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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.



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***EX PARTE* REEXAMINATION COMMUNICATION TRANSMITTAL FORM**

REEXAMINATION CONTROL NO. 90/014,675 .

PATENT UNDER REEXAMINATION 8032278 .

ART UNIT 3992 .

Enclosed is a copy of the latest communication from the United States Patent and Trademark Office in the above identified *ex parte* reexamination proceeding (37 CFR 1.550(f)).

Where this copy is supplied after the reply by requester, 37 CFR 1.535, or the time for filing a reply has passed, no submission on behalf of the *ex parte* reexamination requester will be acknowledged or considered (37 CFR 1.550(g)).

Office Action in Ex Parte Reexamination	Control No. 90/014,675	Patent Under Reexamination 8032278	
	Examiner Luke S Wassum	Art Unit 3992	AIA (FITF) Status No

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

- a. ☐ Responsive to the communication(s) filed on _____.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- b. ☐ This action is made FINAL.
- c. ☒ A statement under 37 CFR 1.530 has not been received from the patent owner.

A shortened statutory period for response to this action is set to expire 2 month(s) from the mailing date of this letter. Failure to respond within the period for response will result in termination of the proceeding and issuance of an *ex parte* reexamination certificate in accordance with this action. 37 CFR 1.550(d). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).** If the period for response specified above is less than thirty (30) days, a response within the statutory minimum of thirty (30) days will be considered timely.

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

- | | |
|--|---|
| 1. ☐ Notice of References Cited by Examiner, PTO-892. | 3. ☐ Interview Summary, PTO-474. |
| 2. ☐ Information Disclosure Statement, PTO/SB/08. | 4. ☐ _____. |

Part II SUMMARY OF ACTION

- 1a. ☒ Claims 1-22 are subject to reexamination.
- 1b. ☐ Claims _____ are not subject to reexamination.
2. ☐ Claims _____ have been canceled in the present reexamination proceeding.
3. ☒ Claims 2-3 and 12-17 are patentable and/or confirmed.
4. ☒ Claims 1,4-11 and 18-22 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ The drawings, filed on _____ are acceptable.
7. ☐ The proposed drawing correction, filed on _____ has been (7a) ☐ approved (7b) ☐ disapproved.
8. ☐ Acknowledgment is made of the priority claim under 35 U.S.C. 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the certified copies have
1 ☐ been received.
2 ☐ not been received.
3 ☐ been filed in Application No. _____.
4 ☐ been filed in reexamination Control No. _____.
5 ☐ been received by the International Bureau in PCT application No. _____.
* See the attached detailed Office action for a list of the certified copies not received.
9. ☐ Since the proceeding appears to be in condition for issuance of an *ex parte* reexamination certificate 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.
10. ☐ Other: _____

cc: Requester (if third party requester)

U.S. Patent and Trademark Office

PTOL-466 (Rev. 08-13)

Office Action in Ex Parte Reexamination

Part of Paper No. 20210608

***Ex Parte* Reexamination**

A request for *Ex Parte* Reexamination of claims 1-22 of United States Patent Number 8,032,278 ("the '278 patent") was filed 16 February 2021 ("the Request"). The '278 patent issued to **Kenneth E. Flick** on 4 October 2011, from application number 11/773,272 ("the '272 application"), filed 3 July 2007.

The Office mailed a Decision granting reexamination of claims 1-22 on 25 March 2021.

Claims 1-22 are subject to reexamination.

Related Proceedings

The application which issued as the '278 patent was application no. 11/773,272 ("the '272 application"), filed 3 July 2007.

The '278 patent was the subject of four previous *Ex Parte* Reexamination proceedings; 90/013,587, filed 14 September 2014 ("**First Reexamination**"); 90/013,851, filed 28 October 2016 ("**Second Reexamination**"); 90/014,309, filed 24 May 2019 ("**Third Reexamination**"); and 90/014,419, filed 11 December 2019 ("**Fourth Reexamination**").

In the Fourth Reexamination, an Order denying the request was mailed on 27 January 2020. Third Party Requester Innova Electronics Corporation filed a petition to

review the examiner's decision to deny reexamination on 25 February 2020. There has been no decision on the petition.

Claim Interpretation

During reexamination, claims are given the broadest reasonable interpretation consistent with the specification and limitations in the specification are not read into the claims (*In re Yamamoto*, 740 F.2d 1569, 222 USPQ 934 (Fed. Cir. 1984)).

Upon review of the original specification and prosecution history, the examiner has found no instance of lexicographic definitions, either express or implied, that are inconsistent with the ordinary and customary meaning of the respective terms. Therefore, for the purposes of claim interpretation, the examiner concludes that there are no claim terms for which Patent Owner is acting as their own lexicographer. See MPEP § 2111.01.IV.

