the vehicle to provide redundancy in the event of a vehicle collision or other catastrophic event (0153, 0166), wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an emissions system (electronic modules for engine control, transmission control, antilock braking, body control, emissions control, para [0006]), a seating system controller and/or sensor (seat operation, para [0150]), an entertainment system (audio/video playback, para [0150]),

monitoring an ambient (outdoor) weather sensor (a climate electronic control unit 174, a climate actuator 176, a climate sensor 178, para [0156]), an odometer reading sensor, a trip mileage reading sensor, a road condition sensor, a radar transmitter/receiver output (radio frequency sensors 800 may be used as a localized radar system for the vehicle, para [0290]), a brake wear sensor, an oxygen sensor, an ambient lighting sensor, a vision system sensor (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a ranging sensor, a parking sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a heating, venting, and air conditioning (HVAC) system and/or sensor, a water sensor, an air-fuel ratio meter (environment control (e.g., air conditioning, heater, fan speed, etc.), para [0308]), a hall effect sensor, a microphone, a radio frequency (RF) sensor, and/or an infrared (IR) sensor (infrared sensors 924, radio frequency sensors 926, and/or touch sensors 928, para [0333]).

Regarding claim 5, Yousefi et al. disclose wherein the first and second processing modules are duplicated and further comprising an arbitration module to arbitrate hand-off conflicts between the duplicated first and second processing modules (link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 6, Yousefi et al. disclose wherein the arbitration module selects one of the first and second processing modules to currently possess and/or own a token, the token indicating at least one of (i) which processing module is an active processing module and/or which processing module is a standby processing module (link manager 440 also indicates which of the links is the primary link and which is the backup link. Typically, packets will be processed via the primary link, para [0193]) and (ii) which processing module is responsible for a selected set of processing tasks, functions, and/or operations associated with the token (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without toss of data, para [0193]).

Regarding claim 7, Yousefi et al. disclose wherein the first and second processing modules are duplicated (redundancy/backup modules 392, para [0175]) and further comprising a health check module to determine a corresponding state of health of each of the duplicated first and second processing modules (manager processing module determines that a communication medium coupling the active network fabric port to a corresponding active network fabric port of the other vehicle network fabric link module is broken (e.g., cable broke, HW failure, SW failure of port), para [0196, 0192] to perform at least one of critical and non-critical tasks, functions, and operations (determining the type of packet (e.g., mission critical, network data, info-entertainment, vehicle operation, etc.). Determining the type of packet can include

determining the type of content carried by the packet, i.e. the packet content type. Having identified the packet 418, and the packet content type, the local network management function 401 determines the processing for the packet 418 and then processes the packet 418 accordingly, para [0175]).

Regarding claim 8, Yousefi et al. disclose wherein the health check module performs a check and/or test, in response to an internally generated interrupt and/or request to determine a selected processing module's ability to perform critical and/or non-critical vehicle tasks, functions, and/or operations (link manager 440, alone or in combination with the processing module 438, monitors the "health" of the transmissions and receptions of packets via the active interconnecting port 444, para [0192]), assign a score to the selected processing module based on the check and/or test results, and/or compare the score to one or more thresholds and/or to a score of a different processing module to determine a relative and/or absolute state of health of the selected processing module (if the data rate of transmissions via the active interconnecting port 444 is lower than a desired threshold due to errors, other factors, or the cable is broken, then the link may be flagged as being in a degenerative state. If the degenerative state compares unfavorably to a threshold, the link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 9, Yousefi et al. disclose wherein the arbitration module, based on the relative and/or absolute state of health of each of the first and second processing modules selects one of the first and second processing modules as a primary

processing module in primary control of the at least most automated vehicle tasks, functions and/or operations (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]) and the other of the first and second processing modules as a secondary processing module in standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]).

Regarding claim 10, Yousefi et al. disclose wherein a hand-off procedure is activated whereby primary control is passed from the first processing module to the secondary processing module and the first processing module enters the standby mode (determining whether hot standby 454 (e.g., another use mode in which a backup link is used to convey the same packets as the active link) is active. If hot standby is not active, the processing module and/or link manager activates another port and retransmits any packets that may have been lost due to the link failure 456, para [0200]).

Regarding claim 11, Yousefi et al. disclose wherein the relative weighting of at least some tasks, functions and/or operations in assigning the score is a function of geographic location of the vehicle (retransmit the packet or request retransmission packet by the other vehicle network fabric link module based on a sliding scale of content type and traffic conditions (e.g., retransmit everything but entertainment under normal traffic conditions, only mission critical packets when network is very busy, etc.), para [0202]).

Regarding claim 12, Yousefi et al. disclose wherein, for a first set of tasks, functions, and/or operations, the first processing module is in primary control and the second processing module is in standby mode and, for a different second set of tasks, functions, and/or operations, the second processing module is in primary control and the first processing module is in standby mode (If hot standby is active for the link aggregation, the method continues by using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0203]).

Regarding claim 13, Yousefi et al. disclose wherein, in the standby mode, the second processing module at least one of (a) performs shadow processing of the at least most automated vehicle tasks, functions and/or operations (using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0230]) and (b) synchronizes stored time stamped processing state information with time-stamped processing state information regarding the at least most automated vehicle tasks, functions and/or operations (packet 704 and packet queues within a vehicle communication network. The packet 704 includes the preamble 706, start of frame 708, timestamp 710, packet type 712, para [0257]).

Regarding claim 14, Yousefi et al. disclose a non-transient, tangible computer readable medium comprising microprocessor executable instructions that, when executed (processors executing appropriate software and the like, para [0630]),

designate (a plurality of vehicle control modules 38, para [0136]) a first processing module as being in an active mode (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]) whereby the first processing module is in primary control of at least most automated vehicle tasks, functions and/or operations (Fig. 3, vehicle control module 38 further includes an analog to digital converter and/or a digital to analog converter. Such devices may include a sensor, an actuator, an intelligent sensor, an intelligent actuator, an electronic control unit (ECU), and/or a control device, para [0139]) and a second processing module as being in a standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]) whereby the second processing module is ready to assume primary control of the at least most automated vehicle tasks, functions and/or operations (Typically, packets will be processed via the primary link. If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 15, Yousefi et al. disclose the limitations as set forth (0153, 0166) and further disclose wherein the first and second processing modules are in wireless communication with one another (if the processing module 44 includes more than one processing device, the processing devices may be centrally located (e.g., directly coupled together via a wired and/or wireless bus structure), para [0143]), and wherein a state of the second processing module is maintained substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module (link manager 440

also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 16, Yousefi et al. disclose the limitations as set forth (0153, 0166) and further teaches wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an engine and/or power control unit (electronic engine control, para [0007]), transmission control unit (TCU) (transmission control, para [0007]), a door setting (door network node module, para [0321]), a window setting (window up/down actuator, para [0455]), a blind spot monitor (a mirror electronic control unit 162, a mirror actuator 164, a mirror sensor 166, para [0156]), an airbag deployment control unit (airbag sensor, airbag actuator, para [0166]), a collision sensor, a nearby object sensing system (collision indication, collision avoidance, para [0166]), a seat belt control unit, a sensor for a seat belt setting (a seat electronic control unit, para [0323]), a power source controller, an energy output sensor (second gauge for battery level, para [0309]), an engine temperature sensor (temperature sensors, para [0304]), oil pressure (oil level, para [0131]), hydraulic pressure, a headlight, an emergency light, a brake light (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of

service and/or if a component failure is likely to occur in the near future, para [0131]), a parking light, a fog light, an interior and/or passenger compartment light, a tail light, a vehicle control system sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a wireless network, a cellular data sensor (a cellular telephone interface, para [0160]), a steering sensor, a torque sensor (steering wheel network node module, para [0306]), an engine, power steering, a display panel, switch state control unit, and a brake control unit (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]).

Regarding claim 17, Yousefi et al. disclose wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an emissions system (electronic modules for engine control, transmission control, antilock braking, body control, emissions control, para [0006]), a seating system controller and/or sensor (seat operation, para [0150]), an entertainment system (audio/video playback, para [0150]), monitoring an ambient (outdoor) weather sensor (a climate electronic control unit 174, a climate actuator 176, a climate sensor 178, para [0156]), an odometer reading sensor, a trip mileage reading sensor, a road condition sensor, a radar transmitter/receiver output (radio frequency sensors 800 may be used as a localized radar system for the vehicle, para

[0290]), a brake wear sensor, an oxygen sensor, an ambient lighting sensor, a vision system sensor (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a ranging sensor, a parking sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a heating, venting, and air conditioning (HVAC) system and/or sensor, a water sensor, a air-fuel ratio meter (environment control (e.g., air conditioning, heater, fan speed, etc.), para [0308]), a hall effect sensor, a microphone, a radio frequency (RF) sensor, and/or an infrared (IR) sensor (infrared sensors 924, radio frequency sensors 926, and/or touch sensors 928, para 0333]

Regarding claim 18, Yousefi et al. disclose wherein the first and second processing modules are duplicated and further comprising an arbitration module to arbitrate hand-off conflicts between the duplicated first and second processing modules (link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 19, Yousefi et al. disclose wherein the arbitration module selects one of the first and second processing modules to currently possess and/or own a token, the token indicating at least one of (i) which processing module is an active processing module and/or which processing module is a standby processing module

(link manager 440 also indicates which of the links is the primary link and which is the backup link. Typically, packets will be processed via the primary link, para [0193]) and (ii) which processing module is responsible for a selected set of processing tasks, functions, and/or operations associated with the token (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 20, Yousefi et al. disclose wherein the first and second processing modules are duplicated (redundancy/backup modules 392, para [0175]) and further comprising a health check module to determine a corresponding state of health of each of the duplicated first and second processing modules (manager processing module determines that a communication medium coupling the active network fabric port to a corresponding active network fabric port of the other vehicle network fabric link module is broken (e.g., cable broke, HW failure, SW failure of port), para [0196]) to perform at least one of critical and non-critical tasks, functions, and/or operations (determining the type of packet (e.g., mission critical, network data, info-entertainment, vehicle operation, etc.). Determining the type of packet can include determining the type of content carried by the packet, i.e. the packet content type. Having identified the packet 418, and the packet content type, the local network management function 401 determines the processing for the packet 418 and then processes the packet 418 accordingly, para [0175]).

Regarding claim 21, Yousefl et al. disclose wherein the health check module performs a check and/or test, in response to an internally generated interrupt and/or request to determine a selected processing module's ability to perform critical and/or non-critical vehicle tasks, functions, and/or operations (link manager 440, alone or in combination with the processing module 438, monitors the "health" of the transmissions and receptions of packets via the active interconnecting port 444, para [0192]), assign a score to the selected processing module based on the check and/or test results, and/or compare the score to one or more thresholds and/or to a score of a different processing module to determine a relative and/or absolute state of health of the selected processing module (if the data rate of transmissions via the active interconnecting port 444 is lower than a desired threshold due to errors, other factors, or the cable is broken, then the link may be flagged as being in a degenerative state. If the degenerative state compares unfavorably to a threshold, the link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 22, Yousefi et al. disclose wherein the arbitration module, based on the relative and/or absolute state of health of each of the first and second processing modules selects one of the first and second processing modules as a primary processing module in primary control of the at least most automated vehicle tasks, functions and/or operations (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]) and the other of the first and second processing modules as a secondary processing module in standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]).

Regarding claim 23, Yousefi further teaches wherein a hand-off procedure is activated whereby primary control is passed from the first processing module to the secondary processing module and the first processing module enters the standby mode (determining whether hot standby 454 (e.g., another use mode in which a backup link is used to convey the same packets as the active link) is active. If hot standby is not active, the processing module and/or link manager activates another port and retransmits any packets that may have been lost due to the link failure 456, para [0200]).

Regarding claim 24, Yousefl et al. disclose wherein the relative weighting of at least some tasks, functions and/or operations in assigning the score is a function of geographic location of the vehicle (retransmit the packet or request retransmission packet by the other vehicle network fabric link module based on a sliding scale of content type and traffic conditions (e.g., retransmit everything but entertainment under normal traffic conditions, only mission critical packets when network is very busy, etc.), para [0202]).

Regarding claim 25, Yousefi et al. disclose wherein, for a first set of tasks, functions, and/or operations, the first processing module is in primary control and the second processing module is in standby mode and, for a different second set of tasks, functions, and/or operations, the second processing module is in primary control and the first processing module is in standby mode (If hot standby is active for the link aggregation, the method continues by using the replicated transmission for the failed

cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0203]).

Regarding claim 26, Yousefi et al. disclose wherein, in the standby mode, the second processing module at least one of (a) performs shadow processing of the at least most automated vehicle tasks, functions and/or operations (using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0230]) and (b) synchronizes stored time-stamped processing state information with time-stamped processing state information regarding the at least most automated vehicle tasks, functions and/or operations (packet 704 and packet queues within a vehicle communication network. The packet 704 includes the preamble 706, start of frame 708, timestamp 710, packet type 712, para [0257]).

Regarding claim 27, Yousefi et al. disclose a method (a vehicular communication network that includes a unified network fabric 32 (e.g., Ethernet-based), one or more communication links 34, para [0136]) comprising: designating, by a microprocessor executable arbitration module processors executing appropriate software and the like, para [0630]), a first processing module as being in an active mode (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]), whereby the first processing module is in primary control of at least most automated vehicle tasks, functions and/or operations (Fig. 3, vehicle control module 38 further includes an analog to digital converter and/or a digital to analog

converter. Such devices may include a sensor, an actuator, an intelligent sensor, an intelligent actuator, an electronic control unit (ECU), and/or a control device, para [0139]), and a second processing module as being in a standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]), whereby the second processing module is ready to assume primary control of the at least most automated vehicle tasks, functions and/or operations (Typically, packets will be processed via the primary link. If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 28, Yousefi et al. disclose wherein the first and second processing modules are in wireless communication with one another (if the processing module 44 includes more than one processing device, the processing devices may be centrally located (e.g., directly coupled together via a wired and/or wireless bus structure), para [0143]), and further comprising: maintaining a state of the second processing module substantially in synchronicity with a state of the first processing module to a enable a statefut failover from the first processing module to the second processing module (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0t93]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 29, Yousefi further teaches wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an engine and/or power control unit (electronic engine control, para [0007]), transmission control unit (TCU) (transmission control, para [0007]), a door setting (door network node module, para [0321]), a window setting (window up/down actuator, para [0455]), a blind spot monitor (a mirror electronic control unit 162, a mirror actuator 164, a mirror sensor 166, para [0156]), an airbag deployment control unit (airbag sensor, airbag actuator, para [0166]), a collision sensor, a nearby object sensing system (collision indication, collision avoidance, para [0166]), a seat belt control unit, a sensor for a seat belt setting (a seat electronic control unit, para [0323]), a power source controller, an energy output sensor (second gauge for battery level, para [0309]), an engine temperature sensor (temperature sensors, para [0304]), oil pressure (oil level, para [013t]), hydraulic pressure, a headlight, an emergency light, a brake light (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a parking light, a fog light, an interior and/or passenger compartment light, a tail light, a vehicle control system sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a wireless network, a cellular data sensor (a cellular telephone interface, para [0160]), a steering sensor, a torque sensor (steering wheel

network node module, para [0306]), an engine, power steering, a display panel, switch state control unit, and a brake control unit (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]).

Regarding claim 30, Yousefi et al. disclose the first and second processing modules are in disparate and spaced apart locations in the vehicle to provide redundancy in the event of a vehicle collision or other catastrophic event (0153, 0166), and wherein the plurality of automated vehicle tasks, functions and/or operations comprise monitoring, controlling and/or operating a plurality of the following: an emissions system (electronic modules for engine control, transmission control, antilock braking, body control, emissions control, para [0006]), a seating system controller and/or sensor (seat operation, para [0150]), an entertainment system (audio/video playback, para [0150]), monitoring an ambient (outdoor) weather sensor (a climate electronic control unit 174, a climate actuator 176, a climate sensor 178, para [0156]), an odometer reading sensor, a trip mileage reading sensor, a road condition sensor, a radar transmitter/receiver output (radio frequency sensors 800 may be used as a localized radar system for the vehicle, para [0290]), a brake wear sensor, an oxygen sensor, an ambient lighting sensor, a vision system sensor (a communication includes the vehicle 10 transmitting data regarding its operational status (e.g., number of hours

since last engine tune-up, wear & tear on the break system, brake fluid level, oil level, transmission fluid level, etc.). The automobile service provider 22 interprets the operational status data to determine if the vehicle 10 is in need of service and/or if a component failure is likely to occur in the near future, para [0131]), a ranging sensor, a parking sensor (general safety issues (e.g., turn signal, brake lights, etc.), para [0158]), a heating, venting, and air conditioning (HVAC) system and/or sensor, a water sensor, a air-fuel ratio meter (environment control (e.g., air conditioning, heater, fan speed, etc.), para [0308]), a hall effect sensor, a microphone, a radio frequency (RF) sensor, and/or an infrared (IR) sensor (infrared sensors 924, radio frequency sensors 926, and/or touch sensors 928, para [0333]).

Regarding claim 31, Yousefi et al. disclose wherein the first and second processing modules are duplicated and further comprising a microprocessor executable arbitration module to arbitrate hand-off conflicts between the duplicated first and second processing modules (link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 32, Yousefi et al. disclose wherein the arbitration module selects one of the first and second processing modules to currently possess and/or own a token, the token indicating at least one of (i) which processing module is an active processing module and/or which processing module is a standby processing module (link manager 440 also indicates which of the links is the primary link and which is the backup link. Typically, packets will be processed via the primary link, para

[0193]) and (ii) which processing module is responsible for a selected set of processing tasks, functions, and/or operations associated with the token (link manager 440 also determines a use mode such as backup transmissions and/or backup receptions of packets, para [0193]; If, however, the primary link has a failure (e.g., an unacceptable degenerative state or is broken), the packet can be processed from the backup link without loss of data, para [0193]).

Regarding claim 33, Yousefi et al. disclose wherein the first and second processing modules are duplicated (redundancy/backup modules 392, para [0175]) and further comprising a microprocessor executable health check module to determine a corresponding state of health of each of the duplicated first and second processing modules (manager processing module determines that a communication medium coupling the active network fabric port to a corresponding active network fabric port of the other vehicle network fabric link module is broken (e.g., cable broke, HW failure, SW failure of port), para [0196]) to perform at least one of critical and non-critical tasks, functions,and operations (determining the type of packet (e.g., mission critical, network data, info-entertainment, vehicle operation, etc.). Determining the type of packet can include determining the type of content carried by the packet, i.e. the packet content type. Having identified the packet 418, and the packet content type, the local network management function 401 determines the processing for the packet 418 and then processes the packet 418 accordingly, para [0175]).

Regarding claim 34, Yousefi et al. disclose wherein the health check module performs a check and/or test, in response to an internally generated interrupt and/or request to determine a selected processing module's ability to perform critical and/or non-critical vehicle tasks, functions, and/or operations (link manager 440, alone or in combination with the processing module 438, monitors the "health" of the transmissions and receptions of packets via the active interconnecting port 444, para [0192]), assign a score to the selected processing module based on the check and/or test results, and/or compare the score to one or more thresholds and/or to a score of a different processing module to determine a relative and/or absolute state of health of the selected processing module (if the data rate of transmissions via the active interconnecting port 444 is lower than a desired threshold due to errors, other factors, or the cable is broken, then the link may be flagged as being in a degenerative state. If the degenerative state compares unfavorably to a threshold, the link manager 440 may deactivate the current active interconnecting port and activate another interconnecting port 444, para [0192]).

Regarding claim 35, Yousefi et al. disclose wherein the arbitration module, based on the relative and/or absolute state of health of each of the first and second processing modules selects one of the first and second processing modules as a primary processing module in primary control of the at least most automated vehicle tasks, functions and/or operations (Fig. 17, link manager 440 also indicates which of the links is the primary link and which is the backup link, para [0193]) and the other of

the first and second processing modules as a secondary processing module in standby mode (Fig. 14, 17, redundancy-backup modules 392, para [0181]).

Regarding claim 36, Yousefi et al. disclose wherein a hand-off procedure is activated whereby primary control is passed from the first processing module to the secondary processing module and the first processing module enters the standby mode (determining whether hot standby 454 (e.g., another use mode in which a backup link is used to convey the same packets as the active link) is active, if hot standby is not active, the processing module and/or link manager activates another port and retransmits any packets that may have been lost due to the link failure 456, para [0200]).

Regarding claim 37, Yousefi et al. disclose wherein the relative weighting of at least some tasks, functions and/or operations in assigning the score is a function of geographic location of the vehicle (retransmit the packet or request retransmission packet by the other vehicle network fabric link module based on a sliding scale of content type and traffic conditions (e.g., retransmit everything but entertainment under normal traffic conditions, only mission critical packets when network is very busy, etc.), para [0202]).

Regarding claim 38, Yousefi et al. disclose wherein, for a first set of tasks, functions, and/or operations, the first processing module is in primary control and the second processing module is in standby mode and, for a different second set of tasks, functions, and/or operations, the second processing module is in primary control and

the first processing module is in standby mode (If hot standby is active for the link aggregation, the method continues by using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0203]).

Regarding claim 39, Yousefi et al. disclose wherein, in the standby mode, the second processing module at least one of (a) performs shadow processing of the at least most automated vehicle tasks, functions and/or operations (using the replicated transmission for the failed cable 466 (i.e., the backup transmission on the hot standby link). The method continues by setting up a new hot standby for a newly activated link 468, para [0230]) and (b) synchronizes stored time-stamped processing state information with time-stamped processing state information regarding the at least most automated vehicle tasks, functions and/or operations (packet 704 and packet queues within a vehicle communication network. The packet 704 includes the preamble 706, start of frame 708, time-stamp 710, packet type 712, para [0257]).

Regarding claims 40, 42, 44, Yousefi et al. disclose a driving history recorder containing operational information from sensors on board the vehicle, the driving history recorder having a crash survivable memory unit, an integrated controller and circuitry board, and one or more network interfaces to communicate with the first and/or second processing modules (See 0089, 0145, 0174, 0177,0153, 0166, 0232, 0350).

Regarding claims 41, 43, 45, Yousefi et al. disclose wherein the first and second processing modules are in disparate and spaced apart locations in the vehicle to

provide redundancy in the event of a vehicle collision or other catastrophic event and wherein one of the first and second processing modules is positioned in a rear portion of the vehicle and the other of the first and second processing module is positioned in a front portion of the vehicle (See 0153, 0166, 0350, 0555, 0556).

