

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VERIZON CONNECT, INC.
Petitioner,

v.

OMEGA PATENTS, LLC,
Patent Owner.
U.S. Patent No. 8,032,278
Filing Date: June 3, 2007
Issue Date: October 4, 2011

Case No. IPR2023-01162

**DECLARATION OF JOSEPH C. McALEXANDER, III IN SUPPORT
OF RESPONSE TO PETITION OF *INTER PARTES* REVIEW**

TABLE OF CONTENTS

I.	INTRODUCTION	4
II.	QUALIFICATIONS.....	5
III.	MATERIALS CONSIDERED	7
IV.	LEGAL UNDERSTANDING.....	11
V.	LEVEL OF ORDINARY SKILL IN THE ART.....	15
VI.	CLAIM CONSTRUCTION.....	16
VII.	SUMMARY OF OPINIONS	18
VIII.	OVERVIEW OF PRIOR ART.....	21
A.	U.S. PATENT No. 6,756,885 TO FLICK (FLICK885)	21
B.	U.S. PATENT No. 6,606,561 TO FLICK (FLICK561)	22
C.	U.S. PATENT APPLICATION PUBLICATION No. 2006/0161315 TO LEWIS ET AL. (LEWIS)	22
D.	U.S. PATENT APPLICATION PUBLICATION No. 2003/0182033 TO UNDERDAHL ET AL. (UNDERDAHL)	23
IX.	THE ‘278 PATENT	23
X.	GROUND 1: CLAIMS 1-22 ARE NOT OBVIOUS OVER <i>FLICK885</i> AND <i>FLICK561</i>	27
A.	FLICK885.....	28
B.	A POSA WOULD NOT HAVE FOUND THE CLAIMS OBVIOUS OVER THE COMBINATION OF <i>FLICK885</i> AND <i>FLICK561</i>	29
C.	PETITIONER’S MOTIVATION TO COMBINE FLICK885 AND FLICK561 IS IMPROPER.....	34
D.	PETITIONER’S PROPOSED COMBINATION OF FLICK885 AND FLICK561 FAILS TO CONSIDER COMPELLING EVIDENCE OF SECONDARY CONSIDERATIONS	37
1.	<i>Evidence of Secondary Considerations Support Patentability</i>	38
E.	CLAIMS 2-3	41
F.	CLAIM 4.....	42
G.	CLAIM 5.....	42
H.	CLAIMS 6-12.....	43
I.	CLAIM 13.....	43
J.	CLAIMS 14-17.....	44

K.	CLAIM 18.....	44
L.	CLAIMS 19-22.....	44
XI.	GROUND 2: CLAIMS 1, 4-6, 8, 11-12, 18-19, 21 ARE NOT ANTICIPATED BY <i>LEWIS</i>.....	45
A.	LEWIS FAILS TO DISCLOSE ALL THE CLAIM ELEMENTS.....	46
B.	CLAIM 2.....	51
C.	CLAIM 3.....	52
D.	CLAIM 4.....	52
E.	CLAIM 5.....	53
F.	CLAIM 6.....	53
G.	CLAIM 8.....	53
H.	CLAIMS 10-12.....	54
I.	CLAIM 13.....	54
J.	CLAIMS 14 AND 16.....	55
K.	CLAIM 18.....	55
L.	CLAIMS 19 AND 21.....	55
XII.	GROUND 3: LEWIS AND UNDERDAHL DO NOT RENDER OBVIOUS CLAIMS 7, 9, 15, 17, 20, AND 22 56	
A.	CLAIMS 7, 15, 20.....	56
B.	CLAIMS 9, 17, 22.....	57
C.	PETITIONERS' PROPOSED COMBINATIONS IGNORE COMPELLING EVIDENCE OF SECONDARY CONSIDERATIONS	57
XIII.	CONCLUSION.....	57

I, Joseph C. McAlexander^{III} declare as follows:

I. INTRODUCTION

1. I have been retained on behalf of Omega Patents, LLC (“Omega”) for the above-captioned *inter partes* review (IPR) proceeding. I am being compensated for my time in connection with this IPR at my standard hourly consulting rate. I understand that this proceeding involves U.S. Patent No. 8,032,278 (“the ‘278 Patent”) titled “Vehicle Tracking Unit With Download Codes and Associated Methods” by Kenneth E. Flick, and that the ‘278 Patent is currently assigned to Omega.

2. I have reviewed and am familiar with the specification of the ‘278 Patent filed July 3, 2007. I understand that the ‘278 Patent has been provided as Ex-1001. I will cite to the specification using the following format: Ex-1001, ‘278 Patent, 1:1-10. This example citation points to the ‘278 Patent specification at column 1, lines 1-10.

3. I have reviewed and am familiar with the file history of the ‘278 Patent. I understand that the file history has been provided as Ex-1009.

4. I understand that the ‘278 Patent has a filing date of July 3, 2007.

5. I have been asked to provide my technical review, analysis, insights, and opinions regarding the '278 *Patent* and the below identified references that Verizon Connect Inc. used as its basis for the grounds set forth in the Petition for *Inter Partes* Review of the '278 *Patent*.

II. QUALIFICATIONS

6. In formulating my opinions, I have relied upon my training, knowledge, and experience in the relevant art.

7. I am the Founder and President of M^cAlexander Sound, formerly the IP Director of CCI and Vice President of EPI Technologies and have 50 years of experience in microcircuit and semiconductor technologies, including: device design, fabrication, assembly, testing, and marketing, and control system design, analysis, quality, reliability, and defect/failure analysis at Texas Instruments.

8. I am a technical expert in the subject matter areas relevant to this *inter partes* review, including design and testing of circuits and systems related to control systems, including wireless communication protocols and operation, information storage and transfer, user interfaces, information signal processing, applications and operating systems, and electronic device hardware and firmware design and control.

From 2000-2003, I represented Toyota as its 30(b)(6) witness and technical expert focused on vehicle alarm systems.

9. I am qualified to reach the opinions and conclusions stated in this report.

10. I am a Registered Professional Engineer (#79454) in the State of Texas and hold a Bachelor of Science degree in Electrical Engineering from North Carolina State University.

11. I am an inventor on 31 U.S. patents and a number of foreign patents, and I am familiar with the patent process. Five of the 31 patents (3 U.S. and 2 EP) are directed to MEMs technology for vehicle air bag sensor deployment. Three of the 31 patents (2 U.S. and 1 EP) are directed to interconnected mobile device tracking, such as is used to track vehicles, and 16 of the 31 patents are directed to general wireless asset tracking.

12. I have been an expert witness and technical consultant for the past 34 years in IP matters related to product/process analysis and investigation.

