

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GEOTAB USA, INC. AND GEOTAB, INC.,
Petitioners,

v.

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

Case No. IPR2023-00504

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

TABLE OF CONTENTS

I.	INTRODUCTION	5
II.	QUALIFICATIONS.....	6
III.	MATERIALS CONSIDERED	7
IV.	LEGAL UNDERSTANDING.....	16
V.	LEVEL OF ORDINARY SKILL IN THE ART	21
VI.	CLAIM CONSTRUCTION.....	22
VII.	SUMMARY OF OPINIONS.....	23
VIII.	OVERVIEW OF PRIOR ART.....	26
A.	U.S. PATENT NO. 6,957,133 TO HUNT ET AL. (<i>HUNT</i>)	26
B.	U.S. PATENT NO. 6,756,885 TO FLICK (<i>FLICK</i> 885).....	27
IX.	THE ‘278 PATENT	27
X.	GROUND 1: CLAIMS 1, 4-6, 8, 11-12, 18-19, 21 ARE NOT ANTICIPATED BY <i>HUNT</i>	31
A.	HUNT FAILS TO DISCLOSE ALL THE CLAIM ELEMENTS	32
1.	<i>The Claims of the ‘278 Patent Require More Than Enabling Data.....</i>	<i>32</i>
2.	<i>Hunt Fails To Disclose A Downloading Interface For Permitting Downloading of Enabling Data...For Use By the Multi-Vehicle Compatible Controller.....</i>	<i>33</i>
B.	CLAIM 4.....	56
C.	CLAIM 5.....	56
D.	CLAIM 6.....	58
E.	CLAIM 8.....	58
F.	CLAIM 11.....	59

G.	CLAIM 12.....	60
H.	CLAIMS 18-19, 21.....	60
XI.	GROUND 2: CLAIMS 1, 4-6, 8, 11-12, 18-19, 21 ARE NOT OBVIOUS OVER <i>HUNT</i>	61
A.	A POSA Would Not Have Found The Claims Obvious In View Of <i>HUNT</i>	61
1.	<i>It Would Not Have Been Obvious for A POSA To Modify Hunt In the Way Proposed By Petitioners</i>	<i>61</i>
2.	<i>Petitioners' Proposed Combinations Ignore Compelling Evidence of Secondary Considerations</i>	<i>71</i>
B.	CLAIM 4.....	72
C.	CLAIM 5.....	73
D.	CLAIM 6.....	73
E.	CLAIM 8.....	73
F.	CLAIM 11.....	74
G.	CLAIM 12.....	74
H.	CLAIMS 18-19, 21.....	74
XII.	GROUND 3: <i>FLICK885</i> AND <i>HUNT</i> DO NOT RENDER OBVIOUS CLAIMS 1-22	75
A.	<i>FLICK885</i>	76
B.	THE CLAIMS OF THE '278 <i>PATENT</i> ARE NOT OBVIOUS BASED ON THE COMBINATION OF <i>FLICK885</i> AND <i>HUNT</i>	77
1.	<i>A POSA Would Not Combine Flick885 with Hunt</i>	<i>77</i>
2.	<i>Petitioners Proposed Combination of Flick885 and Hunt Fails to Consider Compelling Evidence of Secondary Considerations</i>	<i>81</i>

C.	CLAIMS 2-12	82
D.	CLAIM 13.....	82
E.	CLAIMS 14-17	83
F.	CLAIM 18.....	83
G.	CLAIMS 19-22	83
XIII. EVIDENCE OF SECONDARY CONSIDERATIONS SUPPORT PATENTABILITY		84
XIV. CONCLUSION		88

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 of \$625/hr. 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. My CV is attached hereto.

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-1002.

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 Geotab USA, Inc. and Geotab, Inc. used as their bases 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 I 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 Toyoto 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 mobile device tracking, such as is used to track vehicles.

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:

Exhibit	Description
1001	U.S. Patent No. 8,032,278 to Flick (the '278 Patent)
1002	Prosecution File History of U.S. Patent No. 8,032,278
1003	Declaration of Jeffrey Miller, Ph.D.
1004	Curriculum Vitae of Jeffrey Miller, Ph.D.
1005	Prosecution History of Ser. No. 90/013,587 (RX1)
1006	Prosecution History of Ser. No. 90/013,851 (RX2)
1007	Prosecution History of Ser. No. 90/014,309 (RX3)
1008	Prosecution History of Ser. No. 90/014,419 (RX4)
1009	Prosecution History of Ser. No. 90/014,675 (RX5)
1010	Claim Rejection, mailed May 6, 2016 in No. 90/013,587 (RX1)
1011	Decision granting ex parte reexamination request, mailed December 15, 2016 in No. 90/013,851 (RX2)
1012	Ex parte Omega Patents, LLC, No. 2018-008119 (Nov. 3, 2018)
1013	Decision granting ex parte reexamination request, mailed March 25, 2021 in No. 90/014,675 (RX5)
1014	Non-Final Rejection, mailed October 5, 2021 in No. 90/014,675 (RX5)
1015	Patent Owner's Appeal Brief, No. 90/014,675 (April 1, 2022)
1016	Transcript of oral argument in Ex parte Omega Patents, LLC, No. 2022-003758, Reexamination No. 90/014,675 (Oct. 28, 2022)
1017	<i>Ex parte Omega Patents, LLC</i> , No. 2022-003758 (Nov. 30, 2022)
1018	D.I. 50, Claim Construction Order, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb. 20, 2015) (" <i>CalAmp-CC</i> ").
1019	D.I. 34, Claim Construction Order, <i>Omega Patents, LLC v. Firstech, LLC</i> , No. 2:20-cv-01344 (W.D. Wash. Nov. 22, 2021) (" <i>Firstech-CC</i> ").

Exhibit	Description
1020	<i>Omega Patents, LLC v. CalAmp Corp.</i> , 920 F.3d 1337 (Fed. Cir. 2019) (“ <i>CalAmp-I</i> ”)
1021	<i>Omega Patents, LLC v. CalAmp Corp.</i> , 13 F.4th 1361 (Fed. Cir. 2021) (“ <i>CalAmp-IP</i> ”)
1022	D.I. 14, Omega Patents Answering Brief In Opposition to Geotab USA, Inc.’s Motion to Dismiss, <i>Omega Patents, LLC v. Geotab USA, Inc. and Geotab, Inc.</i> , No. 1:22-cv-01044-CFC (D. Del. Nov. 16, 2022)
1023	U.S. Patent No. 6,957,133 (“Hunt”)
1024	U.S. Patent No. 6,756,885 (“Flick-885”)
1025	U.S. Patent No. 6,011,460 (“Flick-460”)
1026	D.I. 040, Omega Patents Opposition to CalAmp Motion For Claim Construction, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Oct. 3, 2014)
1027	D.I. 144, Jury Verdict, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Sep. 30, 2019)
1028	D.I. 310, Jury Verdict, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb. 24, 2016)
1029	D.I. 143, Jury Instructions, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Nov. 24, 2016)
1030	D.I. 309, Jury Instructions, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Sep. 30, 2019)
1031	Y. Park and A. Fumiyuki, eds. <i>Enhanced Radio Access Technologies For Next Generation Mobile Communication</i> . Dordrecht: Springer, 2007.
1032	F. Delli Priscoli and M. Neri, “Integration of the ORBCOMM satellite network with the GSM Short Message Service.” <i>Space Communications</i> , Vol. 19, no. 1, pp. 47-57, 2003.
1033	D.I. 180, Transcript, Civil Jury Trial–Day 3, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb. 18, 2016)
1034	Pages from D.I. 181, Transcript, Civil Jury Trial–Day 4, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb. 19, 2016)

Exhibit	Description
1035	<i>RESERVED</i>
1036	<i>RESERVED</i>
1037	<i>RESERVED</i>
1038	<i>RESERVED</i>
1039	Pages from D.I. 338, Transcript, Civil Jury Trial–Day 2, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Sep. 24, 2019)
1040	Pages from D.I. 339, Transcript, Civil Jury Trial–Day 3, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Sep. 25, 2019)
1041	<i>RESERVED</i>
1042	<i>RESERVED</i>
1043	<i>RESERVED</i>
1044	Comparison of limitations in '278 patent claims 13-22 with limitations in '278 patent claims 1-12
1045	U.S. District Court – Judicial Caseload Profile for the District of Delaware, <i>available at</i> https://www.uscourts.gov/sites/default/files/fcms_na_distprofile0630.2022_0.pdf (last visited December 19, 2022)
1046	Title 40 Code of Federal Regulations, Part 86, Subpart S—General Compliance Provisions for Control of Air Pollution From New and In-Use Light Duty Vehicles, Light-Duty Trucks, and Complete Otto-Cycle Heavy-Duty Vehicles (July 1, 2007)
1047	SAE J1939-71 Vehicle Application Layer (rev. DEC2004)
1048	SAE J1708 Serial Data Communications Between Microcomputer Systems in Heavy-Duty Vehicle Applications (rev. AUG2004)
1049	<i>RESERVED</i>
1050	International Standard ISO 15031-4 Road Vehicles—Communication between vehicle and external equipment for emissions related diagnostics—Part 4: External test equipment (1st ed. June 15, 2005) (“ISO 15031-4:2005”)

Exhibit	Description
1051	Pages from Microsoft Internet & Networking Dictionary (2003)
1052	SAE J1978 OBD-II Scan Tool – Equivalent to ISO/DIS 15031-4: December 14, 2001 (revised 2002-04)
1053	Pages from IEEE 100 The Authoritative Dictionary of IEEE Standard Terms (7th Ed. 2000)
1054	D.I. 265, Federal Circuit Mandate, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. July 1, 2019)
1055	D.I. 392, Order Dismissing With Prejudice, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. June 16, 2022)
1056	U.S. Patent No. 8,856,266 B2
1057	U.S. Patent Application Publication No. US 2005/0032511 A1
1058	U.S. Patent Application Publication No. US 2004/0138790 A1
1059	U.S. Patent No. 6,611,740 to Lowrey
1060	U.S. Patent No. 7,209,813
1061	<i>RESERVED</i>
1062	<i>RESERVED</i>
1063	<i>RESERVED</i>
1064	U.S. Patent No. 7,617,727
1065	D.I. 145-85, PL104, 4/15/2015 Expert Report of Joseph C. McAlexander, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1066	13 Cal. Code Reg. §1968.2 Malfunction and Diagnostic System Requirements—2004 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines (2004)
1067	February 19, 2007 Internet Archive capture of startech.com webpage on computer cables at https://web.archive.org/web/20070219050320/http://www.startech.com/Product/Category.aspx?WCID=7&WCLID=2&MLID=2&menu=1&fro

Exhibit	Description
	m=more&c=US
1068	D.I. 145, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1069	<i>RESERVED</i>
1070	Control of Air Pollution From New Motor Vehicles and New Motor Vehicle Engines; Modification of Federal On-Board Diagnostic Regulations for: Light-Duty Vehicles, Light-Duty Trucks, Medium Duty Passenger Vehicles, Complete Heavy Duty Vehicles and Engines Intended for Use in Heavy Duty Vehicles Weighing 14,000 Pounds GVWR or Less; Extension of Acceptance of California OBD II Requirements, 68 Fed. Reg. 35792 (June 17, 2003)
1071	SAE J1850 Class B Data Communications Network Interface, Rev. 2001-05 (May 2001)
1072	ISO 15765-4:2005(E) Road vehicles – Diagnostics on Controller Area Networks (CAN) – Part 4: Requirements for emissions-related systems (1st ed. ISO January 15, 2005)
1073	ISO 15031-5:2006(E) Road vehicles — Communication between vehicle and external equipment for emissions-related diagnostics — Part 5: Emissions-related diagnostic services (ISO 1st ed. January 15, 2006)
1074	ISO 14230-4 Road vehicles — Diagnostic systems — Keyword Protocol 2000 —Part 4: Requirements for emission-related systems (ISO 1st ed. June 1, 2000)
1075	SAE J1979 (R) E/E Diagnostic Test Modes – Equivalent to ISO/DIS 15031-5:April 30, 2002 (April 2002)
1076	SAE J2178-1 Class B Data Communication Network Messages— Detailed Header Formats and Physical Address Assignments (reaffirmed July 2004).
1077	D.I. 10, Geotab USA, Inc.’s Opening Brief In Support Of Motion To Dismiss, <i>Omega Patents, LLC v. Geotab USA, Inc. and Geotab, Inc.</i> , No. 1:22-cv-01044 (D. Del. Nov. 2, 2022)
1078	SAE J2178-4 Class B Data Communication Network Messages— Message Definitions for Three Byte Headers (reaffirmed July 2004).