Response to Arguments

Applicant's arguments with respect to claims 1-45 have been considered but are moot because the arguments do not apply to any of the references being used in the current rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERTRUDE ARTHUR JEANGLAUDE whose telephone number is (571)272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas 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.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

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 03/03/2015

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

EXAMINER
ARTHUR JEANGLAUD, GERTRUDE

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 03/03/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/830,133	03/14/2013	Christopher P. Ricci	6583-247-CIP-15	1012

TITLE OF INVENTION: DUPLICATED PROCESSING IN 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	06/03/2015

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 03/03/2015
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.
13/830,133	03/14/2013	Christopher P. Ricci	6583-247-CIP-15	1012

TITLE OF INVENTION: DUPLICATED PROCESSING IN 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	06/03/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
ARTHUR JEANGLAUD, GERTRUDE	3661	701-041000

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. _____

Ford Ex. 1002 Page 893 of 1178

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.
13/830,133	03/14/2013	Christopher P. Ricci	6583-247-CIP-15	1012

111285 7590 03/03/2015

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

EXAMINER	
ARTHUR JEANGLAUD, GERTRUDE	

ART UNIT	PAPER NUMBER
3661	

DATE MAILED: 03/03/2015

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. 13/830,133	Applicant(s) RICCI ET AL.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *the amendment filed on 1/29/15*.
   ☐ 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 *1-45*. 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 *2/19/15* .
5. ☐ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

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.
14/468,055	08/25/2014	Christopher P. Ricci	6583-315-CON	5903

111285 7590 04/08/2015

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

EXAMINER
BUTLER, RODNEY ALLEN

ART UNIT	PAPER NUMBER
3667	

NOTIFICATION DATE	DELIVERY MODE
04/08/2015	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. 14/468,055	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner RODNEY BUTLER	Art Unit 3667	AIA (First Inventor to File) Status No

-- 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 *08/25/2014*.

☐ 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) *21-40* 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) *21-40* 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 *08/25/2014* 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 *10/20/2014 & 03/10/2015*.

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

4) ☐ Other: _____.

DETAILED ACTION

Status of the Application

1. The present application is being examined under the pre-AIA first to invent provisions.

Status of the Claims

2. This action is in response to the applicant's filing on August 25, 2014. Claims 21-40 are pending and examined below.

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. Claim 22-30 and 32-40 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.

Claims 22-30 depend from claim 1 which has been canceled, and claims 32-40 depend from claim 11 which has been canceled. Appropriate correction is required.

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent

and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO internet Web site contains terminal disclaimer forms which may be used. Please visit http://www.uspto.gov/forms/. The filing date of the application will determine what form should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

6. Claims 21-40 are rejected on the ground of nonstatutory double patenting over claims 1-20 of U.S. Patent No. 8,818,725 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter. Both the patent and the application are claiming a system to associate a stand-alone computing device and a vehicle and a method to associate a stand-alone computing device and a vehicle. The claim language used in both the patent and the application are substantially the same except for what appears to be corrections that should have been made in the parent application, now U.S. Patent No. 8,818,725.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

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

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 11/13/2014

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

EXAMINER
MITCHELL, NATHAN A

ART UNIT	PAPER NUMBER
2641	

DATE MAILED: 11/13/2014

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/679,887	11/16/2012	Christopher P. Ricci	6583-316	4340

TITLE OF INVENTION: IN-CAR COMMUNICATION BETWEEN 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	02/13/2015

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 11/13/2014
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.
13/679,887	11/16/2012	Christopher P. Ricci	6583-316	4340

TITLE OF INVENTION: IN-CAR COMMUNICATION BETWEEN 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	02/13/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
MITCHELL, NATHAN A	2641	455-420000

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. _____

Ford Ex. 1002 Page 904 of 1178

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.
13/679,887	11/16/2012	Christopher P. Ricci	6583-316	4340

111285 7590 11/13/2014

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

EXAMINER	
MITCHELL, NATHAN A	

ART UNIT	PAPER NUMBER
2641	

DATE MAILED: 11/13/2014

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. 13/679,887	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner NATHAN MITCHELL	Art Unit 2641	AIA (First Inventor to File) Status No

-- 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 *amendment filed 9/30/2014*.
   ☐ 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).
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 _____.

/NATHAN MITCHELL/
Primary Examiner, Art Unit 2641

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.
13/828,513	03/14/2013	Christopher P. Ricci	6583-247-CIP	2080

111285 7590 12/24/2014

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

EXAMINER
ARTHUR JEANGLAUDE, GERTRUDE

ART UNIT	PAPER NUMBER
3661	

NOTIFICATION DATE	DELIVERY MODE
12/24/2014	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. 13/828,513	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner GERTRUDE ARTHUR JEANGLAUDE	Art Unit 3661	AIA (First Inventor to File) Status No

-- 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 *12/4/14*.

☐ 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, 22-29* 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 and 22-29* 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 *3/14/13* 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: _____.

Ford Ex. 1002 Page 909 of 1178

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Response to Amendment

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 1-20, 22-29 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Subject Matter Eligibility Standard

When considering subject matter eligibility under 35 U.S.C. 101, it must be determined whether the claim is directed to one of the four statutory categories of invention, i.e., process, machine, manufacture, or composition of matter. If the claim does fall within one of the statutory categories, it must then be determined whether the claim is directed to a judicial exception (i.e., law of nature, natural phenomenon, and abstract idea), and if so, it must additionally be determined whether the claim is a patent-eligible application of the exception. If an abstract idea is present in the claim, any element or combination of elements in the claim must be sufficient to ensure that

the claim amounts to significantly more than the abstract idea itself. Examples of abstract ideas include fundamental economic practices; certain methods of organizing human activities; an idea itself; and mathematical relationships/formulas.

Alice Corporation Pty. Ltd. v. CLS Bank International, et aL, 573 U.S. __ (2014).

Analysis

The elements of this method *(in general)* are a plurality of known components for a vehicle and wherein a microprocessor executable remote control module operable to **receive a command from a requestor** to **configure and/or alter and/or determine a state of a selected vehicle component**, when **the requestor is authenticated** successfully by the remote control module, to determine whether the requestor is privileged to issue the command, and, when the successfully authenticated requestor is privileged to issue the command, **to configure and/or alter and/or determine** a state of the selected vehicle component, wherein a first requestor, **when authenticated successfully, is entitled to a first set of privileges to configure and/or alter and/or determine a state of a selected vehicle component and a second requestor**, when authenticated successfully, is entitled to a different second set of privileges **to configure and/or alter and/or determine a state of a selected vehicle component**. It appears that all these steps amount to human activities and are considered as abstract ideas. They provide no end result once the authenticated requestor configure or alter the state of the vehicle component. It can reasonably amount to organizing human activities and having mere instructions for implementing the abstract idea on a computer.

Part 1 :

Examples of abstract ideas referenced in Alice Corp. include:

•Fundamental economic practices

•Certain method of organizing human activities

•An idea of itself; and

•Mathematical relationships/formulas

In the instant case, Claims 1-20, 22-29 are directed to both an abstract idea or human activities, mathematical relationship/formula. Since an abstract idea is present in the claim the analysis continues onto part 2.

Part 2:

If an abstract idea is present in the claim, it must be determined whether any element or combination of the elements, in the claim is sufficient to ensure that the claim amounts to significantly more than the abstract idea itself. In other words, are there other limitations of in the claim that show a patent-eligible application of the abstract idea, e.g., more than a mere instruction to apply the abstract idea? Limitations referenced in the Alice Corp. that may be enough to qualify as "significantly more" **when recited in a claim with an abstract idea** include:

•Improvements to another technology or technical field

.Improvements to the functioning of the computer itself

•Meaningful limitations beyond generally linking the use of an abstract idea to a particular technological environment.

In the instant case, Claims 1-20, 22-29 which are directed to both an abstract idea/ human activities and mathematical relationship/formula, fail to identify a particular use or application and therefore are not enough to qualify as an improvement to a particular technology or technical field. The abstract idea of Claims 1-20, 22-29 only generally and broadly link a technological environment and is not particular of the environment or the technical field.

Response to Arguments

Applicant's arguments filed 12/4/14 have been fully considered but they are not persuasive. See reasons set forth above in the office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GERTRUDE ARTHUR JEANGLAUDE whose telephone number is (571)272-6954. The examiner can normally be reached on Monday-Friday from 8:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas 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.

/GERTRUDE ARTHUR JEANGLAUDE/
Primary Examiner, Art Unit 3661

Electronic Patent Application Fee Transmittal

Application Number:	13828960
Filing Date:	14-Mar-2013
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
First Named Inventor/Applicant Name:	Christopher P. Ricci
Filer:	Douglas W. Swartz/Amy Duarte
Attorney Docket Number:	6583-247-CIP-5

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:	22059392
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
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:	6583-247-CIP-5
Receipt Date:	14-APR-2015
Filing Date:	14-MAR-2013
Time Stamp:	16:28:40
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	3137
Deposit Account	191970
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		6583-247-CIP-5_IDS_04.pdf	273764 dac83ab76669b3f8f8634c2985016830accc9097	yes	7
	Multipart Description/PDF files in .zip description				
	Document Description		**Start**	**End**	
	Transmittal Letter		1	3	
	Information Disclosure Statement (IDS) Form (SB08)		4	7	
Warnings:					
Information:					
2	Other Reference-Patent/App/Search documents	6583-228_OA_10-28-2014.pdf	560230 b2372a3f0429422fd6fc89862a18ff9319112dc4	no	17
Warnings:					
Information:					
3	Other Reference-Patent/App/Search documents	6583-228_OA_03-17-2015.pdf	1057709 0039a4508c54d1803c82ca38a6f6a2a83fbfcf7f	no	30
Warnings:					
Information:					
4	Other Reference-Patent/App/Search documents	6583-231_NOA_12-03-2014.pdf	675466 8315058f1ac202f0d0144bbea9018bef4e93b8f5	no	5
Warnings:					
Information:					
5	Other Reference-Patent/App/Search documents	6583-232_NOA_02-02-2015.pdf	351931 70bc25c36da63f4282a8dc4b4c0e253bece d9812	no	5
Warnings:					
Information:					
6	Other Reference-Patent/App/Search documents	6583-233_FOA_12-26-2014.pdf	900978 d4bfa81e443d06c0048b074493b4b3ebe068b655	no	14
Warnings:					
Information:					

7	Other Reference-Patent/App/Search documents	6583-234_OA_02-25-2015.pdf	545471 3ebfdfba6f2b87153525b339b075ce7689958b07	no	14
Warnings:					
Information:					
8	Other Reference-Patent/App/Search documents	6583-244_NOA_10-29-2014.pdf	672578 f7fb39fdcdd84488f510cc3934d608f95a0ece26	no	5
Warnings:					
Information:					
9	Other Reference-Patent/App/Search documents	6583-245_OA_11-03-2014.pdf	658444 24061de1bd059f0e02a3e78d94a2d56e0becf61a	no	9
Warnings:					
Information:					
10	Other Reference-Patent/App/Search documents	6583-245_NOA_03-03-2015.pdf	411375 bb0b1065e166a3a089a7ff2446f578c84db9e51a	no	8
Warnings:					
Information:					
11	Other Reference-Patent/App/Search documents	6583-247_OA_01-16-2015.pdf	1868120 d274c8dc69a1e826d2a370b2c99650bee302a3bf	no	23
Warnings:					
Information:					
12	Other Reference-Patent/App/Search documents	6583-247-CIP_NOA_04-03-2015.pdf	355511 cf919ce0b4d99048308ffc46912439cc4b8bd54c	no	5
Warnings:					
Information:					
13	Other Reference-Patent/App/Search documents	6583-247-CIP-2_NOA_02-02-2015.pdf	510147 728841f6cb85ce7e42df9a7cc3c105809db65e02	no	10
Warnings:					
Information:					
14	Other Reference-Patent/App/Search documents	6583-247-CIP-4_OA_02-27-2015.pdf	525273 bed19c20ddbb51822e0df65f598b39300da127a0	no	16
Warnings:					
Information:					
15	Other Reference-Patent/App/Search documents	6583-247-CIP-8_NOA_11-26-2014.pdf	850287 15cd5f2391bb31c94aa8204c4f967d6bdef56878	no	8
Warnings:					
Information:					

16	Other Reference-Patent/App/Search documents	6583-247-CIP-10_NOA_11-21-2014.pdf	675787 0df30b144a3b7073c64991e510d9d60cec168df9	no	5
Warnings:					
Information:					
17	Other Reference-Patent/App/Search documents	6583-247-CIP-13_NOA_11-21-2014.pdf	791349 5eb73618340b2d6c389021908585d693d6094d56	no	7
Warnings:					
Information:					
18	Other Reference-Patent/App/Search documents	6583-247-CIP-15_OA_10-29-2014.pdf	2654153 c2e491674c0de498e854edf13e73afd9b44e6a86	no	31
Warnings:					
Information:					
19	Other Reference-Patent/App/Search documents	6583-247-CIP-15_NOA_03-03-2015.pdf	354782 b3d022740c001540d191eefd15f3ad05e6b6f758	no	5
Warnings:					
Information:					
20	Other Reference-Patent/App/Search documents	6583-315-CON_OA_04-08-2015.pdf	221883 85d68f9109c18d9ac67f17ec11c04452f9b587ef	no	6
Warnings:					
Information:					
21	Other Reference-Patent/App/Search documents	6583-316_NOA_11-13-2014.pdf	673584 ed1fd5cba6b85b306dadf857b565b4017a553d11	no	5
Warnings:					
Information:					
22	Other Reference-Patent/App/Search documents	6583-247-CIP_OA_12-24-2014.pdf	483585 099598fc5d7a9c890439ec90f4be3850ea6e2522	no	7
Warnings:					
Information:					
23	Fee Worksheet (SB06)	fee-info.pdf	31079 5b14f986fad6dcfc34221cbdab66ee9837421734	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	16103486		

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:

RICCI, Christopher P.

Serial No.: 13/828,960

Filed: March 14, 2013

Atty. File No.: 6583-247-CIP-5

Entitled: "ON BOARD VEHICLE NETWORK SECURITY"

Group Art Unit: 2496

Confirmation No.: 1085

Examiner: Amir Mehrmanesh

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

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/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. 14/657,934 filed 03/13/2015 (Attorney's Ref. No. 6583-247-CIP-8-CON)
- Serial No. 14/657,829 filed 03/13/2015 (Attorney's Ref. No. 6583-247-CIP-13-CON)
- Serial No. 14/659,255 filed 03/16/2015 (Attorney's Ref. No. 6583-244-CON)

☐ 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

Ford Ex. 1002 Page 922 of 1178

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: April 14, 2015

Ford Ex. 1002 Page 924 of 1178

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 06/05/2015

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

EXAMINER
MEHRMANESH, AMIR

ART UNIT	PAPER NUMBER
2496	

DATE MAILED: 06/05/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/828,960	03/14/2013	Christopher P. Ricci	6583-247-CIP-5	1085

TITLE OF INVENTION: ON BOARD VEHICLE NETWORK SECURITY

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	09/08/2015

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 06/05/2015
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.
13/828,960	03/14/2013	Christopher P. Ricci	6583-247-CIP-5	1085

TITLE OF INVENTION: ON BOARD VEHICLE NETWORK SECURITY

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	09/08/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
MEHRMANESH, AMIR	2496	726-028000

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. _____

Ford Ex. 1002 Page 926 of 1178

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.
13/828,960	03/14/2013	Christopher P. Ricci	6583-247-CIP-5	1085

111285 7590 06/05/2015

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

EXAMINER	
MEHRMANESH, AMIR	

ART UNIT	PAPER NUMBER
2496	

DATE MAILED: 06/05/2015

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. 13/828,960	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner AMIR MEHRMANESH	Art Unit 2496	AIA (First Inventor to File) Status No

-- 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 *Amendment filed 04/06/2015*.
   ☐ 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 *1-24*. 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 04/14/2015
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☒ Interview Summary (PTO-413), Paper No./Mail Date *05/29/2015* .
5. ☒ Examiner's Amendment/Comment
6. ☐ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/AMIR MEHRMANESH/
Primary Examiner, Art Unit 2496

DETAILED ACTION

1. The Amendment filed 11/18/2014 is acknowledged and entered.

Claims **1-24** are being considered on the merits.

Claim **1** has been amended.

The following claims **1-24** have been examined and are pending.

The present application is being examined under the pre-AIA first to invent provisions.

Information Disclosure Statement

2. The information disclosure statements (IDS) submitted on 04/14/2015 has been considered. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly an initialed and dated copy of Applicant's IDS form 1449 filed 04/14/2015 are attached to the instant Office action.

EXAMINER'S AMENDMENT

3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee. Authorization for this examiner's amendment was given in a telephone interview with Mr. Douglas W. Swartz (Reg. No. 37,739) on 05/29/2015.

Please **REPLACE CLAIM 1 WITH THE FOLLOWING**:

1. (Currently Amended) A vehicle, comprising:

a plurality of on board computational components;

a first security mechanism to enforce security measure and form a perimeter network logically including the plurality of on board computational components; and

a microprocessor executable network controller operable to (i) detect an instance of a breach of the security measure, (ii) determine whether a computational component affected by the breach of the security measure can be isolated from at least one on board computational component not affected by or potentially affected by the breach of the security measure, and ~~(ii)~~ (iii) when the computational component affected by the breach of the security measure can be isolated from the at least one on board computational component not affected by or potentially affected by the breach of the security measure, at least one of (a) isolate the at least one on board computational component not affected by or potentially affected by the security breach instance from the computational component affected by the security breach instance and (b) isolate the computational component affected by the security breach instance from the at least one on board computational component not affected by or potentially affected by the security breach instance, wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the security breach instance, (2) directing communications to and from the computational component affected by the security breach instance to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational

component affected by the security breach instance, and (4) activating a second security mechanism in response to the security breach instance.

Allowable Subject Matter

4. Applicant's arguments have been considered and are determined to be persuasive. Claims **1-24** are allowed.

In light of Applicant's Amendments and comments filed 04/06/2015, the Examiner here by withdraws the 35 U.S.C 112 rejections of claims 3, 5, 8, 11, 13, 16, 19, 21, and 24. Further in view of the amendment to claims 4, 12, and 20 the Examiner withdraws the 35 U.S.C 112 4th rejections of claims 4, 12, and 20.

Independent claims **1, 9, and 17** are allowed in view of this instant examiner's amendment, Applicant's amendment filed 04/06/2015, and for reasons argued by applicant in pages 13-18 of the Remarks, filed 04/06/2015. The dependent claims **2-8, 10-16, and 18-24** depend upon one of the allowed claims **1, 9, and 17** are therefore allowed by virtue of their dependencies.

No reason for allowance is needed as the record is clear in light of this instant Examiner's Amendment and applicant's arguments and amendment filed on 04/06/2015. See MPEP 1302.14(I).

None of the prior art of record, including the references cited in the Applicant's Information Disclosure Statement either taken by itself or in any combination, would have anticipated or made obvious the invention of the present application at or before the time it was filed.

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

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AMIR MEHRMANESH whose telephone number is (571)270-3351. The examiner can normally be reached on Mon-Thru 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Nalven can be reached on 571-272-3839. 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 .

/AMIR MEHRMANESH/
Primary Examiner, Art Unit 2496

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	13/828,960	RICCI, CHRISTOPHER P.	
	Examiner	Art Unit	
	AMIR MEHRMANESH	2496	

All participants (applicant, applicant's representative, PTO personnel):

(1) *AMIR MEHRMANESH*. (3)_____.

(2) *Mr. Douglas W. Swartz (Reg. No. 37,739)* . (4)_____.

Date of Interview: *29 May 2015*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☒ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☐112 ☐102 ☐103 ☒Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1*.

Identification of prior art discussed: *None*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

The Examiner called Mr. Swartz to discuss all the copending and all the patents in this application's family. Mr. Swartz kindly provided the list of all the applications (16 applications) to the Examiner for determining any potential double patenting. Mr. Swartz further agreed to a minor amendment to claim 1 to correct a typographical error. which resulted in this instant Examiner's Amendment.

Applicant recordation instructions: It is not necessary for applicant to provide a separate record of the substance of interview.

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/AMIR MEHRMANESH/ Primary Examiner, Art Unit 2496	

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

BIB DATA SHEET

CONFIRMATION NO. 1085

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
13/828,960	03/14/2013 RULE	726	2496	6583-247-CIP-5

APPLICANTS

FLEXTRONICS AP, LLC, San Jose, CA

INVENTORS

Christopher P. Ricci, Saratoga, CA;

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

This application is a CIP of 13/679,476 11/16/2012
which claims benefit of 61/560,509 11/16/2011
and claims benefit of 61/637,164 04/23/2012
and claims benefit of 61/663,335 06/22/2012
and claims benefit of 61/646,747 05/14/2012
and claims benefit of 61/653,275 05/30/2012
and claims benefit of 61/653,264 05/30/2012
and claims benefit of 61/653,563 05/31/2012
and claims benefit of 61/672,483 07/17/2012
and claims benefit of 61/714,016 10/15/2012
and claims benefit of 61/715,699 10/18/2012

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

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

05/10/2013

Foreign Priority claimed	☐ Yes ☑ No	☐ Met after Allowance	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
35 USC 119(a-d) conditions met	☐ Yes ☑ No		CA	31	24	3
Verified and Acknowledged	/AMIR MEHRMANESH/ Examiner's Signature	Initials				

ADDRESS

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

TITLE

ON BOARD VEHICLE NETWORK SECURITY

FILING FEE RECEIVED		
1508	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

Search Notes	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13828960	RICCI, CHRISTOPHER P.
	Examiner	Art Unit
	AMIR MEHRMANESH	2496

CPC- SEARCHED

Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED

Symbol	Date	Examiner

US CLASSIFICATION SEARCHED

Class	Subclass	Date	Examiner
726	6-26	12/29/2014	AM
701	1,24,31.4,31.5	12/29/2014	AM
709	227-232	12/29/2014	AM
701	1,24,31.4,31.5,32.6,486	6/1/2015	AM
726	2-7,22-30	6/1/2015	AM

SEARCH NOTES

Search Notes	Date	Examiner
inventor and assignee search via Palm and EAST	12/29/2014	AM
Consulted with Tod Swann regarding 112 2nd and 4th rejection	7/11/2014	AM
EASt keyword search combined with class/subclass search	12/29/2014	AM
Updated EAST keyword search combined with class/subclass search	6/1/2015	AM
Considered all the applications and issued patents in the applicantion family for DP	6/1/2015	AM
Consulted with SPE Andrew Nalven regarding Allowability	6/1/2015	AM
Consulted with Primary Venkat Perungavoor regarding Allowability of cliams	6/1/2015	AM
CPC Classification search	6/1/2015	AM

INTERFERENCE SEARCH

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
701	1,24,31.4,31.5,32.6,486	6/1/2015	AM
726	2-7,22-30	6/1/2015	AM
709	227-232	6/1/2015	AM
	CPC classification search	6/1/2015	AM
	Claim".clm." search using claim's keywords	6/1/2015	AM

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
(Use as many sheets as necessary)				First Named Inventor	RICCI, Christopher P.
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	1	of	4	Attorney Docket Number	6583-247-CIP-5

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	5296840	03/22/1994	Gieffers	
	2	6302438	10/16/2001	Stopper, Jr. et al.	
	3	6502022	12/31/2002	Chastain et al.	
	4	6690940	02/10/2004	Brown et al.	
	5	6782240	08/24/2004	Tabe	
	6	7019641	03/28/2006	Lakshmanan et al.	
	7	7343148	03/11/2008	O'Neil	
	8	7474264	01/06/2009	Bolduc et al.	
	9	7506375	03/17/2009	Kanda et al.	
	10	7549041	06/16/2009	Wang	
	11	7734315	06/08/2010	Rathus et al.	
	12	8527143	09/03/2013	Tan	
	13	8644165	02/04/2014	Saarimaki et al.	
	14	8683496	03/25/2014	Reeves et al.	
	15	8706143	04/22/2014	Elias	
	16	8761673	06/24/2014	Sakata	
	17	8774842	07/08/2014	Jones et al.	
	18	8817761	08/26/2014	Gruberman et al.	
	19	8819180	08/26/2014	Reeves et al.	
	20	8819705	08/26/2014	Reeves et al.	
	21	8838088	09/16/2014	Henn et al.	
	22	8868899	10/21/2014	Galicia et al.	
	23	8933949	01/13/2015	Reeves et al.	
	24	8957905	02/17/2015	Reeves et al.	
	25	8963939	02/24/2015	Yusupov et al.	
	26	2002/0023010	02/21/2002	Rittmaster et al.	
	27	2002/0045484	04/18/2002	Eck et al.	
	28	2004/0255123	12/16/2004	Noyama et al.	
	29	2005/0042999	02/24/2005	Rappaport	
	30	2005/0130744	06/16/2005	Eck et al.	
	31	2005/0153760	07/14/2005	Varley	
	32	2007/0015485	01/18/2007	DeBiasio et al.	
	33	2007/0103328	05/10/2007	Lakshmanan et al.	