III. MATERIALS CONSIDERED

13. In forming my opinions, I have reviewed the following documents, and any other document cited in this declaration:

1001	U.S. Patent No. 8,032,278 to Flick (the '278 Patent)
1002	Declaration of Dr. Azim Eskandarian
1003	U.S. Patent No. 6,756,885 to Flick
1004	U.S. Patent No. 6,606,561 to Flick
1005	U.S. Patent Application Publication No. 2006/0161315 to Lewis
1006	U.S. Patent Application Publication No. 2003/0182003 to Underdahl
1007	U.S. Patent No. 6,011,460 to Flick
1008	U.S. Patent No. 6,812,829 to Flick
1009	File History of Application No. 11/773,272, which issued as U.S. Patent No. 8,032,278 to Flick
1010	03-25-2021 Order Granting the Reexamination (Appl. No. 90/014,675)
1011	06-21-2021 Examiner's Non-Final Office Action (Appl. No. 90/014,675)
1012	08-21-2021 Declaration of Joseph C. McAlexander, III
1013	08-23-2021 Response to Non-Final Office Action (Appl. No. 90/014,675)
1014	04-01-2022 Patent Owner's Appeal Brief (Appl. No. 90/014,675)
1015	12-01-2022 Decision on Appeal (Appl. No. 90/014,675)
1016	Application No. 11/076,259 to Flick
1017	Application No. 10/383,496 to Flick

1018	Application No. 09/859,972 to Flick
1019	Application No. 60/264,811 to Flick
1020	Application No. 60/258,005 to Flick
1021	Application No. 60/251,552 to Flick
1022	Application No. 60/252,125 to Flick
1023	Application No. 60/236,890 to Flick
1024	Application No. 60/246,463 to Flick
1025	Application No. 60/222,777 to Flick
1026	Application No. 60/205,178 to Flick
1027	10-03-2014 Plaintiff's Opposition to CalAmp's Motion for Claim Construction, 6:13-cv-1950-ORL-40-DAB
1028	02-20-2015 Order on Claim Construction, 6:13-cv-1950-ORL-40-DAB
1029	<i>In Ex parte A. James Smith, Jr.</i> , 2010 WL 3269939 (BPAI August 17, 2010).
2001	Declaration of Kenneth Flick
2002	Declaration of Mr. Joseph C. McAlexander, III
2003	Curriculum Vitae of Mr. Joseph C. McAlexander, III
2004	Decision Granting Institution of <i>Inter Partes</i> Review; Paper 11, IPR2023-00504 (July 25, 2023)
2005	<i>Ex parte Omega Patents, LLC</i> , No. 2018-008119 (Nov. 3, 2018)
2006	D.I. 34, Claim Construction Order, <i>Omega Patents, LLC v. Firstech, LLC</i> , No. 2:20-cv-03144 (W.D. Wash. Nov. 22, 2021) (" <i>Firstech-CC</i> ")
2007	<i>Omega Patents, LLC v. CalAmp Corp.</i> , 920 F.3d 1337 (Fed. Cir. 2019) (<i>CalAmp-I</i>)
2008	<i>Omega Patents, LLC v. CalAmp Corp.</i> , 13 F.4th 1361 (Fed. Cir. 2021) (<i>CalAmp-II</i>)

2009	Ex Parte Reexamination Certificate for U.S. Patent No. 8,032,278 issued May 17, 2023
2010	D.I. 297-1, Deposition of Galin Chen, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13- cv-1950 (M.D. Fla. September 24, 2019)
2011	D.I. 297-4, Deposition of Peter Hergesheimer, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13- cv-1950 (M.D. Fla. September 24, 2019)
2012	D.I. 297-5, Deposition of Stephen Hall, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13- cv-1950 (M.D. Fla. September 24, 2019)
2013	U.S. Patent No. 6,636,790 to Lightner
2014	U.S. Patent No. 6,611,740 to Lowrey
2015	U.S. Patent No. 6,957,133 to Hunt
2016	U.S. 6,732,031 to Lightner
2017	U.S. 7,174,243 to Lightner
2018	Prosecution File History of U.S. Patent Application Publication No. 2006/0161315 to Lewis
2019	Declaration of Mr. Christian Tregillis
2020	D.I. 145-43, PL47, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2021	D.I. 145-19, PL1, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2022	D.I. 145-20, PL2, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2023	D.I. 145-34, PL18, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2024	D.I. 145-36, PL20, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2025	D.I. 145-59, PL73, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2026	Master And Cross-License Agreement, dated May 12, 2007, between Omega R&D, Omega Patents and Directed Electronics, Inc.

2027	D.I. 145-38, PL22, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2028	D.I. 145-80, PL99, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2029	D.I. 145-54, PL68, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2030	D.I. 145-53, PL67, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2031	D.I. 145-67, PL81, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2032	D.I. 144, Jury Verdict, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Sep. 30, 2019)
2033	D.I. 310, Jury Verdict, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb. 24, 2016)
2034	Omega Royalty Report (April 2023)

14. I have also relied on my education, experience, research, training, and knowledge in the relevant art, and my understanding of any applicable legal principles described in this declaration.

15. All of the opinions contained in this declaration are based on the documents I reviewed and my knowledge and professional judgment. My opinions have also been guided by my understanding of how a person of ordinary skill in the art would have understood the claims of the ‘278 *Patent* at the time of invention.

For purposes of this declaration, I have been asked to assume that the date of the invention is July 3, 2007.

16. I reserve the right to supplement and amend any of my opinions in this declaration based on documents, testimony, and other information that becomes available to me after the date of this declaration.

IV. LEGAL UNDERSTANDING

17. Omega's counsel has advised me that anticipation under 35 U.S.C. §102 is a basis for invalidity. I understand for a claim to be "anticipated" the prior art reference must not only disclose all elements of the claim within the four corners of the document but must also disclose those elements arranged as in the claim. I have been informed that the standard for anticipation in an *inter partes* review proceeding is by a preponderance of the evidence.

18. I have also been informed that a prior art reference can disclose a claim feature if that feature is expressly described by that reference, or inherent from its disclosure. I have been informed that something is inherent from a prior art reference if the missing descriptive matter must necessarily be present, and it would be so recognized by a person of ordinary skill in the art ("POSA"). I also have been

informed that inherency cannot be established by probabilities or possibilities, and that the mere fact that something may result from a given set of circumstances is not sufficient to show inherency.

19. I have further been informed that where a reference discloses multiple embodiments, the reference should not be limited to a preferred embodiment. Instead, each disclosed embodiment may anticipate. Moreover, I have been informed that, as part of an anticipation analysis, it is proper to take into account not only specific teachings of the reference, but also the inferences that one skilled in the art would reasonably be expected to draw therefrom. A reference can anticipate a claim even if it does not expressly spell out all the limitations arranged or combined as in the claim, if a person of skill in the art, reading the reference, would at once envisage the claimed arrangement or combination.

20. I have been informed that a prior art document can disclose a claim feature, and anticipate a claimed invention, if that feature is described in another document that has been incorporated by reference. I have also been informed that, to incorporate by reference, the host document must identify with detailed particularity what specific material it incorporates, and clearly indicate where that

material is found in the incorporated document. I have also been informed that, in making the determination of the extent to which that material incorporated into a host document can be used, the standard of a POSA should be to determine whether the host document describes the material to be incorporated by reference with sufficient particularity.

21. Omega's counsel has advised me that obviousness under 35 U.S.C. §103 is also a basis for invalidity. I understand that, where a prior art does not identically disclose all of the limitations of a given patent claim, that patent claim is invalid if the differences between the claimed subject matter and the prior art are such that the claimed 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. Obviousness can be based on prior art in the form of a single prior art or a combination of references that either expressly or inherently disclose all limitations of the claimed invention.

22. It is my understanding that the question of obviousness is to be determined based on:

- The scope and content of the prior art;
- The difference or differences between the subject matter of the claim and the prior art (whereby in assessing the possibility of obviousness

one should consider the manner in which a patentee and/or a Court has construed the scope of a claim);

- The level of ordinary skill in the art at the time of the alleged invention of the subject matter of the claim; and
- Any relevant objective factors (the “secondary indicia”) indicating non-obviousness, including evidence of any of the following: commercial success of the products or methods covered by the patent claims; a long-felt need for the alleged invention; failed attempts by others to make the alleged invention; copying of the alleged invention by others in the field; unexpected results achieved by the alleged invention; praise of the alleged invention by the alleged infringer or others in the field; the taking of licenses under the patent by others and the nature of those licenses; expressions of surprise by experts and those skilled in the art at the subject matter of the claim; and whether the patentee proceeded contrary to accepted wisdom of the prior art.

23. It is further my understanding that, for purposes of an obviousness determination, it is impermissible to rely on 20/20 hindsight reconstruction.