Exhibit	Description
1079	Pages from Title 40 Code of Federal Regulations, Part 86, Subpart S—General Compliance Provisions for Control of Air Pollution From New and In-Use Light Duty Vehicles, Light-Duty Trucks, and Complete Otto-Cycle Heavy-Duty Vehicles (July 1, 2014)
1080	Pages from Collins English Dictionary (5th ed. 2000)
1081	Pages from Newton’s Telecom Dictionary (2005)
1082	ISO 14230-2 Road vehicles—Diagnostic systems—Keyword Protocol 2000 – Part 2: data link layer (1st ed. Mar. 15, 1999)
1083	<i>RESERVED</i>
1084	<i>RESERVED</i>
1085	<i>RESERVED</i>
1086	<i>RESERVED</i>
1087	<i>RESERVED</i>
1088	<i>RESERVED</i>
1089	<i>RESERVED</i>
1090	D.I. 145-80, PL99, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1091	D.I. 145-54, PL68, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1092	D.I. 145-53, PL67, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1093	D.I. 145-67, PL81, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1094	D.I. 145-42, PL45, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1095	D.I. 145-57, PL71, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1096	D.I. 145-68, PL82, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)

Exhibit	Description
1097	D.I. 145-69, PL83, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1098	D.I. 145-70, PL84, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1099	D.I. 145-73, PL88, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1100	D.I. 145-74, PL90, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1101	D.I. 145-75, PL92, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1102	D.I. 145-76, PL93, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1103	D.I. 145-77, PL96, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1104	D.I. 145-79, PL98, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1105	D.I. 145-81, PL100, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1106	D.I. 145-83, PL102, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1107	D.I. 145-84, PL103, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1108	D.I. 145-88, PL141, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1109	D.I. 145-55, PL69, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1110	D.I. 145-71, PL85, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1111	D.I. 145-72, PL86, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
1112	D.I. 145-82, PL101, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)

Exhibit	Description
1113	D.I. 145-78, PL97, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2001	U.S. Patent No. 6,636,790 to Lightner
2002	Declaration of Mr. Joseph C. McAlexander, III
2003	Curriculum Vitae of Mr. Joseph C. McAlexander, III
2004	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)
2005	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)
2006	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)
2007	D.I. 39, Defendant CalAmp Corp's Opening Claim Construction Brief, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13- cv-1950 (M.D. Fla. September 5, 2014)
2008	Intent to issue Reexamination Certificate, mailed on April 14, 2023 in 90/014,675 (RX5)
2009	Reexamination Certificate Issued May 17, 2023 in 90/014,675 (RX5).
2011	U.S. Patent No. 5,732,074 to Spaur et al.
2012	U.S. Patent No. 5,515,043 to Berard et al.
2013	U.S. Patent No. 6,628,233 to Knockeart et al.
2014	Declaration of Mr. Christian Tregillis
2015	D.I. 145-43, PL47, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)

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 Petitioners contend that a POSA “would have had a Bachelor’s degree in electrical engineering, computer engineering, computer science, automotive engineering, or a related discipline, and at least two years of experience in networking or automotive engineering.” Petition 9. I understand that Petitioners also contend that “POSAs would have understood networking electronics, been familiar with vehicle data buses, regulations and industry standards involving on-board diagnostics (“OBD-II”), and at least one underlying network protocol used by OBD-II.” Petition 9. While I disagree with Petitioners’ characterization that a POSA “would have understood networking electronics, been familiar with vehicle data buses, regulations and industry standards involving on-board diagnostics (“OBD-II”), and at least one underlying network protocol used by OBD-II”, for the purpose of this Declaration, I have applied the Petitioners’ heightened 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. 1018, 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 has construed the term “enabling data” to mean data that “enables the recited 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.” Decision 25.

30. I understand that all terms not specifically construed should be given their plain and ordinary meaning.

31. 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

32. Multiple patent licensees, multiple United States Patent and Trademark Office (USPTO) patent examiners, two different Patent Trial and Appeal Board (PTAB) panels, a jury, and a District Court all considered and determined the validity of the '278 *Patent*. Petitioners now argue these prior determinations are wrong because of yet another cumulative reference – this time to inventors Hunt, Lowrey and Banet (U.S. Pat No. 6,957,133) (Ex-1023, *Hunt*).

33. In the most-recent fifth ex parte reexam of the '278 *Patent*, the PTAB again found the originally filed claims patentable over a similar reference to Lowrey, Banet, Lightner, Borrego, Myers and Williams (U.S. Pat. No. 6,611,740) (Ex-1059)

either alone or in combination with a reference to Lightner, Borrego, Myers and Lowrey (U.S. Pat. No. 6,636,790) (Ex-2001).

34. The three patents to Hunt, Lowrey, and Lightner are all currently assigned to Verizon Patent and Licensing Inc., New Jersey. It is basically the same rotating group of inventors and the same technology, yet Petitioners urge this time that it is somewhat different.

35. Petitioners concede that *Hunt* still fails to anticipate or render obvious claims 2-3, 7, 9-10, 23-27, 20, and 22. The majority of these claims are directed to a wired signal downloading interface -- one of the two species of downloading interfaces recited in the challenged claims -- the other being a wireless signal downloading interface.

36. To argue obviousness of these claims, Petitioners attempt to combine U.S. Patent No. 6,756,885 to Flick (*Flick885*), also owned by the Patent Owner, with *Hunt*.

37. *Flick885* is described in the Background of the '278 *Patent* and was considered by the examiner in the original prosecution. Accordingly, it is not new either.

38. Regarding its anticipation arguments for Claims 1, 4-6, 8, 11-12, 18-19 and 21, the Petitioners wrongly rely upon boilerplate language in the specification - - unrelated to the actual invention of *Hunt* -- in an attempt to piece together the elements of the challenged claims.

39. The relied-upon boilerplate language is at best unrelated, and at worst contradictory, to the inventors' description of their invention in the specification of *Hunt*. Accordingly, a Person of Ordinary Skill in the Art (POSA) would not read *Hunt* as argued by Petitioners.

40. This same deficiency also applies to the obviousness challenges to these claims where Petitioners' declarant attempts to supply the missing teachings of *Hunt*.

41. Petitioners' characterization of the Patent Owner's evidence of secondary considerations of non-obviousness as "phantom" is flawed. 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).

42. The compelling evidence of secondary considerations was already twice considered and adopted by the PTAB in the second and fifth *ex parte* reexams. *Ex Parte Omega Patents, LLC*, Appeal 2018-008119 (Ex-1012); *Ex Parte Omega Patents, LLC*, Appeal 2022-003758 (Ex-1017).

VIII. OVERVIEW OF PRIOR ART

A. U.S. Patent No. 6,957,133 to Hunt et al. (*Hunt*)

43. *Hunt* (Ex-1023) is directed to a wireless system for monitoring and analyzing a vehicle's GPS and diagnostic data. *Hunt* 2:23-25. The system performs the monitoring and analysis functions using a wireless appliance. *Hunt* 2:25-27. The wireless appliance is based upon an integrated, silicon-based architecture. *Id.* The architecture is in the form of an application specific integrated circuit (ASIC) for communicating with multiple systems on a data communications bus. *Hunt* 2:28-31. A GPS module collects location-based data. *Hunt* 2:23-25, 5:4-5, 6:18-26. A communications circuit collects diagnostic data relating to the vehicle. *Hunt* 5:8-10. The communications circuit selects one supported communications protocol from among supported communications protocols. *Hunt* 5:7-19. Supported protocols are

fixed and correspond to discrete hardware integrated circuit (IC) modules. *Hunt* 5:7-16, 5:43-6:18, and 8:14-9:45.

B. U.S. PATENT NO. 6,756,885 TO FLICK (*FLICK885*)

44. *Flick885* (Ex-1024), an earlier patent to Mr. Flick, the inventor of the ‘278 *Patent*, was cited by Patent Owner during prosecution of the ‘278 *Patent*. Ex-1002. *Flick885* is described in the Background of the Invention section of the ‘278 *Patent*. Accordingly, *Flick885* was specifically considered by the Examiner. *Id.*

45. *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.

IX. THE ‘278 PATENT

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

47. The Background of the Invention also defines problems addressed by the claimed invention of the ‘278 *Patent*. For example, the Background of the Invention provides that “[t]here are, of course, a number of vehicles which come from the manufacturer with some form of security system already installed. In addition, a number of vehicles are also equipped with aftermarket security systems.

48. Many conventional vehicle tracking units may not be readily installed in vehicles, particularly those vehicles already including a vehicle security system. In addition, complexity of installation may significantly increase the system costs.” ‘278 *Patent*, 1:35-42. “Unfortunately, such advanced techniques for dealing with multiple device codes for a vehicle having a data communications bus have not yet been developed for vehicle tracking units.” *Id.* 2:38-41.

49. Moreover, the Background of the Invention 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.

50. The written description and associated drawings of the ‘278 *Patent* include 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.

51. 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, 4-6, 8, 11-12, 18-19, 21 ARE NOT ANTICIPATED BY *HUNT*

52. The Petitioners rely on *Hunt* to challenge the patentability of Claims 1, 4-6, 8, 11-12, 18-19, and 21 as being anticipated by *Hunt*. *Hunt*, described herein, discloses an ASIC based wireless appliance that includes a microprocessor for determining which discrete component based protocol module to select for communication. *Hunt* 5:35-67; 8:46-9:43. Petitioners concede that *Hunt* fails to disclose the first category of downloading interfaces specifically recited in dependent Claims 2 and 3, that is, where the downloading interface comprises a wired signal downloading interface (Claim 2) and includes a connector for temporary connection to a downloading device (Claim 3). *Petition* 5, 67.

53. Regarding the second category of downloading interface – the wireless signal downloading interface (Claims 4 and 5) – Petitioners cobble together disjoint and contradictory language in an attempt to invalidate these claims. *Petition* 34-43. Indeed, Petitioners rely on superfluous and contradictory boilerplate as the sole basis for the purported disclosure. *Hunt* 10:35-12:67.

A. Hunt Fails to Disclose All the Claim Elements

54. I understand the Board has set forth that the perceived dispute between the parties as turning on the meaning of “enabling data”, and whether “enabling data” must be downloaded to Hunt’s vehicle-communications circuit, or whether downloading “enabling data” to Hunt’s microprocessor satisfies the language of the claim limitation 1[e]. Decision, 35.

55. The dispute turns on the entire claim element 1[e]: “a downloading interface for permitting downloading of enabling data to the at least one corresponding vehicle device code for use by said multi-vehicle compatible controller.” Put another way, the dispute turns on whether the cited references disclose the physical structure of an interface that permits the multi-vehicle compatible controller to connect to the outside world and receive enabling data for use by the controller.

1. The Claims of the ‘278 Patent Require More Than Enabling Data

56. The Board relies on what it contends is the “broad” recitation of limitation 1[e], which recites that the enabling data must be for use by the multi-

vehicle compatible controller and the downloading data must be downloaded via a downloading interface.

57. The Board’s focus on the term “enabling data,” removed from the rest of the claim language, is in error. The Board’s decision fails to give proper weight to the entire claim element, and the statement that *Hunt’s* ASIC need not be reprogrammable seemingly removes the claim limitation that the controller download, via a downloading interface, the enabling data for use by the controller.

2. Hunt Fails To Disclose A Downloading Interface For Permitting Downloading of Enabling Data...For Use By the Multi-Vehicle Compatible Controller

a) Hunt Fails to Disclose A Downloading Interface

58. *Hunt* fails to 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.