Examiner Signature	/Amir Mehrmanesh/	Date Considered	06/01/2015

*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.M./

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	RICCI, Christopher P.
(Use as many sheets as necessary)				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	2	of	4	Attorney Docket Number	6583-247-CIP-5

	34	2007/0120697	05/31/2007	Ayoub et al.	
	35	2007/0156317	07/05/2007	Breed	
	36	2008/0305780	12/11/2008	Williams et al.	
	37	2009/0082951	03/26/2009	Graessley	
	38	2009/0224931	09/10/2009	Dietz et al.	
	39	2010/0042498	02/18/2010	Schalk	
	40	2011/0021234	01/27/2011	Tibbitts et al.	
	41	2011/0021213	01/27/2011	Carr	
	42	2011/0092159	04/21/2011	Park et al.	
	43	2011/0137520	06/09/2011	Rector et al.	
	44	2012/0071097	03/22/2012	Matsushita et al.	
	45	2012/0116678	05/10/2012	Witmer	
	46	2012/0274459	11/01/2012	Jaisimha et al.	
	47	2012/0289217	11/15/2012	Reimer et al.	
	48	2013/0035063	02/07/2013	Fisk et al.	
	49	2013/0157640	06/20/2013	Aycock	
	50	2014/0032014	01/30/2014	DeBiasio et al.	

UNPUBLISHED U.S. PATENT DOCUMENTS

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
	51	14/657934	03/13/2015	Ricci	
	52	14/657829	03/13/2015	Ricci	
	53	14/659255	03/16/2015	Ricci	

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]

Examiner Signature	/Amir Mehrmanesh/	Date Considered	06/01/2015

*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.M./

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	RICCI, Christopher P.
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	3	of	4	Attorney Docket Number	6583-247-CIP-5

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.
	54	Official Action for U.S. Patent Application No. 13/679,459, mailed Oct. 28, 2014 (Attorney's Ref. No. 6583-228) 17 pages
	55	Official Action for U.S. Patent Application No. 13/679,459, mailed Mar. 17, 2015 (Attorney's Ref. No. 6583-228) 30 pages
	56	Notice of Allowance for U.S. Patent Application No. 13/679,857, mailed Dec. 3, 2014 (Attorney's Ref. No. 6583-231) 5 pages
	57	Notice of Allowance for U.S. Patent Application No. 13/679,878, mailed Feb. 2, 2015 (Attorney's Ref. No. 6583-232) 5 pages
	58	Official Action for U.S. Patent Application No. 13/679,875, mailed Dec. 26, 2014 (Attorney's Ref. No. 6583-233) 14 pages
	59	Official Action for U.S. Patent Application No. 13/679,676, mailed Feb 25, 2015 (Attorney's Ref. No. 6583-234) 14 pages
	60	Notice of Allowance for U.S. Patent Application No. 13/679,441, mailed Oct. 29, 2014 (Attorney's Ref. No. 6583-244) 5 pages
	61	Official Action for U.S. Patent Application No. 13/679,864, mailed Nov. 03, 2014 (Attorney's Ref. No. 6583-245) 9 pages
	62	Notice of Allowance for U.S. Patent Application No. 13/679,864, mailed Mar. 03, 2015 (Attorney's Ref. No. 6583-245) 8 pages
	63	Official Action for U.S. Patent Application No. 13/679,476, mailed Jan. 16, 2015 (Attorney's Ref. No. 6583-247) 23 pages
	64	Official Action for U.S. Patent Application No. 13/828,513, mailed Dec. 24, 2014 (Attorney's Ref. No. 6583-247-CIP) 7 pages
	65	Notice of Allowance for U.S. Patent Application No. 13/828,513, mailed Apr. 3, 2015 (Attorney's Ref. No. 6583-247-CIP) 5 pages
	66	Notice of Allowance for U.S. Patent Application No. 13/828,651, mailed Feb. 2, 2015 (Attorney's Ref. No. 6583-247-CIP-2) 10 pages
	67	Official Action for U.S. Patent Application No. 13/828,758, mailed Feb. 12, 2015 (Attorney's Ref. No. 6583-247-CIP-3) 10 pages
	68	Official Action for U.S. Patent Application No. 13/828,860, mailed Feb. 27, 2015 (Attorney's Ref. No. 6583-247-CIP-4) 16 pages
	69	Notice of Allowance for U.S. Patent Application No. 13/829,505, mailed Nov. 26, 2014 (Attorney's Ref. No. 6583-247-CIP-8) 8 pages
	70	Notice of Allowance for U.S. Patent Application No. 13/829,718, mailed Nov. 21, 2014 (Attorney's Ref. No. 6583-247-CIP-10) 5 pages

Examiner Signature	/Amir Mehrmanesh/	Date Considered	06/01/2015

*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. [2] Applicant's unique citation designation number (optional). [3] See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. [4] Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). [5] For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. [6] Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. [7] Applicant is to place a check mark here if English language Translation is attached.

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

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	RICCI, Christopher P.
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	4	of	4	Attorney Docket Number	6583-247-CIP-5

	71	Notice of Allowance for U.S. Patent Application No. 13/830,003, mailed Nov. 21, 2014 (Attorney's Ref. No. 6583-247-CIP-13) 7 pages
	72	Official Action for U.S. Patent Application No. 13/830,133, mailed Oct. 29, 2014 (Attorney's Ref. No. 6583-247-CIP-15) 31 pages
	73	Notice of Allowance for U.S. Patent Application No. 13/830,133, mailed Mar. 3, 2015 (Attorney's Ref. No. 6583-247-CIP-15) 5 pages
	74	Official Action for U.S. Patent Application No. 14/468,055, mailed Apr. 8, 2015 (Attorney's Ref. No. 6583-315-CON) 6 pages
	75	Notice of Allowance for U.S. Patent Application No. 13/679,887, mailed Nov. 13, 2014 (Attorney's Ref. No. 6583-316) 5 pages

Examiner Signature	/Amir Mehrmanesh/	Date Considered	06/01/2015

*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. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

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

Index of Claims	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13828960	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	AMIR MEHRMANESH	2496

✓	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	12/29/2014	06/01/2015							
	1	✓	=							
	2	✓	=							
	3	✓	=							
	4	✓	=							
	5	✓	=							
	6	✓	=							
	7	✓	=							
	8	✓	=							
	9	✓	=							
	10	✓	=							
	11	✓	=							
	12	✓	=							
	13	✓	=							
	14	✓	=							
	15	✓	=							
	16	✓	=							
	17	✓	=							
	18	✓	=							
	19	✓	=							
	20	✓	=							
	21	✓	=							
	22	✓	=							
	23	✓	=							
	24	✓	=							

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	114	13/679,476 13/829,157 13/829,058 13/828,860 13/828,758 13/828,651 13/830,133 13/830,066 13/830,003 13/829,862 13/829,799 13/829,718 13/829,605 13/829,505 13/828,513 14/485,467 14/657,934 14/657,829	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/01 08:50
L2	3	l1 and ((security near5 breach).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/01 08:50
L3	7	l1 and ((secur$4).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/01 08:53
L4	467	("20090180668" | "20110112969" | "20130135118" | "20130145297" | "5794164" | "20130295901" | "20100253493" | "7643913" | "20050153760" | "20090224931" | "20110021234" | "20120274459" | "7474264" | "8706143" | "20100090817" | "20120084542" | "20120173905" | "20130138591" | "20130158821" | "20130198802" | "20130204943" | "20130205412" | "7891004" | "20090278806" | "20130309977" | "5648769" | "5838251" | "7493140" | "20120238286" | "20130179689" | "20130212659" | "7891004" | "20020023010" | "8774842" | "8819180" | "20050149752" | "20060042846" | "20060125631" | "20100222939" | "20100295676" | "20120173900" | "20130143546" | "20130144459" | "20130144657" | "20130145279" | "20130151031" | "20130152003" | "20130200991" | "20130205026" | "20130245882" | "20020105968" | "20110267204" | "20120089299" | "20120116609" | "20130099940" | "20130190978" | "20090279839" | "20120296567" | "20040255123" | "20110137520" | "20130035063" | "6502022" |	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 08:54

"8963939" | "20080148374" |
"20080212215" | "20090278750" |
"20100097239" | "20110106375" |
"20110117933" | "20120110356" |
"20130134730" | "20130144460" |
"20130144462" | "20130144469" |
"20130144470" | "20130144520" |
"20130167159" | "20130198737" |
"20130203400" | "20130204493" |
"20130241720" | "7738462" |
"20080051957" | "20080129475" |
"20120313771" | "20140120829" |
"8532574" | "20050031100" |
"20120115446" | "8346432" |
"20020045484" | "20070120697" |
"20080305780" | "20120289217" |
"6302438" | "7019641" | "8644165" |
"20100144284" | "20110105097" |
"20120081311" | "20130143495" |
"20130144461" | "20130144474" |
"20130145482" | "20130151065" |
"20130219039" | "6681176" |
"7295921" | "20060047386" |
"20070057781" | "20080090522" |
"20120284292" | "20130231800" |
"20130288606" | "20140125802" |
"5363306" | "20080234919" |
"20100235042" | "20120242510" |
"5508689" | "7899610" | "8725311" |
"20030182435" | "20070015485" |
"20070103328" | "20070156317" |
"20110092159" | "7734315" |
"8527143" | "8683496" | "8761673" |
"20030158638" | "20040024502" |
"20060250272" | "20080140278" |
"20080174451" | "20080253613" |
"20120081267" | "20130138714" |
"20130143601" | "20130144463" |
"20130145065" | "20130147638" |
"20130166097" | "20130204466" |
"20130218412" | "RE41449" |
"20060274829" | "20120084735" |
"20120084792" | "20030007227" |
"20100202346" | "20110195699" |
"6678747" | "8583292" |
"20050042999" | "20090082951" |
"20100042498" | "20120071097" |
"20120116678" | "5296840" |
"6782240" | "7506375" | "7549041" |
"8817761" | "20130141247" |
"20130141252" | "20130144486" |
"20130145360" | "20130151088" |
"20130154298" | "7606660" |
"20110035098" | "20120259951" |
"5710702" | "5890080" |
"20050130744" | "20110021213" |
"20130157640" | "20140032014" |
"6690940" | "8819705" |
"20110053506" | "20130145401" |
"20130204484" | "20130250933" |
"6484082" | "6724920" | "7548815" |
"20120006610" | "20140066014" |
"20140088798" | "8432260" |
"20090275321" | "20120109446" |

		"7343148").PN.				
L5	39	L4 and (isolat$4 restrict$4) and (virus malware misuse apoofing attack) and security	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/01 08:55
L6	68336	726/2-7,22-30.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 09:32
L7	6	5 and 6	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 09:32
L8	39	L4 and (isolat$4 restrict$4 sandbox) and (virus malware misuse apoofing attack) and security	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/06/01 09:36
L9	10065	701/1,24,32.6,486.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 09:39
L11	13586	701/1,24,31.4,31.5,32.6,486.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 09:51
L12	51162	709/227-232.ccls.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 09:51
L16	109957	(G06F21/85 H04W12/12 G06F3/0484 G06F3/0488 H04W12/02 H04W12/08 G06F11/079 G06F11/0748 G06F11/2023 G06F11/0739 G06F11/1675 G06F2201/81 G06F11/2038 H04L67/12 G06F11/2035).CPC.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 09:55
L18	129190	L6 L11 L12	US-PGPUB; USPAT; USOCR; FPRS;	OR	OFF	2015/06/01 09:56

Ford Ex. 1002 Page 945 of 1178

			EPO; JPO; DERWENT; IBM_TDB			
L19	5262	16 and 18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 09:56
L20	50	(secur$4 near5 (mechanism measure)) same (virus malware misuse apoofing attack (breach near5 security)) and ((unit device component) near5 (harm$4 affect$4)) and (isolat$4 restrict$4 sandbox) same (unit device component) and ((deny$4 near5 network near5 access) ((direct$4 rout$4 re$1direct$4) same (communications traffic) same (firewall proxy gateway)) ((block$4 disconnect$4) same (communications traffic)) ((activat$4 initiat$4) same (second extra) same (secur$4 near5 (mechanism measure))))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 10:17
L22	10	19 and 20	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2015/06/01 10:19
S1	1	"13828960"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:27
S2	166	("20030158638" | "20040024502" | "20050149752" | "20060042846" | "20060125631" | "20060250272" | "20080140278" | "20080148374" | "20080174451" | "20080212215" | "20080253613" | "20090180668" | "20090278750" | "20100090817" | "20100097239" | "20100144284" | "20100222939" | "20100295676" | "20110053506" | "20110105097" | "20110106375" | "20110112969" | "20110117933" | "20120081267" | "20120081311" | "20120084542" | "20120110356" | "20120173900" | "20120173905" | "20130134730" | "20130135118" | "20130138591" | "20130138714" | "20130141247" | "20130141252" | "20130143495" | "20130143546" | "20130143601" | "20130144459" | "20130144460" | "20130144461" | "20130144462" | "20130144463" | "20130144469" | "20130144470" | "20130144474" |	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:28

		"20130144486" | "20130144520" | "20130144657" | "20130145065" | "20130145279" | "20130145297" | "20130145360" | "20130145401" | "20130145482" | "20130147638" | "20130151031" | "20130151065" | "20130151088" | "20130152003" | "20130154298" | "20130158821" | "20130166097" | "20130167159" | "20130198737" | "20130198802" | "20130200991" | "20130203400" | "20130204466" | "20130204484" | "20130204493" | "20130204943" | "20130205026" | "20130205412" | "20130218412" | "20130219039" | "20130241720" | "20130245882" | "20130250933" | "5794164" | "6484082" | "6681176" | "6724920" | "7295921" | "7548815" | "7606660" | "7738462" | "7891004" | "RE41449").PN.				
S3	0	S2 and (isolat$4 restrict$4 block$4) same (affect$4 near10 security)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:30
S4	0	S2 and (isolat$4 restrict$4 block$4) and (affect$4 near10 security)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:31
S5	47	S2 and (isolat$4 restrict$4 block$4) and (security)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:31
S6	27	S2 and (isolat$4 restrict$4 block$4) and (virus malware miuse apoofing attack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:34
S7	2	"20130227648"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:36
S8	27	S2 and (isolat$4 restrict$4) and (virus malware miuse apoofing attack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/07/10 11:53

Ford Ex. 1002 Page 947 of 1178

			IBM_TDB			
S9	99	((Christopher) near2 (Ricci)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/07/10 11:56
S10	16	S9 and (security near5 breach)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:57
S11	3	S9 and ((security near5 breach).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 11:58
S12	117	S2 not S9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:01
S13	0	S12 and ((security near5 breach).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:01
S14	4	S12 and ((security).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:01
S15	17	("7891004").URPN.	USPAT	OR	ON	2014/07/10 12:06
S16	9	S15 and ((security).clm.)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:07
S17	1	S15 and (isolat$4 restrict$4 block$4) and (virus malware miuse apoofing attack)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:08
S18	1	S15 and (isolat$4 restrict$4) and (virus malware misuse apoofing attack) and security	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2014/07/10 12:08

			DERWENT; IBM_TDB			
S19	2	S16 and (isolat$4 restrict$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:09
S20	4	S15 and (isolat$4 restrict$4)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/07/10 12:10

6/ 1/ 2015 10:22:22 AM
C:\ Users\ amehrmanesh\ Documents\ EAST\ Workspaces\ 13828960.wsp

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13828960	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	AMIR MEHRMANESH	2496

CPC							
Symbol						**Type**	**Version**
H04W		12	/	08		F	2013-01-01
G06F		3	/	0484		I	2013-01-01
G06F		3	/	0488		I	2013-01-01
H04L		2012	/	40215		A	2013-01-01
H04L		2012	/	40273		A	2013-01-01
G06F		11	/	1675		A	2013-01-01
G06F		11	/	2023		I	2013-01-01
G06F		11	/	2035		A	2013-01-01
G06F		11	/	2038		A	2013-01-01
G06F		21	/	85		I	2013-01-01
G06F		2201	/	81		A	2013-01-01
H04W		12	/	02		I	2013-01-01
H04W		12	/	12		I	2013-01-01
G06F		2221	/	2149		A	2013-01-01
H04L		67	/	12		A	2013-01-01
G06F		11	/	0739		I	2013-01-01
G06F		11	/	0748		I	2013-01-01
G06F		11	/	079		I	2013-01-01

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

NONE		**Total Claims Allowed:**	
(Assistant Examiner)	(Date)	24	
/AMIR MEHRMANESH/ Primary Examiner.Art Unit 2496	06/01/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	24

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13828960	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	AMIR MEHRMANESH	2496

US ORIGINAL CLASSIFICATION		INTERNATIONAL CLASSIFICATION										
CLASS	SUBCLASS	CLAIMED					NON-CLAIMED					
726	27	H	0	4	W	12 / 08 (2009.01.01)						

CROSS REFERENCE(S)					
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)				
726	2	23	26	28	3
701	1	24	32.6		

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	24	
/AMIR MEHRMANESH/ Primary Examiner.Art Unit 2496	06/01/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	24

Issue Classification	Application/Control No.	Applicant(s)/Patent Under Reexamination
	13828960	RICCI, CHRISTOPHER P.
	Examiner	**Art Unit**
	AMIR MEHRMANESH	2496

☒ 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
	1		17												
	2		18												
	3		19												
	4		20												
	5		21												
	6		22												
	7		23												
	8		24												
	9														
	10														
	11														
	12														
	13														
	14														
	15														
	16														

NONE (Assistant Examiner)	(Date)	**Total Claims Allowed:** 24	
/AMIR MEHRMANESH/ Primary Examiner.Art Unit 2496 (Primary Examiner)	06/01/2015 (Date)	O.G. Print Claim(s) 1	O.G. Print Figure 24

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	RICCI, Christopher P.
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	1	of	1	Attorney Docket Number	6583-247-CIP-5

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	6161071	12/12/2000	Shuman et al.	

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]

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.
	2	Notice of Allowance for U.S. Patent Application No. 14/485,467, mailed Apr. 22, 2015 (Attorney's Ref. No. 6583-247-CIP-7-CON) 13 pages
	3	Official Action for U.S. Patent Application No. 13/829,799, mailed Jun. 3, 2015 (Attorney's Ref. No. 6583-247-CIP-11) 9 pages

Examiner Signature		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.

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 04/22/2015

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

EXAMINER
NGUYEN, PHILLIP H

ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 04/22/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/485,467	09/12/2014	Christopher P. Ricci	6583-247-CIP-7-CON	1414

TITLE OF INVENTION: ON BOARD VEHICLE INSTALLATION SUPERVISOR

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	07/22/2015

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 04/22/2015
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.
14/485,467	09/12/2014	Christopher P. Ricci	6583-247-CIP-7-CON	1414

TITLE OF INVENTION: ON BOARD VEHICLE INSTALLATION SUPERVISOR

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	07/22/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
NGUYEN, PHILLIP H	2191	717-174000

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. _____

Ford Ex. 1002 Page 955 of 1178

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.
14/485,467	09/12/2014	Christopher P. Ricci	6583-247-CIP-7-CON	1414

111285 7590 04/22/2015

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

EXAMINER	
NGUYEN, PHILLIP H	
ART UNIT	PAPER NUMBER
2191	

DATE MAILED: 04/22/2015

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. 14/485,467	Applicant(s) Christopher P. Ricci	
	Examiner NGUYEN, PHILLIP H	Art Unit 2191	

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. 14/485,467	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner PHILLIP H. NGUYEN	Art Unit 2191	AIA (First Inventor to File) Status No

-- 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 *9/12/2014*.
   ☐ 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 *1-24*. 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 20141020,20150310
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
4. ☒ Interview Summary (PTO-413), Paper No./Mail Date *20150327* .
5. ☒ Examiner's Amendment/Comment
6. ☒ Examiner's Statement of Reasons for Allowance
7. ☐ Other _____.

/PHILLIP H NGUYEN/
Primary Examiner, Art Unit 2191

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

2. This Office Action is in response to the preliminary amendment filed 9/12/2014.

3. Claims 1-24 are pending and have been considered below.

Examiner's Amendment

4. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Douglas Swartz (Reg. #37,739) on 3/27/2015. The Examiner's amendment is necessitated to put the claims in condition for allowance.

Claims 1 and 17 are amended as follows:

1. (Currently Amended) A vehicle, comprising:

<u>a microprocessor;</u>

a computer readable memory on board the vehicle;

a power source to propel the vehicle; and

a microprocessor executable installation supervisor operable for a selected computational component to be installed in the vehicle, to create a set of data structures in the selected computational component and/or [[a]] the computer readable medium ~~on board the vehicle~~ to bind the selected computational component to the vehicle, thereby preventing the selected computational component, after installation in the vehicle, from communicating openly with a processing module in a different vehicle.

17. (Currently Amended) A non-transitory ~~non-transient~~, tangible computer readable medium comprising a microprocessor executable installation supervisor on board a selected vehicle that, when executed, creates a set of data structures in a selected computational component to be installed in a selected vehicle and/or a computer readable medium on board the selected vehicle to bind the selected computational component to the selected vehicle, thereby prohibiting the selected computational component, after installation in the selected vehicle, from communicating restricted vehicle information to a processing module in a different vehicle.

Examiner's Statement of Reason for Allowance

5. The following is an examiner's statement of reasons for allowance:

Claims 1-24 of the application are considered allowable when reading the claims in light of the specification. The prior arts of record fail to teach or reasonably suggest the combination of limitation specified in the independent claim.

The closet prior arts are:

Ritter et al. (US 2008/0234919) teaches a method for performing application review validation testing for an engine as installed in a n application, the engine having production sensors and a production electronic control unit (ECU) for controlling the engine using the production sensors, includes running the engine, reading an output of the production sensors with the production ECU during the running of the engine, and determining with the production ECU whether the engine as installed in the application is in compliance with at least one requirement of the application review validation testing based on the output (see at least the Abstract).

Coverdill et al. (US 5,890,080) teaches a method for determining installed electronic devices on a truck and for providing a centralized reset to clear faults in the installed electronics. An instrumentation control unit in the cab of a truck determines installed electronics by requesting electronics on a shared data link to transmit data on the data link. The control unit identifies the installed devices from the transmitted data. Data describing the installed devices including

manufacturer, model, and installed software can be obtained and displayed for diagnostic purposes. The instrumentation control unit provides a centralized reset for resetting the electronic devices on the data link (see at least the Abstract).

