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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)).

Order Granting Request For 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--

The request for *ex parte* reexamination filed 02/16/2021 has been considered and a determination has been made. An identification of the claims, the references relied upon, and the rationale supporting the determination are attached.

Attachments: a) ☒ PTO-892, b) ☐ PTO/SB/08, c) ☐ Other: _____

1. ☒ The request for *ex parte* reexamination is GRANTED.

RESPONSE TIMES ARE SET AS FOLLOWS:

For Patent Owner's Statement (Optional): TWO MONTHS from the mailing date of this communication (37 CFR 1.530 (b)). **EXTENSIONS OF TIME ARE GOVERNED BY 37 CFR 1.550(c).**

For Requester's Reply (optional): TWO MONTHS from the **date of service** of any timely filed Patent Owner's Statement (37 CFR 1.535). **NO EXTENSION OF THIS TIME PERIOD IS PERMITTED.** If Patent Owner does not file a timely statement under 37 CFR 1.530(b), then no reply by requester is permitted.

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cc:Requester (if third party requester)

Decision Granting *Ex Parte* Reexamination

A substantial new question of patentability affecting claims 1-22 of United States Patent Number 8,032,278 (“the ‘278 patent”) is raised by the request for *Ex Parte* Reexamination filed 16 February 2021 (“the Request”). 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 District Court litigation² involving several patents by inventor Kenneth E. Flick, including the '278 patent.

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

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

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

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

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 60/246,436.

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.

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.

Applicant's Response, pages 8-9, filed 5 April, 2011, in the '272 Application.

Relevant Prosecution History

11/773,272

The '272 application was filed on 3 July 2007, with 15 drawing figures and 30 claims. Claims 23-30 were withdrawn from consideration after a restriction requirement and subsequently canceled.

At the time of filing, Applicant submitted an Information Disclosure Statement (IDS), citing 6 patent documents all having the same inventor as the '272 application, Kenneth E. Flick.

Prior art references applied over the course of prosecution included U.S. Patent 5,940,007 to Brinkmeyer et al. ("**Brinkmeyer**") and U.S. Patent 6,253,064 to David A. Monroe ("**Monroe**").

After a non-final rejection mailed on 5 January 2011, Applicant filed a response on 5 April 2011. Therein, they argued that the prior art failed to disclose or suggest the following claimed features (see page 10):

- a multi-vehicle compatible controller 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 (independent claims 1, 13, 18)

- a multi-vehicle compatible tracking unit including a connector for temporary connection to a downloading device (independent claim 13 only).

The Applicants further noted that with respect to the connector, this would enable a user to quickly download new vehicle codes into the multi-vehicle compatible tracking unit without removing and reinstalling the unit.

The Office issued a Notice of Allowance on 28 June 2011.

In the absence of a specific statement of reasons for allowance in the Notice of Allowance, the presumed reasons for allowance are that the prior art of record failed to disclose or suggest the claimed multi-vehicle compatible controller 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.

U.S. Patent 8,032,278 issued on 4 October 2011.

90/013,587 (First Reexamination)

Requester CalAmp Corporation filed a Request for Reexamination of claims 1-22 of the '278 patent on 14 September 2015. Five patents were cited as raising a Substantial New Question of Patentability (SNQ) with respect to the claims:

U.S. Patent 6,028,537 to Suman et al. ("**Suman**");

U.S. Patent 5,732,074 to Spaur et al. ("**Spaur**");

U.S. Patent 5,557,254 to Johnson et al. ("**Johnson**");

U.S. Patent 5,208,756 to Song ("**Song**"); and

U.S. Patent 5,877,724 to Davis ("**Davis**").

In an order mailed 10 November 2015, the Office ordered reexamination of claims 1-22 of the '278 patent.

After receipt of a Patent Owner's Statement and subsequent Requester's Response to the statement, the Office issued a non-final action on 6 May 2016. Therein, based upon the Requester's Response, three additional references were cited as raising an SNQ with respect to claims 1-22:

U.S. Patent 6,009,363 to Beckert et al. ("**Beckert**");

U.S. Patent 7,484,008 to Gelvin et al. ("**Gelvin**"); and

U.S. Patent Application Publication 2001/0033225 to Razavi et al. ("**Razavi**").

Claims 1-22 were rejected as anticipated by **Suman**, as anticipated by **Beckert**, as obvious over **Spaur** and **Johnson**, and as obvious over **Spaur** and **Song**.

In an Examiner's Interview on 16 June 2016, the examiner agreed to withdraw the rejections based upon **Beckert**; no reasoning was provided on the record.