59. As it relates to the “downloading interface for downloading”, a POSA having the requisite years of networking experience and vehicular experience, *at the time of the invention*, would understand that the claimed “downloading interface for permitting downloading” is a physical interface (e.g., either hardwired or wireless)

that permits downloading from somewhere remote or outside of the hardware (i.e., the outside world).

60. Absent a physical downloading interface, there is no way to obtain from the outside world the enabling data to be “for use” by the multi-vehicle compatible controller.

61. The '278 *Patent* describes a wireless version of the downloading interface as including a wireless receiver, interface circuitry or logic circuitry with switching components, and that it may communicate via any one or more wireless technologies such as cellular, satellite, IR, Bluetooth, or WiFi.

62. The '278 *Patent* also describes a wired variation of the downloading interface that includes a connector for temporary connection, a mating connector, and interface circuitry, and may communicate using any one or more of RS232/429 protocol, USB, FireWire, and TCP/IP (Internet).

63. These descriptions from the '278 *Patent* conform to what a POSA would understand the “downloading interface for downloading” to be – permitting enabling data to be downloaded from external devices in the outside world.

64. The use, for example, of WiFi, IR, cellular, satellite, RS232/429 protocol, USB, FireWire, and/or TCP/IP demonstrates that the POSA would readily recognize that running of firmware or providing data from one internal component to another is not performed by a downloading interface for downloading.

65. The above-described protocols or external transfer techniques are not used internally between device components, such as the microprocessor and the vehicle-communications circuit in *Hunt*.

66. Downloading is the transmission of a file or data from one computer or storage device to another, typically over a network, such as, for example, from a larger server to a user device. Downloading is not reading from a memory or communicating data within a single device or ASIC as in *Hunt*. The testing and selecting of the protocols do not satisfy the definition of downloading by a POSA.

67. A POSA understands a “downloading interface for permitting downloading” is not satisfied by permitting communication from one internal component to another internal component, as in *Hunt*. Thus, the Board’s conclusion that *Hunt*’s teaching of “downloading firmware on the MVCC’s microprocessor satisfies the “enabling data” limitation of claim 1” is in error.

68. The Board concluded that the “running of firmware” to select a protocol is somehow downloading, via a downloading interface, enabling data relating to the at least one corresponding vehicle device code. The “running of firmware” is not downloading of enabling data via a downloading interface and for use with a multi-vehicle compatible controller.

69. *Hunt*’s vehicle-communication circuit (box 4 in FIG. 1A; box 25 in FIG. 1B; and box 25 in FIG. 5) in combination with a microprocessor (box 8 in FIG. 1A; box 27 in FIG. 1B; and box 27 in FIG. 5) discloses the claimed multi-vehicle compatible controller. Petition 19-20. However, programming of the vehicle-communication circuit, which is either an ASIC or “transistors or conventional circuit elements,” cannot be changed via a downloading interface. *Hunt* 9:43-44. Accordingly, *Hunt* fails to disclose the claimed downloading interface. No enabling data related to at least one corresponding vehicle device code can be downloaded via a downloading interface in *Hunt* for use by the contended multi-vehicle compatible controller.

70. *Hunt* fails to disclose or suggest to POSA that data that enables the recited 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, can be downloaded from a downloading interface in *Hunt*. Accordingly, *Hunt* fails to disclose the claimed downloading interface for permitting downloading of enabling data for use the by multi-vehicle compatible controller.

b) The Hunt ASIC Cannot Operate on Downloaded Enabling Data

71. *Hunt* discloses a hardware-based system in the form of an ASIC, which is, as recited in Claim 1 of *Hunt*, a single ASIC. *Hunt* 9:18-55; 12:1-17. The discrete individual circuit modules that correspond to each protocol are integrated directly into the ASIC and thus fixed. *Hunt* 9:18-55. *Hunt* discloses that “these logic diagrams represent circuits that function as individual modules within the data-communications circuit and are integrated directly into the ASIC.” *Id.* “These protocols can be implemented using integrated silicon-based solutions (e.g., a custom ASIC), or using transistors or conventional circuit elements.” *Id.* In other words, protocols are fixed and cannot be added post manufacturing.

72. An ASIC is an integrated circuit chip, programmed during manufacture, which has been custom built or fabricated for a specific use rather than

a generic use. See <https://www.pentech.com/design-fabrication-process-asic/> (“Unlike a programmable logic device or standard logic IC, an ASIC is designed to do one specific thing and it does this one thing very well, enabling it to perform faster.”) Logic gates are photolithographically placed and then connected (wired) at the factory during the manufacturing process to perform specific, pre-determined functions. See <https://www.wevolver.com/article/the-ultimate-guide-to-asic-design-from-concept-to-production> (“The first stage in the ASIC design cycle involves defining the specifications and requirements for the project.” “Once the specifications and requirements are established, the next step is to create the ASIC architecture and high-level design.” “The Register-Transfer Level (RTL) design stage involves translating the high-level architecture into a hardware description language (HDL), such as Verilog, System Verilog, or VHDL. This representation describes the behavior of the ASIC in terms of registers, combinational logic, and clock domains.” “During the synthesis stage, the RTL design is converted into a gate-level netlist, which represents the ASIC in terms of transistors, logic gates, and interconnects.” “The physical design stage involves converting the gate-level netlist into a physical layout that can be manufactured by

the semiconductor foundry. This process includes floorplanning, placement, and routing of the various components and interconnects within the ASIC.” “Once the ASIC design has been finalized and taped out, the next step is manufacturing the integrated circuit.” “Wafer fabrication is the process of creating the ASIC on a silicon wafer using a series of photolithography, etching, and deposition steps.”) These structures and functions cannot be changed once the ASIC is manufactured.

73. In the case of *Hunt*, the ASIC is controlled by a microprocessor to select among the protocols for which the ASIC was created.

74. In *Hunt*, not only is a downloading interface for downloading enabling data for the multi-vehicle controller absent, a POSA would understand that there is no need for a downloading interface to permit downloading of enabling data for the multi-vehicle compatible controller because any data hypothetically downloaded cannot be operated on by the ASIC since the programming of the ASIC is fixed.

75. There is no need for vehicle device codes to be downloaded in *Hunt* via a downloading interface since an ASIC could not do anything with these codes.

76. With no mechanism to use subsequent downloaded data, there is no basis to suggest a POSA would understand *Hunt* to disclose a downloading interface for such data.

77. The vehicle codes in *Hunt* are fixed during manufacture. There is no need for instructions to select the vehicle device codes from those already stored to be downloaded via a downloading interface since the multi-vehicle compatible controller already has those stored therein from manufacture, and since vehicle device codes cannot be added, there is no reason to add instructions for device codes that do not and cannot exist.

78. There is no need for data to allow the multi the multi-vehicle compatible controller to generate the vehicle device codes to be downloaded via a downloading interface since, this is again, programmed into the ASIC at manufacture.

79. Any hypothetical downloading of enabling data via a hypothetical downloading interface would have no effect on the operation of *Hunt*.

80. The *Hunt* vehicle communication circuit is expressly directed to an ASIC, but Petitioners attempt to broaden *Hunt* to cover other non-disclosed embodiments beyond the ASIC.

81. A POSA would understand that *Hunt* does not teach or suggest the claimed downloading interface since an ASIC is pre-programmed and fixed at a semiconductor fabrication level; and *Hunt* expressly touts the benefits of an ASIC.

82. By using an ASIC, “the entire wireless appliance **13** can be incorporated into a single ‘chip set’, described by a reference design, thereby reducing its size, manufacturing costs, and potential post-installation failures.” *Hunt* 5:39-42.

83. *Hunt* teaches that the wireless appliance is embodied in an ASIC; and the claims of *Hunt* also require a microprocessor. *Hunt* 8:46-9:27. Claim 2 of *Hunt*, for example, recites a microprocessor and a vehicle-communication circuit. *Hunt* 12:41-48. The vehicle-communications circuitry is in electrical communication with the microprocessor and integrated into a single ASIC. *Id.* The microprocessor does not perform interfacing with the ASIC using any of the protocols hard wired in the ASIC, as those functions are embodied only in an ASIC. *Hunt* 8:46-9:27 and FIGS.

1A and 1B. Moreover, ASICs by definition are faster because they are hard wired to produce a result based on inputs. Processors that are instruction driven are slower than an ASIC because one must go back and forth to retrieve the instructions, interpret the instructions, and then execute the instructions. A POSA would not go backwards and replace the ASIC with a processor.

84. Rather, the microprocessor performs basic computer functionality, for example, selecting one of the ASIC-embedded protocols, and determines the communication of the host vehicle. *Id.* The microprocessor does not provide individual support for the communication protocols, which instead is done by the ASIC-based communication modules 25a-25e. *Id.*