Goossen et al. (US 6,678,747) teaches a method and apparatus for collecting and distributing information to and from a computing element that is quickly scalable at the installation to varying types and numbers of signals. Standard sized modules containing a generalized set of computation, discrete I/O, analog I/O, serial I/O, adaptable I/O, etc. or any combination thereof, provide the building blocks that can be attached to each other to provide the desired combination of functions. These modular components are mated to each other through a simple serial interface providing the inter-module communication interface and local power requirements. The modules are quickly stacked together snapped in place in a manner supporting sever environment (see at least the Abstract).

However, Ritter, Coverdill and Goossen taken alone or in any reasonable combination fail to teach:

"…*create a set of data structures in the selected computational component and/or a computer readable medium on board the vehicle to bind the selected computational component to the vehicle, thereby preventing the selected computational component, after installation in the vehicle, from*

communicating openly with a processing module in a different vehicle" as specified in the independent claim 1.

Independent claims 9 and 17 recite similar features and therefore are allowed for the same reason.

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

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHILLIP H. NGUYEN whose telephone number is (571)270-1070. The examiner can normally be reached on Monday - Thursday 8:00 AM - 4:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Wei Y. Zhen can be reached on (571) 272-3708. 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.

/PHILLIP H NGUYEN/
Primary Examiner, Art Unit 2191

Notice of References Cited	Application/Control No. 14/485,467	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner PHILLIP H. NGUYEN	Art Unit 2191	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-6,161,071	12-2000	Shuman et al.	701/48
	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.
13/829,799	03/14/2013	Christopher P. Ricci	6583-247-CIP-11	9675

111285 7590 06/03/2015

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

EXAMINER
WILLIAMS, JEFFERY L

ART UNIT	PAPER NUMBER
2495	

NOTIFICATION DATE	DELIVERY MODE
06/03/2015	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. 13/829,799	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	AIA (First Inventor to File) Status No

-- 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 *3/14/13*.

☐ 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) _____ is/are allowed.

7)☒ Claim(s) *1-21* 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 *3/14/13* 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 *10/18/13, 10/18/13,7/3/14,10/20/14,3/11/15*.

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

4) ☐ Other: _____.

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Claims 1 – 21 are pending.

Any references to applicant's specification are made by way of applicant's U.S. pre-grant printed patent publication.

Claim Rejections - 35 USC § 112

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

> (d) REFERENCE IN DEPENDENT FORMS.—Subject to subsection (e), a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), fourth paragraph:

> Subject to the [fifth paragraph of 35 U.S.C. 112 (pre-AIA)], a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

Claims 5, 12, and 19 are rejected under 35 U.S.C. 112(d) or pre-AIA 35 U.S.C. 112, 4th paragraph, as being of improper dependent form for failing to further limit the subject matter of the claim upon which it depends, or for failing to include all the limitations of the claim upon which it depends. Specifically, these claims attempt to broaden the scope of their respective parent claims. Applicant may cancel the claim(s),

amend the claim(s) to place the claim(s) in proper dependent form, rewrite the claim(s) in independent form, or present a sufficient showing that the dependent claim(s) complies with the statutory requirements.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1 – 21 are rejected under pre-AIA 35 U.S.C. 102(e) as being clearly anticipated by Yousefi et al. (Yousefi), US 2012/0110356.

Regarding claim 8, Yousefi discloses:

(a) in a vehicle in communication with plural communication networks, selecting, by a microprocessor executable network selector and from among the plural communication networks, a network for signal transmission of a selected signal to an on board destination based on one or more of a status of the selected network, a status of a node in the selected network, a signal/noise ratio of the selected network, type,

urgency, importance, format, and/or requirement of signal to be transmitted, an available and/or unavailable bandwidth in the selected network and/or node of the selected network, a current performance parameter(s) of the selected network, and a quality of service of the selected network (e.g. Yousefi, Abstract; fig. 1-3, 13, par. 137,138, 141, 149)*;*

and (b) configuring, by the network selector, the selected signal for transmission over the selected network to the on board destination (e.g. Yousefi, par. 142, 147).

Regarding claim 9, Yousefi discloses:

wherein the plural networks comprise local and-non-local networks, wherein the plural local communication networks comprise at least one wireless network and a bus-type network and at least one wireless network non-local to the vehicle, and wherein the at least one non-local wireless network comprises at least one of the Internet, a Wi Fi.TM. network, an infrared network, and a Bluetooth.TM. network (e.g. Yousefi, par. 137; fig. 1, 4).

Regarding claim 10, Yousefi discloses:

wherein a source of the selected signal is one or more of an on board sensor, an on board system controller, an on board processing module, an on board sensor monitor, an on board gateway and/or firewall, a communication device using a communication network external to the vehicle, a portable communication device of a

vehicle occupant, the portable communication device currently being located within the vehicle, an occupant input system, and an occupant output system (e.g. Yousefi, fig. 1, 4, 6).

Regarding claim 11, Yousefi discloses:

wherein the plural networks are generated by an on board or portable component located physically within the vehicle (e.g. Yousefi, fig. 1, 4, 6).

Regarding claim 12, Yousefi discloses:

wherein the source of the selected signal is one or more of on board sensor, an on board system controller, an on board processing module, an on board sensor monitor, an on board gateway and/or firewall, an occupant input system, and an occupant output system (e.g. Yousefi, fig. 1, 4, 6).

Regarding claim 13, Yousefi discloses:

wherein the network selector determines, for each of the plural communication networks, a corresponding one or more of a network status, a node status, a signal/noise ratio, an available and/or unavailable bandwidth, a current performance parameter(s), and a quality of service and selects the selected network based on one or more relative values associated with the corresponding one or more of a network status,

a node status, a signal/noise ratio, an available and/or unavailable bandwidth, a current performance parameter(s), and a quality of service (e.g. Yousefi, par. 137, 142).

Regarding claim 8, Yousefi discloses:

wherein the network selector determines a composite value for each of the plural networks, the composite value being based on one or more of the corresponding one or more of a network status, a node status, a signal/noise ratio, an available and/or unavailable bandwidth, a current performance parameter(s), and a quality of service and the selection of the selected network is based on comparing the composite values (e.g. Yousefi, par. 141, for example a priority value).

Regarding claims 1 – 7 and 15 – 21, they are means and program claims that essentially correspond to the method above, and they are rejected, at least, for the same reasons.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFERY WILLIAMS whose telephone number is (571)272-7965. The examiner can normally be reached on 9:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Farid Homayounmerhr can be reached on 571-272-3739. 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.

/JEFFERY WILLIAMS/
Primary Examiner, Art Unit 2495

Notice of References Cited	Application/Control No. 13/829,799	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2012/0110356 A1	05-2012	Yousefi et al.	713/320
*	B	US-2003/0158638 A1	08-2003	Yakes et al.	701/22
*	C	US-6,302,438 B1	10-2001	Stopper et al.	280/735
*	D	US-2012/0259951 A1	10-2012	Schalk et al.	709/217
*	E	US-7,891,004 B1	02-2011	Gelvin et al.	726/26
*	F	US-2012/0173900 A1	07-2012	Diab et al.	713/310
*	G	US-2012/0173905 A1	07-2012	Diab et al.	713/320
*	H	US-2012/0173900 A1	07-2012	Diab et al.	713/310
*	I	US-2007/0156317 A1	07-2007	Breed, David S.	701/045
	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.

Electronic Acknowledgement Receipt

EFS ID:	22529826
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
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:	6583-247-CIP-5
Receipt Date:	03-JUN-2015
Filing Date:	14-MAR-2013
Time Stamp:	18:21:43
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		6583-247-CIP-5_IDS_05.pdf	286250 95bd2430ea8f51b961b7958fda00d8904c899f6f	yes	4

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Transmittal Letter	1	3
	Information Disclosure Statement (IDS) Form (SB08)	4	4

Warnings:					
Information:					
2	Other Reference-Patent/App/Search documents	6583-247-CIP-7-CON_NOA_04-22-2015.pdf	568082 068dba5ce71af62a5617801e5f3b79e24b91cae1	no	13
Warnings:					
Information:					
3	Other Reference-Patent/App/Search documents	6583-247-CIP-11_OA_06-03-2015.pdf	307309 837daa30e2e1546e894c471056813d1354e48d04	no	9
Warnings:					
Information:					
		Total Files Size (in bytes):	1161641		

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: RICCI, Christopher P. Serial No.: 13/828,960 Filed: March 14, 2013 Atty. File No.: 6583-247-CIP-5 Entitled: "ON BOARD VEHICLE NETWORK SECURITY"	Group Art Unit: 2496 Confirmation No.: 1085 Examiner: Amir Mehrmanesh SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT *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/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. _____ 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

Ford Ex. 1002 Page 978 of 1178

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.

Ford Ex. 1002 Page 979 of 1178

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: June 3, 2015

Ford Ex. 1002 Page 980 of 1178

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

Jun 05, 2015 05:50:27 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.
13828960	NOA	06/05/2015	6583-247-CIP-5
	INTV.SUM.EX	06/05/2015	6583-247-CIP-5
	1449	06/05/2015	6583-247-CIP-5

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:	**13828960**	**Examiner:**	**Mehrmanesh**	**GAU:**	**2496**
From:	**Joseph Boris**	**Location:**	**IDC**	**Creation Date:**	**06/18/2015**

Tracking #: Week Date: 06/01/2015

DOC CODE	DOC DATE	MISCELLANEOUS
[ ] 1449		[ ] Continuing Data
[X] IDS	06/03/2015	[ ] Foreign Priority
[ ] CLM		[ ] Document Legibility
[ ] IIFW/FWCLM		[ ] Fees
[ ] SRFW		[ ] Petition (TC)
[ ] DRW		[ ] Other
[ ] OATH		
[ ] 312		
[ ] SPEC		

[RUSH] Message:

Please initial/line through citations on IDS 06/03/15.

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:	13828960	**Examiner:**	Mehrmanesh	**GAU:**	2496
From:	Joseph Boris	**Location:**	IDC	**Creation Date:**	06/18/2015

Tracking #: Week Date: 06/01/2015

DOC CODE	DOC DATE	MISCELLANEOUS
[ ] 1449		[ ] Continuing Data
[X] IDS	06/03/2015	[ ] Foreign Priority
[ ] CLM		[ ] Document Legibility
[ ] IIFW/FWCLM		[ ] Fees
[ ] SRFW		[ ] Petition (TC)
[ ] DRW		[ ] Other
[ ] OATH		
[ ] 312		
[ ] SPEC		

[RUSH] Message:

Please initial/line through citations on IDS 06/03/15.

Thank you.

[XRUSH] Response:

The information disclosure statement (IDS) submitted on 06/03/2015 was filed after issuance of the NOA on 06/01/2015 but prior to the mailing date of the Notice of Allowance on 06/03/2015. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner and an initialed and dated copy of Applicant's IDS form 1449 filed 06/03/2015 is attached to the instant Office action.

Regards,

Initials: /A.M./

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

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT *(Use as many sheets as necessary)*				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	RICCI, Christopher P.
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	1	of	1	Attorney Docket Number	6583-247-CIP-5

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	6161071	12/12/2000	Shuman et al.	

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]

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.
	2	Notice of Allowance for U.S. Patent Application No. 14/485,467, mailed Apr. 22, 2015 (Attorney's Ref. No. 6583-247-CIP-7-CON) 13 pages
	3	Official Action for U.S. Patent Application No. 13/829,799, mailed Jun. 3, 2015 (Attorney's Ref. No. 6583-247-CIP-11) 9 pages

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

Examiner Signature	/Amir Mehrmanesh/	Date Considered	06/25/2015

*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.

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.
13/828,960	03/14/2013	Christopher P. Ricci	6583-247-CIP-5	1085

111285 7590 06/30/2015

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

EXAMINER
MEHRMANESH, AMIR

ART UNIT	PAPER NUMBER
2496	

NOTIFICATION DATE	DELIVERY MODE
06/30/2015	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

UNITED STATES DEPARTMENT OF COMMERCE
U.S. Patent and Trademark Office
Address : COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
13/828,960	14 March, 2013	RICCI, CHRISTOPHER P.	6583-247-CIP-5

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

EXAMINER	
AMIR MEHRMANESH	
ART UNIT	PAPER
2496	20150625

DATE MAILED:

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

Commissioner for Patents

Examiner's Note:
1. Information Disclosure Statement (IDS) filed on 06/03/2015 has been considered by the examiner but the cited references neither appear to anticipate nor render obvious the claim invention as it is explained in reasons for allowance.

Information Disclosure Statement

2. The information disclosure statement (IDS) submitted on 06/03/2015 was filed after issuance of the NOA on 06/01/2015 but prior to the mailing date of the Notice of Allowance on 06/03/2015. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner and an initialed and dated copy of Applicant's IDS form 1449 filed 06/03/2015 is attached to the instant Office action.

Regards,

/AMIR MEHRMANESH/
Primary Examiner, Art Unit 2496

PTO-90C (Rev.04-03)

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

Jun 30, 2015 05:34:57 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.
13828960	1449	06/30/2015	6583-247-CIP-5
	M327	06/30/2015	6583-247-CIP-5

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

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

Jun 30, 2015 05:34:57 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.
13828960	1449	06/30/2015	6583-247-CIP-5
	M327	06/30/2015	6583-247-CIP-5

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

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

Jun 30, 2015 05:34:57 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.
13828960	1449	06/30/2015	6583-247-CIP-5
	M327	06/30/2015	6583-247-CIP-5

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

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

Jun 30, 2015 05:34:57 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.
13828960	1449	06/30/2015	6583-247-CIP-5
	M327	06/30/2015	6583-247-CIP-5

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

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

Jun 30, 2015 05:34:57 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.
13828960	1449	06/30/2015	6583-247-CIP-5
	M327	06/30/2015	6583-247-CIP-5

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

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
				First Named Inventor	Christopher Ricci
(Use as many sheets as necessary)				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	1	of	1	Attorney Docket Number	6583-247-CIP-5

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	2004/0257208	12/23/2004	Huang et al.	
	2	2007/0115101	05/24/2007	Creekbaum et al.	
	3	2009/0195370	08/06/2009	Huffman et al.	
	4	2010/0228404	09/09/2010	Link et al.	
	5	2012/0149341	06/14/2012	Tadayon et al.	

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]

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.
	6	Official Action for U.S. Patent Application No. 13/679,476, mailed Jun. 4, 2015 (Attorney's Ref. No. 6583-247) 25 pages
	7	Official Action for U.S. Patent Application No. 13/829,058, mailed Jul. 16, 2015 (Attorney's Ref. No. 6583-247-CIP-6) 11 pages
	8	Official Action for U.S. Patent Application No. 14/657,934, mailed Aug. 20, 2015 (Attorney's Ref. No. 6583-247-CIP-8-CON) 5 pages
	9	Official Action for U.S. Patent Application No. 13/829,605, mailed Jun. 4, 2015 (Attorney's Ref. No. 6583-247-CIP-9) 12 pages
	10	Official Action for U.S. Patent Application No. 13/829,862, mailed Jul. 16, 2015 (Attorney's Ref. No. 6583-247-CIP-12) 9 pages
	11	Official Action for U.S. Patent Application No. 13/830,066, mailed Aug. 13, 2015 (Attorney's Ref. No. 6583-247-CIP-14) 16 pages

Examiner Signature		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.

Electronic Acknowledgement Receipt

EFS ID:	23415873
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
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:	6583-247-CIP-5
Receipt Date:	04-SEP-2015
Filing Date:	14-MAR-2013
Time Stamp:	18:44:59
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	Other Reference-Patent/App/Search documents	6583-247_OA_06-04-2015.pdf	919619 0be850e914f40f8251cba51b1b5664a6c56a7d3c	no	25

Warnings:	
Information:	

2	Other Reference-Patent/App/Search documents	6583-247-CIP-6_NFOA_2015-07-16.pdf	352966 b7c3df77ccce2bd4b5fadc959987311b72491270	no	11
Warnings:					
Information:					
3	Other Reference-Patent/App/Search documents	6583-247-CIP-8-CON_OA_08-20-2015.pdf	457729 aa06fe74e4d6ef41391837334027cc1bb142990a	no	5
Warnings:					
Information:					
4	Other Reference-Patent/App/Search documents	6583-247-CIP-9_OA_06-04-2015.pdf	344378 44afb275f32e21f998a2c860b40c9fac46d415dc	no	12
Warnings:					
Information:					
5	Other Reference-Patent/App/Search documents	6583-247-CIP-12_NFOA_2015-07-16.pdf	278160 44d75597e73962c26f9c0c86d8ce2f6da0e4ac27	no	9
Warnings:					
Information:					
6	Other Reference-Patent/App/Search documents	6583-247-CIP-14_OA_08-13-2015.pdf	517205 ba8e0fc235a14ffeed50c81d3637d18803545f34	no	16
Warnings:					
Information:					
7		6583-247-CIP-5_IDS_06.pdf	134451 6ab2b3a257f96decef6031156d229280d4073e8f	yes	3

Multipart Description/PDF files in .zip description

Document Description	Start	End
Transmittal Letter	1	2
Information Disclosure Statement (IDS) Form (SB08)	3	3

Warnings:	
Information:	
Total Files Size (in bytes):	3004508

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 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.
13/679,476	11/16/2012	Christopher P. Ricci	6583-247	2650

111285 7590 06/04/2015

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

EXAMINER
WILLIAMS, JEFFERY L

ART UNIT	PAPER NUMBER
2495	

NOTIFICATION DATE	DELIVERY MODE
06/04/2015	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. 13/679,476	Applicant(s) RICCI ET AL.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	AIA (First Inventor to File) Status No

-- 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* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, 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 *2/10/15*.

☐ 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 – 6, 8 –14,16-18, and 24-27* 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, 8 –14,16-18, and 24-27* 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 *11/16/12* 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/08) Paper No(s)/Mail Date *3/16/15*.

3) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. *5/1/15* .

4) ☐ Other: _____.

Applicant-Initiated Interview Summary	Application No.	Applicant(s)	
	13/679,476	RICCI ET AL.	
	Examiner	Art Unit	
	JEFFERY WILLIAMS	2495	

All participants (applicant, applicant's representative, PTO personnel):

(1) *JEFFERY WILLIAMS*. (3)_____.

(2) *RICHARD ZELENKA*. (4)_____.

Date of Interview: *01 May 2015*.

Type: ☒ Telephonic ☐ Video Conference
☐ Personal [copy given to: ☐ applicant ☐ applicant's representative]

Exhibit shown or demonstration conducted: ☐ Yes ☐ No.
If Yes, brief description: _____.

Issues Discussed ☐101 ☒112 ☒102 ☐103 ☐Others
(For each of the checked box(es) above, please describe below the issue and detailed description of the discussion)

Claim(s) discussed: *1*.

Identification of prior art discussed: *Yakes*.

Substance of Interview
(For each issue discussed, provide a detailed description and indicate if agreement was reached. Some topics may include: identification or clarification of a reference or a portion thereof, claim interpretation, proposed amendments, arguments of any applied references etc...)

Examiner and applicant's representative discussed the amendments of 2/10/15. The examiner noted that a careful consideration will be given upon examination. No agreement was reached regarding the patentability of the claims over the prior art.

Applicant recordation instructions: The formal written reply to the last Office action must include the substance of the interview. (See MPEP section 713.04). If a reply to the last Office action has already been filed, applicant is given a non-extendable period of the longer of one month or thirty days from this interview date, or the mailing date of this interview summary form, whichever is later, to file a statement of the substance of the interview

Examiner recordation instructions: Examiners must summarize the substance of any interview of record. A complete and proper recordation of the substance of an interview should include the items listed in MPEP 713.04 for complete and proper recordation including the identification of the general thrust of each argument or issue discussed, a general indication of any other pertinent matters discussed regarding patentability and the general results or outcome of the interview, to include an indication as to whether or not agreement was reached on the issues raised.

☐ Attachment

/JEFFERY WILLIAMS/ Primary Examiner, Art Unit 2495	

Summary of Record of Interview Requirements

Manual of Patent Examining Procedure (MPEP), Section 713.04, Substance of Interview Must be Made of Record
A complete written statement as to the substance of any face-to-face, video conference, or telephone interview with regard to an application must be made of record in the application whether or not an agreement with the examiner was reached at the interview.

Title 37 Code of Federal Regulations (CFR) § 1.133 Interviews
Paragraph (b)

In every instance where reconsideration is requested in view of an interview with an examiner, a complete written statement of the reasons presented at the interview as warranting favorable action must be filed by the applicant. An interview does not remove the necessity for reply to Office action as specified in §§ 1.111, 1.135. (35 U.S.C. 132)

37 CFR §1.2 Business to be transacted in writing.
All business with the Patent or Trademark Office should be transacted in writing. The personal attendance of applicants or their attorneys or agents at the Patent and Trademark Office is unnecessary. The action of the Patent and Trademark Office will be based exclusively on the written record in the Office. No attention will be paid to any alleged oral promise, stipulation, or understanding in relation to which there is disagreement or doubt.

The action of the Patent and Trademark Office cannot be based exclusively on the written record in the Office if that record is itself incomplete through the failure to record the substance of interviews.

It is the responsibility of the applicant or the attorney or agent to make the substance of an interview of record in the application file, unless the examiner indicates he or she will do so. It is the examiner's responsibility to see that such a record is made and to correct material inaccuracies which bear directly on the question of patentability.

Examiners must complete an Interview Summary Form for each interview held where a matter of substance has been discussed during the interview by checking the appropriate boxes and filling in the blanks. Discussions regarding only procedural matters, directed solely to restriction requirements for which interview recordation is otherwise provided for in Section 812.01 of the Manual of Patent Examining Procedure, or pointing out typographical errors or unreadable script in Office actions or the like, are excluded from the interview recordation procedures below. Where the substance of an interview is completely recorded in an Examiners Amendment, no separate Interview Summary Record is required.

The Interview Summary Form shall be given an appropriate Paper No., placed in the right hand portion of the file, and listed on the "Contents" section of the file wrapper. In a personal interview, a duplicate of the Form is given to the applicant (or attorney or agent) at the conclusion of the interview. In the case of a telephone or video-conference interview, the copy is mailed to the applicant's correspondence address either with or prior to the next official communication. If additional correspondence from the examiner is not likely before an allowance or if other circumstances dictate, the Form should be mailed promptly after the interview rather than with the next official communication.

The Form provides for recordation of the following information:
- Application Number (Series Code and Serial Number)
- Name of applicant
- Name of examiner
- Date of interview
- Type of interview (telephonic, video-conference, or personal)
- Name of participant(s) (applicant, attorney or agent, examiner, other PTO personnel, etc.)
- An indication whether or not an exhibit was shown or a demonstration conducted
- An identification of the specific prior art discussed
- An indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). Note: Agreement as to allowability is tentative and does not restrict further action by the examiner to the contrary.
- The signature of the examiner who conducted the interview (if Form is not an attachment to a signed Office action)

It is desirable that the examiner orally remind the applicant of his or her obligation to record the substance of the interview of each case. It should be noted, however, that the Interview Summary Form will not normally be considered a complete and proper recordation of the interview unless it includes, or is supplemented by the applicant or the examiner to include, all of the applicable items required below concerning the substance of the interview.