24. And still further, it is my understanding that a patent claim composed of several elements is not proved obvious merely by demonstrating that each of its elements was independently known in the prior art. There must be an apparent reason why it would have been obvious to modify the prior art to arrive at the claimed invention. I understand that, to avoid impermissibly applying hindsight, it is helpful to determine whether there is a teaching, suggestion, or motivation in the prior art that would lead one of ordinary skill in the art to combine the elements.

When there is no suggestion, teaching, or motivation for the proposed combination, or when the prior art suggests something other than the combination, this weighs against a finding of obviousness. The patent challenger has the burden to show that a person of ordinary skill in the relevant field had a reason to combine the elements in the manner claimed when asserting obviousness in view of a combination of references.

25. It is my understanding that evidence of secondary considerations must be considered when determining obviousness and cannot be discounted, as they play a critical role in the obviousness analysis. Evidence of secondary considerations can weigh against a finding of obviousness and are often relied upon to provide guides against the forbidden use of hindsight.

V. LEVEL OF ORDINARY SKILL IN THE ART

26. I understand that Petitioner contends that a POSA “would have been someone knowledgeable in mobile computing systems and location technology.”
Petition 18. Petitioner also contends that the POSA “would have had either (1) a Bachelor of Science degree in Electrical Engineering, Mechanical Engineering, Automotive Engineering, Computer Engineering, or equivalent field, with at least

two years of academic or industry experience in the automotive industry; or (2) a Master of Science degree in Electrical Engineering, Mechanical Engineering, Automotive Engineering, Computer Engineering, or an equivalent field, with at least a year of academic or industry experience in the same field.” *Id.* at 18. Petitioner also contends that “[w]ith more education...less experience is needed,” and that “more experience can be substitute for formal education. *Id.* at 18-19. For the purpose of this Declaration, I have applied the Petitioner’s level of skill.

VI. CLAIM CONSTRUCTION

27. I understand that, in *inter partes* review, the U.S. Patent and Trademark Office applies the plain and ordinary meaning of claim terms, in view of the specification, as would have been understood by a POSA.

28. I also understand that two district courts have construed terms in challenged claims: Ex. 1028, D.I. 50, *Omega Patents v. CalAmp Corp.*, No. 6:13-cv-1950 (M.D. Fla. Feb. 20, 2015) (*CalAmp-CC*), and Ex. 1019, D.I. 34, *Omega Patents v. Firstech*, No. 2:20-cv-01344 (W.D. Wash. Nov. 22, 2021) (*Firstech-CC*). I also understand that the Federal Circuit issued opinions on two appeals from the

CalAmp litigation: Ex. 1020, 920 F.3d 1337 (Fed. Cir. 2019) (*CalAmp-I*) and Ex. 1021, 13 F.4th 1361 (Fed. Cir. 2021) (*CalAmp-II*).

29. I understand the Board in a related, co-pending proceeding, construed the claim term “enabling data,” referring to the specification of the ‘278 *Patent* as the single best guide to the meaning of a disputed claim term. Ex-2004, 25. The ‘278 *Patent* describes the term “enabling data” as data that “may be the vehicle device code or codes, an instruction to select a code or codes from among those already stored, or the data or sequence to allow the controller 111 to generate the vehicle device code or codes, for example.” Ex-1001, 24:8-13. The Board in the related proceeding also looked to *Ex parte Omega Patents, LLC*, No. 2018-008119 (*Omega Patents I*) (Ex-2005) for guidance on the construction of “enabling data” and wholly adopted this construction as: data that “enables the recited controller to use a particular vehicle device code from among plural such codes by providing either (1) the code itself to the controller, or (2) data that otherwise enables the controller to select or generate the code.” Ex-2004, 25-27 (citing *Omega Patents I*, 12-13).

30. I understand that Petitioner offers a definition of the terms “vehicle tracking unit,” “vehicle positioning determining device” and “vehicle position

information” that includes generally detecting movement, for example, in the cases of shock and motion around the vehicle. Petition, 22.

31. However, a POSA would confirm, based on the specification of the ‘278 *Patent*, that the plain and ordinary meaning of a vehicle tracking unit, a vehicle position determining device, and vehicle position information refers to tracking of and information of a geographic position of the vehicle, not events local to the vehicle.

32. I understand that all terms not specifically construed are given their plain and ordinary meaning.

33. Based on my review of these materials and my personal knowledge and experience, I have considered each term of the ‘278 *Patent* claims not specifically construed and have applied plain and ordinary meaning to those terms as it would have been understood by one skilled in the art as of July 3, 2007.

VII. SUMMARY OF OPINIONS

34. Petitioner argues that multiple patent licensees, multiple United States Patent and Trademark Office (USPTO) patent examiners, two different Patent Trial and Appeal Board (PTAB) panels, a jury, a District Court, and an Appeals Court are

all wrong about the validity of the ‘278 *Patent* because the USPTO somehow overlooked the inventor’s own art, U.S. Patent Nos. 6,756,885 (Ex-1003; *Flick885*) and 6,606,561 (Ex-1004; *Flick561*).

35. *Flick885* and *Flick561* is the same art that has been considered many times by Examiners, juries, and judges alike. This is the same art that has been of record since the filing of the ‘278 *Patent*.

36. With nearly fifteen years of hindsight, Petitioner argues that the inventor’s own art, which was of record since the filing of the ‘278 *Patent*, somehow renders the claims of the ‘278 *Patent* invalid.

37. Petitioner’s characterization and combination of *Flick885* and *Flick561* are flawed. A person of ordinary skill in the art (POSA) would not have combined *Flick885* and *Flick561*, as contended by the Petitioner, and Petitioner’s attempt to do so is fraught with impermissible hindsight.

38. I understand that evidence of secondary considerations weighs heavily in favor of patentability. Petitioner’s characterization of the Patent Owner’s evidence of secondary considerations of non-obviousness as “inadequate” is flawed for reasons discussed herein.

39. Relevant here is that significant parts of this evidence of secondary considerations was elicited from an infringer's employees in litigation involving the '278 *Patent*, who described the '278 *Patent* as providing important features sought by its customers and increasing the value of their product -- technology they could not design around. D.I. 297-1, 26:11-20 (Ex-2004); D.I. 297-4, 45:3-19, 46:25-47:19 (Ex-2005); D.I. 297-5, 64:15-24, 102:16-103:13, 155:4-13 (Ex-2006).

40. Petitioner also argues that multiple patent licensees, multiple United States Patent and Trademark Office (USPTO) patent examiners, two different Patent Trial and Appeal Board (PTAB) panels, a jury, a District Court, and an Appeals Court are *all* also wrong about the validity of the '278 *Patent* because of yet another cumulative reference – this time to Lewis et al. (U.S. Patent Application Publication No. 2006/0161315) (Ex-1005; *Lewis*).

41. As discussed in more detail below, *Lewis*, like the many cumulative references that have come before it for consideration in challenging the '278 *Patent*, falls well short of disclosing all the claim elements of the '278 *Patent*, including the claimed downloading interface. The many challenges to the '278 *Patent*, including those advanced by Petitioner, are all essentially the same – the same technology, the

same invalidity recipe, and the same art already considered - yet Petitioner contends this time it is somehow different. But it is no different.

VIII. OVERVIEW OF PRIOR ART

A. U.S. Patent No. 6,756,885 to Flick (Flick885)

42. *Flick885* (Ex-1003), a patent issued to Mr. Flick, the inventor of the ‘278 *Patent*, was cited by Patent Owner during prosecution of the ‘278 *Patent*. Ex-1009. *Flick885* is described in the Background of the Invention section of the ‘278 *Patent* as disclosing “a multi-vehicle control system whereby a multi-vehicle compatible controller stores a set of device codes for a given vehicle device for a plurality of different vehicles.” ‘278 *Patent*, 2:29-33.