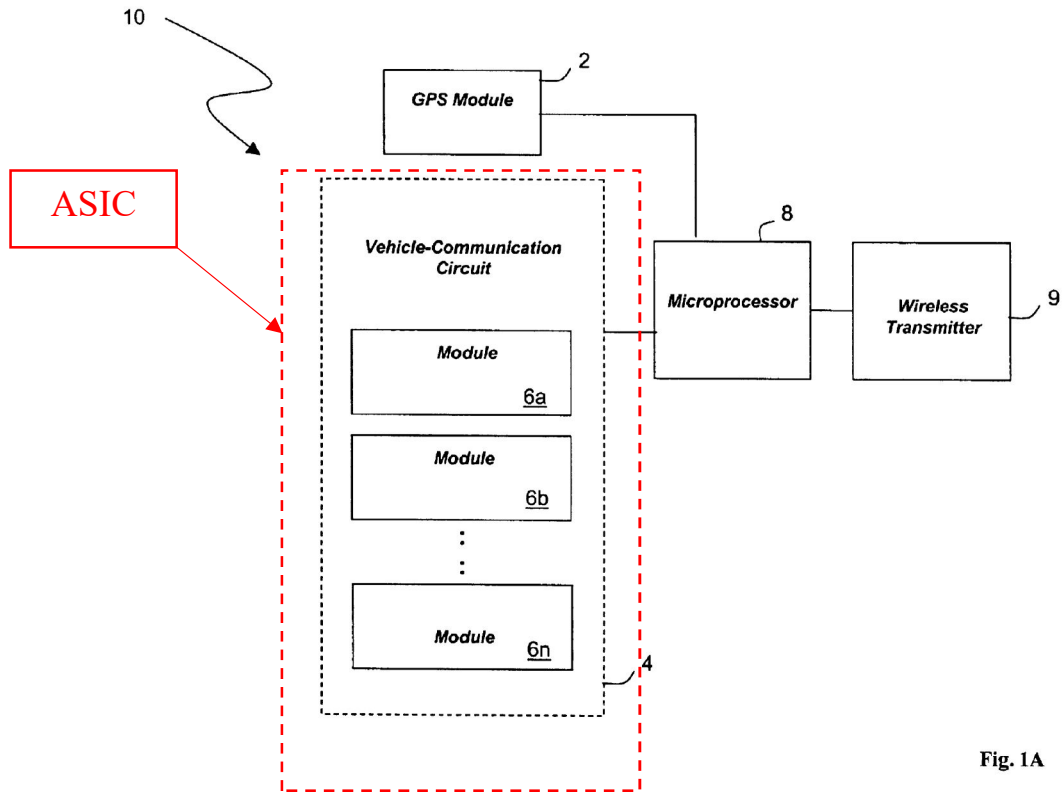


Fig. 1A

Patent Owner's Annotated FIG. 1A of *Hunt*

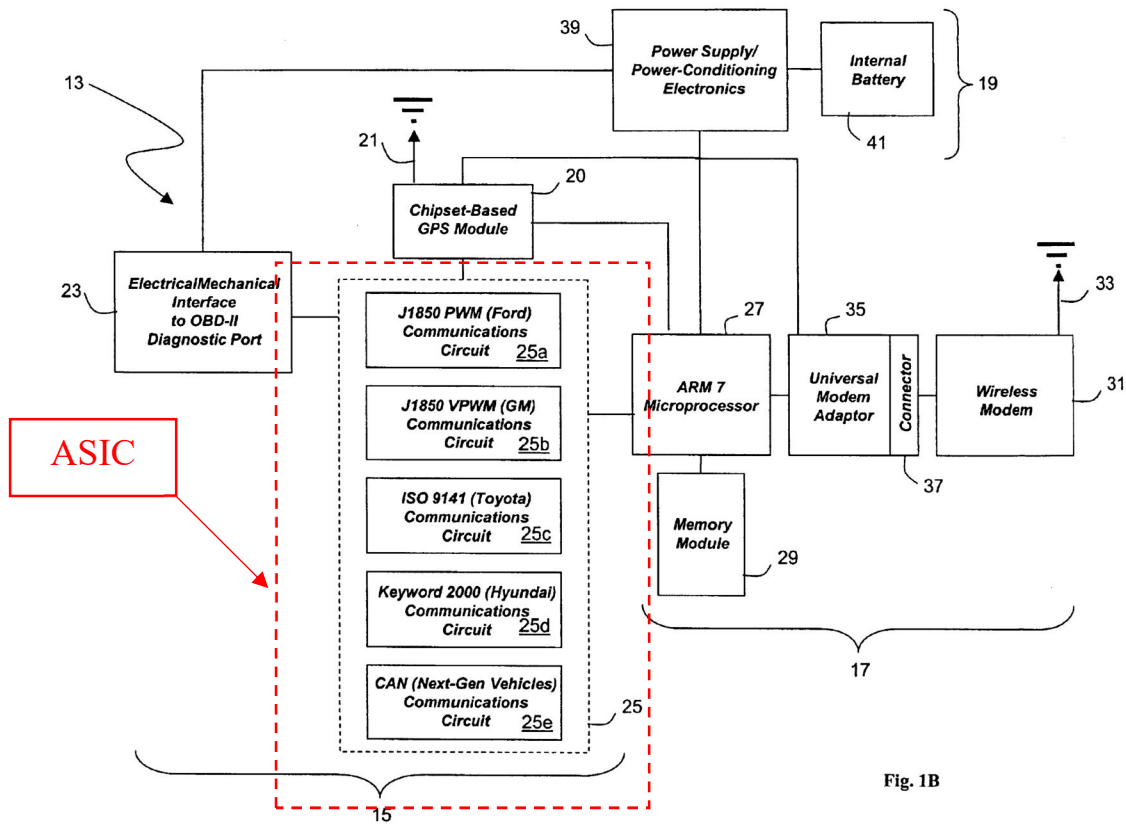


Fig. 1B

Patent Owner's Annotated FIG. 1B of *Hunt*

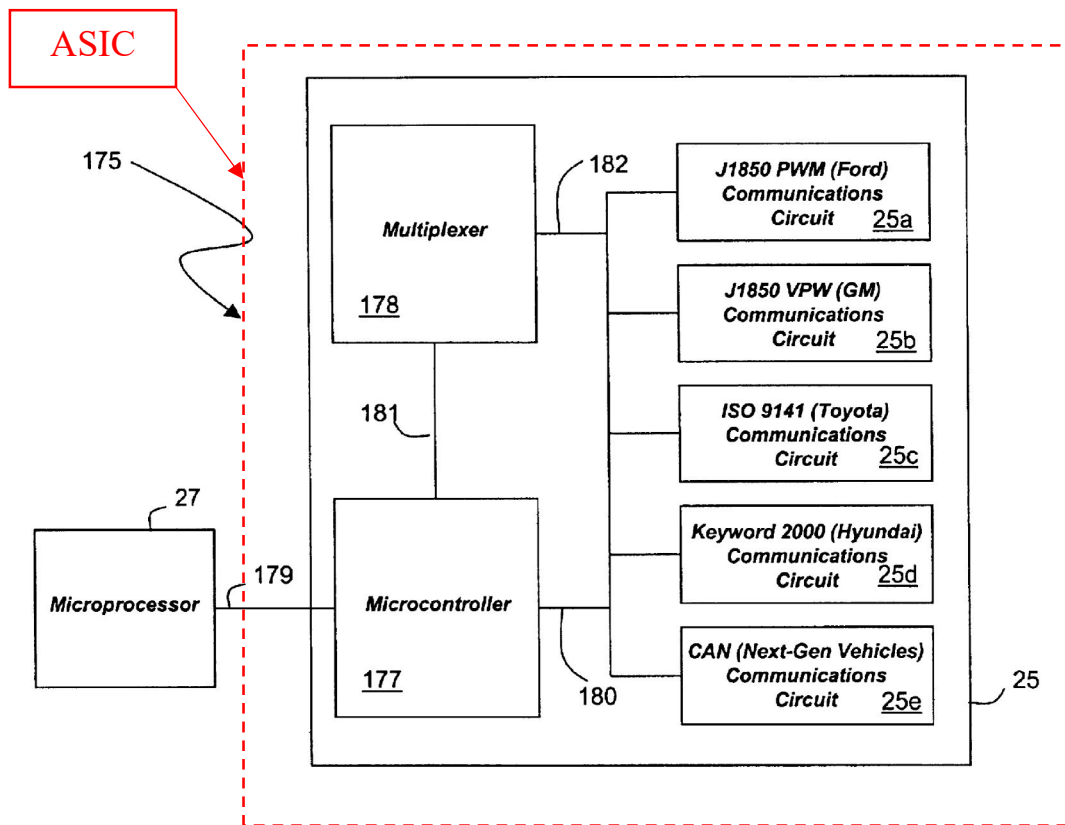


Fig. 5

Patent Owner's Annotated FIG. 5 of *Hunt*

85. Petitioners concede that *Hunt* fails to disclose a wired signal downloading interface. Regardless, the Board took the position that downloading firmware that is run to determine the vehicle-communications protocol of the host vehicle is enabling data. Petition 5, 67; Decision 36-37. The Board took the position

that the *Hunt* microprocessor “*communicates the specific protocol* to the vehicle communications circuit.” Decision, 36 (Emphasis in original).

86. Simply running firmware that determines the proper vehicle-communications protocol and providing some sort of instructions from one internal component to another internal component does not amount to downloading via a downloading interface of enabling data.

87. Downloading, particularly via a downloading interface, is not an internal running of firmware or internal communications between components.

88. A POSA would understand downloading of enabling data via a downloading interface to mean the enabling data comes from somewhere “external” or the outside world.

89. Loading firmware onto or executing firmware on a microprocessor is not downloading via a downloading interface.

90. Firmware, for example, is basic instructions for specific hardware. Firmware is typically embodied in an integrated circuit and provides basic instructions for the hardware.

91. A POSA, based upon the ASIC teachings of *Hunt*, would consider the “firmware loaded into non-volatile storage medium” as providing the basic operations, for example, for the microprocessor **27**, as the programming of the ASIC is fixed or fixed by conventional circuit elements, transistors, integrated silicon based solutions. *Hunt* 8:14-65; 9:36-43; 11:11-19; FIGS. 1A and 1B. This is not downloading of enabling data via a downloading interface. And even if the firmware is somehow added at a time later than ASIC fabrication, it is not done via a downloading interface for permitting downloading of enabling data. For example, firmware may be added by providing an integrated circuit with these basic instructions.

92. There can be no anticipation where the POSA is left to guess how to arrange the disjointed elements in an attempt to arrive at the claimed invention.

c) Boilerplate Cannot Fill The Gaps in Hunt To Disclose A Downloading Interface

93. Petitioners concede that *Hunt* fails to disclose a wired signal downloading interface. Petition 5, 67. The Petitioners turn to inconsistent boilerplate language to find a wireless signal downloading interface. Petition 34-36 (citing *Hunt* 10:46-54 and 11:5-18). The boilerplate language relied upon by

Petitioners (*Hunt* 10:36-11:67) amounts to nothing more than unsupported speculation, inconsistent with the description of the invention of the *Hunt* reference.

94. The POSA would be unable to use the teachings of *Hunt* to somehow make a wired or wireless signal downloading interface. And since the ASIC is pre-loaded with the predetermined protocols, there is no reason for any additional downloading, and thus no reason to even consider the boilerplate. Stated alternatively, such a need for a downloading interface is unnecessary and would additionally be inoperative since the ASIC is not programmable post manufacturing.

95. Boilerplate in the specification that is seemingly in every patent cannot operate to broaden the scope of what it conveys to a POSA, particularly, when the specification is read as a whole. That is just the case in *Hunt*. *Hunt* teaches using an ASIC, but Petitioners want *Hunt* to disclose embodiments that include updating the protocols – essentially undoing or ignoring the ASIC teachings.

96. The *Hunt* specification concludes with nine paragraphs of boilerplate language. (*Hunt* 10:36-11:67). Petitioners point to *Hunt* 10:46-54 which describes, in part, “some embodiments of the present invention may be implemented in part or in whole as a hard-wired circuit, a circuit configuration fabricated into an application

specific integrated circuit, or a firmware program loaded into non-volatile storage, or as a software program loaded from or into a data storage medium as machine readable code.” (Emphasis Added). Petition 35. There is nothing in *Hunt* that would teach or suggest to a POSA how to logically reconcile the above boilerplate passage, filled with generic alternative language, with the inventors’ invention (*i.e.*, the ASIC) being taught in *Hunt*.

97. *Hunt* fails to disclose all of the claim elements within its four corners specifically “arranged” as in the challenged claims.

98. *Hunt* is silent as to what boilerplate language could be implemented, how to do so, and to which data (*e.g.*, protocol implementation data, or programming instructions for how to perform the functions taught by *Hunt*, such as the microprocessor **27**, as discussed in further detail below). In other words, the boilerplate does not amount to a showing that the specific arrangement claimed in the ‘278 *Patent* is disclosed.

99. The voluminous boilerplate section of *Hunt* describes that “some of the processes may be programmed when the computer system is manufactured or via computer-readable medium at a later date.” Ex. 1023, 11:10-19. These processes,

which are loosely associated with some of the present embodiments, may be executed by programmable equipment, such as computers. *Id.* *Hunt* fails to disclose which processes can be updated, offering no guidance to a POSA whether these processes include firmware or what functions are encompassed by “some.”

100. The POSA cannot fabricate missing puzzle pieces from mere blanket boilerplate statements. There are simply too many variations and “what-ifs” to produce the claimed invention. Indeed, as noted above, the claimed and disclosed embodiments of *Hunt* identify the microprocessor 27, and separate vehicle-communications circuit, in the form of an ASIC, in communication with the microprocessor. *Hunt* 8:15-20, 8:46-9:45; 12:4-17; 12:43-48; FIG. 1A, 1B, and 5. The separate circuit or circuits are discrete circuit elements embodied in an ASIC that includes modules corresponding to different protocols. *Id.*

101. There is no downloading interface for permitting downloading of enabling data relating to the at least one corresponding vehicle device code for use by the multi-vehicle compatible controller. *Id.*

d) Hunt's Diagnostic And Network Compatibility Functions

102. *Hunt* describes the microprocessor **27** receiving and processing diagnostic data and location based data operating to format the diagnostic data using firmware. Ex-1023, 6:18-65. This firmware is configured to recognize the wireless modem and format outgoing vehicle diagnostics so that the wireless appliance can operate on different wireless networks throughout the world. *Id.*

103. *Hunt* fails to disclose updating this firmware. *Hunt* fails to disclose whether this firmware, which may or may not be different from other firmware, is included in the “some processes” that may be “programmed at a later date.” Ex-1023, 11:11-19. And even if *Hunt* could somehow disclose updating this firmware, the wireless network communications capability is not enabling data: data that enables the recited 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. *Id.*

104. This does not disclose a downloading interface for downloading enabling data related to the at least one corresponding vehicle device code for the

multi-vehicle compatible controller, nor does this disclosure of *Hunt* permit the addition of a broad data interface to be based thereon.

e) Hunt's Protocol Selecting Functions

105. The *Hunt* microprocessor **27** also determines the protocol and communicates the protocol to the ASIC which selects one of the five modules to communicate with the host vehicle. *Hunt* 9:18-23; FIG. 5. The ability of the microprocessor **27** to update firmware that tests “each protocol in an effort to establish communications,” as contended by the Petitioners, 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. Just because the firmware of the microprocessor **27** can maybe be updated, and the microprocessor **27** selects the appropriate protocol, does not mean that *Hunt* somehow discloses a downloading interface as in the challenged claims. *Id.*

106. There is no disclosure in *Hunt* that updating the microprocessor firmware equates to downloading enabling data for use in the controller, because a POSA understands the protocols necessary for communication on the vehicle data

bus are in the ASIC and cannot be changed. *Hunt* 9:18-45. There is nothing in *Hunt* that discloses any 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.

f) Hunt's Modem

107. Petitioners wrongly contend that *Hunt's* universal modem adapter and wireless modem together disclose the claimed downloading interface for permitting downloading of enabling data relating to the at least one corresponding vehicle device code for use by the multi-vehicle compatible controller. Petition 37.