A complete and proper recordation of the substance of any interview should include at least the following applicable items:
1) A brief description of the nature of any exhibit shown or any demonstration conducted,
2) an identification of the claims discussed,
3) an identification of the specific prior art discussed,
4) an identification of the principal proposed amendments of a substantive nature discussed, unless these are already described on the Interview Summary Form completed by the Examiner,
5) a brief identification of the general thrust of the principal arguments presented to the examiner,
   (The identification of arguments need not be lengthy or elaborate. A verbatim or highly detailed description of the arguments is not required. The identification of the arguments is sufficient if the general nature or thrust of the principal arguments made to the examiner can be understood in the context of the application file. Of course, the applicant may desire to emphasize and fully describe those arguments which he or she feels were or might be persuasive to the examiner.)
6) a general indication of any other pertinent matters discussed, and
7) if appropriate, the general results or outcome of the interview unless already described in the Interview Summary Form completed by the examiner.

Examiners are expected to carefully review the applicant's record of the substance of an interview. If the record is not complete and accurate, the examiner will give the applicant an extendable one month time period to correct the record.

Examiner to Check for Accuracy

If the claims are allowable for other reasons of record, the examiner should send a letter setting forth the examiner's version of the statement attributed to him or her. If the record is complete and accurate, the examiner should place the indication, "Interview Record OK" on the paper recording the substance of the interview along with the date and the examiner's initials.

DETAILED ACTION

This action is in response to the communication filed on 2/10/15.

All objections and rejections not set forth below have been withdrawn.

Claims 1 – 6, 8 – 14, 16 – 18, and 24 – 27 are pending.

Any references to applicant's specification are made by way of applicant's U.S. pre-grant printed patent publication.

The present application is being examined under the pre-AIA first to invent provisions.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to provide proper antecedent basis for these recitations of "… wherein each of the plural computation modules has … operating system capabilities", "…wherein at least a pair of .... computation modules has ... non-identical ... operating system capabilities..." (e.g. claim 1), "...the ... computation modules is a software application of an ... portable device located physically within the vehicle…" (e.g. claim 24), selecting a "computation module … based on operating system capabilities…", and wherein that selection satisfies "software application operating system performance requirements".

Specifically, the examiner was unable to find the idea of that software modules as having “operating system capabilities” or non-identical “operating system capabilities”. Furthermore, the examiner was unable to identify a disclosure of one of the selected computation modules as being located on a portable device within the vehicle. Furthermore, the examiner notes that, while paragraph 233 of applicant’s specification appears to suggest that requirements of an operating system can dictate the selection of a module, the specification does not appear to teach the selection of a module based on capabilities of an operating system. Furthermore noted, the vocabulary of "software application operating system performance requirements" is not found within the applicant’s original disclosure and it is not a standard and recognized term within the art.

The examiner notes that the applicant’s specification is lengthy and extensive. Thus, if the applicant believes the examiner’s position to be taken in error, the applicant is respectfully encouraged to clarify the record with specific citations of support within the originally filed disclosure.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 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.

Claims 1 – 6, 8 – 14, 16 – 18, and 24 – 27 are rejected under 35 U.S.C. 112, 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(s), at the time the application was filed, had possession of the claimed invention. Applicant has not pointed out where the new (or amended) claim is supported, nor does there appear to be a written description of the claim limitations in the application as filed (see above objection to the specification).

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 – 6, 8 – 14, 16 – 18, and 24 – 27 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.

Specifically, regarding claim 1, the recitation of computation modules as having “operating system capabilities" is ambiguous and renders the scope of the claims indefinite. The examiner notes that it is not clear whether the applicant is suggesting that the computation modules are operating systems and thus have different abilities, or

that the computation modules are capable of being executed by an operating system, or something else entirely. The examiner points out that the applicant's original specification is silent as to this recitation.

Similarly, it is not clear what the applicant is intending to suggest by the recitation of “wherein the computational module selector selects a computational module from among the plural computation modules that has … operating system capabilities that satisfy the performance requirements of the selected task, operation, and/or function”. Again, the examiner respectfully points out that the applicant's original specification is silent as to this recitation.

Specifically, regarding claim 25 is indefinite in scope because the term or language of "software application operating system performance requirements" is not found within the applicant’s original disclosure and it is not a standard and recognized term or language within the art.

All depending claims are rejected by virtue of dependency.

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 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 1 – 5, 8 – 14, 18, and 24 – 27 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Yakes et al. (Yakes), US 2003/0158638 A1.

Regarding claim 1, as best understood in light of the above rejections, Yakes discloses:

a *non-transient, tangible computer readable memory; a computational module selector to select a computational module form among plural computation modules in communication with the computational module selector to perform a selected task, operation, and/or function, module selector to perform a selected task, operation, and/or function, the selected task, operation, and/or function having performance requirements, wherein each of the plural computation modules has processing capabilities and operating system capabilities; wherein at least a pair of the plural computation modules has non-identical processing capabilities and/or operating system capabilities* (e.g. Yakes, fig. 2:14, 16 - CPU). Herein, Yakes discloses a means, comprising a cpu with a control program, which selects between and operates a plurality of programmed instructions, i.e. modules, wherein each of the "modules" or units of program instructions perform a different function (i.e. have different requirements for performance or capabilities).

a network selector module to select one of plural communication networks local to the vehicle for transmitting a selected signal and wherein the network selector

module selects one of plural communication networks local to the vehicle for transmitting a selected signal based on one or more of network/node status, signal/noise ratio, type of signal, available and/or unavailable bandwidth, network performance parameter(s), and quality of service, wherein the network selector module configures the selected signal in accordance with the selected network's transmission protocol (e.g. Yakes, fig. 2:16 – control program; par. 102, 103). Herein, Yates discloses a stored software program, i.e. “network selector module”, that enables the CPU to select and properly communicate between different communication networks based upon protocol (e.g. “type of signal”).

wherein the computational module selector selects a computational module from among the plural computation modules that has processing capabilities … that satisfy the performance requirements of the selected task, operation, and/or function (e.g. Yakes, par. 102 - 104, 213). Herein, the control program can select which software modules are to operate within the system based upon the needed capabilities of the different software modules.

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Yakes does not explicitly recite language stating that *computational module selector selects a computational module* based upon “operating system capabilities”. While, it is noted above, that it is unclear what the applicant is attempting to recite, the

examiner points out however, that Yakes teaches that the selection of operation by computation modules is based upon load within the system (e.g. Yakes, fig. 6, 7).

Thus, the examiner points out that it would have been obvious to one of ordinary skill in the art, in view of the teachings of Yakes in combination with logic and common sense, to realize that the load balancing teachings of Yakes corresponds to the capability of an "operating system" to perform the required functions.

Regarding claim 2, Yakes discloses:

a plurality of processing modules, a first processing module being in an active mode whereby the first processing module is in primary control of at least most vehicle functions and a second processing module being in a standby mode whereby the second processing module is ready to assume primary control of at least most vehicle functions, wherein the first and second processing modules are in wireless communication with one another, and wherein a state of the second processing module is maintained substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module (e.g. Yakes, fig. 2:14; par. 184, 185). Herein, the CPU may execute at least one module (i.e. primary control). Furthermore, information transfer for at least some of the modules is accomplished wirelessly.

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 3, Yakes discloses:

wherein the vehicle comprises an arbitration module to arbitrate hand-off conflicts between duplicated first and second processing modules and wherein the arbitration module selects one of the first and second processing modules to currently possess and/or own a token, the token indicating which processing module is an active processing module and/or which processing module is a standby processing module (e.g. Yakes, fig. 2:14, 16 - CPU). CPU's arbitrate the execution of tasks such as by semaphore.

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 4, Yakes discloses:

wherein the vehicle further comprises a health check module to determine a corresponding state of health of each of the duplicated first and second processing modules to perform at least one of critical and non-critical tasks, functions, and operations and wherein the health check module performs a check and/or test, in response wherein the health check module performs a check and/or test, in response to an internally generated interrupt and/or request to determine a selected processing module's ability to perform critical and/or non-critical vehicle tasks, functions, and/or operations, assign a score to the selected processing module based on the check and/or test results, and compare the score to one or more thresholds and/or to a score

of a different processing module to determine a state of health to determine a state of health of the selected processing module (e.g. Yakes, par. 336).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 5, Yakes discloses:

wherein the vehicle further comprises a displayed object movement module to move displayed objects from a source input/output system to a target input/output system, the source and target input/output systems corresponding to different vehicle occupants and wherein the displayed object movement module selects the and wherein the displayed object movement module selects the target input/output system from among plural input/output systems on board the vehicle based on input from a user of the source input/output system (e.g. Yakes, par. 357).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 8, Yakes discloses:

and wherein the diagnostic module provides the warning and/or error signal to the vehicle occupant and interactively communicates a likely cause of the warning and/or error signal to the occupant and receives a command from the occupant to

contact one or more of an emergency service provider, an emergency responder, and a remotely located diagnostic service (e.g. Yakes, par. 91).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 9, Yakes discloses:

and wherein the remote control module is associated with one or more of the vehicle owner, a law enforcement authority, a lender associated with a loan having the vehicle as collateral, and a vehicle manufacturer and wherein the requested vehicle function, is executed or caused to be executed notwithstanding a contrary command from the vehicle operator (e.g. Yakes, par. 281).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 10, Yakes discloses:

and wherein the media controller, in a dependent mode, provides common content synchronously to each of the input/output systems and, in an independent mode, provides different content to different ones of the input/output systems (e.g. Yakes, par. 184).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 11, Yakes discloses:

and wherein the newly installed software and/or hardware and/or other component is one or more of an on-board sensor, a processing module or component thereof, a software application, a circuit board, an expansion module or component thereof, a critical or non-critical device, and a cellular upgrade module (e.g. Yakes, fig. 2).

wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, par. 400, 421-423).

Regarding claim 12, Yakes discloses:

wherein the computational module is selected from among plural computational modules, and wherein the plural computational modules comprise one or more vehicle processing devices and one or more occupant computational devices, the one or more occupant computational devices comprising one or more of a mobile phone, personal digital assistant, tablet computer, and laptop computer (e.g. Yakes, fig. 2; par. 297).

Regarding claim 13, Yakes discloses:

wherein the computational module is selected from among plural computational modules, and wherein the plural computational modules comprise multiple software applications corresponding to different versions, releases, and/or vendors of a common type of software application (e.g. Yakes, fig. 2; par. 5, 400). The software modules comprise different types of functions and times of release (i.e. different versions).

Regarding claim 14, Yakes discloses:

wherein the vehicle further comprises a network security module to isolate a component encountering a security breach and/or isolate a primary processing module from one or more other components in a local vehicle network and wherein the network security module filters and/or prohibits communications between the isolated one of the component and/or processing module with other network components, wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, fig. 19; par. 277, 403, 404). The system comprises software means for detecting failures and isolating processing modules by turning off inputs and outputs and replicating the failed modules elsewhere within the system.

Regarding claim 18, Yakes discloses:

wherein the vehicle further comprises a social networking module to enable processing modules of different vehicles to wirelessly connect to exchange vehicle information, wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, fig. 34, 35; par. 185).

Regarding claim 24, Yakes discloses:

wherein at least one of the plural computation modules is a software application of an on board or portable device located physically within the vehicle (e.g. Yakes, par. 87, 222, 244, 246). Herein, different software programs (i.e. computation modules), for

the performance of different vehicle functions, are downloaded into the system components located on the vehicle.

Regarding claim 25, Yakes discloses:

wherein the selected task, operation, and/or function is running a software application, wherein the computational module selector selects a computational module from among the plural computation modules based on operating system capabilities that satisfy the software application operating system performance requirements (e.g. Yakes, par. 87, 222, 244, 246).

Regarding claim 26, Yakes discloses:

wherein the vehicle further comprises a display, wherein the software application is displayed on the display (e.g. Yakes, par. 98, 329).

Regarding claim 27, Yakes discloses:

wherein the display is configured to allow the user to interact with the software application (e.g. Yakes, par. 98, 329).

Claims 6 and 16 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Yakes in view of Yousefi et al. (Yousefi), US 2012/0110356 A1.

Regarding claim 6, Yakes discloses a vehicle software system for monitoring a vehicle and receiving media signals from outside sources. However, Yakes does not appear to disclose a media filter module.

Yousefi also discloses a vehicle software system for monitoring a vehicle and for receiving media signals. Furthermore Yousefi discloses:

a media filter module to apply a selected rule to filter third party sourced signals received by a vehicle processing module for presentation to a vehicle occupant via a corresponding input/output system and wherein the selected rule is one or more of a whitelist, blacklist, user preference, sensed occupant context, and/or governing federal, state, provincial, and/or local law and/or regulation applicable to a current sensed spatial location of the vehicle, wherein each of the afore-mentioned modules are stored in a non- transient, tangible computer readable memory (e.g. Yousefi, fig. 107:1752; par. 572, 576, 577).

It would have been obvious to one of skill in the art to employ the media filter teachings of Yousefi within the vehicle software system of Yakes. This would have been obvious because one of ordinary skill in the art would have been motivated by the advantages of flexibility in considering the preferences or requirements of the vehicle and/or vehicle occupants when receiving media.

Regarding claim 16, Yakes discloses a vehicle software system for monitoring a vehicle and receiving media signals from outside sources. However, Yakes does not appear to disclose a media filter module.

Yousefi also discloses a vehicle software system for monitoring a vehicle and for receiving media signals. Furthermore Yousefi discloses:

a network controller module to cache automatically streaming media in response to a vehicle state change, function, and/or operation … (e.g. Yousefi, fig. 60, 61; par. 155, 320, 342 - 345). Herein, Yousefi discloses that automatically steaming media, such as camera footage, may be cached in the event of a change in vehicle state or operation.

and wherein the network controller module caches automatically streaming media in response to the vehicle state changing from a parked state to an unparked state (e.g. Yousefi, fig. 60, 61; par. 346, 347). Herein, Yousefi discloses that automatically steaming media, such as camera footage, may be cached in the event a parked vehicle becomes unsettled or otherwise involved within a collision (i.e. unparked). Furthermore, the examiner notes that while Yousefi does not explicitly state that a collision results in movement or motion, one of ordinary skill will logically recognize in light of physical principle that a collision may result in motion of the parked vehicle.

It would have been obvious to one of skill in the art to employ the media filter teachings of Yousefi within the vehicle software system of Yakes. This would have been obvious because one of ordinary skill in the art would have been motivated by the

advantages of flexibility in considering the preferences or requirements of the vehicle and/or vehicle occupants when receiving media.

Furthermore, the combination enables:

wherein the computational module selector continuously checks if excess processing power is available from at least among the plural computation modules, an expansion module and an external computational device, whereby the selected task, operation and/or function is off-loaded, wherein each of the afore-mentioned modules are stored in a non-transient, tangible computer readable memory (e.g. Yakes, fig. 6, 7).

Claim 17 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Yakes in view of Breed et al. (Breed), US 2007/0156317 A1.

Regarding claim 17, Yakes discloses a vehicle software system for monitoring a vehicle. However, Yakes does not appear to disclose a presence reporting module to determine the presence or lack of presence of operators and occupants within the vehicle while the vehicle is in motion.

Breed also discloses a vehicle software system for monitoring a vehicle. Furthermore Breed discloses a presence reporting module that utilizes a selected communication channel to determine the presence or lack of presence of operators and occupants within the vehicle while the vehicle is in motion (e.g. Breed, fig. 1 – 4; par. 99, 145, 212).

It would have been obvious to one of skill in the art to employ the presence reporting teachings of Breed within the system of Yakes. This would have been obvious because one of skill in the art would have been motivated by the advantages of vehicle and occupant safety.

Response to Arguments

Applicant's arguments filed 2/10/15 have been fully considered but they are not persuasive.

Applicant argues or alleges essentially that:

…

Furthermore, the Yakes "interface modules are both physically and functionally interchangeable because the interface modules are capable of being plugged in at any slot on the network, and are capable of performing any functions that are required at that slot on the network. See [0244]. …

…

This is opposite, and a teaching-away, from amended Claim 1, which, inter alia, requires "wherein at least a pair of the plural computation modules has non-identical processing capabilities and/or operating system capabilities." …

…

(Remarks, pg. 10 – 11)

Examiner respectfully responds:

The examiner respectfully disagrees. Specifically, applicant's remarks are relevant only to the on-board hardware components that can be programmed with the different software applications (i.e. "computation modules"). However, the examiner notes that the prior art clearly shows that the software units or applications of the prior art are different and perform different functions. Thus, the examiner points out that the prior art teaches the claimed subject matter of different software modules that perform non-identical functions.

Applicant argues or alleges essentially that:

…

Primary reference Yakes and secondary reference Yousefi provide additional teach aways from some features. For example, Yakes requires two on more communication networks, e.g. "each of the communication networks 1661-1663 may be formed of two or more communication networks to provide redundancy within each control system." See [0236]. In contrast, amended Claim 1 requires a "network selector module to select one of plural communication networks."…

… In contrast, amended Claim 1 requires a network selector module that "selects one of plural communication networks local to the vehicle for transmitting a selected signal based on one or more of network/node status, signal/noise ratio, type of signal,

available and/or unavailable bandwidth, network performance parameter(s), and quality of service."

…

(Remarks, pg. 11, 12)

Examiner respectfully responds:

The examiner respectfully disagrees. Specifically, applicant's remarks are unpersuasive, at least, for the reason that it is unclear as to what rationale the applicant believes to be the basis for the prior art as teaching away from the claimed invention.

The examiner respectfully notes that even if the prior art discloses redundant networks, as alleged by the applicant, it would still anticipate "plural" networks as claimed.

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 JEFFERY WILLIAMS whose telephone number is (571)272-7965. The examiner can normally be reached on 9:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Farid Homayounmerhr can be reached on 571-272-3739. 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.

/JEFFERY WILLIAMS/
Primary Examiner, Art Unit 2495

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.
13/829,058	03/14/2013	Christopher P. Ricci	6583-247-CIP-6	3520

111285 7590 07/16/2015

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

EXAMINER
WILLIAMS, JEFFERY L

ART UNIT	PAPER NUMBER
2495	

NOTIFICATION DATE	DELIVERY MODE
07/16/2015	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. 13/829,058	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	AIA (First Inventor to File) Status No

-- 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 *3/10/15*.

☐ 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) *1-39* 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) *1-39* 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 *3/10/15 10/20/14 7/3/14 10/18/13 10/18/13*.

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

4) ☐ Other: _____.

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Claims 1 – 39 are pending.

Any references to applicant's specification are made by way of applicant's U.S. pre-grant printed patent publication.

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 – 13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Specifically, the claim(s) does/do not fall within at least one of the four categories of patent eligible subject matter because the claims are directed solely to an executable controller (i.e. software). Software does not fall within any of the statutory categories of invention.

Claim Rejections - 35 USC § 112

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

> (d) REFERENCE IN DEPENDENT FORMS.—Subject to subsection (e), a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), fourth paragraph:

> Subject to the [fifth paragraph of 35 U.S.C. 112 (pre-AIA)], a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

Claims 9, 12, and 13 are rejected under 35 U.S.C. 112(d) or pre-AIA 35 U.S.C. 112, 4th paragraph, as being of improper dependent form for failing to further limit the subject matter of the claim upon which it depends, or for failing to include all the limitations of the claim upon which it depends.

Specifically, these claims are all recited to depend upon themselves. For the purpose of examination the examiner presumes them to depend upon claims 8, 11, and 12, respectively. Applicant may cancel the claim(s), amend the claim(s) to place the claim(s) in proper dependent form, rewrite the claim(s) in independent form, or present a sufficient showing that the dependent claim(s) complies with the statutory requirements.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (**pre-AIPA** 35 U.S.C. 102(e)).

Claims 1 – 33 are rejected under pre-AIA 35 U.S.C. 102(e) as being clearly anticipated by Tadayon et al. (Tadayon), US 2012/0149341 A1.

Regarding claim 1, Tadayon discloses:

a microprocessor executable media controller on board the vehicle operable (a) to determine a first spatial location of an external communication device, the external communication device being in wireless communication with the on board media controller and the first spatial location being associated with a first set of restrictions, the first set of restrictions being at least one of a control on connectivity access by the

external communication device, a restriction on the connectivity access, and a restriction on one or more functions of the external communication device and (b), in response, to apply the first set of restrictions (e.g. Tadayon, par. 12, 52, 53, 263; fig. 2; figs. 3).

Regarding claim 2, Tadayon discloses:

wherein, as a result of applying the first set of restrictions, the media controller declines to accept connectivity access by the external communication device (e.g. par. 49, 126, 261, 263 - herein policy rules can allow (i.e. "whitelist") or prevent (i.e. "blacklist") the reception of signals).

Regarding claim 3, Tadayon discloses:

wherein, as a result of applying the first set of restrictions, the media controller applies a restriction on the connectivity access (e.g. par. 49, 126, 261, 263 - herein policy rules can allow (i.e. "whitelist") or prevent (i.e. "blacklist") the reception of signals).

Regarding claim 4, Tadayon discloses:

wherein, as a result of applying the first set of restrictions, the media controller restricts the one or more functions of the external communication device (e.g. par. 49, 126, 261, 263 - herein policy rules can allow (i.e. "whitelist") or prevent (i.e. "blacklist") the reception of signals, i.e. a function of the device).

Regarding claim 5, Tadayon discloses:

wherein the media controller measures, at a plurality of connectivity access points, a respective signal strength associated with a transmission by the external communication device, and, based on the measurements, determines the first spatial location by triangulation (e.g. Tadayon, figs. 2, 3; par. 78).

Regarding claim 6, Tadayon discloses:

wherein a second spatial location is associated with a second set of restrictions, the first and second sets of restrictions being different from one another (e.g. Tadayon, par. 53, 58, 100).

Regarding claim 7, Tadayon discloses:

wherein the media controller monitors the external communication for a change from the first to the second spatial locations and, upon detecting the change, applies the second set of restrictions (e.g. Tadayon, par. 53, 58, 100).

Regarding claim 8, Tadayon discloses:

wherein the media controller is operable to receive a media stream from a remote node, the received media stream being for an occupant associated with at least one of an on board vehicle input/output system and external communication device, identify which on board vehicle input/output systems and/or external communication

devices are restricted by the first set of restrictions and provide the media stream, in compliance with the first set of restrictions, to a selected input/output system and/or external communication device associated with the occupant (e.g. Tadayon, par. 53, 58, 100, 215).

Regarding claim 9, Tadayon discloses:

wherein the first set of restrictions are applied as a due to operator command and/or as a result of a governing law (e.g. Tadayon, par. 52, 126).

Regarding claim 10, Tadayon discloses:

wherein the media stream is for all occupants of the vehicle but is provided only to unrestricted input/output systems and/or external communication devices, the unrestricted input/output systems and/or external communication devices being a subset of all input/output systems and/or external communication devices on board the vehicle (e.g. Tadayon, par. 58, 102, 103).

Regarding claim 11, Tadayon discloses:

wherein the restriction is as a result of a governing law and wherein the media controller, for a current satellite-positioning-system based position of the vehicle, current state of the vehicle, and a selected input/output system and/or external communication device determines that a law restricts the input/output system and/or external communication device from performing at least one of the following functions: texting

from an on board input/output system and/or external communication device, displaying streaming video content to an on board input/output system and/or external communication device, initiating and/or continuing a cellular call, and providing a media channel of a multimedia media stream (e.g. Tadayon, par. 52, 126).

Regarding claim 12, Tadayon discloses:

wherein the selected input/output system and/or external communication device is associated with the vehicle operator and the current state of the vehicle is one or more of moving and in gear (e.g. Tadayon, par. 126-139).