The Office notes that there were several claim terms construed by the Patent Trial and Appeal Board (PTAB) in a decision¹ on appeal in the Second Reexamination. In the Decision, the PTAB also considered the construction of claim terms ordered in related

¹ Reexamination Proceeding 90/013,851, Decision on Appeal, 13 November 2018.

District Court litigation² involving several patents by inventor Kenneth E. Flick, including the '278 patent.

The construed claim terms are as follows:

Multi-Vehicle Compatible Controller, construed as “electronic circuitry that performs one or more control functions, and can operate with more than one vehicle.”

Different Vehicles, construed as “vehicles from different manufacturers, different models, or different trim levels of the same make or model, but having different electronics.”

Enabling Data, construed as “data related to the at least one corresponding vehicle device code for use by said multi-vehicle compatible controller, and which enables the controller to use a *particular* vehicle device code from among plural such codes for different vehicles by providing either (1) the code itself to the controller, or (2) data that otherwise enables the controller to select or generate the code.”

The Court’s construction of these claim terms is consistent with the broadest reasonable interpretation and is adopted for the purposes of the instant reexamination proceeding.

² *Omega Patents, LLC v. CalAmp Corp.*, No. 6:13-cv-1950-Orl-40DAB (M.D. Fla.), Claim Construction Order, 20 February 2015.

The Office also notes that the PTAB construed the claimed Vehicle Device Codes as “signal from a vehicle device”. However, in light of the disclosure at col. 23, line 67 through col. 24, line 3, that “[t]he corresponding vehicle [device] code may be for reading from the vehicle device **121**. Similarly, the corresponding vehicle [device] code may be additionally or alternatively for writing to the vehicle device **121**”, for the purposes of the instant reexamination proceeding, the term Vehicle Device Codes will be construed as “signal *to or* from a vehicle device.”

Priority

The ‘278 patent is a continuation-in-part of application 11/076,259, filed 9 March 2005, now U.S. Patent 7,720,597, which is a continuation of application 10/383,496, filed 7 March 2003, now U.S. Patent 7,149,623, which is a continuation of application 09/859,972 (“**972 application**”), filed 17 May 2001, now U.S. Patent 6,606,561.

The ‘278 patent also claimed priority under 35 U.S.C. § 119(e) to the following provisional applications:

60/264,811, filed 29 January 2001;
60/258,005, filed 22 December 2000;
60/251,552, filed 6 December 2000;
60/252,125, filed 20 November 2000;

60/246,463³, filed 7 November 2000;
60/236,890, filed 29 September 2000;
60/222,777, filed 3 August 2000; and
60/205,178, filed 17 May 2000.

As a continuation-in-part, the '278 patent is entitled to a priority date earlier than the actual filing date of the '272 application only for those claims that are fully supported by the earlier cited applications.

The Office notes that each of the independent claims of the '278 patent includes several features that were not disclosed in the earlier cited applications, including the fact that the tracking unit and its components are *multi-vehicle compatible*, that the vehicle includes a *vehicle data bus* that extends throughout the vehicle to facilitate communication between the controller and *at least one vehicle device* using at least one corresponding *vehicle device code*, and that the tracking unit includes a *downloading interface* for permitting *downloading of enabling data* related to the at least one corresponding vehicle device code.

³ The Office notes that the serial number of this provisional application contains a typographical error; the provisional application presumably intended in the priority claim was actually 60/246,436.

Since each of the independent claims of the '278 patent includes subject matter not supported by its parent application, the patent is entitled only to a priority date of 3 July 2007, the actual application date of the '272 application.

The Claimed Invention

Independent Claim 1 is directed to a multi-vehicle compatible tracking unit for a vehicle comprising a vehicle data bus extending throughout the vehicle. The multi-vehicle compatible tracking unit may comprise a vehicle position determining device, a wireless communications device, and a multi-vehicle compatible controller for cooperating with the vehicle position determining device and the wireless communications device to send vehicle position information. The multi-vehicle compatible controller may be coupled to the vehicle data bus for communication thereover with at least one vehicle device using at least one corresponding vehicle device code from among a plurality thereof for different vehicles. The multi-vehicle compatible tracking unit may comprise a downloading interface for permitting downloading of enabling data related to the at least one corresponding vehicle device code for use by the multi-vehicle compatible controller.

Independent Claims 13 and 18 are directed to multivehicle compatible tracking units similar to that of Claim 1, but further recite the downloading interface comprising a connector for temporary connection to a downloading device and a wireless receiver for temporary connection to a downloading device, respectively.

Prior Art Cited in the Request

The following reference was cited by the third party Requester in the Request for *Ex Parte* Reexamination:

U.S. Patent 6,611,740 to Lowrey et al. ("**Lowrey**")

U.S. Patent 6,636,790 to Lightner et al. ("**Lightner**").