108. As described above, microprocessor **27** receives and processes diagnostic data and location based data and operates to format the diagnostic data using firmware. *Hunt* 6:18-65. One modem can be physically replaced with another modem. *Hunt* 6:56-59.

109. The firmware is configured to recognize the wireless modem and to format outgoing vehicle diagnostic so that the wireless appliance can operate on different wireless networks throughout the world. *Id.*

110. This does not disclose the claimed downloading interface for enabling data related to the at least one corresponding vehicle device code, nor does this disclosure of *Hunt* permit the addition of a broad data interface to be based thereon.

111. And even if, hypothetically, *Hunt*'s modems somehow disclose the claimed downloading interface, the data these modems process is not enabling data related to the at least one corresponding vehicle device code. That is, the modem data is not data that enables the recited 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. Instead, the only disclosure associated with the modem communication is "diagnostic and location-based data" and GPS data. *Hunt*, 6:35-38, 10:6-9.

g) A Cellphone Is Not A Downloading Interface

112. Petitioners leap to yet another disjointed boilerplate section of *Hunt* in an attempt to show that *Hunt*'s ASIC device can be a cellphone and thus includes the claimed downloading interface. Petition 37, citing *Hunt* 11:34-40.

113. The *Hunt* wireless appliance is hardwire installed in a vehicle. *Hunt* 5:5-6, 8:46-65. It is illogical to hardwire install a cellphone in the vehicle, particularly to the OBD-11 diagnostic port as taught by *Hunt*. *Id.*

114. *Hunt* teaches that any deviation from an ASIC is undesirable. As described *Supra*, by using an ASIC, “the entire wireless appliance **13** can be incorporated into a single ‘chip set’, described by a reference design, thereby reducing its size, manufacturing costs, and potential post-installation failures.” *Hunt* 5:39-42.

115. Thus, there is no reason that a POSA would interpret the boilerplate language to include or disclose the claimed downloading interface. Petitioner’s jump to use of boilerplate language would thus require undue experimentation on how to keep size and costs small and reduce post-installation failures, particularly in view of the express desire to achieve this using an ASIC.

116. The Petitioner’s desire to treat the various boilerplate sections as simply being interchangeable with the various embodiments is improper and contrary to the teachings of *Hunt*, as will be understood by a POSA.

117. A POSA will understand that the boilerplate language does not apply to the vehicle-communication circuit including modules, as described in *Hunt*. Thus, *Hunt* fails to 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 as in the challenged claims.

B. Claim 4

118. As explained in Section X.A above, *Hunt* fails to disclose a wireless 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. For at least these reasons set forth in Section X.A above, dependent Claim 4 is also patentable.

C. Claim 5

119. *Hunt* 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 and that includes a wireless receiver for temporary connection to a downloading interface. Petitioners once again turn to the boilerplate of *Hunt* as allegedly disclosing this recitation too. Petition 42. In particular, the Petitioners, as described in Section X.A

above, desire to read the boilerplate language as disclosing more than it reasonably conveys to a POSA.

120. Petitioners then make a jump in logic that a POSA, in view of the boilerplate, would have turned to the host computer system **57** of *Hunt* as being a downloading device. Petition 42, citing to *Hunt* 7:40-49. The cited portions of *Hunt* merely describe that data packets sent to the *Hunt* appliance are sent over the Internet to a computer. *Hunt* 7:40-49.

121. Petitioners continue to mix and match disjointed embodiments for which there is no logical connection. There is no logical connection between a host computer that runs a website that communicates with the *Hunt* wireless appliance, boilerplate about computer instructions being on a computer readable medium, and logic circuits the function as individual protocol modules integrated into an ASIC, and specifically no logical connection to the contended wireless downloading interface and its temporary connection to a downloading device. *Hunt* 9:28-35, 11:11-19, 7:40-49.

122. A POSA would understand a host computer that runs a website cannot be a wireless 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 and that includes a wireless receiver for temporary connection to a downloading interface.

123. The host computer has nothing to do with protocols, nor selecting the communications protocol of the host vehicle.

D. Claim 6

124. Section X.A above explains that *Hunt* fails to disclose a wireless 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. For at least these reasons set forth in Section X.A above, dependent Claim 6 is also patentable.

E. Claim 8

125. Section X.A above, explains that *Hunt* fails to disclose a wireless 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. For at least these reasons set forth in Section X.A above, dependent Claim 8 is also patentable.

126. Moreover, despite the Petitioners' contentions, the '*278 Patent* claimed downloading interface is for permitting downloading of enabling data.

127. Dependent Claim 8 recites the downloading interface being also for permitting downloading of at least programming instruction. Thus, the downloading interface of the '*278 Patent* is for permitting downloading of both enabling data and at least one programming instruction. No matter how many passages of *Hunt* are cobbled together by Petitioners, *Hunt* fails to disclose a downloading interface that is for permitting downloading of enabling data and also for permitting downloading of at least programming instruction. For at least this additional reason, dependent Claim 8 is also patentable.

F. Claim 11

128. Section X.A above, explains that *Hunt* fails to disclose a wireless 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. For at least these reasons set forth in Section X.A above, dependent Claim 11 is also patentable.

G. Claim 12

129. Section X.A above, explains that *Hunt* fails to disclose a wireless 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. For at least these reasons set forth in Section X.A above, dependent Claim 12 is also patentable.

H. Claims 18-19, 21

130. Independent Claim 18 recites subject matter from independent Claim 1 and dependent Claim 5. ‘278 *Patent* 25:64-26:15, 26:26-29, and 27:27-28-15. Independent Claim 18 does not recite the downloading interface as a wireless downloading interface as recited in dependent Claim 5. *Id.* For the reasons set forth in Section X.A and X.C above, independent Claim 18 is also patentable.

131. Dependent Claims 19 and 21 are also patentable for at least the same reasons.

XI. GROUND 2: CLAIMS 1, 4-6, 8, 11-12, 18-19, 21 ARE NOT OBVIOUS OVER *HUNT*

132. Petitioners, recognizing the shortcomings of *Hunt*, proffer alternatives that the POSA would simply fill in the missing pieces. Petition 46-48. A POSA would not have found it obvious to “fill in” the missing pieces of *Hunt*.

133. Additionally, evidence of secondary considerations weighs heavily in favor of patentability.

A. A POSA Would Not Have Found the Claims Obvious in View of *Hunt*

1. It Would Not Have Been Obvious for A POSA To Modify *Hunt* In the Way Proposed By Petitioners

134. In Ground 2, Petitioners concede that *Hunt* fails to disclose the downloading interface as in the challenged claims. However, Petitioners contend that “[t]o the extent *Hunt*’s disclosure of programming the system ‘later’ than manufacture (*Hunt*, 11:5-18) is treated as not expressly disclosing programming the firmware, updating *Hunt*’s *firmware* through its wireless modem and/or wired connection would have been the conventional and obvious way to implement *Hunt*’s post-manufacture programming with a reasonable expectation of success.” Emphasis in original; Petition 48, citing *Miller* (Ex-1003), ¶ 355.

135. The Board’s rationale that, “it would have been routine for an ordinarily skilled artisan to utilize a programmable computer system for *Hunt*’s vehicle-communication circuit and update it through its downloading interface (i.e., universal modem adaptor and wireless modem)” is flawed. Decision 39.

136. As described above in Section X.A above, there is no logical connection disclosed in *Hunt* between the firmware and the modules defined in the ASIC. The firmware may simply update the basic functions of the microprocessor, which is discrete and separate from the ASIC that includes the modules. *Hunt* 8:46-9:45, FIGS. 1a, 1b, and 5.

137. As described in Section X.A above, there is simply no reason to download and update the firmware with enabling data in *Hunt*. Since protocols are hardwired in the form of an ASIC, and unchangeable, as agreed by the Board, there is simply no reason to update or change the functions that operate with these fixed protocols.

138. The Board relied on *Hunt*’s disclosure that “it would be ‘apparent to one or ordinary skill in the art’ that some of the disclosed embodiments could be implemented ‘in many different embodiments of software, firmware, and

hardware.” Decision, 39 (citing Ex. 1023, 10:55-59). The Board further relied on *Hunt*’s disclosure that the *absence* of specific reference to actual software code or specialized hardware components is because artisans of ordinary skill would be able to “design software and control hardware to implement the embodiments of the present invention based on the description herein with only a reasonable effort and without undue experimentation.” Decision 39-40; Ex. 1023, 10:64-11:4. The Board offers no specific evidence to support this conclusion. A POSA would not make the logical leaps required to design software to “implement the embodiments of the present invention based upon the description” without involving undue experimentation.

139. The Board gives full faith and credit to *Hunt*’s boilerplate noting that they find no fault with reliance on boilerplate as providing evidence that a POSA would have recognized there were many predictable and routine variations for implementing *Hunt*’s invention. See generally, Decision, 40. The Board relies on boilerplate of *Hunt* that speaks generally about the disclosed embodiments. *Id.*

140. The specification of *Hunt*, when read as whole, clearly demonstrates that what *Hunt* actually conveys to a POSA is far narrower than what the Petitioners

and Board are extracting from the boilerplate. The general language does not operate to contradict the specific disclosure – the fixed ASIC teachings.

141. Despite the boilerplate, the specification as a whole suggests to a POSA something contrary to the boilerplate – using an ASIC with fixed programming. *Hunt* fails to disclose to a POSA a scope that is as broad as the Petitioners’ contention and the Board’s conclusion.

142. The boilerplate’s use of general, vague, and permissive language does not open the door for a POSA to implement any and all changes as routine and conventional.

143. The Board concluded that, from *Hunt*’s general boilerplate, the POSA was aware of the techniques for updating programming via a downloading interface, and a POSA “wishing to utilize a programmable vehicle-communication circuit (e.g., to add new communications modules ‘later’ or post manufacture) would have been motivated to update that vehicle-communications circuit via *Hunt*’s downloading interface.” Decision, 40.

144. Other than the teachings of the ‘278 *Patent*, there is nothing that would lead a POSA to search for such a combination. *Hunt* did not recognize this problem,

because otherwise *Hunt* would have used a solution other than an ASIC. The Board offers no reason to make such a combination other than, if it is possible and predictable, the POSA would have done so. This is not correct.

145. A POSA would not read the *Hunt* general boilerplate as inviting updating of programming via a downloading interface, nor does it invite adding new communications modules “later.”

146. The Board relies on *KSR* noting that combining two embodiments disclosed adjacent each other in the prior art does not require a leap of inventiveness. Decision, 40 citing *KSR*, 550 U.S. at 417. But there is only one embodiment, and general boilerplate language does not amount to another embodiment or undo the specific embodiments disclosed.

147. Embodiments and disclosures cannot be fabricated based upon wish-for boilerplate language. A POSA would understand that it is not possible to have essential structural features, such as the *Hunt* ASIC, also be “non-restrictive” based upon boilerplate.

148. The modem delivers packets of data to an Internet-accessible website for display of diagnostic and location data. *Hunt* 6:35-7:61. The modem of *Hunt* does not use, download, or otherwise operate on enabling data.

149. *Hunt* is silent as to updating the downloading data via a downloading interface because updating an ASIC post manufacture is not possible -- the functions of the ASIC are set during manufacture.