Regarding claim 13, Tadayon discloses:

wherein the function is providing a media channel of a multimedia media stream and wherein the media controller presents a first channel, but not a second, of the multimedia stream to the selected input/output system and/or external communication device (e.g. Tadayon, par. 3, 58, 311, 331 – herein different channels (e.g. physical or logical) can be used to present media).

Regarding claims 14 – 39, they are program and method claims essentially corresponding to the above claims, and they are rejected, at least, for the same reasons.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFERY WILLIAMS whose telephone number is (571)272-7965. The examiner can normally be reached on 9:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Farid Homayounmerhr can be reached on 571-272-3739. 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.

/JEFFERY WILLIAMS/
Primary Examiner, Art Unit 2495

Notice of References Cited	Application/Control No. 13/829,058	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2012/0149341 A1	06-2012	Tadayon et al.	455/412.1
	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

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.
14/657,934	03/13/2015	Christopher P. Ricci	6583-247-CIP-8-CON	2257

111285 7590 08/20/2015

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

EXAMINER
LIPMAN, JACOB

ART UNIT	PAPER NUMBER
2434	

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

Office Action Summary	Application No. 14/657,934	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JACOB LIPMAN	Art Unit 2434	AIA (First Inventor to File) Status No

-- 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 *3/13/15*.

☐ 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) *32-64* 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) *32-64* 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: _____.

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the claims at issue are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the reference application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO internet Web site contains terminal disclaimer forms which may be used. Please visit http://www.uspto.gov/forms/. The filing date of the application will

determine what form should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to http://www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

2. Claims 32-64 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-33 of U.S. Patent No. 9,088,572. Although the claims at issue are not identical, they are not patentably distinct from each other because the instant claims are broader than the patented claims.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JACOB LIPMAN whose telephone number is (571)272-3837. The examiner can normally be reached on M-Fr.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kambiz Zand can be reached on 571-272-3811. 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.

/JACOB LIPMAN/
Primary Examiner, Art Unit 2434

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.
13/829,605	03/14/2013	Christopher P. Ricci	6583-247-CIP-9	7968

111285 7590 06/04/2015

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

EXAMINER
WILLIAMS, JEFFERY L

ART UNIT	PAPER NUMBER
2495	

NOTIFICATION DATE	DELIVERY MODE
06/04/2015	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. 13/829,605	Applicant(s) RICCI ET AL.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	AIA (First Inventor to File) Status No

-- 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 *3/14/13*.

☐ 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) *1-27* 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) *1-27* 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 *3/14/13* 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 *10/18/13, 10/18/13,7/3/14,10/20/14,3/10/15*.

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

4) ☐ Other: _____.

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Claims 1 - 27 are pending.

Any references to applicant's specification are made by way of applicant's U.S. pre-grant printed patent publication.

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 – 9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim(s) does/do not fall within at least one of the four categories of patent eligible subject matter because the claims are directed to software per se. (i.e. a module executed by a processor).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 6, 9 – 15, 18 – 24 and 27 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Huffman et al. (Huffman), US 2009/0195370 A1.

Regarding claim 19, Huffman discloses:

a microprocessor executable remote control module receiving a request from a remote source to command a vehicle function, the microprocessor executable remote control module authenticating the requestor, and when successfully authenticated and privileged to request the performance of the vehicle function, the microprocessor executable remote control module executing the request notwithstanding a contrary command from the vehicle operator (e.g. Huffman, fig. 2:210; par. 24, 41).

Regarding claim 20, Huffman discloses:

wherein the remote source is associated with one or more of a vehicle owner, law enforcement authority, emergency service provider, lender associated with a loan having the vehicle as collateral, and a manufacturer of the vehicle (e.g. Huffman, fig. 2:210; par. 41).

Regarding claim 21, Huffman discloses:

wherein the vehicle function is identified by a function-specific code and wherein the remote control module maps the function-specific code in a look up table indexing function-specific codes with corresponding vehicle functions to determine the requested vehicle function to be performed (e.g. Huffman, par. 24, 26; fig. 2:210 – herein, memory (i.e. "look up table") is used to store "function codes" that correspond to vehicle functions).

Regarding claim 22, Huffman discloses:

wherein the requested vehicle function is one or more of accelerate, decelerate, activate, deactivate, provide current vehicle location, broadcast audible and/or visual message to vehicle operator, brake, set a maximum, vehicle velocity, and lock doors (e.g. Huffman, par. 14, 24).

Regarding claim 23, Huffman discloses:

wherein the remote control module activates a system stand-by procedure to perform the vehicle function (e.g. Huffman, par. 14, 24). Herein, placing the system places the vehicle in stand by (e.g. shuts off the engine).

Regarding claim 24, Huffman discloses:

wherein the requestor is not privileged to request performance of the vehicle function from outside a predetermined range of a wireless network of the vehicle (e.g. Huffman, fig. 2). Herein, requests must be received by a network, i.e. be in range of the network.

Regarding claim 27, Huffman discloses:

wherein the remote control module authenticates the requestor by one or more of encrypted key exchange, public and private key cryptography, secure remote password, multi-factor authentication, time-based authentication, unique digital identity, closed-loop authentication, and access control service and wherein different requestors have differing sets of privileges (e.g. Huffman, par. 10, 11, 24).

Regarding claims 1 – 6, 9 – 15, and 18, they are apparatus and medium claims essentially corresponding to the method claims above, and they are rejected, at least, for the same reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 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 7, 8, 18, 17, 25, and 26 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Huffman in view of Creekbaum et al. (Creekbaum), US 2007/0115101 A1.

Regarding claim 25, Huffman discloses *wherein the requestor is a control system of the vehicle* (e.g. Huffman, fig. 2:230), but Huffman does not disclose that a request is in response to a trigger event such as the vehicle movement inside or outside a geographical area.

Creekbaum, similar to Huffman, discloses a remote vehicle control system, wherein the system sends a request to control a vehicle *in response to occurrence of a trigger event, the trigger event comprising movement of the vehicle at least one of outside a defined geographical area and inside a defined geographical area* (e.g. Creekbaum, abstract).

It would have been obvious to one of skill in the art to apply the teachings of Creekbaum within Huffman. This would have been obvious because one of skill in the art would have been motivated by the advantages of securely managing vehicular threats (e.g. Creekbaum, par. 5).

Regarding claim 25, Huffman discloses a remote vehicle control system, but Huffman does not disclose that a remote vehicle control request is to provide information.

Creekbaum, similar to Huffman, discloses a remote vehicle control system, wherein the system enables requests to monitor information such as *comprising at least one of a current and/or historic speed of the vehicle, vehicle identification number, vehicle owner identity, driver's license number, vehicle insurance information, and license plate number* (e.g. Creekbaum, par. 16, 20, 21; fig. 1:125).

It would have been obvious to one of skill in the art to apply the teachings of Creekbaum within Huffman. This would have been obvious because one of skill in the art would have been motivated by the advantages of securely managing vehicular threats (e.g. Creekbaum, par. 5).

Regarding claims 7, 8, 18, and 17, they are apparatus and medium claims essentially corresponding to the method claims above, and they are rejected, at least, for the same reasons.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFERY WILLIAMS whose telephone number is (571)272-7965. The examiner can normally be reached on 9:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Farid Homayounmerhr can be reached on 571-272-3739. 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.

/JEFFERY WILLIAMS/
Primary Examiner, Art Unit 2495

1

Notice of References Cited	Application/Control No. 13/829,605	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	Page 1 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2012/0110356 A1	05-2012	Yousefi et al.	713/320
*	B	US-2003/0158638 A1	08-2003	Yakes et al.	701/22
*	C	US-6,302,438 B1	10-2001	Stopper et al.	280/735
*	D	US-2012/0259951 A1	10-2012	Schalk et al.	709/217
*	E	US-7,891,004 B1	02-2011	Gelvin et al.	726/26
*	F	US-2012/0173900 A1	07-2012	Diab et al.	713/310
*	G	US-2012/0173905 A1	07-2012	Diab et al.	713/320
*	H	US-2012/0173900 A1	07-2012	Diab et al.	713/310
*	I	US-2007/0156317 A1	07-2007	Breed, David S.	701/045
*	J	US-2007/0115101 A1	05-2007	Creekbaum et al.	340/426.22
*	K	US-2010/0228404 A1	09-2010	Link et al.	701/1
*	L	US-2009/0195370 A1	08-2009	Huffman et al.	340/426.13
*	M	US-2004/0257208 A1	12-2004	Huang et al.	340/426.1

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. 13/829,605	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	Page 2 of 2

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	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.
13/829,862	03/14/2013	Christopher P. Ricci	6583-247-CIP-12	2764

111285 7590 07/16/2015

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

EXAMINER
WILLIAMS, JEFFERY L

ART UNIT	PAPER NUMBER
2495	

NOTIFICATION DATE	DELIVERY MODE
07/16/2015	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. 13/829,862	Applicant(s) RICCI, CHRISTOPHER P.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	AIA (First Inventor to File) Status No

-- 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 *3/11/15*.

☐ 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) *1-33* 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) *1-33* 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 *3/11/15 10/20/14 7/3/14 10/18/13 10/18/13*.

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

4) ☐ Other: _____.

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Claims 1 – 33 are pending.

Any references to applicant's specification are made by way of applicant's U.S. pre-grant printed patent publication.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (**pre-AIPA** 35 U.S.C. 102(e)).

Claims 1 – 33 are rejected under pre-AIA 35 U.S.C. 102(e) as being clearly anticipated by Tadayon et al. (Tadayon), US 2012/0149341 A1.

Regarding claim 1, Tadayon discloses:

a microprocessor executable media filter operable to filter and/or process a third party sourced signal received by an onboard component of the vehicle in a manner consistent with one or more rules, the one or more rules pertaining to one or more of a whitelist, blacklist, sensed occupant context, and/or a law and/or regulation (e.g. Tadayon, par. 12, 52, 53, 263).

Regarding claim 2, Tadayon discloses:

wherein the one or more rules is a whitelist and wherein the whitelist is at least one of predetermined by a manufacturer of the vehicle and configured by and unique to the vehicle occupant to receive the third party sourced signal, the whitelist indicating third party signal sources privileged to send signals to the vehicle occupant (e.g. par. 49, 126, 261, 263 - herein policy rules can allow (i.e. "whitelist") or prevent (i.e. "blacklist") the reception of signals).

Regarding claim 3, Tadayon discloses:

wherein the one or more rules is a blacklist and wherein the blacklist is at least one of predetermined by a manufacturer of the vehicle and configured by and unique to the vehicle occupant to receive the third party sourced signal, the blacklist indicating

third party signal sources not privileged to send signals to the vehicle occupant (e.g. par. 49, 126, 261, 263 - herein policy rules can allow (i.e. "whitelist") or prevent (i.e. "blacklist") the reception of signals).

Regarding claim 4, Tadayon discloses:

wherein the one or more rules is based on sensed occupant context and wherein sensed occupant context comprises one or more of an operating mode of a vehicle display associated with the occupant, a current spatial location of the vehicle, an operating state of the vehicle, a role of the occupant in the vehicle, a physical characteristic of the occupant, and a preference of the occupant (e.g. Tadayon, par. 48, 58).

Regarding claim 5, Tadayon discloses:

wherein the one or more rules is based on one or more of whether the vehicle is parked or moving, a geopolitical location of the vehicle, whether the occupant is operating the vehicle, and an age of the occupant (e.g. Tadayon, par. 53).

Regarding claim 6, Tadayon discloses:

wherein the one or more rules is based on a federal, state, provincial, and/or local law and/or regulation applicable to a current geopolitical location of the vehicle (e.g. Tadayon, par. 53, 261-263).

Regarding claim 7, Tadayon discloses:

wherein the one or more rules require the third party sourced signals to be processed for a first occupant of the vehicle in a manner different than a different second occupant of the vehicle (e.g. Tadayon, par. 58).

Regarding claim 8, Tadayon discloses:

wherein the media filter determines a spatial location of an external computational device located within the vehicle and, based on the determined spatial location of the computational device, applies the one or more rules (e.g. Tadayon, par. 58; figs. 3).

Regarding claim 9, Tadayon discloses:

wherein the one or more rules is related to a received strength of the third party sourced signal, a physical location of the vehicle relative to a broadcast range of third party signal source, an operating state of the vehicle, and a request by the third party to provide additional content to the vehicle and wherein, in response to the one or more rules, content from the third party signal source is cached for later presentation to the vehicle occupant (e.g. Tadayon, par. 52, 99).

Regarding claim 10, Tadayon discloses:

wherein, based on the one or more rules, a media form and/or type is altered to present at least part of the payload of the signal to the vehicle occupant (e.g. Tadayon, par. 102, 103).

Regarding claim 11, Tadayon discloses:

wherein at least one of the following steps is performed in response to application of the one or more rules: (i) video content in a payload of the signal is not presented to the vehicle occupant while audio content of the payload is presented to the vehicle occupant; and (ii) text content in the payload is converted into an analogous audio stream and presented audibly to the vehicle occupant (e.g. Tadayon, par. 3, 311, 331).

Regarding claims 12 – 33, they are program and method claims essentially corresponding to the above claims, and they are rejected, at least, for the same reasons.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFERY WILLIAMS whose telephone number is (571)272-7965. The examiner can normally be reached on 9:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Farid Homayounmerhr can be reached on 571-272-3739. 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.

/JEFFERY WILLIAMS/
Primary Examiner, Art Unit 2495

Notice of References Cited	Application/Control No. 13/829,862	Applicant(s)/Patent Under Reexamination RICCI, CHRISTOPHER P.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	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.
13/830,066	03/14/2013	Christopher P. Ricci	6583-247-CIP-14	6649

111285 7590 08/13/2015

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

EXAMINER
WILLIAMS, JEFFERY L

ART UNIT	PAPER NUMBER
2495	

NOTIFICATION DATE	DELIVERY MODE
08/13/2015	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. 13/830,066	Applicant(s) RICCI ET AL.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	AIA (First Inventor to File) Status No

-- 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 *3/14/13*.

☐ 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) *1-42* 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) *1-42* 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 *3/14/13* 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 *3/12/15 10/24/14 7/3/14 10/18/13 10/18/13*.

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

4) ☐ Other: _____.

The present application is being examined under the pre-AIA first to invent provisions.

DETAILED ACTION

Claims 1 – 42 are pending.

Any references to applicant's specification are made by way of applicant's U.S. pre-grant printed patent publication.

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 – 42 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.

Regarding claims 1 – 42, the recitations of "task, function, and/or operation" renders the scope of the claims ambiguous indefinite. Specifically, there does not appear to be evidence any actual or patentable distinction within any of the art, the claim language, and the applicant's own disclosure between the meanings for each of a "task", a "function", and "operation". In other words, each term appears to essentially represent a process or action and the redundant recitation of the same subject matter renders the scope of the claims indefinite.

Regarding claims 1 – 42, the recitation of "at least most automated vehicle tasks" renders the scope of the claims indefinite. Specifically, within the context of the claims, the term "most" is a relative term that is would be subject to a clear enumeration, identification, and demarcation of "automated vehicle tasks". As the applicant fails to clearly establish antecedent basis for the scope of "automated vehicle tasks" (e.g. by number, type, identification), it would be unclear to one of skill in the art as to what falls within or outside the scope of "most".

The term "substantially" in claims 3, 17, and 31 is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. In other words, it is not clear and definite to one of skill in the art as to what

specific point or points in time subject matter would fall within or outside the scope of the claimed “synchronicity”.

Regarding claims 16 – 22 and 24 – 28, they are rejected as indefinite in scope as they comprise only a general narrative and fail to further comprise limitations (e.g. instructions or medium limitations) to the medium or instructions of claim 15.

Regarding claims 30 – 42, they are rejected as indefinite in scope as they comprise only a general narrative and fail to further comprise limitations (e.g. method steps in addition to the step of “determining”) to the method of claim 29.

Regarding claims 9, 23, and 37, the recitations of “the check and/or test results” lack antecedent basis within the claims and therefore renders the scope of the claims indefinite.

All depending claims are rejected, at least, by virtue of dependency.

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

> (d) REFERENCE IN DEPENDENT FORMS.—Subject to subsection (e), a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), fourth paragraph:

> Subject to the [fifth paragraph of 35 U.S.C. 112 (pre-AIA)], a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

Claims 16 – 22 and 24 – 28, and 30 – 42 are rejected under 35 U.S.C. 112(d) or pre-AIA 35 U.S.C. 112, 4th paragraph, as being of improper dependent form for failing to further limit the subject matter of the claim upon which it depends, or for failing to include all the limitations of the claim upon which it depends. Please see above rejections. Applicant may cancel the claim(s), amend the claim(s) to place the claim(s) in proper dependent form, rewrite the claim(s) in independent form, or present a sufficient showing that the dependent claim(s) complies with the statutory requirements.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 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 –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4 – 15, 16, 18 – 30, and 32 – 42 are rejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Yakes et al. (Yakes), US 2003/0158638.

Regarding claim 1, Yakes discloses:

at least one processing module to control at least one automated vehicle task, function, and/or operation (e.g. Yakes, fig. 1, 2)*;*

and a health check module to determine a corresponding state of health of the at least one processing module to perform the at least one of task, function, and/or operation (e.g. Yakes, fig. 42, 43; par. 323, 336).

Regarding claim 2, Yakes discloses:

wherein the at least one processing module comprises a plurality of processing modules, wherein the at least one automated vehicle task, function, and/or operation comprises a plurality of automated vehicle tasks, functions and/or operations (e.g. Yakes, fig. 9, 12)*,*

wherein a first processing module of the plurality of processing modules is in an active mode, whereby the first processing module is in primary control of at least most automated vehicle tasks, functions and/or operations, and a second processing module of the plurality of processing modules is in a standby mode, whereby the second processing module is ready to assume primary control of the at least most automated vehicle tasks, functions and/or operations (e.g. Yakes, fig. 9, 12; par. 167; e.g. see also par. 132, 163; e.g. see also par. 226, 241-243; etc…). For example, Yakes dislcoses that control system 12 can be used to control the vehicle functions at one time, whereas control system 1212 can be used to control vehicle functions at a second time. Also for example, Yakes discloses that a load manager can control vehicle functions at one time

and a load sequencer can control vehicle functions at a second time. Also for example, Yakes discloses that one control system module can control vehicle functions at one time, whereas second control system module can control vehicle functions at a second time, such as when the vehicle is damaged. Etc...

Regarding claim 4, Yakes discloses:

wherein the at least one automated vehicle task, function and/or operation comprises monitoring, controlling and/or operating a plurality of the following: an engine and/or power control unit, transmission control unit (TCU), a door setting, a window setting, a blind spot monitor, an airbag deployment control unit, a collision sensor, a nearby object sensing system, a seat belt control unit, a sensor for a seat belt setting, a power source controller, an energy output sensor, an engine temperature sensor, oil pressure, hydraulic pressure, a headlight, an emergency light, a brake light, a parking light, a fog light, an interior and/or passenger compartment light, a tail light, a vehicle control system sensor, a wireless network, a cellular data sensor, a steering sensor, a torque sensor, an engine, power steering, a display panel, switch state control unit, and a brake control unit (e.g. Yakes, fig. 1 - 14).

Regarding claim 5, Yakes discloses:

wherein the at least one automated vehicle task, function and/or operation comprises monitoring, controlling and/or operating a plurality of the following: an emissions system, a seating system controller and/or sensor, an entertainment system,

monitoring an ambient (outdoor) weather sensor, an odometer reading sensor, a trip mileage reading sensor, a road condition sensor, a radar transmitter/receiver output, a brake wear sensor, an oxygen sensor, an ambient lighting sensor, a vision system sensor, a ranging sensor, a parking sensor, a heating, venting, and air conditioning (HVAC) system and/or sensor, a water sensor, a air-fuel ratio meter, a hall effect sensor, a microphone, a radio frequency (RF) sensor, and/or an infrared (IR) sensor (e.g. Yakes, fig. 1 - 14).

Regarding claim 6, Yakes discloses:

wherein the at least one processing module comprises first and second processing modules, wherein the first and second processing modules are duplicated (e.g. Yakes, par. 68, 69, 70)*, and further comprising an arbitration module to arbitrate hand-off conflicts between the duplicated first and second processing modules* (e.g. Yakes, par. 67, 104, 132, 150, 163; see also e.g. par. 226, 241 - 244). Herein, one processing module can be duplicates, wherein one can act as a deputy or arbiter for selecting another processing module from a plurality to handle vehicle operations.

Regarding claim 7, Yakes discloses:

wherein the arbitration module selects one of the first and second processing modules to currently possess and/or own a token, the token indicating at least one of (i) which processing module is an active processing module and/or which processing module is a standby processing module and (ii) which processing module is responsible

for a selected set of processing tasks, functions, and/or operations associated with the token (e.g. Yakes, par. 67, 104, 132, 150, 163; see also for e.g. par. 241 - 244). Herein, the control unit selects a processing module of a plurality of processing modules to be in an active state and associates status information, i.e. “token”, indicating such state.

Regarding claim 8, Yakes discloses:

wherein the health check module performs a check and/or test, in response to an internally generated interrupt and/or request to determine the at least one processing module's ability to perform the at least one automated vehicle task, function, and/or operation (e.g. Yakes, fig. 42, 43; par. 323, 336, 241 - 244).

Regarding claim 9, Yakes discloses:

wherein a health check module assigns a score to the at least one processing module based on the check and/or test results, and/or compares the score to one or more thresholds and/or to a score of a different processing module to determine a relative and/or absolute state of health of the at least one processing module (e.g. Yakes, fig. 42, 43; par. 328, 330). Herein, the system displays interpretable fault information, i.e. "a score").

Regarding claim 10, Yakes discloses:

wherein the at least one processing module comprises first and second processing modules, wherein the first and second processing modules are duplicated,

and further comprising an arbitration module to arbitrate hand-off conflicts between the duplicated first and second processing modules wherein the arbitration module, based on the relative and/or absolute state of health of each of the first and second processing modules selects one of the first and second processing modules as a primary processing module in primary control of the at least one automated vehicle task, function and/or operation and the other of the first and second processing modules as a secondary processing module in standby mode (e.g. Yakes, par. 67, 104, 132, 150, 163, 226, 241 - 244). Herein, the control unit selects a processing module of a plurality of processing modules to be in an active state and associates status information, i.e. "token", indicating such state; wherein such selection of modules is made based upon failures or damage to the modules).

Regarding claim 11, Yakes discloses:

wherein a hand-off procedure is activated whereby primary control is passed from the first processing module to the secondary processing module and the first processing module enters the standby mode (e.g. Yakes, par. 241 – 243).

Regarding claim 12, Yakes discloses:

wherein the at least one automated vehicle task, function, and/or operation comprises a plurality of automated vehicle tasks, functions, and/or operations and wherein the relative weighting of at least some tasks, functions and/or operations in assigning the score is a function of geographic location of the vehicle (e.g. Yakes, fig. 1

- 13). The examiner furthermore notes that the "relative weighting" has been explicitly limited by the applicant as being optional. Therefore, further characterizations of optional subject matter is optional within the scope of the claimed invention.

Regarding claim 13, Yakes discloses:

wherein, for a first set of tasks, functions, and/or operations, the first processing module is in primary control and the second processing module is in standby mode and, for a different second set of tasks, functions, and/or operations, the second processing module is in primary control and the first processing module is in standby mode.