Summary of the Grounds of Rejection

Ground 1: Claims 1, 4-11, and 18-22 are unpatentable under 35 U.S.C. § 103(a) as obvious over **Lowrey** in view of **Lightner**.

Relevant Statutes

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 negated by the manner in which the invention was made.

Claim Rejections

Ground 1: Lowrey and Lightner

Claims 1, 4-11, and 18-22 are unpatentable under 35 U.S.C. § 103(a) as obvious over **Lowrey** in view of **Lightner**.

Claim 1

Regarding claim 1, **Lowrey** teaches a **multi-vehicle compatible tracking unit for a vehicle** (see disclosure of in-vehicle wireless appliance **13** which can include hardware for global-positioning system (GPS) so that the location of the vehicle can be monitored [i.e., a *tracking* unit], col. 10, lines 56-61 and drawing Figure 1; see also disclosure that the wireless appliance can be easily installed in nearly every vehicle with an OBD-II connector and can easily be transferred from one vehicle to another [i.e., multi-vehicle compatible], col. 4, lines 59-63), comprising a **vehicle data bus extending throughout the vehicle** (see disclosure of a shared, standardized electronic buss over which most

ECUs transmit status and diagnostic information, col. 1, lines 14-25 et seq.), the multi-vehicle compatible tracking unit comprising:

- a) **a vehicle position determining device** (see disclosure that hardware for global-positioning system (GPS) may be included so that the location of the vehicle can be monitored along with its data, col. 10, lines 56-61 et seq.);
- b) **a wireless communications device** (see disclosure of a data-transmitting component [e.g., a radio of cellular modem] that sends out the data packet over an existing wireless network, col. 2, lines 55-59; see also disclosure that the data transmission component that sends formatted data through cable 17 to antenna 14 which then radiates the data packet over airlink 9 to a base station 11 included in a wireless network 4, col. 6, lines 14-26 et seq. and drawing Figure 1);
- c) **a multi-vehicle compatible controller** (see disclosure of the data-collection component of in-vehicle wireless appliance 13, and that said data-collection component includes a microcontroller, col. 6, lines 55-61; see also disclosure that the wireless appliance can be easily installed in nearly every vehicle with an OBD-II connector and can easily be transferred from one vehicle to another [i.e., multi-vehicle compatible], col. 4, lines 59-63) **for cooperating with said vehicle position determining device and said wireless**

communications device to send vehicle position information (see disclosure that the data-collection component collects diagnostic data from the engine computer **15**, formats the data in a packet and passes the packet to the data-transmission component, col. 6, lines 8-22 et seq.; see also disclosure that hardware for global-positioning system (GPS) may be included so that the location of the vehicle can be monitored along with its data [i.e., vehicle location data is also collected by the data-collection component, formatted, and passed to the data-transmission component], col. 10, lines 56-61 et seq.);

d) said multi-vehicle compatible controller to be coupled to the vehicle data

bus for communication thereover with at least one vehicle device (see disclosure that the in-vehicle wireless appliance **13** interfaces with other vehicle systems via the OBD-II connector, col. 2, lines 2-3; see also disclosure that OBD-II systems exchange data over a shared, standardized electronic buss which effectively functions as an on-board computer network in the vehicle, including many processors each of which transmits and receives data, col. 1, lines 14-22 et seq.; see also disclosure that the data-collection component collects vehicle data from engine computer **15** via cable **16** [i.e., part of the claimed vehicle data bus], col. 6, lines 8-22 et seq. and drawing

Figure 1) **using at least one corresponding vehicle device code** (see disclosure of the use of diagnostic trouble codes [DTCs] that indicate a specific problem with the vehicle, col. 1, lines 31-36 and col. 1, line 63 through col. 2, line 14; see also disclosure of a data-collection schema, which is essentially a map that describes the data that the wireless appliance collects from the vehicle's engine computer, and its corresponding location in the computer's memory, col. 6, lines 54-62; see also disclosure that the appliance collects diagnostic data defined by the schema, formats the data in a data packet, and then sends an outgoing packet over the airlink to a wireless network, col. 6, line 65 through col. 7, line 4; the Office notes that the disclosed diagnostic data collected from engine computer **15** by wireless appliance **13**, as well as the queries defined by the data-collection schema that specify which diagnostic data is to be retrieved from the engine computer, are both consistent with the Office's interpretation of the claimed 'vehicle device codes' as 'a signal to or from a vehicle device') **from among a plurality thereof for different vehicles** (see disclosure that the schema, defining the data to be collected from the vehicle's engine computer, is specific to a given type of vehicle and is typically loaded onto the

microcontroller before the wireless appliance is installed in the vehicle, col. 6, lines 62-65 et seq.); and