43. *Flick885* discloses a multi-vehicle compatible control system for a vehicle that operates on a data communications bus. *Flick885*, 5:5-15. A multi-vehicle compatible controller of the system provides a bus interface for remote operation of devices on the data communications bus. *Id.*, 5:11-34, 6:33-40. The bus interface interfaces using proper signal levels and formats on the data communications bus. *Id.*, 6:35-40.

B. U.S. Patent No. 6,606,561 To Flick (Flick561)

44. *Flick561* (Ex-1004), another patent issued to Mr. Flick, was listed by the Patent Owner in the related applications section of the '*278 Patent* as being in the priority chain for the '*278 Patent*. Ex-1009; '*278 Patent*, 1:7-14. *Flick561* is also incorporated by reference into the '*278 Patent*. '*278 Patent*, 1:19-20.

45. *Flick561* discloses a vehicle tracking unit mounted in a vehicle to interface with various vehicle devices. *Flick561*, 4:7-15. The vehicle tracking unit includes a vehicle position determining device and wireless communications circuitry cooperating to communicate a vehicle position to a monitoring station based upon a vehicle alarm activation. *Id.* at 4:56-63, 8:6-20, 56.

C. U.S. Patent Application Publication No. 2006/0161315 To Lewis et al. (Lewis)

46. *Lewis* (Ex-1005) is directed to a real time vehicle performance and position monitoring system. *Lewis*, 0023. A GPS position receiver collects position data of the vehicle. *Id.* at 0024, 0026. The GPS based position data along with onboard diagnostic data is wirelessly communicated to off-site computers. *Id.* at 0026-0027.

D. U.S. Patent Application Publication No. 2003/0182033¹ To Underdahl et al. (Underdahl)

47. *Underdahl* (Ex-1006) purports to address the problems facing automobile dealerships as it relates to locking and unlocking vehicles. *Underdahl*, 0005-0008. Particularly, *Underdahl* addresses a dealership spending unnecessary overhead organizing remote transmitters. *Id.* at 0008. To address these shortcomings facing automobile dealerships, a removable door lock apparatus allows a salesperson at a dealership to control the door lock status by changing the door lock state between locked and unlocked. *Id.* at 0033.

IX. THE ‘278 PATENT

48. The Background of the Invention section of the ‘278 *Patent* (Ex-1001) states that, “[m]otor vehicles, such as passenger cars, trucks, buses, fleet vehicles, etc. are widely used and knowing the locations of such vehicles is often desired. For example, should a vehicle be stolen, it would be beneficial to know the vehicle's location so that authorities could be promptly and accurately directed to retrieve the

¹ Petitioner erroneously refers to *Underdahl's* publication no. as being 2003/0182003. Petition, 6, 77. Patent Owner understands *Underdahl's* publication no. as being 2003/0182033.

vehicle. Indeed, the tracking system could plot the getaway path of the thief.” ‘278 *Patent*, 1:30-36.

49. The Background of the Invention discusses uses in the context of tracking the geographic location of the vehicle. For example, it explains:

For a company with hired drivers, it may be desirable to know the driver's whereabouts during the course of the day. Similarly, a rental car agency or other fleet operator, for example, may wish to know the whereabouts of its fleet of vehicles.

It may also be desirable to track the location of a vehicle as it is used throughout the course of a normal day. For parents of younger or older drivers, for example, knowledge of the vehicle's location may provide some assurance that the driver is at designated locations and following a prescribed route. ‘278 *Patent*, 1:37-46.

50. The Background of the Invention also describes the inventor's prior developed technology relating to security and control systems that address data bus interoperability as follows:

U.S. Pat. No. 5,719,551, assigned to Omega Patents, LLC, the assignee of the present invention, discloses a vehicle security system for a vehicle including a data bus connecting a plurality of vehicle devices. A signal enabling circuit enables the alarm controller to operate using a set of desired signals selected from a plurality of possible sets for different vehicles. U.S. Pat. No. 6,011,460, assigned to Omega Patents, LLC, discloses a similar system where the set of desired signals from the plurality of different sets of signals for different vehicles is obtained, such as by connection and communication with a downloading device. Additionally, U.S. Pat. No. 6,756,885, also assigned to Omega Patents, LLC, discloses a multi-vehicle control system whereby a multi vehicle compatible controller stores a set of device codes for a given vehicle device for a plurality of different vehicles. Device codes are read from the data communications bus, and a match between a read device code and the stored device codes is determined to provide compatibility with different vehicles. *Id.* 2:19-37.

51. The written description and associated drawings of the '*278 Patent* include embodiments directed to stolen vehicle alerts and speeding alerts (Figs. 4-6) and fault alerts such as low battery or GPS/cellular failure alerts (Figs. 8-9). See '*278 Patent*, 15:4-15:53, 18:3-19:9. The '*278 Patent* also describes embodiments having a downloading interface to address the potential difficulties of interfacing to a vehicle data bus and devices connected thereto. '*278 Patent*, 23:41-25:4, and FIGS. 10-13. Embodiments include a remote transmitter, and a remote start controller including a receiver and at least one processor to generate a climate control command on the data communications bus of the vehicle and remote start the vehicle. *Id.* The at least one processor of the remote start controller is also configured to perform a different respective function in each different embodiment. *Id.*

52. There are two species or categories of signal downloading interfaces disclosed and claimed in the '*278 Patent*: (1) a wired signal downloading interface (e.g. Claim 2) that may include a connector for temporary connection to a downloading device (e.g., Claim 3); and (2) a wireless signal downloading interface

(e.g. Claim 4) that may include a wireless receiver for temporary connection to a downloading device (e.g., Claim 5). ‘278 Patent 24:14 – 25:28; 26:16-29.

X. GROUND 1: CLAIMS 1-22 ARE NOT OBVIOUS OVER *FLICK885* AND *FLICK561*

53. Petitioner relies on the selective combination of the many times considered *Flick885* and *Flick561* patents to challenge the patentability of Claims 1-22 as being obvious over *Flick885* and *Flick561*. *Flick885* and *Flick561* have been of record since the filing of the ‘278 Patent.

54. Petitioner attacks the patentability of the claims of the ‘278 Patent with the benefit of nearly fifteen years of hindsight in selecting and combining bits and pieces of prior art – prior art that was already considered by a multitude of tribunals and has been of record since filing of the ‘278 Patent. Ex-1009; Ex-1015; Ex-2005; Ex-2007; Ex-2008.

55. Petitioner attempts to stretch the teachings of *Flick885* beyond what *Flick855* discloses to a POSA – contending that *Flick885* “inherently” discloses various claim elements. Petitioner’s contentions fail to consider the entire teachings of *Flick885* and *Flick561* and fail to supply the missing pieces and/or a proper rationale for combination.

56. *Flick885* and *Flick561* are of record and, therefore, have been considered and are cumulative of art before the examiner. Petitioner's arguments for unpatentability seems to ignore the evidence of secondary considerations, which also supports patentability. *Id.*

57. Petitioner contends that a combination of *Flick885* and *Flick561* renders obvious the claims of the '278 *Patent*. More particularly, Petitioner contends that *Flick885* discloses "everything" except the "tracking unit" or GPS. Petition 5, 22-24. This is essentially the same rejection advanced in the co-pending IPR, IPR2023-00504, by way of the combination of U.S. Patent No. 6,957,133 to Hunt (*Hunt*) (Ex-2015) and *Flick885*. *Id.*

A. Flick885

58. *Flick885* (Ex-1003) was cited by Patent Owner during prosecution of the '278 *Patent*. Ex-1009. *Flick885* is described in the Background of the Invention section of '278 *Patent*.