150. The Board concludes that a skilled artisan would have used known and predictable techniques for updating or adding new communications modules later. Decision, 40. However, neither the Board, the Petitioners, nor *Hunt* describe specifically how to achieve this.

151. An ASIC is hardwired and not updatable. Decision, 39. There is simply no way to update the *Hunt* ASIC with new protocols later, and a POSA would not download enabling data because of the fixed nature of the ASIC.

152. To add new protocols would require a complete disregard of the ASIC teachings in *Hunt*. *Hunt* specifically uses, and even claims, an ASIC for reducing size, manufacturing costs, and post-installation failures. *Hunt*, 5:40-41.

153. At best, *Hunt* conveys to a POSA that the protocols of the Hunt ASIC can be implemented in silicon-based solutions, transistors, or conventional circuit elements – all of which are not updatable via a downloading interface for downloading enabling data. *Hunt*, 9:36-43.

154. There is nothing predictable and routine about undoing an ASIC. Stated alternatively, what is predictable to a POSA is that the *Hunt* ASIC cannot have protocols or new modules added post manufacture. As such, there is no reason set forth in *Hunt* to update the ASIC with new protocols.

155. *Hunt* touts the use of the ASIC as beneficial. *Hunt*, 5:39-42. Even if a POSA would recognize that it may be beneficial to add new protocols in *Hunt*, the POSA, at the time of the invention, would likely simply replace the ASIC with a new ASIC having the updated or new protocols thereon similar to *Hunt*'s disclosure of replacing one modem for another. As discussed above, a POSA would not replace an ASIC with a processor. See ¶83 above.

156. Petitioners' conclusory statement that it was "predictable" falls well short of any required technical rationale required to sustain an obviousness rejection – it is generic and bears no relation to any specific combination of prior art elements.

157. In other words, despite Petitioners' declarant's attempt to supply the missing teachings of *Hunt*, *Hunt* fails to render obvious the claims of the '278 *Patent*, and specifically, fails to teach, suggest, or describe in any way 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.

158. Moreover, the only way a POSA could possibly make the leap proposed by Petitioners would involve the improper use of hindsight based upon Patent Owner's own specification. Without that hindsight, a POSA would conclude that the ASIC was not programmable post manufacturing and thus, a downloading interface would be impractical and inoperable and to try to do so would add unnecessary cost.

159. *Hunt* discloses that its modem can operate on different wireless networks. *Hunt* 6:35-50.

160. *Hunt* further discloses that, "[w]ith firmware, the microprocessor **27** formats the diagnostic and location based data into separate packets and serially transfers these packets through a universal modem adaptor **35** to a wireless modem

31.” *Hunt* 6:35-38. A POSA would thus understand that, even if the firmware were to be updated, it would be solely for formatting packets of diagnostic and location-based data for communication via the modem. This is not enabling data. This is not data that enables the recited 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.

161. To make a connection that a firmware update is for updating the ASIC protocols in *Hunt* is neither supported by *Hunt*, nor would the POSA make that leap. *Id.* *Hunt* still fails to 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.

162. The evidence does not support an interpretation of *Hunt* where the firmware is updated with enabling data via a downloading interface, and any contention that it somehow would be contrary to the actual teachings of *Hunt*.

163. To simply declare that a mash-up of *Hunt* to arrive at the claimed embodiments would be “predicable” is conclusory at best and, without more,

amounts to a conclusory declaration that the combination is “common sense” since it is possible that the POSA could arrive at the claimed embodiments. This hindsight type of analysis is entirely opposite to what a POSA using common sense would derive since the *Hunt* ASIC was not programmable post manufacturing.

164. Petitioners fall well short of providing any evidence that a POSA would have, without hindsight, recognized the problem facing the inventor, turned to boilerplate language in *Hunt*, and apply the boilerplate language to desired selected sections of *Hunt*, all while considering the teachings of *Hunt* as a whole. Section 103 cannot be redefined with boilerplate language.

165. There is nothing in *Hunt* that would motivate a POSA, at the time of invention, to recognize, fabricate, and puzzle together a downloading interface for permitting downloading of enabling data related to at least one corresponding vehicle device code for use by a multi-vehicle compatible controller. The only way to achieve this specific combination would be to improperly apply a hindsight reconstruction.

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

166. Truthful and compelling evidence of secondary considerations has been presented, most of which is already considered and confirmed twice by the PTAB. Ex-1012, Ex-1017. 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-1017). The evidence of secondary considerations weighs heavily in favor of non-obviousness.

167. That is, this evidence is not just a cumulative or confirmatory part of the obviousness analysis, but rather is independent evidence of non-obviousness that is the most probative evidence in avoiding the trap of hindsight.

168. When the secondary considerations evidence is considered, the claims of the '278 *Patent* are not obvious in view of *Hunt*. In these proceedings, similar art to *Hunt* was presented and considered and with respect to the same missing claim element – the downloading interface for permitting downloading of enabling data relating to at least one vehicle device code for use by the multi-vehicle compatible controller.

169. The '*278 Patent* was one of the patents asserted in the CalAmp litigation providing features for multi-vehicle compatibility via the data bus for a vehicle tracking system. Ultimately, a jury found that the Calamp accused products infringed the '*278 Patent*. Ex-1028.

170. The technology in the '*278 Patent* avoided the need to have multiple SKUs (stock keeping units), thus it was a sales-driven request of customers to simplify installation and reduce the number of units needed by installers, as noted by engineers of CalAmp. Ex-2005, 40:6 -41:3; Ex. 2006, 40:20-41:3.

171. Alternatively, without the patented '*278 Patent* technology, a vehicle tracking device would have limited value because of the need to stock far more vehicle specific products, increasing the expense, the number of products, and the required stocking levels of such products. Ex-2005, 46:25 – 48:19.

B. Claim 4

172. Sections X.A and XI.A above explain that *Hunt* fails to disclose or render obvious a wireless 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. For at least the reasons set forth in Sections X.A and XI.A above, dependent Claim 4 is also patentable.

C. Claim 5

173. *Hunt* fails to disclose or render obvious 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 and that includes a wireless receiver for temporary connection to a downloading interface. That is, for at least the reasons set forth in Sections X.A and XI.A above, dependent Claim 5 is also patentable.

D. Claim 6

174. Sections X.A and XI.A above explain that *Hunt* fails to disclose or render obvious a wireless 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. For at least the reasons set forth in Sections X.A and XI.A above, dependent Claim 6 is also patentable.

E. Claim 8

175. Sections X.A and XI.A above explain that *Hunt* fails to disclose or render obvious a wireless 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. For at least the reasons set forth in Sections X.A and XI.A above, dependent Claim 8 is also patentable.

F. Claim 11

176. Sections X.A and XI.A above explain that *Hunt* fails to disclose or render obvious a wireless 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. For at least the reasons set forth in Sections X.A and XI.A above, dependent Claim 11 is also patentable.

G. Claim 12

177. Sections X.A and XI.A above explain that *Hunt* fails to disclose or render obvious a wireless 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. For at least the reasons set forth in Sections X.A and XI.A above, dependent Claim 12 is also patentable.

H. Claims 18-19, 21

178. Independent Claim 18 recites subject matter from independent Claim 1 and dependent Claim 5. ‘278 *Patent* 25:64-26:15, 26:26-29, and 27:27-28-15.

Independent Claim 18 does not recite the downloading interface as a wireless downloading interface as recited in dependent Claim 5. *Id.* For the reasons set forth above in Sections Section X.A, XI.A above, independent Claim 18 is also patentable.

179. Dependent Claims 19 and 21 are also patentable for at least the reasons set forth above in Sections X.A and XI.A above.

XII. GROUND 3: *FLICK885* AND *HUNT* DO NOT RENDER OBVIOUS CLAIMS 1-22

180. Petitioners are improperly distilling the claims of the ‘278 *Patent* to make the argument that a POSA would have known to slap a GPS unit in a single housing with the other components.

181. Petitioners’ contentions fail to consider the entire teachings of *Flick885* and *Hunt*, and Petitioners’ declarant fails to supply the missing pieces and/or rationale for combination.

182. *Flick885* and the art that it incorporates by reference, namely U.S. Patent No. 6,011,460 to Flick (*Flick460*), were already considered and is cumulative. Petitioners’ arguments for unpatentability must also fail in light of the Patent Owner’s compelling evidence of secondary considerations of non-obviousness.

183. Petitioners contend that a combination of *Flick885* and *Hunt* renders obvious the claims of the '278 *Patent*. Petitioners contend that *Flick885* discloses “everything” except GPS and a single housing. Petition 49; *Miller* ¶ 361.

A. Flick885

184. *Flick885* (Ex-1024) was cited by the Patent Owner during prosecution of the '278 *Patent*. Ex-1002. *Flick885* is described in the Background of the Invention section of '278 *Patent*. Accordingly, *Flick885* was specifically considered by the Examiner. *Id.*

185. *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.

186. *Flick460* 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-1002.

Flick460, also similarly to *Flick885*, was 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. The Claims of the ‘278 *Patent* are Not Obvious Based on the Combination of *Flick885* and *Hunt*

1. A POSA Would Not Combine *Flick885* with *Hunt*

187. A POSA would not combine *Flick885* with *Hunt*. A combination of *Flick885* and *Hunt* can only be achieved through the use of improper hindsight.

188. Petitioners attempt to fill in the missing teachings in an attempt to arrive at the challenged claims using hindsight. Petition 50-51, *Miller* ¶¶ 365-367. *Flick885* addresses, among others, the problems of security system or car alarm compatibility, but does not disclose anything about vehicle position determining. *Flick885* 1:21-67.

189. *Hunt* is directed to the monitoring of a vehicle, particularly, for analyzing a vehicle’s GPS and diagnostic data. *Hunt* 2:23-25, 4:11-27. *Hunt* does not address ongoing compatibility with different vehicles since *Hunt* discloses

protocol modules being embodied in an ASIC. *Hunt* 9:18-45; see also, e.g., Section X.A above

190. Petitioners contend that a POSA would add location services to *Flick885* to “achieve any or all of the ‘advantages’ *Hunt* describes.” Petition 50-51, *Miller* ¶ 366. This statement amounts to nothing more than an unsupportable conclusion that a POSA would turn to *Hunt* simply to make *Flick885* better in ways *Flick885* did not comprehend or suggest.

191. Petitioners’ declarant’s statement is insufficient as a motivation to make or build something better – failing to explain why a POSA would have combined the specific elements to arrive at the challenged claims.

192. A POSA would understand that at the time of the invention adding GPS would make the device slower, as more processing power would be required at a time when processing power, particularly in real-time, was severely limited.

193. There is no evidence to support that combination of *Hunt* with *Flick885* will make a stronger, cheaper, faster, more durable, or more efficient device. A POSA would understand adding GPS, at the time of invention, would make the device slower as more processing power would be required at a time when

processing power, particularly in real-time was severely limited. There is no evidence as to specifically those “any and all advantages” of *Hunt* are as they relate to *Flick885*.

194. Mr. Flick is the inventor on over 100 patents. Since Mr. Flick did not come up with adding GPS until the ‘278 *Patent*, then there is no way a POSA would have come up with adding GPS to the ‘278 *Patent* without the benefit of hindsight?

195. If showing the claims of the ‘278 *Patent* as being obvious can be achieved simply with a reference that discloses the use of GPS for tracking, then any of the Examiners during examination, and even this Board in the litany of challenges the ‘278 *Patent* faced, would have made such a rejection.

196. The cited and considered documents in the ‘278 *Patent*, and its prosecution history and challenges, are replete with GPS references. Yet, the Examiner issued the ‘278 *Patent*.

197. The Petitioners’ declarant’s blanket conclusory statement that the “combination” is “no more than the ‘predictable use of the prior art elements’” as the rationale for combining *Flick885* and *Hunt* is also improper as conclusory and lacking a technical rationale.