- e) **a downloading interface** (see disclosure of the data-transmission component configured to transmit an outgoing data packet comprising the diagnostic data over a network and to receive over the same network an incoming data packet that modifies the communication software, Abstract) **for permitting downloading of enabling data related to the at least one corresponding vehicle device code for use by said multi-vehicle compatible controller** (see disclosure of the ability to download a data packet containing a new schema, col. 7, lines 14-26; see also disclosure that the host vehicle receives the packet and processes it to extract the new data-collection schema, which the wireless appliance uses to extract a revised set of data from the vehicle's engine computer, or to query a set of data that is relevant to a DTC that has been generated by the vehicle, col. 7, lines 33-43 et seq.; the Office notes that the disclosed data packet containing a new schema is consistent with the Office's interpretation of the claimed 'enabling data' as including 'data that otherwise enables the controller to select or generate the code', since said new schema, which includes the data to collect and its location, enables the wireless appliance to collect that particular data, i.e., to use that particular

vehicle device code from among plural such codes for different vehicles corresponding to different schemas).

To the extent that **Lowrey** does not explicitly teach additional details of how the diagnostic data is vehicle-specific, **Lightner** discloses these additional details at col. 6, lines 26-34:

Depending on the make and model of the vehicle, the data packet can contain hundreds of datum that describe, e.g.: i) basic properties of the power train (e.g., emission levels, fuel-system status, engine temperature, speed and odometer readings, anti-lock brake status, RPMs, fuel and intake manifold pressure); and ii) manufacturer-specific information (e.g., status of the door locks, airbags, and entertainment center). In total, for most vehicles there are typically more than 300 datum that can be included in the data packet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of **Lightner** into that of **Lowrey**, since they both relate to wireless in-vehicle appliances that utilize the vehicle's OBD-II systems to monitor diagnostic data from various on-board systems and to transmit such data over a wireless connection to a host computer system, such that vehicle health and performance can be remotely monitored. Furthermore, since the diagnostic data is produced by the OBD-II system, and both references disclose the use of an OBD-II

system, any disclosure with respect to the diagnostic data generated by the disclosed vehicle tracking system would apply equally to both references.

Claim 4

Regarding claim 4, **Lowrey** additionally teaches the tracking unit of claim 1 wherein said downloading interface comprises **a wireless signal downloading interface** (see disclosure of the data-transmission component configured to transmit an outgoing data packet comprising the diagnostic data over a network and to receive over the same network an incoming data packet that modifies the communication software, Abstract; see also disclosure that the transmission occurs wirelessly via a link 9, col. 1, line 60 through col. 2, line 42 et seq. and drawing Figure 1).

Claim 5

Regarding claim 5, **Lowrey** additionally teaches the tracking unit of claim 4 wherein said wireless signal downloading interface comprises **a wireless receiver** (see disclosure of the data-transmission component configured to transmit an outgoing data packet comprising the diagnostic data over a network and to receive over the same network an incoming data packet that modifies the communication software, Abstract) **for temporary connection to a downloading device** (see disclosure of host computer

system 5 [i.e., downloading device] that can include multiple computers, software pieces, and other signal processing and switching equipment such as routers and digital signal processors, col. 6, lines 28-38, see also disclosure that the connection to the downloading device takes place at longer intervals specified in the data-collection schema, such as every 10 minutes [i.e., a temporary connection], col. 6, lines 18-22).

Claim 6

Regarding claim 6, **Lowrey** additionally teaches the tracking unit of claim 1 wherein **the corresponding at least one vehicle code is for reading from the at least one vehicle device** (see disclosure that the data-collection schema is essentially a map that describes the data that the wireless appliance collects from the vehicle's engine computer, and its corresponding location in the computer's memory, col. 6, lines 54-62 et seq.; see also disclosure that the appliance collects diagnostic data defined by the schema, col. 6, line 67 through col. 7, line 1; in other words, the data-collection schema defines the claimed at least one vehicle device code, in that the schema is used to generate queries to read data from a corresponding at least one vehicle device).

Claim 7

Regarding claim 7, **Lowrey** additionally teaches the tracking unit of claim 1 wherein **the corresponding at least one vehicle code is for writing to the at least one vehicle device** (see disclosure that a new schema can be transmitted to the wireless appliance to query a set of data that is relevant to a DTC registered by the vehicle, *or to 'clear' a DTC when it is deemed to no longer be problematic* [i.e., writing to a vehicle device], col. 7, lines 14-43).

To the extent that **Lowrey** does not explicitly disclose additional examples of at least one vehicle code for writing to the at least one vehicle device, **Lightner** further discloses such a feature (see disclosure that a data packet can be sent from the host computer system to the wireless communication system, which is processed by the microprocessor in the data collector/router to generate a signal that is sent to one of the vehicle's microcontrollers for adjusting a setting in the particular microcontroller, col. 3, line 22 through col. 4, line 8 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize at least one vehicle code for writing to the at least one vehicle device, since this would allow technicians to not only remotely diagnose problems in a

vehicle based on downloaded diagnostic data, it would allow the technician to remotely take action to address said problem.