59. Also referenced by Petitioner is U.S. Patent No. 6,011, 460 (*Flick460*), which is directed to a vehicle security system for a vehicle having a data

communications bus. *Flick460*, abstract. *Flick460*, like *Flick885* was also cited in the prosecution of the '278 *Patent* and also considered by the Examiner. Ex-1009.

60. Like *Flick885*, *Flick460* was also described in the background section of the '278 *Patent*, specifically: "U.S. Pat. No. 6,011,460, assigned to Omega Patents, LLC, discloses a similar system where the set of desired signals from the plurality of different sets of signals for different vehicles is obtained, such as by connection and communication with a downloading device." '278 *Patent*, 2:25-29.

B. A POSA would not have Found the Claims Obvious Over the Combination of *Flick885* and *Flick561*

61. Petitioner asserts that the motivation to selectively combine references is (1) "because there are several interrelated teachings, motivations and suggestions in each of these references"; (2) because the use of sensors to detect movement proximate the vehicle would motivate a POSA to use a tracking unit; and (3) "because common sense and market forces would teach them to develop a system that could be implemented in any vehicle type. Petition 19-20. I disagree. For the reasons set forth herein, a POSA would not have combined *Flick885* and *Flick561* in an attempt to arrive at the claimed embodiments.

62. Petitioner contends that *Flick885* inherently discloses a multi-vehicle compatible tracking unit because “one of the sensors disclosed is to ‘detect movement of the vehicle.’” Petition, 22, citing *Flick885*, 1:28-29. Petitioner further contends that *Flick885*, in addition to ultrasonic and microwave motion detectors, radar sensors may be used to monitor the area proximate the vehicle. *Id.*, citing *Flick885*, 1:29-32.

63. The various sensors described in *Flick885* detect movement in or around the vehicle, or movement of the vehicle. *Flick885*, 1:27-32. A POSA would not consider this to be detecting the position of the vehicle or vehicle tracking.

64. Petitioner argues that a POSA would understand that sensors, particularly radar sensors, have been used to track the position and velocity of a moving object and are often used for tracking terrestrial and airborne vehicles. Petition, 22. I disagree. The various sensors that Petitioner argues perform “vehicle tracking” are physically at the vehicle.

65. Radar is well known to track distant moving objects. A vehicle cannot be tracked if the radar device used for tracking it is at the vehicle. *Id.* Contrary to Petitioner’s argument, *Flick885* described the radar sensor to be “used to monitor

the area proximate the vehicle.” *Flick885*, 1:31-32. There is nothing in *Flick885* that discloses or suggests a vehicle tracking unit or tracking the position of the vehicle itself.

66. Petitioner also contends that a POSA would add the vehicle tracker from *Flick561* because an objective of *Flick885* is to add devices to an existing system, such as, for example, a vehicle security system. Petition, 22. However, a POSA at the time viewed vehicle security and vehicle tracking as two different problems, as described in *Flick885* and *Flick561*. Vehicle tracking, in the technology development world, occurred later in time, and involved reporting geographic location of a vehicle to a separate monitoring station or device. Only through impermissible hindsight would one suggest combining these patents.

67. On page 23 of the Petition, Petitioner contends that *Flick885* “also likely discloses a vehicle position determining device since the vehicle sensors may detect movement of the vehicle.” Petition, 23. However, *Flick885* fails to teach a vehicle position determining device to a POSA.

68. Instead, the sensors that are described in *Flick885* include sensors that detect opening of the trunk, hood, doors, windows, and movement of the vehicle or

within the vehicle, and may include motion detectors, vibration sensors, sound discriminators, pressure sensors, and radar sensors “*used to monitor the area proximate the vehicle.*” *Flick885*, 1:26-32. A POSA would not deem these sensors as vehicle position determining devices.

69. The Petitioner further contends that *Flick885* discloses an MVCC for cooperating with a vehicle position determining device and a wireless communications device to send vehicle position information. Petition, 26. The Petitioner cited to *Flick885* as disclosing a control system including a transmitter and a receiver “*for receiving signals from the transmitter, and a multi-vehicle compatible controller cooperating with the transmitter and receiver.*” Petition, 26 citing *Flick885*, 3:6-9; emphasis added by Petitioner. The MVCC in *Flick885* does not cooperate with a vehicle position determining device, nor does it send vehicle position data, because *Flick885* does not have a vehicle position determining device.

70. *Flick885* discloses signals for providing vehicle security functions or remote operations, such as, for example, remote start or remote door unlocking. *Flick885*, 5:16-34. In other words, the MVCC of *Flick885* permits compatibility with different codes on the data bus, which may vary by vehicle. *Flick885*, 5:12-15.

71. With respect to the MVCC cooperating with a vehicle position determining device and a wireless communications device to send vehicle position information, Petitioner again turns to what they contend is “inherently” disclosed by *Flick885*. Petition 27. Petitioner contends that *Flick885* inherently discloses a multi-vehicle compatible tracking unit because “one of the sensors disclosed is to ‘detect movement of the vehicle.’” Petition, 27, citing to *Flick885*, 1:28-29. In addition to ultrasonic and microwave motion detectors, Petitioner further contends that *Flick885* radar sensors may be used to monitor the area proximate the vehicle. Petition, 27; emphasis added. None of these sensors are used for tracking of, or detecting the position of, the vehicle.

72. The various sensors described in *Flick885* that detect movement in or around the vehicle, or movement of the vehicle, do not track or detect the position, geographically, of the vehicle. *Flick885*, 1:27-32. Particularly, when considered in the context of the cited passage of *Flick885*, a POSA would understand that the movement detected in or around the vehicle is NOT a detection of the position, geographically, of the vehicle.

C. Petitioner’s Motivation to Combine Flick885 and Flick561 is Improper

73. Petitioner contends that a POSA would have combined *Flick885* and *Flick561* because “there are several interrelated teachings, motivations, and suggestions” and that both *Flick885* and *Flick561* “address problems with vehicle security systems.” Petition, 19. Vehicle tracking and data bus multi-vehicle compatibility are not interrelated.

74. Petitioner attempts to narrow *Flick885* to be directed to a vehicle security system and the problems of vehicle security systems. Petition, 19. However, a more careful and common sense reading of *Flick885* leads a POSA to understand that *Flick885* is directed to a control system providing multi-vehicle compatibility with different data bus codes. *Flick885*, 5:12-15.

75. Contrary to Petitioner’s arguments, none of the independent claims of *Flick885* is directed solely to security systems. While security functions can be performed using the MVCC disclosed in *Flick885*, so can keyless entry and remote start functions. *Flick885*, 3:33-35, 5:39-40, 7:4-9.

76. Similarly, Petitioner attempts to narrow *Flick561* to be directed to vehicle security systems and addressing problems with vehicle security systems.

Petition, 19. *Flick561* is directed to a tracking and an alerting system for a vehicle. *Flick561*, 1:17-20. The vehicle tracker may be beneficial for reporting the geographic location of the vehicle, whether for fleet operators, parents or when a vehicle is stolen. *Flick561*, 1:17-40. The vehicle tracker may be beneficial for use with an “optional separate security system.” *Flick561*, 5:57-59. *Flick561* is not specifically or solely directed to a vehicle security system, nor does it address the problems of vehicle security systems.

77. Having “some overlap” would not drive a POSA to combine *Flick561* with *Flick885* when properly considering the claims of the ‘278 *Patent* as a whole. The Petitioner’s unjustified focus on vehicle security fails to consider the claims of the ‘278 *Patent* as a whole and the art for what it teaches to a POSA. The only way the Petitioner could arrive at such a rationale would be through impermissible hindsight.