Patent Owner filed a subsequent response on 6 July 2016, including arguments that the claims distinguished over the prior art of record, and supported by declarations by Michael J. Suman and Joseph C. McAlexander, III, (**Suman Declaration** and **McAlexander Declaration**, respectively).

Specifically, Patent Owner argued that the prior art of record failed to disclose (1) the multi-vehicle compatible controller to 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*; and (2) 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.

In a Notice of Intent to Issue an *Ex Parte* Reexamination Certificate (NIRC) mailed 1 December 2016, the examiner referred to the **Suman Declaration** and **McAlexander Declaration** as providing reasons why the claims distinguished over the prior art of record.

Therefore, the presumed reasons for confirming the claims was that the prior art of record failed to disclose or render obvious the claimed features of (1) the multi-vehicle compatible controller to 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*; and (2) 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.

A Reexamination Certificate was issued on 28 December 2016.

90/013,851 (Second Reexamination)

Requester CalAmp Corporation filed a Request for Reexamination of claims 1-22 of the '278 patent on 28 October 2016. Five references were cited as raising a Substantial New Question of Patentability (SNQ) with respect to the claims:

U.S. Patent 6,009,363 to Beckert et al. ("**Beckert**")⁴;

U.S. Patent 5,732,074 to Spaur et al. ("**Spaur**")⁵;

U.S. Patent 6,028,537 to Suman et al. ("**Suman**")⁶;

U.S. Patent 6,330,499 to Chou et al. ("**Chou**")⁷; and

"SAE On-Board Diagnostics for Light and Medium Duty Vehicles Standards Manual ("**SAE HS-3000**").

In an order mailed 15 December 2016, the Office ordered reexamination of claims 1-22 of the '278 patent.

In the Order, it was noted that the four 'old art' references were not precluded from raising an SNQ with respect to the claims, because they were each considered in combination with a new reference, **SAE HS-3000**. The four proposed SNQs were based upon a combination of prior art that had not previously been considered by the Office.

⁴ **Beckert** is old art, as it was applied to reject claims during prosecution of the First Reexamination.

⁵ **Spaur** is old art, as it was applied to reject claims during prosecution of the First Reexamination.

⁶ **Suman** is old art, as it was applied to reject claims during prosecution of the First Reexamination.

⁷ **Chou** is old art, as it was applied to reject claims during prosecution of the '972 application, the great-grandparent of the '272 application.

A non-final rejection was mailed on 29 March 2017. Therein, claims 1, 4-8, 11, 12, and 18-21 were rejected as anticipated or obvious over **Chou** (pages 22-33). Claims 9, 10, and 22 were rejected as obvious over **Chou** and **Suman** (pages 33-37). Claims 2, 3, and 13-16 were rejected as obvious over **Chou** and **Spaur** (pages 37-41). Claim 17 was rejected as obvious over **Chou**, **Suman**, and **Spaur** (page 41).

After an examiner's interview at which no agreement was reached, Patent Owner filed a Response to the Office action on 12 June 2017. Therein, Patent Owner argued, *inter alia*, that **Chou** failed to disclose or render obvious the claimed features of (1) the multi-vehicle compatible controller to 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; and (2) 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.

The rejections were maintained in a final rejection mailed 19 July 2017, as well as Advisory Actions mailed 29 September, 10 October, and 5 December 2017.

The rejections were appealed to the Patent Trial and Appeals Board (PTAB), with the Brief filed on 27 February 2018, the Examiner's Answer mailed on 14 May 2018, and the Reply Brief filed on 16 August 2018. An Oral Hearing was held on 31 October 2018.

On 13 November 2018, the PTAB issued a decision, reversing the rejections. Therein, the PTAB concluded that the prior art of record failed to disclose or render obvious the features of (1) the *multi-vehicle compatible controller* to 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; and (2) 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.

A Reexamination Certificate was issued on 6 February 2019.

90/014,309 (Third Reexamination)

Requester CalAmp Corporation filed a Request for Reexamination of claims 1-22 of the '278 patent on 24 May 2019. Five references were cited as raising a Substantial New Question of Patentability (SNQ) with respect to the claims:

U.S. Patent 6,430,164 to Jones et al. ("**Jones**");

“CellPort Delivers Wireless, Vehicle-Based Applications Platform; Announces CP2100 Mobile Network Server” (“**CellPort Labs**”);

“A Demonstration Project for the ITS Data Bus Prototype” by Spelt et al. (“**Spelt**”);

“Prep for a Multimedia Future” by Maury Wright (“**Wright**”); and

“SAE On-Board Diagnostics for Light and Medium Duty Vehicles Standards Manual⁸” (“**SAE HS-3000**”).