Claim 8

Regarding claim 8, **Lowrey** additionally teaches the tracking unit of claim 1 wherein said downloading interface is also for permitting **downloading of at least one programming instruction for said multi-vehicle compatible controller** (see disclosure of the ability to download a data packet containing a new schema, col. 7, lines 14-26; see also disclosure that the host vehicle receives the packet and processes it to extract the new data-collection schema, which the wireless appliance uses to extract a revised set of data from the vehicle's engine computer, to send out data at a revised frequency, or to query a set of data that is relevant to a DTC that has been generated by the vehicle, col. 7, lines 33-43 et seq.; see also disclosure that the wireless appliance can receive over a network an incoming data packet that modifies the communication software, Abstract).

Claim 9

Regarding claim 9, **Lowrey** additionally teaches the tracking unit of claim 1 further comprising **a remote transmitter** (see disclosure the system can include a hand-held device, e.g., a cellular telephone or portable digital assistant, that connects to the

host computer system through the Internet, col. 3, lines 56-63) and wherein **said multi-vehicle compatible controller also performs at least one vehicle remote control function responsive to said remote transmitter** (see disclosure that the disclosed systems can be used for, *inter alia*, remote control of the vehicle [e.g., in response to theft or traffic/registration violations], col. 11, lines 8-13).

Claim 10

Regarding claim 10, **Lowrey** additionally teaches the tracking unit of claim 9 wherein the at least one vehicle remote control function comprises at least one of **a vehicle security function**, a remote keyless entry function, and a remote engine starting function (see disclosure that the disclosed systems can be used for, *inter alia*, remote control of the vehicle [e.g., in response to theft or traffic/registration violations], col. 11, lines 8-13).

Claim 11

Regarding claim 11, **Lowrey** additionally teaches the tracking unit of claim 1 wherein the wireless position determining device comprises **a Global Positioning System (GPS) receiver** (see disclosure that hardware for global-positioning system

(GPS) may be included so that the location of the vehicle can be monitored along with its data, col. 10, lines 56-61 et seq.).

Claim 18

Regarding claim 18, **Lowrey** teaches a **multi-vehicle compatible tracking unit for a vehicle** (see disclosure of in-vehicle wireless appliance **13** which can include hardware for global-positioning system (GPS) so that the location of the vehicle can be monitored [i.e., a *tracking* unit], col. 10, lines 56-61 and drawing Figure 1; see also disclosure that the wireless appliance can be easily installed in nearly every vehicle with an OBD-II connector and can easily be transferred from one vehicle to another [i.e., multi-vehicle compatible], col. 4, lines 59-63), comprising a **vehicle data bus extending throughout the vehicle** (see disclosure of a shared, standardized electronic buss over which most ECUs transmit status and diagnostic information, col. 1, lines 14-25 et seq.), the multi-vehicle compatible tracking unit comprising:

- a) a **vehicle position determining device** (see disclosure that hardware for global-positioning system (GPS) may be included so that the location of the vehicle can be monitored along with its data, col. 10, lines 56-61 et seq.);

- b) **a wireless communications device** (see disclosure of a data-transmitting component [e.g., a radio or cellular modem] that sends out the data packet over an existing wireless network, col. 2, lines 55-59; see also disclosure that the data transmission component that sends formatted data through cable 17 to antenna 14 which then radiates the data packet over airlink 9 to a base station 11 included in a wireless network 4, col. 6, lines 14-26 et seq. and drawing Figure 1);
- c) **a multi-vehicle compatible controller** (see disclosure of the data-collection component of in-vehicle wireless appliance 13, and that said data-collection component includes a microcontroller, col. 6, lines 55-61; see also disclosure that the wireless appliance can be easily installed in nearly every vehicle with an OBD-II connector and can easily be transferred from one vehicle to another [i.e., multi-vehicle compatible], col. 4, lines 59-63) **for cooperating with said vehicle position determining device and said wireless communications device to send vehicle position information** (see disclosure that the data-collection component collects diagnostic data from the engine computer 15, formats the data in a packet and passes the packet to the data-transmission component, col. 6, lines 8-22 et seq.; see also disclosure that hardware for global-positioning system (GPS) may be

included so that the location of the vehicle can be monitored along with its data [i.e., vehicle location data is also collected by the data-collection component, formatted, and passed to the data-transmission component], col. 10, lines 56-61 et seq.);