78. Petitioner advances another rationale for combining *Flick561* with *Flick885*, this time contending that the discussion of vehicle sensors in *Flick885* would “teach toward” using a vehicle tracker in *Flick561*. Petition, 20. As discussed *Supra*, the sensors disclosed in *Flick885* are local sensors to detect movement

proximate to the vehicle or movement of the vehicle from shock, not the geographic location of the vehicle. See Section VI, *Supra*. The mere suggestion by the Petitioner that the vehicle sensors in *Flick885* “teach toward” is a clear admission that *Flick885* does not have such vehicle tracking sensors.

79. The Petitioner concludes that “these teachings of sensors to detect movement would motivate a POSITA to use a tracking unit, including a GPS sensor, as disclosed in the ‘561 Patent.” Petition, 20. Petitioner’s rationale is inconsistent with how a POSA would view the art, suggesting without any basis that attempting to monitor local activity in and around a vehicle would compel one to add non-existent GPS sensors to assist in vehicle tracking. GPS sensors were not disclosed in *Flick885*, nor would they provide functionality for detecting proximity movement.

80. Petitioner next argues the “prospects of incorporating a vehicle tracking unit from the ‘561 Patent would have motivated skilled artisans to include it for the vehicle security system disclosed in the ‘885 Patent.” Petition, 20. There is nothing in *Flick885* or *Flick561* that would alert a POSA to this prospect. Indeed, any “prospect” necessarily comes from the inventor’s own work – the ‘278 *Patent* – and this is impermissible hindsight.

81. Petitioner argues yet a third rationale as a motivation for combining *Flick885* and *Flick561* – that being one of “common sense” and “market forces” – would teach a POSA to develop this combined system. Petition, 20. Petitioner’s third rationale is merely a conclusion and is not any form of an articulated technical rationale. Petitioner falls well short of providing any evidence that a POSA would have, without hindsight and while considering *Flick881* and *Flick561* as a whole, arrived at the claimed invention in the ‘278 *Patent*.

82. In summary, Petitioner’s combination of *Flick885* and *Flick561* can only be achieved through the use of improper hindsight, using the ‘278 *Patent* as a roadmap.

D. Petitioner’s Proposed Combination of Flick885 and Flick561 Fails to Consider Compelling Evidence of Secondary Considerations

83. In response to the Petition, Patent Owner presents compelling evidence of secondary considerations, much of which I understand has already been considered and confirmed twice by the PTAB. Ex-1015, Ex-2005. This evidence, which was already considered by the PTAB twice, included licensing, commercial success, copying by others, customer need, and limited value for accused products without the invention. See *Ex Parte Flick*, Appeal 2022-003758 at 14 (Ex-1015);

D.I. 297-1, 26:11-20 (Ex-2010); D.I. 297-4, 45:3-19, 46:25-47:19 (Ex-2011); D.I. 297-5, 64:15-24, 102:16-103:13, 155:4-13 (Ex-2012).

84. As I understand it, evidence of secondary considerations plays an important role in the obviousness analysis.

85. Not only is the combination of Flick885 and Flick561 improper, but when the secondary considerations evidence is considered, the claims of the ‘278 *Patent* are not obvious in view of *Flick885* and *Flick561*.

86. Petitioner’s suggests impermissibly slapping a GPS from *Flick561* into the *Flick885* system in a single housing, nearly fifteen (15) years later and after careful consideration by a multitude of tribunals, renders the claims of the ‘278 *Patent* obvious. This seems to ignore the disclosure of the art and the evidence of secondary considerations.

1. Evidence of Secondary Considerations Support Patentability

87. Petitioner contends that Patent Owner’s evidence of secondary considerations should be discarded for lack of a nexus. Petition 66-67. Petitioner relies on statements made by the Patent Owner and me as Omega’s expert in a co-pending *inter partes* review proceeding (IPR2023-00504). Petition 67. Petitioner

contended that Omega had argued that the commercial success of the ‘278 *Patent* was “attributable entirely to the multi-vehicle compatibility of the claimed invention.” Petition, 67; Emphasis added. This is an incorrect characterization of my testimony.

88. I testified by quoting the testimony of CalAmp’s employee in the proceeding that confirmed the infringement of the accused CalAmp products: “Further, the infringing CalAmp Products would have “limited value” if it were not for the multi-vehicle compatibility. (Hergesheimer deposition, 46:25-47:169).” Ex-1012, ¶24(j); See also Ex-2011 for the Deposition of Peter Hergesheimer. Petitioner’s statement about the commercial success of the ‘278 *Patent* is misleading and takes the evidence I referred to out of context.

89. Despite Petitioner’s contentions, this PTAB has twice considered the evidence of secondary considerations and relied on it in confirming validity. *Ex Parte Omega Patents, LLC*, Appeal 2018-008119 (Ex-2005); *Ex Parte Omega Patents, LLC*, Appeal 2022-003758 (Ex-1015

90. In other words, the PTAB has already, on multiple occasions, considered the same secondary evidence and determined the sufficiency of this

evidence. Here, there is commercial success, there is copying, there is licensing, there is customer need, there is limited value of accused products without the invention (not entirely the multi-vehicle compatibility as contended by the Petitioner), and there is a nexus, to the ‘278 Patent.

91. For example, Mr. Hergesheimer, a director of software and architecture for CalAmp, testified about customer need for the benefits of the ‘278 Patent, particularly that the LMU-3000 was a “sales-driven request” from customers who expressed a demand for the features therein. Ex-2011, 40:6-41:3. Mr. Hergesheimer also confirmed that multi-vehicle compatibility was a value proposition, and without such a capability, its products would have limited value because it allows specific products to service more vehicles, increasing ease of use and decreasing costs. Ex-2011, 46:25-47:19. For example, by providing multi-vehicle compatibility on the data bus, fewer different devices would be required to cover the same range of vehicles and manufacturers. Mr. Hergesheimer also confirmed that the ability to download software and data bus codes via hardwire or wirelessly provided a benefit of convenience while reducing expense. Ex-2011, 47:25-48:19. All of this testimony supports a finding of non-obviousness.

92. The PTAB made its findings based upon *Lowrey* (Ex-2014) and *Lightner* (Ex-2013), both references similar to *Flick885* and *Flick561*, *Lewis*, and *Underdahl*, technologically, and by way of formulation of the rejection. *Lowrey* is directed to an internet-based vehicle diagnostic system that includes a wireless appliance in electrical contact with an in-vehicle computer and that can report position data from a GPS device, while *Lightner* is directed to a wireless diagnostic system and method for monitoring vehicles that includes a wireless appliance that can be physically and electrically installed. Here, Petitioner contends that the Board did not have the benefit of considering *Flick885*, *Lewis*, or *Underdahl* when it considered the evidence of commercial success. As discussed Supra, *Flick885* was of record since filing of the '278 Patent.

93. In my analysis I have considered the evidence of secondary considerations consistent with the previous determinations of this Board and other tribunals.

E. Claims 2-3

94. Sections X.B-D, above, explain that even the selective combination of *Flick885* and *Flick561* fails to disclose or render obvious the claimed limitations.

For at least these reasons set forth above in Sections X.B-D, dependent Claims 2-3 are also patentable.

F. Claim 4

95. Sections X.B-D, above, explain that even the selective combination of *Flick885* and *Flick561* fails to disclose or render obvious the claimed limitations. For at least these reasons set forth above in Sections X.B-D, dependent Claim 4 is also patentable.

96. Additionally, Petitioner contended that *Flick829*, which “is incorporated by reference in the ‘278 Patent’” also discloses a wireless signal downloading interface. Petition, 35; Emphasis added. This is incorrect, as the ‘278 *Patent* does not incorporate by reference *Flick829*. It is unclear what Petitioner is attempting to show with *Flick829*, *i.e.*, whether or not it is being incorporated by reference in the ‘278 *Patent*. Petitioner fails to establish or explain that even the selective combination of *Flick885* and *Flick561* discloses or renders obvious the claimed limitations.