198. The Board agreed with the Petitioners that *Hunt* teaches “many advantages” and that this is a proper impetus for combining *Flick* ‘885 and *Hunt*. Decision, 46, citing Ex-1023, 4:12. However, a careful reading of *Hunt* acknowledges that the term “many advantages” refers to the ability to characterize vehicle performance in near real time by analyzing real time transmission of GPS and diagnostic data, followed by analysis and display of these data using an Internet-hosted website. *Hunt*, 4:12-18. In other words, it is not the GPS that provides the “many advantages” but rather the ability to present the acquired data via the Internet and in real-time.

199. There is no evidence to show that the desire to add GPS from *Hunt* to the *Flick*885 existed in the art. And the adoption of the problem that GPS provides “many advantages” in terms of the solution (i.e., adding GPS), weighs heavily in favor of the prohibited use of hindsight. Thus, a POSA would not combine *Flick*885 with *Hunt* and any combination would be improper for these reasons alone.

2. Petitioners Proposed Combination of *Flick885* and *Hunt* Fails to Consider Compelling Evidence of Secondary Considerations

200. Compelling evidence of secondary considerations, most of which is already recognized and confirmed twice by the PTAB, has been presented. This evidence, which was already considered by this Board on multiple occasions, 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-1017); D.I. 297-1, 26:11-20 (Ex. 2003); D.I. 297-4, 45:3-19, 46:25-47:19 (Ex. 2004); D.I. 297-5, 64:15-24, 102:16-103:13, 155:4-13 (Ex. 2005). The evidence of secondary considerations weighs in favor of non-obviousness, and thus in Patent Owner's favor in this regard. This evidence of secondary considerations is not just a cumulative or confirmatory part of the obviousness analysis, but is independent evidence of non-obviousness that is the most probative evidence in avoiding the forbidden use of hindsight.

201. When the secondary considerations evidence is properly weighed with respect to the proposed combination of *Flick885* and *Hunt*, particularly the adding of a vehicle position determining device and a multi-vehicle compatible controller

for cooperating with the vehicle position determining device to send vehicle position data, the claims of the '278 *Patent* are not obvious.

202. Petitioners are offering to simply slap a GPS from *Hunt* into the *Flick885* system and put it all in a single housing, and contend, nearly fifteen (15) years later and after careful consideration by a multitude of tribunals, that the combination would have been obvious. This, in my technical opinion, is wrong, flies in the face of common sense, and does not give proper weight to the independent, secondary consideration evidence.

C. Claims 2-12

203. Section XII.B above explains that even the selective combination of *Flick885* and *Hunt* fails to disclose or render obvious the claimed embodiments. For at least these reasons set forth above in Section XII.B, dependent Claims 2-12 are also patentable.

D. Claim 13

204. Independent Claim 13 includes subject matter from independent Claim 1 and dependent Claim 3. Section XII.B above explains that even the selective combination of *Flick885* and *Hunt* fails to disclose or render obvious the claimed

embodiments. For at least these reasons set forth above in Section XII.B, independent Claim 13 is also patentable.

E. Claims 14-17

205. Dependent Claims 14-17 recite subject matter similar to dependent Claims 6-9. Section XII.B above explains that even the selective combination of *Flick885* and *Hunt* fails to disclose or render obvious the claimed embodiments. For at least these reasons set forth above in Section XII.B, dependent Claims 14-17 are also patentable.

F. Claim 18

206. Independent Claim 18 recites subject matter from independent Claim 1 and dependent Claim 5. ‘278 *Patent* 25:64-26:15, 26:26-29, and 27:27-28-15. Independent Claim 18 does not recite the downloading interface as a wireless downloading interface as recited in dependent Claim 5. *Id.* For the reasons set forth above in Section XII.B, independent Claim 18 is also patentable over the combination of *Flick885* and *Hunt*.

G. Claims 19-22

207. Dependent Claims 19-22 recite subject matter similar to dependent Claims 6-9. Section XII.B above explains that even the selective combination of

Flick885 and *Hunt* fails to disclose or render obvious the claimed embodiments. For at least these reasons set forth above in Section XII.B, dependent Claims 19-22 are also patentable.

XIII. EVIDENCE OF SECONDARY CONSIDERATIONS SUPPORT PATENTABILITY

208. This PTAB has twice considered the evidence of secondary considerations. *Ex Parte Omega Patents, LLC*, Appeal 2018-008119 (Ex-1012); *Ex Parte Omega Patents, LLC*, Appeal 2022-003758 (Ex-1017).

209. Petitioners want the PTAB to simply discard the evidence that the PTAB has already considered twice as it relates to the '278 *Patent*, and, most recently:

“A key aspect of our finding in this regard is, as it was in a related appeal, (1) the jury's verdict in related litigation that there was a nexus between the evidence of secondary considerations of non-obviousness and the claimed invention, and (2) the Federal Circuit's affirming the district court's upholding the jury's infringement verdict. *See Omega Patents*, 13 F.4 at 1365 (affirming the

judgment of infringement of the '278 patent's asserted claims). *Ex Parte Flick*, Appeal 2022-003758 (Ex-1017), at 13-14; internal footnotes omitted.

Our holding in a related appeal involving similar secondary considerations evidence is instructive in this regard, albeit in connection with a different patent. *Cf.* Dec. 2019 Bd. Dec'n, at 10-18. In that appeal, we found Appellant's evidence of secondary considerations of non-obviousness of the claimed invention, including licensing, commercial success, and copying by others, outweighed the evidence of obviousness and was dispositive of error in the Examiner's rejections. *See id.* at 17-18.

In reaching this conclusion, we emphasized the jury's verdict that there was a nexus for each proffered secondary consideration to the claimed invention. *See id.* at 13

(noting the jury's finding that eight licenses were key factors in the claimed invention's non-obviousness because the licenses were accepted *due to the merits of the claimed invention*), 14 (noting the jury's finding that the commercial success of products embodying the claimed invention was due to the claimed invention's merits---not other factors), and 16 (noting the jury's verdict that others copying the claimed invention was a key factor indicating non-obviousness of that invention). *Ex Parte Flick*, Appeal 2022-003758 (Ex-1017), at 13-14; internal footnotes omitted.

Notably, as Appellant indicates, the jury made similar findings here. *See* Appeal Br. 38 (reproducing jury verdict form indicating the jury's finding that others accepted licenses under patents *because of the merits of the claimed invention*), 39 (reproducing jury verdict form indicating

the jury's finding that accused products covered by the claim were commercially successful *due to the merits of the claimed invention* rather than due to advertising, promotion, salesmanship, or product features other than those claimed), and 42 (reproducing jury verdict form indicating the jury's finding that others copying the claimed invention indicated non-obviousness of the claimed invention).” *Ex Parte Flick*, Appeal 2022-003758 (Ex-1017), at 13-14; internal footnotes omitted.

210. The PTAB has already, on multiple occasions, considered the same secondary evidence and determined the sufficiency of this evidence: there is a nexus, there is commercial success, there is copying, there is licensing, there is customer need, and there is limited value of accused products without the invention. *Id.* The PTAB has carefully considered and found this evidence sufficient twice, taking into consideration a jury verdict, Federal Circuit Appeal, and testimony of the opposing party admitting to copying and limited value of product without the claimed invention. *Id.*; *see also* 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).

211. Rarely does evidence get considered this many times and by such a variety of tribunals. The evidence of secondary considerations here should be fully considered consistent with the previous determinations of this Board and other tribunals. And when the evidence of secondary considerations is properly considered, the evidence clearly supports a finding of non-obviousness.

XIV. CONCLUSION

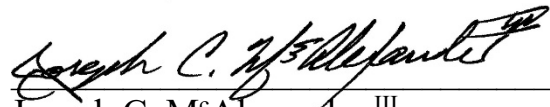
212. In signing this declaration, I recognize that the declaration will be filed as evidence in a contested case before the Patent Trial and Appeal Board of the United States Patent and Trademark Office. I also recognize that I may be subject to cross-examination in the case and that cross-examination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

213. 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 18th of October 2023.

Respectfully submitted,



Joseph C. McAlexander III

PROFESSIONAL SUMMARY

Currently a Registered Professional Engineer (#79454) and recognized as an inventor on 31 US and a number of foreign patents, I am President of McAlexander Sound, Inc., and the Managing Director of McAlexander Sound Pte Ltd. I have focused my expertise to support a number of clients in product, process, and operations analysis and investigation. Forty-eight years of experience in microcircuit and semiconductor technologies has developed my skills in areas of circuit design and analysis, device fabrication and assembly, testing, marketing, control system design and analysis, manufacturing operations and respective areas of quality, reliability, and defect / failure analysis. I am also the President and CEO of MDFHoldings, Inc., an IP holding company currently engaged in the field of GPS Tracking, and was formerly, among others, a Manager with QM Partners, LP, supporting clients in IP management and licensing. I have:

- designed and managed development, testing, and evaluation of devices including Dynamic Random Access Memories (DRAMs), Static Random Access Memories (SRAMs), Charge Coupled Devices (CCDs), Shift Registers (SRs), and functional circuits including I/O buffers for address and data, decoders, clocks, sense amplifiers, fault tolerant, parallel-to-serial data paths for video applications, level shifters, converters, pumps, and logic, as well as wireless communication systems and MEMs applications;
- managed operations including engineering, training, and quality assurance for device fabrication, assembly, test, analysis, and reliability assessment, as well as manufacturing control, each of which involved both volatile and non-volatile memory; testing, analysis, and control involving use of mechanical calibration and measuring equipment, including optical, scanning e-beam, IR, capacitive, and laser using phase contrast and Fast Fourier Transform (FFT) for High Aspect Ratio Inspection (HARI) applications; audio and video system design and installation;
- taught courses in solid state device physics, integrated circuit design, integrated circuit fabrication, and statistical control;
- provided expert services, investigating both process and design technologies of various devices (microprocessor and controller, memory, programmable logic, card, tag, module, mixed signal, custom, and other), systems (PC and peripheral, computer, control, laser measurement, switch, architecture, software, and other), and consumer products (medical, TV, telephone, VCR, facsimile, copier, lighting, game, and other);
- provided nuclear radiation hardness testing services for military and space clients; and
- managed the design and installation of audio sound and video systems for private and commercial enterprises.

PROFESSIONAL SUMMARY

From 1986-1990, I was Executive Vice President of EPI Technologies, Inc., prior to joining the staff at Cochran Consulting, Inc. where I served as senior managing consultant from 1991-2002. From 1972 to 1986, I was employed by Texas Instruments Incorporated.

EXPERIENCE PROFILE

1988-present

McAlexander Sound, Inc. (McASI) - Richardson, TX
President

- o System, Product, and Process investigation, expert witness services for protection of intellectual property;
- o Patent portfolio development and valuation;
- o Product liability and insurance claim investigation, expert witness services for matters involving such claims;
- o Quality Systems consulting and engineering;
- o Radiation Hardness Testing Technical Representative;
- o Acoustic system design/installation
- o Technical Advisor in High Aspect Ratio and Surface Contour Measurement using Direct-to-Digital Holography.

2005-present

McAlexander Sound Pte Ltd - Singapore
Managing Director

- o System, Product, and Process investigation, expert witness services for protection of intellectual property;
- o Patent portfolio development and valuation;
- o Contract consultation;
- o Not assigned any patents and is not engaged in any IP related licensing or litigation activities.

2002-present

MDFHoldings, Inc. – Las Vegas, NV
CEO

- o IP holding and licensing company;
- o Assigned U.S. Patent Nos. 7,340,260 and 7,657,265 and EP 1 557 058 B1, each related to an object locating system;
- o Has not been and is not engaged in any IP related litigation or licensing activities.

2006-2020

QM Partners, L.P. – Texas
Manager

- o Management of development, licensing, prosecution and exploitation of assigned intellectual property;
- o Not assigned any patents and is not engaged in any IP related licensing or litigation activities.

EXPERIENCE PROFILE (continued)

2006-2020

Guardian Technologies, LLC – Texas
Manager

- o IP holding and licensing company;
- o Litigated U.S. Patent No. 5,657,076 related to security surveillance 2009-2011 (patent expired 2015);
- o Assigned U.S. Patent No. 8,334,775 related to RFID tracking (reassigned 2020 to personal);
- o Not engaged in any IP related licensing or litigation activities.