Regarding claim 14, Yakes discloses:

wherein, in the standby mode, the second processing module at least one of (a) performs shadow processing of the at least most automated vehicle tasks, functions and/or operations and (b) synchronizes stored time-stamped processing state information with time-stamped processing state information regarding the at least most automated vehicle tasks, functions and/or operations (e.g. Yakes, par. 226, 244). Each duplicate processing module maintains (i.e. “shadow processing”) the processing states of all vehicle modules.

Regarding claims 15, 16, 18 – 30, and 32 – 42, they comprises essentially similar subject matter, and they are rejected, at least, for the same reasons.

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 35 U.S.C. 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, 17, and 31 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Yakes.

Regarding claims 3, 17, and 31, Yakes discloses:

wherein a state of the second processing module is maintained substantially in synchronicity with a state of the first processing module to a enable a stateful failover from the first processing module to the second processing module (e.g. Yakes, 226, 241-244).

However, Yakes does not appear to explicitly disclose that processing modules within a vehicle can communicate with each other wirelessly. However, the examiner points out that it would have been obvious to one of skill in the art to recognize that wireless signals may be substituted for wired signals. This would have been obvious because it was a well-known and common practice to interchange wires for wireless and vice versa for the advantages offered by each medium.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFERY WILLIAMS whose telephone number is (571)272-7965. The examiner can normally be reached on 9:30-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Farid Homayounmerhr can be reached on 571-272-3739. 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.

/JEFFERY WILLIAMS/
Primary Examiner, Art Unit 2495

Notice of References Cited	Application/Control No. 13/830,066	Applicant(s)/Patent Under Reexamination RICCI ET AL.	
	Examiner JEFFERY WILLIAMS	Art Unit 2495	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-2003/0158638 A1	08-2003	Yakes et al.	701/22
*	B	US-2012/0110356 A1	05-2012	Yousefi et al.	713/320
	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.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	)	Group Art Unit: 2496
Christopher Ricci	)	Confirmation No.: 1085
Serial No.: 13/828,960	)	Examiner: Amir Mehrmanesh
Filed: March 14, 2013	)	SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT
Atty. File No.: 6583-247-CIP-5	)	
Entitled: "On Board Vehicle Network Security"	)	*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

Ford Ex. 1002 Page 1074 of 1178

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: Sept 4, 2015

Ford Ex. 1002 Page 1075 of 1178

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	Group Art Unit: 2496
RICCI, Christopher P.	Confirmation No.: 1085
Serial No.: 13/828,960	Examiner: Amir Mehrmanesh
Filed: March 14, 2013	
Atty. File No.: 8283-247-CIP-5	
Entitled: "ON BOARD VEHICLE NETWORK SECURITY"	***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 June 5, 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 Claims are reflected in the listing of claims which begins on page **2** of this paper.

Remarks/Arguments begin on page **12** of this paper.

AMENDMENTS TO THE CLAIMS

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

Listing of Claims

1. (Currently Amended) A vehicle, comprising:

a plurality of on board computational components;

a first security mechanism to enforce a security measure and form a perimeter network logically including the plurality of on board computational components; and

a microprocessor executable network controller operable to (i) detect an instance of a breach of the security measure, (ii) determine whether a computational component affected by the instance of a breach of the security measure can be isolated from at least one on board computational component not affected by or potentially affected by the instance of a breach of the security measure, and (iii) when the computational component affected by the instance of a breach of the security measure can be isolated from the at least one on board computational component not affected by or potentially affected by the instance of a breach of the security measure, at least one of (a) isolate the at least one on board computational component not affected by or potentially affected by the instance of a ~~security~~ breach ~~instance~~ of a security measure from the computational component affected by the ~~security breach~~ instance of a breach of a security measure and (b) isolate the computational component affected by the ~~security breach~~ instance of a breach of a security measure from the at least one on board computational component not affected by or potentially affected by the ~~security breach~~ instance of a breach of a security measure, wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the ~~security breach~~ instance of a breach of a security measure, (2) directing communications to and from the computational component affected by the ~~security breach~~ instance of a breach of a security measure to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the ~~security breach~~ instance of a breach of a security measure, and (4) activating a second security mechanism in response to the ~~security breach~~ instance of a breach of a security measure.

Ford Ex. 1002 Page 1077 of 1178

2. (Previously Presented) The vehicle of claim 1, wherein the security breach instance is one or more of an instance of a virus, malware, unauthorized access, misuse, modification, denial-of-service attack, spoofing, man-in-the-middle attack, ARP poisoning, smurf attack, buffer overflow, heap overflow, format string attack, SQL injection, identity theft (or MAC spoofing), network injection, caffe latte attack, or denial of a computer network and/or network-accessible resource, wherein the network controller receives a warning signal associated with the security breach instance from a gateway, a firewall, a honeypot, a network node impacted by the security breach instance, and a network probe, and wherein the first security mechanism is one or more of: encryption, checks on MAC addresses, disabling ESSID broadcasting, isolating the vehicular network by a firewall and/or gateway, hiding the SSID (Service Set Identifier), MAC ID filtering, static IP addressing , IEEE 802.11, 802.11i, and/or 802.1x security, use of the wired equivalent privacy encryption, TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, end-to-end encryption, and RF shielding substantially surrounding an interior of the vehicle to attenuate signals and prevent wireless signals from propagating outside the vehicle.

3. (Previously Presented) The vehicle of claim 2, wherein the computational component affected by the security breach instance is an on board computational component, wherein the at least one board computational component is one or more of an on-board sensor, processing module, software application, expansion module, critical device, non-critical device, and cellular upgrade module, and wherein the computational component affected by the security breach instance and the at least one on board computational component are both within a perimeter network of the vehicle.

4. (Previously Presented) The vehicle of claim 2, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the at least one board computational component is one or more of an on board sensor, a media controller, a gateway, a firewall, a processing module, a network controller, an input/output system, a display controller, an audio controller, an arbitration module, a health check module, a critical system controller, a non-critical system controller, an on board sensor monitor, a displayed object movement module, a diagnostic module, a media filter, a network selector, a remote control

module, a computational module selector, an expansion module, an application, and a plug-in module.

5. (Previously Presented) The vehicle of claim 1, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the microprocessor executable network controller analyzes the security breach instance by one or more of reviewing historical behavior and comparing the behavior to templates characteristic of differing types of attacks and/or applying rules to the historical behavior and updating firewall settings to protect against a further security breach instance.

6. (Previously Presented) The vehicle of claim 1, wherein the computational component affected by the security breach instance is an external computational device and wherein the at least one on board computational component not affected by the security breach instance is isolated from the external computational device by the vehicular wireless network denying vehicular wireless network access by the external computational component.

7. (Previously Presented) The vehicle of claim 1, wherein at least one of the following is true about the isolation: communications between the at least one on board computational component in a vehicular wireless network not affected by the security breach instance and the computational component affected by the security breach instance, the communications not normally passing through a gateway and/or firewall are redirected through and filtered by the gateway and/or firewall and communications between the at least one on board computational component in a vehicular wireless network not affected by the security breach instance and the computational component affected by the security breach instance are blocked in whole or part.

8. (Previously Presented) The vehicle of claim 1, wherein the at least one computational component is inside of a perimeter network of the vehicle, wherein the at least one on board computational component in a vehicular wireless network not affected by the security breach instance is a critical component, wherein the computational component affected by the security breach instance is a node on the vehicular wireless network and physically and/or logically positioned outside of but interiorly and/or internally to the perimeter network, and wherein isolation is effected by enabling a critical communication security mechanism that is

one or more of encryption of access restrictions in the at least one on board computational component in a vehicular wireless network, disabling ESSID broadcasting, hiding the SSID, performing MAC ID filtering, performing static IP addressing, implementing IEEE 802.11, 802.11i, and/or 802.1x security, using wired equivalent privacy encryption, using one or more of TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, and using end-to-end encryption.

9. (Currently Amended) A method, comprising:

in a vehicle comprising a plurality of on board computational components, a first security mechanism to enforce security measure and form a perimeter network logically including the plurality of on board computational components, and a microprocessor executable network controller, the microprocessor executable network controller identifying a possible security breach instance;

in response, the microprocessor executable network controller determining whether a computational component affected by the possible security breach ~~of the security measure~~ instance can be isolated from at least one on board computational component not affected by or potentially affected by the possible security breach ~~of the security measure~~instance; and

when the computational component affected by the possible security breach ~~of the security measure~~ instance can be isolated from the at least one on board computational component not affected by or potentially affected by the possible security breach ~~of the security measure~~instance, the microprocessor executable network controller at least one of (a) isolating the at least one on board computational component not affected by or potentially affected by the possible security breach instance from the computational component affected by the possible security breach instance and (b) isolating the computational component affected by the possible security breach instance from the at least one on board computational component not affected by or potentially affected by the possible security breach instance, wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the possible security breach instance, (2) directing communications to and from the computational component affected by the possible security breach instance to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the possible security breach instance, and (4) activating a second security mechanism in response to the possible security breach instance.

10. (Previously Presented) The method of claim 9, wherein the security breach instance is one or more of an instance of a virus, malware, unauthorized access, misuse, modification, denial-of-service attack, spoofing, man-in-the-middle attack, ARP poisoning, smurf attack, buffer overflow, heap overflow, format string attack, SQL injection, identity theft (or MAC spoofing), network injection, caffe latte attack, or denial of a computer network and/or network-accessible resource, wherein the network controller receives a warning signal associated with the security breach instance from a gateway, a firewall, a honeypot, a network node impacted by the security breach instance, and a network probe, and wherein the first security mechanism is one or more of: encryption, checks on MAC addresses, disabling ESSID broadcasting, isolating the vehicular network by a firewall and/or gateway, hiding the SSID (Service Set Identifier), MAC ID filtering, static IP addressing , IEEE 802.11, 802.11i, and/or 802.1x security, use of the wired equivalent privacy encryption, TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, end-to-end encryption, and RF shielding substantially surrounding an interior of the vehicle to attenuate signals and prevent wireless signals from propagating outside the vehicle.

11. (Previously Presented) The method of claim 10, wherein the computational component affected by the security breach instance is an on board computational component, wherein the at least one board computational component is one or more of an on-board sensor, processing module, software application, expansion module, critical device, non-critical device, and cellular upgrade module, and wherein the computational component affected by the security breach instance and the at least one on board computational component are both within a perimeter network of the vehicle.

12. (Previously Presented) The method of claim 10, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the at least one board computational component is one or more of an on board sensor, a media controller, a gateway, a firewall, a processing module, a network controller, an input/output system, a display controller, an audio controller, an arbitration module, a health check module, a critical system controller, a non-critical system controller, an on board sensor monitor, a displayed object movement module, a diagnostic module, a media filter, a network selector, a remote control

module, a computational module selector, an expansion module, an application, and a plug-in module.

13. (Previously Presented) The method of claim 9, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the microprocessor executable network controller detects a possible security breach instance by one or more of reviewing historical behavior and comparing the behavior to templates characteristic of differing types of attacks and/or applying rules to the historical behavior and updating firewall settings to protect against a further security breach instance.

14. (Previously Presented) The method of claim 9, wherein the computational component affected by the security breach instance is an external computational device and wherein the at least one on board computational component not affected by the security breach instance isolation is isolated from the external computational device by the vehicular wireless network denying vehicular wireless network access by the external computational component.

15. (Previously Presented) The method of claim 9, wherein at least one of the following is true about the isolation: communications between the at least one on board computational component in a vehicular wireless network not affected by the security breach instance and the computational component affected by the security breach instance, the communications not normally passing through a gateway and/or firewall are redirected through and filtered by the gateway and/or firewall and communications between the at least one on board computational component in a vehicular wireless network not affected by the security breach instance and the computational component affected by the security breach instance are blocked in whole or part.

16. (Previously Presented) The method of claim 9, wherein the at least one computational component is inside of a perimeter network of the vehicle, wherein the at least one on board computational component in a vehicular wireless network not affected by the security breach instance is a critical component, wherein the computational component affected by the security breach instance is a node on the vehicular wireless network and physically and/or logically positioned outside of but interiorly and/or internally to the perimeter network, and wherein isolation is effected by enabling a critical communication security mechanism that is

one or more of encryption of access restrictions in the at least one on board computational component in a vehicular wireless network, disabling ESSID broadcasting, hiding the SSID, performing MAC ID filtering, performing static IP addressing, implementing IEEE 802.11, 802.11i, and/or 802.1x security, using wired equivalent privacy encryption, using one or more of TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, and using end-to-end encryption.

17. (Currently Amended) In a vehicle comprising a plurality of on board computational components, a non-transient, tangible computer readable medium comprising a first security mechanism to enforce security measure and form a perimeter network logically including the plurality of on board computational components and a microprocessor executable network controller on board a selected vehicle that, when executed, detects an instance of a breach of the security measure, determines whether a computational component affected by the instance of a breach of the security measure can be isolated from at least one on board computational component not affected by or potentially affected by the instance of a breach of the security measure, and, when the computational component affected by the instance of a breach of the security measure can be isolated from the at least one on board computational component not affected by or potentially affected by the instance of a breach of the security measure, and at least one of isolates the at least one on board computational component not affected by or potentially affected by the instance of a ~~security~~ breach ~~instance~~ of the security measure from the computational component affected by the instance of a ~~security~~ breach ~~instance~~ of the security measure isolates the computational component affected by the ~~security~~ instance of a breach ~~instance~~ of a security measure from the at least one on board computational component not affected by or potentially affected by the instance of a ~~security~~ breach ~~instance~~of the security measure, wherein the isolation is one or more of: (1) denying vehicular wireless network access to the computational component affected by the instance of a ~~security~~ breach ~~instance~~of the security measure, (2) directing communications to and from the computational component affected by the instance of a ~~security~~ breach ~~instance~~ of the security measure to a firewall and/or gateway to enforce a security measure, (3) blocking communications to and from the computational component affected by the instance of a ~~security~~ breach ~~instance~~of the security measure, and (4) activating a second security mechanism in response to the instance of a ~~security~~ breach ~~instance~~of the security measure.

18. (Previously Presented) The computer readable medium of claim 17, wherein the security breach instance is one or more of an instance of a virus, malware, unauthorized access, misuse, modification, denial-of-service attack, spoofing, man-in-the-middle attack, ARP poisoning, smurf attack, buffer overflow, heap overflow, format string attack, SQL injection, identity theft (or MAC spoofing), network injection, caffe latte attack, or denial of a computer network and/or network-accessible resource and wherein the network controller receives a warning signal associated with the security breach instance from a gateway, a firewall, a honeypot, a network node impacted by the security breach instance, and a network probe, and wherein the first security mechanism is one or more of: encryption, checks on MAC addresses, disabling ESSID broadcasting, isolating the vehicular network by a firewall and/or gateway, hiding the SSID (Service Set Identifier), MAC ID filtering, static IP addressing , IEEE 802.11, 802.11i, and/or 802.1x security, use of the wired equivalent privacy encryption, TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, end-to-end encryption, and RF shielding substantially surrounding an interior of the vehicle to attenuate signals and prevent wireless signals from propagating outside the vehicle.

19. (Previously Presented) The computer readable medium of claim 18, wherein the computational component affected by the security breach instance is an on board computational component, wherein the at least one on board computational component is one or more of an on-board sensor, processing module, software application, expansion module, critical device, non-critical device, and cellular upgrade module, and wherein the computational component affected by the security breach instance and the at least one on board computational component are both within a perimeter network of the vehicle.

20. (Previously Presented) The computer readable medium of claim 18, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the at least one on board computational component is one or more of an on board sensor, a media controller, a gateway, a firewall, a processing module, a network controller, an input/output system, a display controller, an audio controller, an arbitration module, a health check module, a critical system controller, a non-critical system controller, an on board sensor monitor, a displayed object movement module, a diagnostic module, a media filter, a network

selector, a remote control module, a computational module selector, an expansion module, an application, and a plug-in module.

21. (Previously Presented) The computer readable medium of claim 17, wherein the computational component affected by the security breach instance is outside of a perimeter network of the vehicle containing the at least one on board computational component and wherein the microprocessor executable network controller detects a possible security breach instance by one or more of reviewing historical behavior and comparing the behavior to templates characteristic of differing types of attacks and/or applying rules to the historical behavior and updating firewall settings to protect against a further security breach instance.

22. (Previously Presented) The computer readable medium of claim 17, wherein the computational component affected by the security breach instance is an external computational device and wherein the at least one on board computational component not affected by the security breach instance is isolated from the external computational device by the vehicular wireless network denying vehicular wireless network access by the external computational component.

23. (Previously Presented) The computer readable medium of claim 17, wherein at least one of the following is true about the isolation: communications between the at least one on board computational component in a vehicular wireless network not affected by the security breach instance and the computational component affected by the security breach instance, the communications not normally passing through a gateway and/or firewall are redirected through and filtered by the gateway and/or firewall and communications between the at least one on board computational component in a vehicular wireless network not affected by the security breach instance and the computational component affected by the security breach instance are blocked in whole or part.

24. (Previously Presented) The computer readable medium of claim 17, wherein the at least one computational component is inside of a perimeter network of the vehicle, wherein the at least one on board computational component in a vehicular wireless network not affected by the security breach instance is a critical component, wherein the computational component affected by the security breach instance is a node on the vehicular wireless network and physically and/or logically positioned outside of but interiorly and/or internally to the perimeter

network, and wherein isolation is effected by enabling a critical communication security mechanism that is one or more of encryption of access restrictions the at least one on board computational component in a vehicular wireless network, disabling ESSID broadcasting, hiding the SSID, performing MAC ID filtering, performing static IP addressing, implementing IEEE 802.11, 802.11i, and/or 802.1x security, using wired equivalent privacy encryption, using one or more of TKIP, EAP, LEAP, PEAP, WPAv 1, and/or WPAv2 protocols, and using end-to-end encryption.

REMARKS/ARGUMENTS

The amendments to Claims 1, 9, and 17 do not require an additional search or examination, and the amendments are requested to further clarify any potential ambiguity in the claims. The claims have not been earlier amended as the need for the amendments was not appreciated when the Amendment and Response was filed.

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
Registration No. 37,739
1560 Broadway, Suite 1200
Denver, Colorado 80202-5141
(303) 863-9700

Date: September 8, 2015

Ford Ex. 1002 Page 1087 of 1178

Electronic Acknowledgement Receipt

EFS ID:	23428580
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
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:	8283-247-CIP-5
Receipt Date:	08-SEP-2015
Filing Date:	14-MAR-2013
Time Stamp:	16:11:02
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_8283-247-CIP-5.pdf	188552 58208d6d1596ac02821850c623a4b55a097f81c2	yes	12

	Multipart Description/PDF files in .zip description		
	Document Description	**Start**	**End**
	Amendment after Notice of Allowance (Rule 312)	1	1
	Claims	2	11
	Applicant Arguments/Remarks Made in an Amendment	12	12
Warnings:			
Information:			
	Total Files Size (in bytes):	188552	

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.

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 06/05/2015
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.
13/828,960	03/14/2013	Christopher P. Ricci	8283-247-CIP-5	1085

TITLE OF INVENTION: ON BOARD VEHICLE NETWORK SECURITY

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	09/08/2015

EXAMINER	ART UNIT	CLASS-SUBCLASS
MEHRMANESH, AMIR	2496	726-028000

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: AutoConnect Holdings LLC
(B) RESIDENCE: (CITY and STATE OR COUNTRY): Wellesley, MA

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 September 8, 2015
Typed or printed name Douglas W. Swartz Registration No. 37,739

Ford Ex. 1002 Page 1090 of 1178

Electronic Patent Application Fee Transmittal

Application Number:	13828960
Filing Date:	14-Mar-2013
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
First Named Inventor/Applicant Name:	Christopher P. Ricci
Filer:	Douglas W. Swartz/Amy Duarte
Attorney Docket Number:	8283-247-CIP-5

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:	23428675
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
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:	8283-247-CIP-5
Receipt Date:	08-SEP-2015
Filing Date:	14-MAR-2013
Time Stamp:	16:13:25
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Credit Card
Payment was successfully received in RAM	$960
RAM confirmation Number	3416
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	Issue Fee Payment (PTO-85B)	Issue-fee-transmittal_8283-247-CIP-5.pdf	95418 5a9c59cc0723b263e47f824b912ad6d7996b724d	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30990 58195efb4218a79a38b89d9c3652870ae81cd7c2	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	126408		

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 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.
13/828,960	03/14/2013	Christopher P. Ricci	8283-247-CIP-5	1085

7590 09/10/2015

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

EXAMINER	
MEHRMANESH, AMIR	

ART UNIT	PAPER NUMBER
2496	

NOTIFICATION DATE	DELIVERY MODE
09/10/2015	ELECTRONIC

NOTICE OF NON-COMPLIANT INFORMATION DISCLOSURE STATEMENT

An Information Disclosure Statement (IDS) filed 09-04-15 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.

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

Sep 10, 2015 05:28:36 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.
13828960	M327	09/10/2015	8283-247-CIP-5

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:	**13828960**	**Examiner:**	**Mehrmanesh**	**GAU:**	**2496**
From:	**Chuck Bowen**	**Location:**	**RTFM**	**Creation Date:**	**09/10/2015**

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	09/08/2015	
☐ SPEC		

[RUSH] Message:

Please respond to the 09/08/15 A.NA.

Thank you.

CB

[XRUSH] Response:

Initials: _____

NOTE: This form will be included as part of the official USPTO record with the response document coded as XRUSH.
REV: JUL 15

PRINTER RUSH

(PTO ASSISTANCE)

Application:	**13828960**	**Examiner:**	**Mehrmanesh**	**GAU:**	**2496**
From:	**Chuck Bowen**	**Location:**	**RTFM**	**Creation Date:**	**09/10/2015**

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	09/08/2015	
☐ SPEC		

[RUSH] Message:

Please respond to the 09/08/15 A.NA.

Thank you.

CB

[XRUSH] Response:

Amendment filed 09/08/2015 does not change the scope of the claims. Accordingly the amendment has been enterned.

Initials: /A.M./

NOTE: This form will be included as part of the official USPTO record with the response document coded as XRUSH.
REV: JUL 15

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.
13/828,960	03/14/2013	Christopher P. Ricci	8283-247-CIP-5	1085

111285 7590 09/25/2015

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

EXAMINER
MEHRMANESH, AMIR

ART UNIT	PAPER NUMBER
2496	

NOTIFICATION DATE	DELIVERY MODE
09/25/2015	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)
	13/828,960	RICCI, CHRISTOPHER P.
	Examiner	Art Unit
	AMIR MEHRMANESH	2496

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

1. ☒ The amendment filed on *08 September 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.

Amendment filed 09/08/2015 does not change the scope of the claims. Accordingly the amendment has been enterned.

/AMIR MEHRMANESH/
Primary Examiner, Art Unit 2496

OK TO ENTER: /A.M./

/A.M./ 09/21/2015

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	Group Art Unit: 2496
RICCI, Christopher P.	Confirmation No.: 1085
Serial No.: 13/828,960	Examiner: Amir Mehrmanesh
Filed: March 14, 2013	
Atty. File No.: 8283-247-CIP-5	
Entitled: "ON BOARD VEHICLE NETWORK SECURITY"	***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 June 5, 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 Claims are reflected in the listing of claims which begins on page **2** of this paper.

Remarks/Arguments begin on page **12** of this paper.