G. Claim 5

97. Sections X.B-D, above, explain that even the selective combination of *Flick885* and *Flick561* fails to disclose or render obvious the claimed limitations.

For at least these reasons set forth above in Sections X.B-D, dependent Claim 5 is also patentable.

98. Additionally, Petitioner contends that *Flick460*, which “is incorporated by reference in the ‘278 Patent’” also discloses the wireless signal downloading interface including a wireless receiver. Petition, 35; Emphasis added. Petitioner fails to establish or explain that even the selective combination of *Flick885* and *Flick561* discloses or renders obvious the claimed limitations.

H. Claims 6-12

99. Sections X.B-D, above, explain that even the selective combination of *Flick885* and *Flick561* fails to disclose or render obvious the claimed limitations. For at least these reasons set forth above in Sections X.B-D, dependent Claims 6-12 are also patentable.

I. Claim 13

100. Independent Claim 13 recites subject matter similar to Claims 1 and 3. Sections X.B-D, above, explain that even the selective combination of *Flick885* and *Flick561* fails to disclose or render obvious the claimed limitations. For at least these reasons set forth above in Sections X.B-D, dependent Claim 13 is also patentable.

J. Claims 14-17

101. Dependent Claims 14-17 recite subject matter similar to dependent Claims 6-9, respectively. Sections X.B-D, above, explain that even the selective combination of *Flick885* and *Flick561* fails to disclose or render obvious the claimed limitations. For at least these reasons set forth above in Sections X.B-D, dependent Claims 14-17 are also patentable.

K. Claim 18

102. Independent Claim 18 recites subject matter similar to Claims 1 and 5. Sections X.B-D, above, explain that even the selective combination of *Flick885* and *Flick561* fails to disclose or render obvious the claimed limitations. For at least these reasons set forth above in Sections X.B-D, dependent Claim 18 is also patentable.

L. Claims 19-22

103. Dependent Claims 19-22 recite subject matter similar to dependent Claims 6-9, respectively. Sections X.B-D, above, explain that even the selective combination of *Flick885* and *Flick561* fails to disclose or render obvious the claimed limitations. For at least these reasons set forth above in Sections X.B-D, dependent Claims 19-22 are also patentable.

XI. GROUND 2: CLAIMS 1, 4-6, 8, 11-12, 18-19, 21 ARE not anticipated by LEWIS

104. Petitioner turns to *Lewis* in an attempt to show *Lewis* anticipates Claims 1-6, 8, 10-14, 16, 18-19, and 21 of the '278 Patent. *Lewis*, much like all the other prior art references that were previously considered by the many tribunals, is yet another cumulative reference locatable in hindsight. *Lewis*, like other art already considered, also fails to disclose all the claim elements. *Lewis* discloses a real time vehicle performance and position monitoring system. *Lewis*, 0023. A GPS position receiver collects position data of the vehicle. *Id.* at 0024, 0026. The GPS based position data along with onboard diagnostic data is wirelessly communicated to off-site computers. *Id.* at 0026-0027; See Section, VIII.C, Supra.

105. *Lewis* addresses the problems with large scale deployment of real-time communication of vehicle tracking and monitoring data. *Lewis*, 0010-0013. *Lewis* discloses that certain events require a certain level of performance in terms of real-time monitoring using the internet, for example, roadside emergencies, hazardous material spills, and homeland security operations. *Lewis*, 0013-0014. *Lewis* uses peer-to-peer communications to address some of these problems and also makes the data available via a remote site via the Internet. *Lewis*, 0042, 0103. *Lewis*, much

like the recently used *Hunt*² reference, does not address ongoing compatibility with different vehicles. *Lewis* is no better than *Hunt* or any other art already considered.

A. Lewis Fails to Disclose All the Claim Elements

106. Petitioner argues that the various disjointed passages of *Lewis* somehow disclose the claimed 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. Petition, 56 (citing paragraphs 0042, 0022, 0093, 0047, 0091, and 0054 of *Lewis*). The various cited passages of *Lewis* fail to support the Petitioner's contentions.

107. Particularly, *Lewis* discloses the system being able to perform “vehicle-to-vehicle (peer-to-peer) communication for relaying any data including vehicle location and performance data....” *Lewis*, 0042. This relaying is nothing more than a remote downloading operation of the vehicle location and performance data from the vehicle device. It does not matter whether the data is downloaded to a server,

² *Hunt* was used to form an invalidity basis in co-pending IPR2023-00504, on the basis of both novelty and obviousness. See Ex-2004 and Ex-2015, for example.

computer, or another vehicle, this is still a remote downloading of this data from the vehicle device.

108. From the perspective of any given vehicle device of *Lewis*, the location and performance data can be uploaded somewhere else, including another vehicle. *Lewis*, 0042. *Lewis* fails to disclose that the same vehicle device that uploads its data for remote downloading is itself capable of downloading this location and performance data from another vehicle device.

109. Even if the vehicle device in *Lewis* is capable of downloading position and performance data for another vehicle, this position and performance data is not enabling data related to the at least one corresponding vehicle device code for use by the multi-vehicle compatible controller.

110. Paragraph 0022 of *Lewis* discloses that vehicles may communicate with each other in a peer-to-peer fashion. *Lewis*, 0022. Again, there is nothing in *Lewis* that discloses or suggests to a POSA that this data is downloaded by *the vehicle device* that collects the position and performance data. *Lewis* discloses that vehicles, and more particularly, buses, communicate with one another. *Lewis*, 0074 0090.

111. Even if the vehicle device of *Lewis* can download this position and performance data from another vehicle, this data is NOT enabling data related to the at least one corresponding vehicle device code for use by the multi-vehicle compatible controller.

112. The PCMCIA port in paragraph 0093 of *Lewis* cited by Petitioner is simply an interface of a laptop by which performance and position data can be downloaded to the laptop. *Lewis*, 0093; Petition 56. This downloading is not by the vehicle device. *Lewis*, 0093.

113. The data downloaded by the laptop is actually *uploaded* by the *Lewis* vehicle device. Thus, this too is not 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.

114. Paragraphs 0047³ and 0091, both cited by Petitioner, fail to disclose a downloading interface for permitting downloading of enabling data related to the at

³ Petitioner cites to paragraph 0047 of *Lewis*, but appears to actually cite paragraph 0046 of *Lewis*. Regardless, there is no disclosure of a downloading interface for permitting downloading of enabling data in any paragraph of *Lewis*.

least one corresponding vehicle device code for use by the multi-vehicle compatible controller.

115. Paragraph 0047, for example, discloses position and performance data being displayed on a graphical user interface (GUI) of a web-based data visualization system. *Lewis*, 0047. The GUI is a visual representation of the performance and position data downloaded FROM or OFF of the vehicle device. *Id.* A POSA would not recognize this as 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. *Id.*

116. Petitioner's cited portion of *Lewis* paragraph 0091 has nothing to do with downloading or uploading. Instead, this paragraph of *Lewis* discloses video data being broadcast to all linked vehicles, and the receiving vehicles may determine what is determined. *Lewis*, 0091. This is not, either taken alone or in combination with Petitioner's other cited portions of *Lewis*, 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. *Id.*

117. Lastly, Petitioner turns to paragraph 0054 of *Lewis*, which discloses the I/O subsystem of the vehicle device including a PC interface (USB/RS232) for on-site debugging. Petition, 57. Petitioner contended that the PC (personal computer) provides the on-site debugging of the system “by which data is downloaded from the PC to the system in order to fix errors or bugs within the system.” Petition, 57. Petitioner is providing its own idea of how *Lewis* performs the debugging that is not disclosed or suggested in *Lewis*.