In an order mailed 10 July 2019, the Office ordered reexamination of claims 1-22 of the ‘278 patent.

In the Order, it was noted that the ‘old art’ reference was not precluded from raising an SNQ with respect to the claims, because it was considered in combination with new references. The proposed SNQs were based upon a combination of prior art that had not previously been considered by the Office.

⁸ **SAE HS-3000** is old art, as it was applied to establish an SNQ during prosecution of the Second Reexamination.

In a Notice of Intent to Issue an *Ex Parte* Reexamination Certificate (NIRC) mailed 27 November 2019, the examiner stated that the reason for confirming the claims was that the prior art of record failed to disclose or render obvious the claimed features of (1) the *multi-vehicle compatible controller* to 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; and (2) 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.

A Reexamination Certificate was issued on 8 January 2020.

90/014,419 (Fourth Reexamination)

Requester Innova Electronics Corporation filed a Request for Reexamination of claims 1-22 of the '278 patent on 11 December 2019. Seven references were cited as raising a Substantial New Question of Patentability (SNQ) with respect to the claims:

U.S. Patent 5,719,551 to Kenneth E. Flick ("**Flick '551**");

U.S. Patent 5,940,007 to Brinkmeyer et al.⁹ ("**Brinkmeyer**");
U.S. Patent 6,253,064 to David A. Monroe¹⁰ ("**Monroe**");
U.S. Patent 5,081,667 to Drori et al. ("**Drori**");
"Trimble Microsoft Launch GPS System for Car PC" ("**SpaceDaily**");
"Travetek Makes Mission Possible" by Jim Mateja ("**Mateja**"); and
"DRIVING SMART: Lost in Yonkers? An Olds Option Could be a Guide" by
John Holusha ("**Holusha**").

In an order mailed 27 January 2020, the Office denied reexamination of claims 1-22 of the '278 patent.

The reason cited for the denial was that both of the proposed SNQs relied upon the **Flick '551** as the primary reference, but the reference was considered 'old art' already considered by the Office because it was listed on the face of the '278 patent in the 'References Cited' section, and furthermore because at col. 22, lines 3-7, the '278 patent incorporated the contents of the **Flick '551** patent by reference. The Office further concluded that the remaining cited references were either 'old art', or were

⁹ **Brinkmeyer** is old art, as it was applied to reject claims during prosecution of the '272 application.

¹⁰ **Monroe** is old art, as it was applied to reject claims during prosecution of the '272 application.

cumulative to the art previously considered during prosecution of the '272 application and the previous reexaminations.

Patent Owner filed a Petition for Review of Examiner's Decision Refusing *Ex Parte* Reexamination under 37 C.F.R. § 1.181 on 25 February 2020. A decision on the petition has not yet been rendered by the Office.

The Substantial New Question of Patentability

The standard for establishing a Substantial New Question of Patentability is defined in the following sections of the MPEP:

MPEP § 2242(I) provides, in pertinent part:

A prior art patent or printed publication raises a substantial question of patentability where there is a substantial likelihood that a reasonable examiner would consider the prior art patent or printed publication important in deciding whether or not the claim is patentable.

Over the course of the original prosecution of the '272 application, and the subsequent four reexamination proceedings of the '278 patent, the limitations that were not found in the prior art were

a multi-vehicle compatible controller to 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; and

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.

Thus, prior art which teaches or suggests the above-cited claim features would raise a Substantial New Question of Patentability with respect to claims 1-22 of the '278 patent.

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**")

The Office notes that the Requester also cites U.S. Patent 6,636,790 to Lightner et al. ("**Lightner**"), which Requester alleges was fully incorporated by reference by **Lowrey**, despite having not been specifically identified by application number in the specification.

The requirements for proper incorporation of subject matter by reference are specified in 37 C.F.R. § 1.57. Subsection (c) requires that an incorporation by reference must be set forth in the specification and must (1) express a clear intent to incorporate by reference by using the root words "incorporat(e)" and "reference" (e.g., "incorporate by reference"); and (2) clearly identify the referenced patent, application, or publication.

Lowrey includes the following disclosure at col. 2, lines 59-62, with respect to a "wireless appliance":

Such a wireless appliance is described in the application **WIRELESS DIAGNOSTIC SYSTEM FOR VEHICLES**, filed Feb. 1, 2001, the contents of which are incorporated herein by reference.

This disclosure clearly satisfies the requirement of 37 C.F.R. § 1.57(c)(1), by use of the phrase "incorporated herein by reference."