d) **said multi-vehicle compatible controller to be coupled to the vehicle data bus for communication thereover with at least one vehicle device** (see disclosure that the in-vehicle wireless appliance **13** interfaces with other vehicle systems via the OBD-II connector, col. 2, lines 2-3; see also disclosure that OBD-II systems exchange data over a shared, standardized electronic buss which effectively functions as an on-board computer network in the vehicle, including many processors each of which transmits and receives data, col. 1, lines 14-22 et seq.; see also disclosure that the data-collection component collects vehicle data from engine computer **15** via cable **16** [i.e., part of the claimed vehicle data bus], col. 6, lines 8-22 et seq. and drawing Figure 1) **using at least one corresponding vehicle device code** (see disclosure of the use of diagnostic trouble codes [DTCs] that indicate a specific problem with the vehicle, col. 1, lines 31-36 and col. 1, line 63 through col. 2, line 14; see also disclosure of a data-collection schema, which is essentially a map that describes the data that the wireless appliance

collects from the vehicle's engine computer, and its corresponding location in the computer's memory, col. 6, lines 54-62; see also disclosure that the appliance collects diagnostic data defined by the schema, formats the data in a data packet, and then sends an outgoing packet over the airlink to a wireless network, col. 6, line 65 through col. 7, line 4; the Office notes that the disclosed diagnostic data collected from engine computer **15** by wireless appliance **13**, as well as the queries defined by the data-collection schema that specify which diagnostic data is to be retrieved from the engine computer, are both consistent with the Office's interpretation of the claimed 'vehicle device codes' as 'a signal to or from a vehicle device') **from among a plurality thereof for different vehicles** (see disclosure that the schema, defining the data to be collected from the vehicle's engine computer, is specific to a given type of vehicle and is typically loaded onto the microcontroller before the wireless appliance is installed in the vehicle, col. 6, lines 62-65 et seq.); and

- e) **a downloading interface** (see disclosure of the data-transmission component configured to transmit an outgoing data packet comprising the diagnostic data over a network and to receive over the same network an incoming data packet that modifies the communication software, Abstract) **for permitting**

downloading of enabling data related to the at least one corresponding vehicle device code for use by said multi-vehicle compatible controller

(see disclosure of the ability to download a data packet containing a new schema, col. 7, lines 14-26; see also disclosure that the host vehicle receives the packet and processes it to extract the new data-collection schema, which the wireless appliance uses to extract a revised set of data from the vehicle's engine computer, or to query a set of data that is relevant to a DTC that has been generated by the vehicle, col. 7, lines 33-43 et seq.; the Office notes that the disclosed data packet containing a new schema is consistent with the Office's interpretation of the claimed 'enabling data' as including 'data that otherwise enables the controller to select or generate the code', since said new schema, which includes the data to collect and its location, enables the wireless appliance to collect that particular data, i.e., to use that particular vehicle device code from among plural such codes for different vehicles corresponding to different schemas);

- f) **said downloading interface comprising a wireless receiver for temporary connection to a downloading device** (see disclosure of the data-transmission component configured to transmit an outgoing data packet comprising the diagnostic data over a network and to receive over the same

network an incoming data packet that modifies the communication software, Abstract; see also disclosure that the transmission occurs wirelessly via a link 9, col. 1, line 60 through col. 2, line 42 et seq. and drawing Figure 1).

To the extent that **Lowrey** does not explicitly teach additional details of how the diagnostic data is vehicle-specific, **Lightner** discloses these additional details at col. 6, lines 26-34:

Depending on the make and model of the vehicle, the data packet can contain hundreds of datum that describe, e.g.: i) basic properties of the power train (e.g., emission levels, fuel-system status, engine temperature, speed and odometer readings, anti-lock brake status, RPMs, fuel and intake manifold pressure); and ii) manufacturer-specific information (e.g., status of the door locks, airbags, and entertainment center). In total, for most vehicles there are typically more than 300 datum that can be included in the data packet.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teachings of **Lightner** into that of **Lowrey**, since they both relate to wireless in-vehicle appliances that utilize the vehicle's OBD-II systems to monitor diagnostic data from various on-board systems and to transmit such data over a wireless connection to a host computer system, such that vehicle health and

performance can be remotely monitored. Furthermore, since the diagnostic data is produced by the OBD-II system, and both references disclose the use of an OBD-II system, any disclosure with respect to the diagnostic data generated by the disclosed vehicle tracking system would apply equally to both references.

Claim 19

Regarding claim 19, **Lowrey** additionally teaches the tracking unit of claim 18 wherein **the corresponding at least one vehicle code is for reading from the at least one vehicle device** (see disclosure that the data-collection schema is essentially a map that describes the data that the wireless appliance collects from the vehicle's engine computer, and its corresponding location in the computer's memory, col. 6, lines 54-62 et seq.; see also disclosure that the appliance collects diagnostic data defined by the schema, col. 6, line 67 through col. 7, line 1; in other words, the data-collection schema defines the claimed at least one vehicle device code, in that the schema is used to generate queries to read data from a corresponding at least one vehicle device).