118. *Lewis* is silent as to what is being debugged or how this debugging is being performed. For example, debugging may include repositioning a GPS antenna for a better view of the satellites based upon data downloaded from the vehicle device to the PC or ensuring the connection between the GPS device and serial port is correct. *Lewis*, 0095. Debugging may include setting the proper protocol. *Lewis*, 0098. Debugging may include understanding why data may not be available to the remote site via the Internet. *Lewis*, 0103. Debugging may be performed simply by reviewing data downloaded from a vehicle device to the PC. Debugging does not necessarily involve changing the programming of the vehicle device or downloading data from the PC to the vehicle device.

119. There is nothing in *Lewis* that would teach or suggest to a POSA how to logically morph debugging using a PC interface into a downloading interface for downloading of *enabling data related to the at least one corresponding vehicle device code for use by the multi-vehicle compatible controller*. ‘278 Patent, 26:12-15.

B. Claim 2

120. Petitioner generically argues the claimed downloading of *enabling data related to the at least one corresponding vehicle device code for use by the multi-vehicle compatible controller* is disclosed in *Lewis*. Petition, 57. A wired signal downloading interface is missing from *Lewis*. The various input-output interconnections of the *Lewis* vehicle device have nothing to do with enabling data. *Lewis* cannot disclose a wired downloading interface as claimed in the ‘278 Patent because it does not disclose 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.

121. For these reasons, and the reasons set forth above in Section XI.A that *Lewis* failing to disclose or suggest the claimed limitations, dependent Claim 2 is also patentable.

C. Claim 3

122. Section XI.A, above, explains that *Lewis* fails to disclose or suggest the claimed limitations. For at least these reasons set forth above in Section XI.A, dependent Claim 3 is also patentable.

D. Claim 4

123. Petitioner leaps to yet another disjointed portion of *Lewis* to find a wireless signal downloading interface. Petition, 58; '278 *Patent*, 26:23-25. Petitioner cites paragraph 0022 of *Lewis*, which discloses vehicles wirelessly communicating with each other or with servers. *Lewis*, 0022. For at least the reasons set forth above in Section XI.A, *Lewis* also fails to disclose a wireless signal 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.

124. A POSA would further understand the wireless communication to the servers and other vehicles is for the communication of position and performance data

so that it can be displayed on a remote web site. *Lewis*, 0103. This communication has nothing to do with enabling data related to the at least one corresponding vehicle device code for use by the multi-vehicle compatible controller.

125. For these reasons, and the reasons set forth above in Section XI.A that *Lewis* failing to disclose or suggest the claimed limitations, dependent Claim 4 is also patentable.

E. Claim 5

126. Section XI.A, above, explains that *Lewis* fails to disclose or suggest the claimed limitations. Moreover, any temporary connection, such as the PC interface (USB/RS232), is wired. *Lewis*, 0054. For at least these reasons and those set forth above in Section XI.A, dependent Claim 5 is also patentable.

F. Claim 6

127. Section XI.A, above, explains that *Lewis* fails to disclose or suggest the claimed limitations. For at least these reasons set forth above in Section XI.A, dependent Claim 6 is also patentable.

G. Claim 8

128. *Lewis* fails to disclose a downloading interface that permits downloading of at least one programming instruction for the multi-vehicle

compatible controller. Petitioner regurgitates the word salad pointing to the PC interface for “debugging.” Petition, 60-61. There is nothing in *Lewis* that discloses or suggests that debugging involves permitting downloading (from the PC to the vehicle device) of a programming instruction for the vehicle device.

129. For at least these reasons and those set forth above Section XI.A, above, which explain that *Lewis* fails to disclose or suggest the claimed limitations, dependent Claim 8 is also patentable.

H. Claims 10-12

130. Section XI.A, above, explains that *Lewis* fails to disclose or suggest the claimed limitations. For at least these reasons set forth above in Section XI.A, dependent Claims 10-12 are also patentable.

I. Claim 13

131. Independent Claim 13 is similar to independent Claim 1 and dependent Claim 3. Sections XI.A and XI.C, above, explains that *Lewis* fails to disclose or suggest the claimed limitations. For at least these reasons set forth above in Sections XI.A and XI.C, independent Claim 13 is also patentable.

J. Claims 14 and 16

132. Dependent Claims 14 and 16 are similar to dependent Claims 6 and 8, respectively. Sections XI.A and XI.F-G, above, explains that *Lewis* fails to disclose or suggest the claimed limitations. For at least these reasons set forth above in Section XI.A and XI.F-G, dependent Claims 14 and 16 are also patentable.

K. Claim 18

133. Independent Claim 18 is similar to independent Claim 1 and dependent Claim 5. Sections XI.A and XI.E, above, explains that *Lewis* fails to disclose or suggest the claimed limitations. For at least these reasons set forth above in Section XI.A and XI.E, independent Claim 18 is also patentable.

L. Claims 19 and 21

134. Dependent Claims 19 and 21 are similar to dependent Claims 6 and 8, respectively. Sections XI.A and XI.F-G, above, explains that *Lewis* fails to disclose or suggest the claimed limitations. For at least these reasons set forth above in Section XI.A and XI.F-G, dependent Claims 19 and 21 are also patentable.

XII. GROUND 3⁴: LEWIS AND UNDERDAHL DO NOT RENDER OBVIOUS CLAIMS 7, 9, 15, 17, 20, AND 22

A. Claims 7, 15, 20

135. Petitioner turns to *Underdahl* as allegedly disclosing some of the missing pieces of *Lewis*. Petitioner argues that a POSA would turn to *Underdahl* for the claimed vehicle device code as being for writing to at least one vehicle device because they both “relate to fleet management and tracking vehicle diagnostics and location information using a multi-vehicle compatible tracking unit.” Petition 59-60. The Petition offers nothing to suggest a POSA would be motivated to combine these references.

136. While I understand references directed to the same field of endeavor or have common subject matter may be combinable, I do not understand this guarantees a POSA would have been motivated to combine the references in the way specifically claimed. Petitioner offers no technical explanation as to why a POSA would have combined *Lewis* and *Underdahl* as contended. Rather than a technical rationale, this appears to be a conclusion based upon hindsight. For these reasons, and the reasons set forth Supra in Section XI.A, which explains that *Lewis* fails to

⁴ Petitioner, in the Petition, refers to Ground 3 as Ground 2a. Petition 6.

disclose or suggest the claimed limitations, a combination with *Underdahl* is also improper, and dependent Claims 7, 15, and 20 are patentable.

B. Claims 9, 17, 22

137. Section XI.A, explains that *Lewis* fails to disclose or suggest the claimed limitations. Section XII.A, above, explains that a further combination with *Underdahl* is improper. For at least these reasons set forth above in Sections XI.A and XII.A, dependent Claims 9, 17, and 22 are also patentable.

C. Petitioners' Proposed Combinations Ignore Compelling Evidence of Secondary Considerations

138. As noted in Section X.D above, Patent Owner has presented compelling evidence of secondary considerations, most of which has been considered and confirmed twice by the PTAB. Ex-1015, Ex-2009. When evidence of secondary considerations is properly considered, the claims of the '278 *Patent* are not obvious in view of *Lewis* and *Underdahl*.

XIII. CONCLUSION

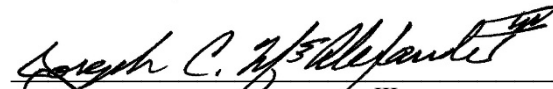
139. In signing this declaration, I recognize that the declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject

to cross-examination in the case and that cross-examination will take place within the United States. If cross-examination is required of me, I will appear for cross-examination within the United States during the time allotted for cross-examination.

140. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on 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.

Executed this the 8th date of December 2023.

Respectfully submitted,



Joseph C. McAlexander III