With respect to the requirement of 37 C.F.R. § 1.57(c)(2), the specification includes only the name of the application and the date on which it was filed. MPEP § 608.1(p) states that with respect to incorporation by reference, "A citation of a patent

application by attorney docket number, inventor name, filing date and title of invention may sufficiently describe the document, but *even then correction should be made to specify the application number.*" (emphasis added)

Since the MPEP states that even given an attorney docket number, inventor name, filing date and title of invention, applicant should correct the citation to include the application number, the Office will interpret the instant citation, which includes only the filing date and title of the invention, as not complying with the provisions of 37 C.F.R. § 1.57(c)(2), and therefore improper.

Nevertheless, Requester has provided evidence (see **Request**, pages 4-5) that the document that the inventor intended to incorporate by reference was actually application number 09/776,106, now U.S. Patent 6,636,790 (**Lightner**). In their discussion of reasons for raising an SNQ, Requester cites to portions of **Lightner** in addition to **Lowrey**.

Since, as noted above, the attempt to incorporate by reference the disclosure of **Lightner** into the specification of **Lowrey** was improper, the Office will treat the request for reexamination as being based on **Lowrey** in combination with **Lightner**.

Proposed Substantial New Question of Patentability

Ex Parte Reexamination of claims 1-22 of the '278 patent has been requested, based upon the following issues presented in the form of proposed claim rejections:

Issue 1: Whether claims 1-22 are obvious under 35 U.S.C. § 103(a) in view of **Lowrey** and **Lightner**¹¹.

Analysis

The Examiner agrees that based upon the following analysis, the teachings of the cited prior art raises a substantial new question of patentability with regard to claims 1-22 of the '278 patent.

Issue 1: Lowrey and Lightner

Lowrey in view of **Lightner** raises a substantial new question of patentability with respect to claims 1-22 of the '278 patent, for the reasons discussed below.

¹¹ Requester proposes to reject claims 1, 2, and 4-22 as anticipated by **Lowrey** (incorporating **Lightner** by reference). As discussed above, the Office concludes that the incorporation by reference of **Lightner** by **Lowrey** was improper, and instead treats the request as applying the combination of **Lowrey** and **Lightner** to the claims of the '278 patent.

Lowrey discloses a system for monitoring a vehicle that includes a wireless appliance in electrical contact with an in-vehicle computer. The wireless appliance features (1) a data-collection component that supports communication software that collects diagnostic data from the computer; and (2) a data-transmission component, in electrical contact with the data-collection electronics, configured to transmit an outgoing data packet comprising the diagnostic data over a network and receive over the same network an incoming data packet that modifies the communication software.

Embodiments of the invention can access data from the vehicle, analyze it, and make it available to organizations (e.g., an automotive dealership or service center) over the internet so that the vehicle's performance can be analyzed accurately and in real-time. The data includes, for example, diagnostic trouble codes (DTCs) and mechanical and electrical data stored in the vehicle's engine computer.

The communication software supported by the data-collection component features a schema component that identifies the diagnostic data to be collected from the vehicle's computer. The schema component features an address that describes a location of a diagnostic datum in the vehicle's computer memory. It can also describe a time or frequency that the data-collection component collects data from the vehicle's computer, or a time or frequency that the data-transmission component transmits an

outgoing data packet. The schema component is typically an ASCII or binary data file that is configured to be processed by the communication software.

Software schemas that update the type or frequency of the vehicle's data can be directly downloaded to specific wireless appliances or groups of wireless appliances (corresponding, e.g., to a fleet of vehicles or a group of vehicles having the same year, make, or model). The 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. A schema specific to a given type of vehicle is typically loaded onto the microcontroller before the wireless appliance is installed in the vehicle. The appliance collects diagnostic data defined by the schema, formats these data in a data packet, and then sends an outgoing packet over the airlink to a wireless network.

A technician working at a vehicle-service center can log into the web site and analyze the data set corresponding to a particular vehicle to diagnose a potential mechanical or electrical problem. Based on the analysis, the technician may decide that additional data are required, or that data need to be collected and transmitted at a higher or lower frequency. In this case, the technician uses the web site to select a new schema and then sends an incoming data packet that includes a new schema over the wireless network to the wireless appliance included in the vehicle being diagnosed.

The wireless appliance uses the updated schema to extract a revised set of data from the engine's computer, or send out data at a revised frequency. In other applications, the new schema can be used 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.

Specifically with respect to the SNQ, **Lowrey** discloses *a multi-vehicle compatible controller to 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.*

As discussed above with respect to claim construction, the claimed multi-vehicle compatible controller is interpreted by the Office as "electronic circuitry that performs one or more control functions, and can operate with more than one vehicle."