Claim 20

Regarding claim 20, **Lowrey** additionally teaches the tracking unit of claim 18 wherein **the corresponding at least one vehicle code is for writing to the at least one**

vehicle device (see disclosure that a new schema can be transmitted to the wireless appliance to query a set of data that is relevant to a DTC registered by the vehicle, *or to 'clear' a DTC when it is deemed to no longer be problematic* [i.e., writing to a vehicle device], col. 7, lines 14-43).

To the extent that **Lowrey** does not explicitly disclose additional examples of at least one vehicle code for writing to the at least one vehicle device, **Lightner** further discloses such a feature (see disclosure that a data packet can be sent from the host computer system to the wireless communication system, which is processed by the microprocessor in the data collector/router to generate a signal that is sent to one of the vehicle's microcontrollers for adjusting a setting in the particular microcontroller, col. 3, line 22 through col. 4, line 8 et seq.).

It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize at least one vehicle code for writing to the at least one vehicle device, since this would allow technicians to not only remotely diagnose problems in a vehicle based on downloaded diagnostic data, it would allow the technician to remotely take action to address said problem.

Claim 21

Regarding claim 21, **Lowrey** additionally teaches the tracking unit of claim 18 wherein said downloading interface is also for permitting **downloading of at least one programming instruction for said multi-vehicle compatible controller** (see disclosure of the ability to download a data packet containing a new schema, col. 7, lines 14-26; see also disclosure that the host vehicle receives the packet and processes it to extract the new data-collection schema, which the wireless appliance uses to extract a revised set of data from the vehicle's engine computer, to send out data at a revised frequency, or to query a set of data that is relevant to a DTC that has been generated by the vehicle, col. 7, lines 33-43 et seq.; see also disclosure that the wireless appliance can receive over a network an incoming data packet that modifies the communication software, Abstract).

Claim 22

Regarding claim 22, **Lowrey** additionally teaches the tracking unit of claim 18 further comprising **a remote transmitter** (see disclosure the system can include a hand-held device, e.g., a cellular telephone or portable digital assistant, that connects to the host computer system through the Internet, col. 3, lines 56-63) and wherein **said multi-vehicle compatible controller also performs at least one vehicle remote control function responsive to said remote transmitter** (see disclosure that the disclosed

systems can be used for, *inter alia*, remote control of the vehicle [e.g., in response to theft or traffic/registration violations], col. 11, lines 8-13).

Allowable Subject Matter

Claims 2, 3, and 12-17 are confirmed.

STATEMENT OF REASONS FOR PATENTABILITY AND/OR CONFIRMATION

The following is an examiner's statement of reasons for patentability and/or confirmation of the claims found patentable in this reexamination proceeding:

Regarding claims 2, 3, and 13-17, these claims recite a downloading interface comprising a wired downloading signal interface (claims 2 and 3) or a downloading interface comprising a connector for temporary connection to a downloading device (claims 13-17).

The prior art of record teaches a tracking unit for a vehicle comprising a wireless appliance that collects diagnostic data from the vehicle and transmits said diagnostic data to a host computer system via a wireless network/airlink. No wired downloading interface or download interface comprising a connector is disclosed.

Requester urges the Office to use a broad interpretation of the claimed 'connector' and 'wired interface', such that the prior art would read on the limitations. However, the Office concludes that even under the BRI standard, such an interpretation would be unreasonable. Under BRI, claims are interpreted in light of, and consistent with, the specification. Requester's proposed interpretation would be inconsistent with what is disclosed by the Patent Owner in the specification and drawings.

For instance, at col. 24, lines 39-47, the '278 patent discloses that the wired downloading interface may connect (via connectors **133a** and **133b**) directly to a downloading device, such as a laptop computer, via RS232/429 protocol, USB, FireWire, TCP/IP (Internet), or any other wired protocol, or alternately via a socket for accepting a memory card or other data storage media capable of transferring data. The wired downloading interface is also illustrated in drawing Figure 13.

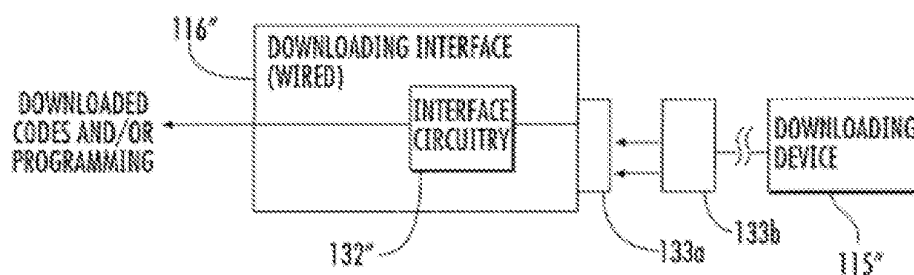


FIG. 13

With respect to claim 2, Requester proposes that a 'wired' signal downloading interface should be interpreted broadly enough to encompass **Lowrey's** cable **17**

connecting wireless appliance **13** and antenna **14** (see Figure 1). However, the term ‘interface’ commonly refers to the boundary across which computer components or systems exchange data. While **Lowrey’s** cable **17** interfaces wireless appliance **13** with antenna **14**, it does not interface with a downloading device, as is disclosed.