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 25, 2015 05:41:06 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.
13828960	N271	09/25/2015	8283-247-CIP-5

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

Substitute for form 1449/PTO				Complete if Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Application Number	13/828,960
				Filing Date	March 14, 2013
(Use as many sheets as necessary)				First Named Inventor	Christopher Ricci
				Art Unit	2496
				Examiner Name	Amir Mehrmanesh
Sheet	1	of	3	Attorney Docket Number	6583-247-CIP-5

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	5363306	11/08/1994	Kuwahara et al.	
	2	5648769	07/15/1997	Sato et al.	
	3	5710702	01/20/1998	Hayashi et al.	
	4	5838251	11/17/1998	Brinkmeyer et al.	
	5	7493140	02/17/2009	Michmerhuizen et al.	
	6	8432260	04/30/2013	Talty et al.	
	7	8532574	09/10/2013	Kirsch	
	8	2002/0105968	08/08/2002	Pruzan et al.	
	9	2006/0047386	03/02/2006	Kanevsky et al.	
	10	2006/0274829	12/07/2006	Siemens et al.	
	11	2007/0057781	03/15/2007	Breed	
	12	2008/0051957	02/28/2008	Breed et al.	
	13	2008/0090522	04/17/2008	Oyama	
	14	2008/0129475	06/05/2008	Breed et al.	
	15	2009/0278806	11/12/2009	Duarte et al.	
	16	2011/0267204	11/03/2011	Chuang et al.	
	17	2012/0006610	01/12/2012	Wallace et al.	
	18	2012/0089299	04/12/2012	Breed	
	19	2012/0116609	05/10/2012	Jung et al.	
	20	2012/0084792	04/05/2012	Benedek et al.	
	21	2012/0084735	04/05/2012	Sirpal	
	22	2012/0259951	10/11/2012	Schalk et al.	
	23	2011/0035098	~~04/24/2012~~	Goto et al.	February 10, 2011
	24	2012/0284292	11/08/2012	Rechsteiner et al.	
Change(s) applied	25	2012/0313771	12/13/2012	Wottlifff, III	
to document.	26	2013/0099940	04/25/2013	Protopapas	
/J.E.B./	27	2013/0190978	07/25/2013	Kato et al.	
7/6/2015	28	2013/0231800	09/05/2013	Ricci	
	29	2013/0288606	10/31/2013	Kirsch	
	30	2013/0295901	11/07/2013	Abramson et al.	
	31	2013/0309977	11/21/2013	Heines et al.	
	32	2014/0066014	03/06/2014	Nicholson et al.	

Examiner Signature	/Amir Mehrmanesh/	Date Considered	12/29/2014

*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.M./

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.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/828,960	10/27/2015	9173100	8283-247-CIP-5	1085

111285 7590 10/07/2015

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 171 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

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

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

Oct 08, 2015 05:40:20 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.
13828960	ISSUE.NTF	10/07/2015	8283-247-CIP-5

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 the Patent of:	Serial No.: 13/828,960
Inventor(s): Christopher Ricci	Filed: March 14, 2013
Patent No.: 9,173,100	Conf. No. 1085
Issued: October 27, 2015	
Atty. File No.: 8283-247-CIP-5	***Submitted via EFS-Web***
Entitled: "ON BOARD VEHICLE NETWORK SECURITY"	

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 correction which is requested herein. The error in claim 24 of the patent is a typographical error and support for the correction may be found in the Response dated April 16, 2015, at page 12, claim 24, line 9.

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 18, 2016

Ford Ex. 1002 Page 1106 of 1178

PTO/SB/44 (09-07)
Approved for use through 08/31/2013. OMB 0651-0033
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.
(Also Form PTO-1050)

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 9,173,100

APPLICATION NO. : 13/828,960

ISSUE DATE : October 27, 2015

INVENTOR(S) : Christopher 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 24, column 64, line 63, delete "other" therein.

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.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Acknowledgement Receipt

EFS ID:	24649876
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
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:	8283-247-CIP-5
Receipt Date:	18-JAN-2016
Filing Date:	14-MAR-2013
Time Stamp:	17:58:12
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	8283-247-CIP-5_Request-Certificate-Correction.pdf	245958 a3a066aff662079d1c3358530f178db25831e2fb	no	2

Warnings:	
Information:	

Total Files Size (in bytes):	245958

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 PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

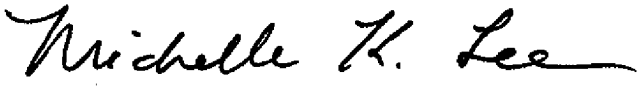
PATENT NO. : 9,173,100 B2
APPLICATION NO. : 13/828960
DATED : October 27, 2015
INVENTOR(S) : Christopher Ricci

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 24, column 64, line 63, delete "other" therein.

Signed and Sealed this
Twenty-ninth Day of March, 2016



Michelle K. Lee
Director of the United States Patent and Trademark Office

PTO/AIA/81A (02-15)
Approved for use through 01/31/2018. 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

PATENT - POWER OF ATTORNEY OR REVOCATION OF POWER OF ATTORNEY WITH A NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS

Patent Number	9,173,100
Issue Date	October 27, 2015
First Named Inventor	Christopher P. Ricci
Title	ON BOARD VEHICLE NETWORK SECURITY
Attorney Docket No.	51263-00062

I hereby revoke all previous powers of attorney given in the above-identified patent.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint Practitioner(s) associated with the Customer Number identified in the box at right as my/our attorney(s) or agent(s) with respect to the patent identified above, and to transact all business in the United States Patent and Trademark Office connected therewith: 25231

OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) with respect to the patent identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Please recognize or change the correspondence address for the above-identified patent to:

☐ The address associated with the above-identified Customer Number.

OR

☒ The address associated with the Customer Number identified in the box at right: 25231

OR

☐ Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

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.

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.
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.

Electronic Acknowledgement Receipt

EFS ID:	29520060
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
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:	8283-247-CIP-5
Receipt Date:	16-JUN-2017
Filing Date:	14-MAR-2013
Time Stamp:	12:13:15
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_51263-00062.pdf	257415 f62e68d1f8874d2f6bde7d1682c2786a8d5a275d	no	2

Warnings:

Information:	
Total Files Size (in bytes):	257415

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 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
13/828,960	03/14/2013	Christopher P. Ricci	8283-247-CIP-5

CONFIRMATION NO. 1085

MISCELLANEOUS NOTICE

111285
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

OC00000092331701

Date Mailed: 06/26/2017

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 26, 2017 03:50:15 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.
13828960	PEFN	06/26/2017	8283-247-CIP-5

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

Doc Code: N572

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 DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/828,960	03/14/2013	Christopher P. Ricci	8283-247-CIP-5

CONFIRMATION NO. 1085

OC000000092331701

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: 06/23/2017

DENIAL OF REQUEST FOR POWER OF ATTORNEY

The request for Power of Attorney filed 06/16/2017 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(c) 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.
- ☐ 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

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

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)
Approved for use through 01/31/2018. 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

PATENT - POWER OF ATTORNEY OR REVOCATION OF POWER OF ATTORNEY WITH A NEW POWER OF ATTORNEY AND CHANGE OF CORRESPONDENCE ADDRESS

Patent Number	9,173,100
Issue Date	October 27, 2015
First Named Inventor	Christopher P. Ricci
Title	ON BOARD VEHICLE NETWORK SECURITY
Attorney Docket No.	51263-00062

I hereby revoke all previous powers of attorney given in the above-identified patent.

☐ A Power of Attorney is submitted herewith.

OR

☒ I hereby appoint Practitioner(s) associated with the Customer Number identified in the box at right as my/our attorney(s) or agent(s) with respect to the patent identified above, and to transact all business in the United States Patent and Trademark Office connected therewith: 25231

OR

☐ I hereby appoint Practitioner(s) named below as my/our attorney(s) or agent(s) with respect to the patent identified above, and to transact all business in the United States Patent and Trademark Office connected therewith:

Practitioner(s) Name	Registration Number

Please recognize or change the correspondence address for the above-identified patent to:

☐ The address associated with the above-identified Customer Number.

OR

☒ The address associated with the Customer Number identified in the box at right: 25231

OR

☐ Firm or Individual Name					
Address					
City		State		Zip	
Country					
Telephone		Email			

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.

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.
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.

Electronic Acknowledgement Receipt

EFS ID:	29700555
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
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:	8283-247-CIP-5
Receipt Date:	06-JUL-2017
Filing Date:	14-MAR-2013
Time Stamp:	12:11:43
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	Assignee showing of ownership per 37 CFR 3.73	373c_aia0096_51263-00062.pdf	120790 0e88ee6dd1d170a8bcfbff84d58b3814c3c1e55c	no	3

Warnings:

Information:					
2	Power of Attorney	POA_Signed_51263-00062.pdf	257415 f62e68d1f8874d2f6bde7d1682c2786a8d5a275d	no	2
Warnings:					
Information:					
			Total Files Size (in bytes):	378205	

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/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.: 9,173,100 Filed/Issue Date: October 27, 2015

Titled: ON BOARD VEHICLE NETWORK SECURITY

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 030029, Frame 0853, 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.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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)

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/	July 6, 2017
Signature	Date
ROBERT G. CROUCH	34,806
Printed or Typed Name	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.

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.

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
13/828,960	03/14/2013	Christopher P. Ricci	8283-247-CIP-5

CONFIRMATION NO. 1085

POWER OF ATTORNEY NOTICE

111285
Sheridan Ross P.C.
1560 Broadway
Suite 1200
Denver, CO 80202

OC000000092701125

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 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**.

/tlulu/

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
13/828,960	03/14/2013	Christopher P. Ricci	51263-00062

CONFIRMATION NO. 1085

POA ACCEPTANCE LETTER

25231
MARSH, FISCHMANN & BREYFOGLE LLP
8055 East Tufts Avenue
Suite 450
Denver, CO 80237

OC000000092701148

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**.

/tlulu/

To: PTOMail@mfblaw.com,,
From: PAIR_eOfficeAction@uspto.gov
Cc: PAIR_eOfficeAction@uspto.gov
Subject: Private PAIR Correspondence Notification for Customer Number 25231

Jul 13, 2017 10:03:57 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.
13828960	N570	07/12/2017	51263-00062
	N570	07/12/2017	51263-00062

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.**

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.
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.

Electronic Acknowledgement Receipt

EFS ID:	35820300
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	25231
Filer:	Unisha Patel
Filer Authorized By:	
Attorney Docket Number:	51263-00062
Receipt Date:	24-APR-2019
Filing Date:	14-MAR-2013
Time Stamp:	16:02:16
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.

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 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
13/828,960	03/14/2013	Christopher P. Ricci	51263-00062

CONFIRMATION NO. 1085

153965
Patent Ventures, LLC
700 Uccelli Drive
7204
Redwood City, CA 94063

POA ACCEPTANCE LETTER

OC000000107728170

Date Mailed: 04/29/2019

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/24/2019.

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**.

/mnguyen/

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
13/828,960	03/14/2013	Christopher P. Ricci	51263-00062

CONFIRMATION NO. 1085

POWER OF ATTORNEY NOTICE

25231
Marsh Fischmann & Breyfogle LLP
8055 East Tufts Avenue, Suite 450
Denver, CO 80237

OC000000107728158

Date Mailed: 04/29/2019

NOTICE REGARDING CHANGE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 04/24/2019.

- 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**.

/mnguyen/

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 29, 2019 03:38:46 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.
13828960	N570	04/29/2019	51263-00062
	N570	04/29/2019	51263-00062

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
13/828,960	03/14/2013	Christopher P. Ricci	51263-00062	170500

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

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)
51263-00062

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. 9,173,100 Application Number 13/828,960

Issue Date 10-27-2015 Filing Date 03-14-2013

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. _____

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))

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 Application of

Inventor: Christopher P. Ricci

Confirmation Number: 1085

Application No.: 13/828,960

Filed: April 15th, 2016

Title: ON BOARD VEHICLE NETWORK SECURITY

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 October 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

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.

Ford Ex. 1002 Page 1144 of 1178

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:	13828960
Filing Date:	14-Mar-2013
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
First Named Inventor/Applicant Name:	Christopher P. Ricci
Filer:	Unisha Patel
Attorney Docket Number:	51263-00062

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:	46333287
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	153965
Filer:	Unisha Patel
Filer Authorized By:	
Attorney Docket Number:	51263-00062
Receipt Date:	03-AUG-2022
Filing Date:	14-MAR-2013
Time Stamp:	14:25:06
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	E202283E25254514
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 Office of Petitions	SB6651263-00062.pdf	318115 a2f3de68d983b87c2856ae2233d2d2053e0eb19f	no	5
Warnings:					
Information:					
2	Petition for review by the Office of Petitions	Petitiontorevive51263-00062.pdf	24900 5ad3affdd78bfd5d2cb73fc8e836516240aafb19	no	1
Warnings:					
Information:					
3	Miscellaneous Incoming Letter	GreggDeclaration7-12-2022.pdf	328398 33717391aa7932814140f724998b1bc0edc4cced	no	4
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	37912 2cf2817a6e9a60e5da52f42eb360c8ac8918c441	no	2
Warnings:					
Information:					
		Total Files Size (in bytes):	709325		

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.

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*	U.S. Application Number* (e.g., 08/555,555)	Maintenance Fee Amount (37 CFR 1.20(e)-(g))	Surcharge Amount (37 CFR 1.20(h))	Payment Year (select one below) Column 5		
	Column 1	Column 2	Column 3	Column 4	3.5 yrs	7.5 yrs	11.5 yrs
1	9,173,100	13/828,960	$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).

** WHERE MAINTENANCE FEE PAYMENTS ARE TO BE MADE BY AUTHORIZATION TO CHARGE A DEPOSIT ACCOUNT, BOTH THE NAME AND SIGNATURE OF AN AUTHORIZED USER ARE REQUIRED.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

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
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.

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]1005

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.

Credit Card Billing Address

Street Address 1: 1655 Delano Street

Street Address 2: Unit 32

City: Milpitas

State/Province: CA | Zip/Postal Code: 95035

Country: US

Daytime Phone #: 9088126409 | Fax #:

Request and Payment Information

Description of Request and Payment Information:

☐ Patent Fee	☒ Patent Maintenance Fee	☐ Trademark Fee	☐ Other Fee
Application No.	Application No. 13/828,960	Application No.	IDON Customer No.
Patent No.	Patent No. 9,173,100	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.

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.
13/828,960	03/14/2013	Christopher P. Ricci	51263-00062	1085

153965 7590 03/07/2023

Patent Ventures, LLC
1655 Delano Street, 32
Milpitas, CA 93035

EXAMINER
MEHRMANESH, AMIR

ART UNIT	PAPER NUMBER
2496	

NOTIFICATION DATE	DELIVERY MODE
03/07/2023	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.:9,173,100 :
Issue Date: October 27, 2015 :
Application No.:13/828,960 : ON PETITION
Filed: March 14, 2013 :
Attorney Docket No. 51263-00062

This is a decision on the petition, filed August 3, 2022, to reinstate the above-cited patent pursuant to 37 CFR 1.378(b)[1].

The petition 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. Extensions of this two-month time limit can be granted under 37 CFR 1.136(a). This is **not** a final agency action within the meaning of 5 U.S.C. § 704.

The above-identified patent issued on October 27, 2015. Therefore, the grace period in 35 U.S.C. § 41(b) for paying the 3.5-year maintenance fee expired at midnight on October 27, 2019.

The petition does not satisfy 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.

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*

---

[1] (a) The Director may accept the payment of any maintenance fee due on a patent after expiration of the patent if, upon petition, the delay in payment of the maintenance fee is shown to the satisfaction of the Director to have been unintentional. If the Director accepts payment of the maintenance fee upon petition, the patent shall be considered as not having expired, but will be subject to the conditions set forth in 35 U.S.C. 41(c)(2).

(b) Any petition to accept an unintentionally delayed payment of a maintenance fee must include:

(1) The required maintenance fee set forth in § 1.20(e) through (g);

(2) The petition fee as set forth in § 1.17(m); and

(3) A statement that the delay in payment of the maintenance fee was unintentional. The Director may require additional information where there is a question whether the delay was unintentional.

(c) Any petition under this section must be signed in compliance with § 1.33(b).

Filed in Patent Applications and Patents Based on Unintentional Delay, 85 FR 12222 (March 2, 2020). Therefore, additional information, beyond the "Declaration of Gregg Hershenson In Support Of Petition Under 37 CFR 1.378" filed on August 3, 2022, is required that provides a further 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. As to this first period of delay, petitioner states:

> 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.

"Declaration of Gregg Hershenson In Support Of Petition Under 37 CFR 1.378" filed on August 3, 2022, pp.1-2.

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. The declaration of Mr. Hershenson makes clear that, at the time the subject patent expired, it was the responsibility of IP Optimum to pay the 3.5-year maintenance fee. On renewed petition, a statement from the authorized representative of IP Optimum is required in which the representative informs as to their understanding of why the 3.5-year maintenance fee for the subject patent was not timely paid.

The second period of delay petitioner must address on renewed petition is the delay in filing the initial petition pursuant to 37 CFR 1.378(b). Petitioner must explain why the initial petition was not filed until August 3, 2022, including, but not limited to informing, how petitioner discovered that the 3.5-year maintenance fee was not paid and the approximate date on which petitioner discovered that the maintenance fee was not paid. The renewed petition must also explain petitioner's diligent efforts to promptly file the petition under 37 CFR 1.378(b) once petitioner discovered the subject patent was expired.

The third period of delay petitioner must address on renewed petition is any undue delay in filing a *grantable* petition pursuant to 37 CFR 1.378(b).

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).

The renewed petition is not required to be accompanied by a fee under 37 CFR 1.17(m).

In re Patent No. 9,173,100 Application No. 13/828,960

Further correspondence with respect to this matter should be addressed as follows:

By mail: Commissioner for Patents
United States Patent and Trademark Office
Box 1450
Alexandria, VA 22313-1450

By facsimile: (571) 273-8300
Attn: Office of Petitions

By Internet: EFS-Web or Patent Center

Telephone inquiries concerning this decision may be directed to the undersigned at (571) 272-3222.

/KENYA A THORNTON MCLAUGHLIN/
Attorney Advisor, OPET

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

Mar 07, 2023 03:32:18 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.
13828960	PETDEC	03/07/2023	51263-00062

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. 9,173,100

Inventor: Christopher P. Ricci

Confirmation Number: 6219

Application No.: 13/828,960

Filed: March 14, 2013

Title: ON BOARD VEHICLE NETWORK SECURITY

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 March 7, 2023, Decision on Patent Owner's Petition under 37 CFR 1.378 to revive Patent No. 9,173,100 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.

Ford Ex. 1002 Page 1161 of 1178

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.

AutoConnect and IP Optimum included provisions in the PPA to ensure payment of any

[1] Patent Owner understands that IP Optimum is no longer a going concern.

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. Thus, AutoConnect mistakenly believed that IP Optimum was the party responsible to pay the maintenance fee when it was in fact AutoConnect who was contractually obligated to do so. 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 March 7, 2023 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, such 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

Ford Ex. 1002 Page 1164 of 1178

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:

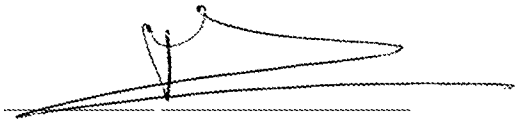
1. I co-founded IPwe in January 2018 and served as Managing Director from then until September 2021. I was responsible for the commercialization of patent portfolios. In particular, I managed the commercialization of a vehicular technology patent portfolio brought by an entity called IP Optimum and acquired 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

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:

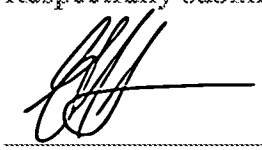
6.11 Prosecution Obligations; Fees. No undisclosed actions must be taken by Seller before any governmental entity (including the United States Patent and Trademark Office or equivalent authority anywhere in the world) within ninety (90) days of the Closing Date with respect to any of the Assigned Patent 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

Electronic Acknowledgement Receipt

EFS ID:	47646415
Application Number:	13828960
International Application Number:	
Confirmation Number:	1085
Title of Invention:	ON BOARD VEHICLE NETWORK SECURITY
First Named Inventor/Applicant Name:	Christopher P. Ricci
Customer Number:	153965
Filer:	Unisha Patel
Filer Authorized By:	
Attorney Docket Number:	51263-00062
Receipt Date:	07-MAR-2023
Filing Date:	14-MAR-2013
Time Stamp:	20:05:30
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	Petition1378B51263-000623-7-2023.pdf	45979 5bf6f0c52ff2b1a98757620eefeeadf5f5fae27b	no	4

Warnings:

Information:					
2	Miscellaneous Incoming Letter	AsselotDeclaration.pdf	84326 4e946c88fc6d099006bcd6a7baea51735a25d449	no	2
Warnings:					
Information:					
3	Miscellaneous Incoming Letter	HershensonDeclaration.pdf	934804 134fa25620a18df3471d980687f65b35639e71de	no	6
Warnings:					
Information:					
			Total Files Size (in bytes):	1065109	

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 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.
13/828,960	03/14/2013	Christopher P. Ricci	51263-00062	1085

153965 7590 04/05/2023

Patent Ventures, LLC
1655 Delano Street, 32
Milpitas, CA 93035

EXAMINER
MEHRMANESH, AMIR

ART UNIT	PAPER NUMBER
2496	

NOTIFICATION DATE	DELIVERY MODE
04/05/2023	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.:9,173,100	:	
Issue Date: October 27, 2015	:	
Application No.:13/828,960	:	ON PETITION
Filed: March 14, 2013	:	
Attorney Docket No. 51263-00062		

This is a decision on the renewed petition, filed on March 7, 2023, to reinstate the above-cited patent pursuant to 37 CFR 1.378(b)[1].

The petition is **GRANTED**.

The above-identified patent issued on October 27, 2015. Therefore, the grace period in 35 U.S.C. § 41(b) for paying the 3.5-year maintenance fee expired at midnight on October 27, 2019.

The subject renewed petition under 37 CFR 1.1378(b) was filed on March 7, 2023, and includes a statement which provides additional information showing the entire period of delay was unintentional. Patentee is required to immediately inform the Office if, upon further investigation, patentee discovers that the entire delay in paying the maintenance fee was not unintentional.

The 3.5-year maintenance fee of 1,000.00, and petition fee of $1,050.00, were received on August 3, 2022. The above-identified patent is reinstated, accordingly.

Petitioner is reminded that the one-year window in which to pay the 7.5-year maintenance fee opened on October 27, 2022, and will close at midnight on October 27, 2023. The 7.5-year maintenance fee (along with any necessary surcharge) must be timely paid to avoid expiration of the subject patent for failure to pay the 7.5-year maintenance fee.

---

[1] 37 CFR 1.378(b) provides:

(b) Any petition to accept an unintentionally delayed payment of a maintenance fee must include:

(1) The required maintenance fee set forth in § 1.20(e) through (g);

(2) The petition fee as set forth in § 1.17(m); and

(3) A statement that the delay in payment of the maintenance fee was unintentional. The Director may require additional information where there is a question whether the delay was unintentional.

Questions regarding the maintenance fee due dates and payments must be directed to the Maintenance Fee Office at (571) 272-6500. Telephone inquiries concerning this decision may be directed to the undersigned at (571) 272-3222.

/KENYA A THORNTON MCLAUGHLIN/
Attorney Advisor, OPET

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 05, 2023 03:27:59 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.
13828960	PETDEC	04/05/2023	51263-00062

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