Lowrey discloses a wireless appliance comprising a data-collection component. The wireless appliance collects diagnostic data from the vehicle's engine computer, and the data-collection component formats the data in a packet and then passes the packet to a data-transmission component (col. 6, lines 8-22). The data-collection component includes a microcontroller that has software and a data-collection 'schema' loaded into the microcontroller's memory (col. 6, lines 55-59). The disclosed controller is multi-vehicle compatible, in that the wireless appliance can be easily installed in nearly every

vehicle with an OBD-II connector in a matter of minutes, and can be easily transferred from one vehicle to another (col. 4, lines 59-63).

Lowrey furthermore discloses that OBD-II systems monitor a vehicle's electrical and mechanical systems and generate data that are processed by a vehicle's engine control unit (ECU) to detect any malfunction or deterioration in the vehicle's performance. Most ECUs transmit status and diagnostic information over a shared, standardized electronic buss in the vehicle. The buss effectively functions as an on-board computer network with many processors, each of which transmits and receives data (col. 1, lines 14-22).

As discussed above with respect to claim construction, the claimed vehicle device code is interpreted by the Office as "signal to or from a vehicle device."

Lowrey discloses collecting diagnostic data from the vehicle computer, including diagnostic trouble codes (DTCs) (col. 1, lines 29-36, and col. 1, line 63 through col. 2, line 14). Further disclosed is the use of a data-collection 'schema' which is essentially a 'map' that describes data that the wireless appliance collects from the vehicle's engine computer. The schema is specific to a given type of vehicle (col. 6, line 54 through col. 7, line 3).

Lowrey therefore discloses *a multi-vehicle compatible controller to 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*, a feature that was lacking in the prior art of record at the time of allowance of the '278 patent, and the later confirmation of claims in the subsequent reexamination proceedings.

Further with respect to the SNQ, **Lowrey** discloses *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*.

As discussed above with respect to claim construction, the claimed enabling data is interpreted by the Office 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."

Lowrey discloses downloading new or updated schema to extract a revised set of data from the engine's computer, or send out data at a revised frequency. In other applications, the new schema can be used 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 (col. 7, lines 19-26). The schema is specific to a given type of vehicle (col. 6, line 59 through col. 7, line 3).

Lowrey therefore discloses *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*, a feature that was lacking in the prior art of record at the time of allowance of the '278 patent, and the later confirmation of claims in the subsequent reexamination proceedings.

Non-cumulative features taught by **Lowrey** include the data-collection component which features a schema component that identifies the diagnostic data to be collected from the vehicle's computer (col. 6, lines 55-59), taken in the context that the schema is specific to a given type of vehicle [i.e., the system is multi-vehicle compatible] (col. 6, line 54 through col. 7, line 3), as well as the capability for a new or updated schema to be downloaded to the wireless appliance (col. 7, lines 19-26) and where the wireless appliance can be easily installed in nearly every vehicle with an OBD-II connector in a matter of minutes, and can be easily transferred from one vehicle to another (col. 4, lines 59-63).

In light of these teachings, there is a substantial likelihood that a reasonable examiner would consider **Lowrey** in combination with **Lightner** important in deciding whether or not claims 1-22 of the '278 patent are patentable.

The teachings of **Lowrey** in combination with **Lightner** are new and non-cumulative with respect to the teachings of the prior art applied during the prosecution of the '272 application, or during any of the four previous reexamination proceedings. Furthermore, the teachings of **Lowrey** in combination with **Lightner** have not been considered in a final holding of invalidity by a federal court. Accordingly, **Lowrey** in combination with **Lightner** raises a substantial new question of patentability with regard to claims 1-22 that has not been decided in a previous examination, reexamination, or other proceeding before the Office.

Conclusion

As discussed above, the prior art cited in the request raises a SNQ as to the claims of the '278 patent. Specifically, there is a substantial likelihood that a reasonable examiner would consider the new non-cumulative teachings of **Lowrey** regarding the claimed features of *a multi-vehicle compatible controller to 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 and 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* (with respect to claims 1-22) in combination with other art, as discussed above, to be important in deciding whether or not the claims are patentable.

Extensions of time under 37 CFR 1.136(a) will not be permitted in these proceedings because the provisions of 37 CFR 1.136 apply only to "an applicant" and not to parties in a reexamination proceeding. Additionally, 35 U.S.C. 305 requires that *ex parte* reexamination proceedings "will be conducted with special dispatch" (37 CFR 1.550(a)). Extensions of time in *ex parte* reexamination proceedings are provided for in 37 CFR 1.550(c).

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. 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.

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

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

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