With respect to claim 13, interpreting the claimed connector as analogous to the transmit/receive functionality of **Lowrey’s** data transmission component would be inconsistent with the ‘278 patent’s disclosures regarding the connectors and the wired downloading interface.

Indeed, the disclosed characterization of **Lowrey’s** in-vehicle appliance as ‘wireless’ makes clear that the interface between the appliance and the downloading device is not a wired interface comprising a connector for connecting to a downloading device.

On this basis, claims 2, 3, and 13-17 are confirmed.

Regarding claim 12, there is no disclosure in the prior art of record that teaches or fairly suggests a housing that contains all of the claimed vehicle position determining device, wireless communications device, multi-vehicle compatible controller, and download interface.

On this basis, claim 12 is confirmed.

Any comments considered necessary by PATENT OWNER regarding the above statement must be submitted promptly to avoid processing delays. Such submission by the patent owner should be labeled: "Comments on Statement of Reasons for Patentability and/or Confirmation" and will be placed in the reexamination file.

Conclusion

Extensions of time under 37 CFR 1.136(a) do not apply in reexamination

proceedings. The provisions of 37 CFR 1.136 apply only to “an applicant” and not to parties in a reexamination proceeding. Further, in 35 U.S.C. 305 and in 37 CFR 1.550(a), it is required that reexamination proceedings “will be conducted with special dispatch within the Office.”

Extensions of time in reexamination proceedings are provided for in 37 CFR

1.550(c). A request for extension of time must specify the requested period of extension and it must be accompanied by the petition fee set forth in 37 CFR 1.17(g). Any request for an extension in a third party requested ex parte reexamination must be filed on or before the day on which action by the patent owner is due, and the mere filing of a request will not effect any extension of time. A request for an extension of time in a third party requested ex parte reexamination will be granted only for sufficient cause, and for a reasonable time specified. Any request for extension in a patent owner requested ex parte reexamination (including reexamination ordered under 35 U.S.C. 257) for up to two months from the time period set in the Office action must be filed no later than two months from the expiration of the time period set in the Office action. A request for an extension in a patent owner requested ex parte reexamination for more than two months from the time period set in the Office action must be filed on or before

the day on which action by the patent owner is due, and the mere filing of a request for an extension for more than two months will not effect the extension. The time for taking action in a patent owner requested ex parte reexamination will not be extended for more than two months from the time period set in the Office action in the absence of sufficient cause or for more than a reasonable time.

The Patent Owner is reminded of the continuing responsibility under 37 CFR 1.565(a), to apprise the Office of any litigation activity, or other prior or concurrent proceeding, involving U.S. Patent No. 8,032,278 throughout the course of this reexamination proceeding. The third party requester is also reminded of the ability to similarly apprise the Office of any such activity or proceeding throughout the course of this reexamination proceeding. See MPEP §§ 2207, 2282 and 2286.

The Patent Owner is reminded that any proposed amendment to the specification and/or claims in the reexamination proceeding must comply with the provisions of 37 C.F.R. § 1.530(d)-(j), must be formally presented pursuant to 37 C.F.R. § 1.52(a) and (b), and must include any fees required by 37 C.F.R. § 1.20(c). See MPEP § 2250(IV) for examples to assist in the preparation of proper amendments in reexamination proceedings.

In order to ensure full consideration of any amendments, affidavits or declarations, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 CFR 1.116, after final rejection and 37 CFR 41.33 after appeal, which will be strictly enforced.

Any document filed by the Patent Owner must be served on the third party requester (or requesters in a merged proceeding) in the reexamination proceeding in the manner provided by 37 C.F.R. § 1.248. See 37 C.F.R. § 1.550(f) and MPEP § 2266.03.

All correspondence relating to this *ex parte* reexamination proceeding should be directed:

By EFS-Web: Registered Users may submit correspondence via EFS-Web, at <https://efs.uspto.gov/efile/myportal/efs-registered>.

By Mail to: Mail Stop *Ex Parte* Reexam
Central Reexamination Unit
Commissioner for Patents
United States Patent & Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

By FAX to: (571) 273-9900
Central Reexamination Unit

By hand: Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

EFS-Web offers the benefit of quick submission to the particular area of the Office that needs to act on the correspondence. Also, EFS-Web submissions are "soft-scanned" (i.e., electronically uploaded) directly into the official file for the reexamination proceeding, which offers parties the opportunity to review the content of their submission after the "soft scanning" process is complete.

Any inquiry concerning this communication should be directed to the Central
Reexamination Unit at telephone number 571-272-7705.

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