2006-2020

Appropriate Holdings, LLC – Delaware
Manager

- o IP holding company;
- o Not assigned any patents, has not been and is not engaged in any IP related licensing or litigation activities.

1996-2010

RMC Management, LLP - Plano, TX
Partner

- o Asset management.

1991-2002

Cochran Consulting, Inc. (CCI) - Richardson, TX
Managing Consultant

- o System, Product, and Process investigation, expert witness services for protection of intellectual property;
- o Design, process, and product reliability;
- o Defect and failure analysis.

1986-Nov'90

EPI Technologies, Inc. - Richardson, TX
Executive Vice President and Company Officer

- o Managed Advanced Technology Div., QA, and Engineering, including software program development;
- o Developed strategic, space/energy market growth plans;
- o Negotiated the acquisition of and managed a radiation company;
- o Designed and managed physical analysis, radiation effects, and environmental stress laboratories, including optical and e-beam measurement;
- o Achieved > 30% annual revenue growth and profitability for each laboratory the first 12 months;

EXPERIENCE PROFILE (continued)

- o Product and Process investigation services for protection of intellectual property.

1972 – 1986 **Texas Instruments, Inc.** - Dallas/Houston, TX; Singapore

'84 - '86 **Quality/Reliability Assurance Manager, TI Dallas** Advanced DRAM semiconductor wafer fabrication facility

- o Developed/implemented on-line, computerized SPC software tools for dimensioning analysis and control and pattern recognition;
- o Coordinated people development, design-of-experiments;
- o Managed chemical and physical analysis laboratories;
- o Implemented control systems to assure product, process, material, equipment, and facility compliance, including Cost of Quality analysis.

'82 - '84 **Quality/Reliability Assurance and Engineering Manager, TI Singapore** assembly/test facility

- o Developed, implemented, and operated an effective Quality/Reliability Assurance program for assembly processing including optical pattern recognition for equipment registration;
- o Supervised 225 people for 7 day/week operation, including QRA, Computer Systems software development, and Training;
- o Trained engineers in Solid State Physics, device fabrication, and statistical process control.

'81 - '82 **Engineering Operations Manager, TI Houston**

- o Managed DRAM memory product cost center;
- o Responsible for division test software generation, product assembly and test quality / yield, cost reduction and quality improvement;
- o Provided technical customer interface for marketing;
- o Coordinated TI Singapore engineering test/assembly.

'79 - '81 **Product Engineering Manager, TI Houston**

- o Responsible for yield improvement, technical customer interface, quality improvement, design evaluation, and device characterization for DRAM and CCD products;
- o Developed device specifications and test software.

EXPERIENCE PROFILE (continued)

'72 - '79

Design Section Manager / Engineer, TI Houston

- o Responsible for design and development, process compatibility, production introduction of Dynamic Ram products;
- o Activities included electrical and physical layout, SPICE model simulation, test program generation, and product implementation for MOS Dynamic Ram products.

1969 - 1972

**U. S. Army - Coventry, Rhode Island; Seoul, Korea
Captain, Air Defense Artillery**

- o Served one year as Communications Officer in Korea;
- o Served two years as Tactical Officer, New England Defense.

ORGANIZATIONS, PUBLICATIONS, EDUCATIONPROFESSIONAL ORGANIZATIONS AND AWARDS

- 1 - Institute of Electrical and Electronics Engineers, Inc. (IEEE), Senior Member. Societies:
Computer, Electron Devices, Solid State Circuits
- 2 - Licensing Executives Society (LES)
- 3 - National Society of Professional Engineers
- 4 - Texas Board of Professional Engineers, Registered License #79454
- 5 - Society of Flight Test Engineers
- 6 - American Society of Civil Engineers
- 7 - Architectural Engineering Institute
- 8 - 2000/2001 Nationwide Register's Who's Who in Executives and Businesses
- 9 - 1996/1997 Strathmore's Who's Who Registry of Business Leaders

PUBLICATIONS

- 1- NUS Proceedings of Engineering Convention '83, Aug '83, pgs. 139-142, The Memory Challenge.
- 2- Archives of Biochemistry and Biophysics, Dec'81, Vol. 212, No. 2, Equilibrium Constants under Physiological Conditions for the Reactions of D-3-Phosphoglycerate Dehydrogenase and L-Phosphoserine Aminotransferase.
- 3- International Electron Devices Meeting, Dec '79, pgs. 355-357, Sub 100ns 16K x 1 MOS Dynamic RAM Using a Grounded Substrate.

EDUCATION PROFILE

- | | |
|-------------|--|
| 1980 - 1985 | Taught Solid State Device Physics, Semiconductor Processing, Circuit Design Techniques, and Statistical Quality Control Methods

Effectiveness Training and Japanese Manufacturing Techniques, Participative Problem Solving courses |
| 1975 - 1976 | 1.5 years Graduate Study in Neural Science, the University of Texas Graduate School of Biomedical Science |
| 1965 - 1969 | BSEE, North Carolina State University |

PATENTS (US-31, Foreign-8)

4,239,993	(1980) High Performance Dynamic Sense Amplifier with Active Loads
4,280,070	(1981) Balanced Input Buffer Circuit for Semiconductor Memory
4,288,706	(1981) Noise Immunity in Input Buffer Circuit for Semiconductor Memory
4,370,575	(1983) High Performance Dynamic Sense Amplifier with Active Loads
4,418,293	(1983) High Performance Dynamic Sense Amplifier with Multiple Column Outputs
4,533,843	(1985) High Performance Dynamic Sense Amplifier with Voltage Boost for Row Address Lines
4,543,500	(1985) High Performance Dynamic Sense Amplifier Voltage Boost for Row Address Lines
4,543,501	(1985) High Performance Dynamic Sense Amplifier with Dual Channel Grounding Transistor
4,748,349	(1988) High Performance Dynamic Sense Amplifier with Voltage Boost for Row Address Lines
6,172,640 B1	(2001) Pet Locator
6,236,358 B1	(2001) Mobile Object Locator
6,421,001 B1	(2002) Object Locator
6,441,778 B1	(2002) Pet Locator
6,480,147 B2	(2002) Portable Position Determining Device
6,518,919 B1	(2003) Mobile Object Locator
6,771,213 B2	(2004) Object Locator
6,859,171 B2	(2005) Mobile Object Locator

PATENTS (continued)

7,113,126 B2	(2006) Portable Positioning Determining Device
7,179,674 B2	(2007) Bi-Directional Released-Beam Sensor
7,209,075 B2	(2007) Mobile Object Locator
7,324,044 B2	(2008) Object Locator
7,336,227 B2	(2008) Portable Position Determining Device
7,340,260 B2	(2008) System and Method for Tracking the Location of Multiple Mobile Radio Transceiver Units (assigned to MDFHoldings, Inc.)
7,353,706 B2	(2008) Weighted Released-Beam Sensor
7,397,097 B2	(2008) Integrated Released Beam Layer Structure Fabricated in Trenches and Manufacturing Method Thereof
7,564,405 B2	(2009) Object Locator
7,657,265 B2	(2010) System and Method for Tracking the Location of Multiple Mobile Radio Transceiver Units (assigned to MDFHoldings, Inc.)
7,760,137 B2	(2010) Portable Positioning Determining Device
7,764,228 B2	(2010) Portable Positioning Determining Device
7,989,906 B2	(2011) Bi-Directional released-Beam Sensor
8,334,775 B2	(2012) RFID-Based Asset Security and Tracking System, Apparatus and Method (assigned to personal)
JP 55-053640 B4	(1980) Defect Resistant Semiconductor Memory Cell
JP 59-044720 B4	(1984) Semiconductor High Speed Read/Write Memory Unit
DE2935121 C2	(1980) Clock Voltage Generator for Semiconductor Memory with Reduced Power Dissipation
DE3043651 A1	(1981) Clock Voltage Generator for Semiconductor Memory with Reduced Power Dissipation

PATENTS (continued)

GB2032211 B2	(1980) High Performance Dynamic MOS Read/Write Memory
EP 1 557 058 B1	(2011) System and method for tracking the location of multiple mobile radio transceiver units (assigned to MDFHoldings, Inc.) [States: AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR]
EP 1 676 809 B1	(2010) Weighted released-beam sensor [States: DE FR GB IT]
EP 1 676 810 B1	(2010) Bi-directional released-beam sensor [States: DE FR GB IT]

CASES

Cases over at least the past 7 years, either active or closed, in which I have signed a Protective Order, have testified as an expert either at a trial, hearing, or deposition, or have submitted statements / opinions by declaration, affidavit, or report, are:

CASE¹	CASE NUMBER	LOCATION	YEAR	TYPE²
Kangaroo Media* v. Immersion Entertainment (*firm: Kenyon & Kenyon)	2:12-cv-00382-JFC, 2:14-cv-01536-JFC	WD PA	2012 - 2016	P,t
(Audio/Video Entertainment System patent)				
Securus* v. Global (*firm: Gruber)	3:13-CV-03009-K	ND TX	2014 - 2017	P,t
(Patents related to telecom systems)				
Global v. Securus* (*firm: Gruber)	3:14-CV-0829-K, 3:13-CV-00713-JRS	ND TX / ED VA	2014 - 2017	P
(Patents related to telecom systems)				
Advanced Audio Devices* (*firm: Clark Hill PLC)	IPR2014-01155	USPTO PTAB	2014 - 2016	P,t
(Patent 7,289,393 related to music jukebox)				
Advanced Audio Devices* (*firm: Clark Hill PLC)	IPR2014-01156	USPTO PTAB	2014 - 2016	P,t
(Patent 7,817,502 related to a personal digital stereo player)				
Advanced Audio Devices* (*firm: Clark Hill PLC)	IPR2014-01157	USPTO PTAB	2014 - 2016	P,t
(Patent 7,933,171 related to a personal digital stereo player)				
Advanced Audio Devices* (*firm: Clark Hill PLC)	IPR2014-01158	USPTO PTAB	2014 - 2016	P,t
(Patent 8,400,888 related to a personal digital stereo player)				

¹ * = Client

² P=Patent, C=Contract, ©=Copyright, TS=Trade Secret, AT=Antitrust; CA=Class Action; t=testified, TH=Trial/Hearing

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
One-E-Way* v. Sony, Sennheiser, BlueAnt, Creative Tech, Beats, Jawbone, Jabra (*firm: Knobbe Marten, Olson & Bear)	337-TA-943	ITC (Pender)	2014 - 2018	P,t
(Patents related to bluetooth configured headphones)				
Omega* v. Calamp	6:13-cv-1950-Orl-31DAB	MD, FL	2015 - 2016	P,t,TH
(Patents related to vehicular control systems and tracking)				
AVM* v. Intel (*firm: Boies, Schiller & Flexner)	1:15-cv-00033-RGA	DE	2015 - 2016	P,t,TH
(Patent related to dynamic logic circuits)				
Allure Energy* v. Honeywell (*firm: McKool Smith)	1:15-cv-00079-RP	WDTX, Austin	2015 - 2017	P
(Smart Thermostat)				
IV* v. Toshiba (*firm: Desmarais)	13-cv-453-SLR-SRF	DE	2015 - 2017	P,t,TH
(NAND Flash)				
IMS v. Micron* (*Weil Gotchal/ Orrick)	1:14-cv-01480-RGA	DE	2015 - 2022	P,t
(Patents related to flash memory)				
Honeywell v. Allure* (*firm: Dickinson Wright)	IPR201501248, 01251,01253	USPTO PTAB	2015 - 2017	P
(Smart Thermostat)				
Blitzsafe* v Honda (*firm: Brown Rudnick)	2:15-cv-01274-JRG-RSP	EDTX, Marshall	2015 - 2017	P,t
(Patents related to audio device integration systems)				
Blitzsafe* v Hyundai (*firm: Brown Rudnick)	2:15-cv-01275-JRG-RSP	EDTX, Marshall	2015 - 2017	P,t
(Patents related to audio device integration systems)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Blitzsafe* v Nissan (*firm: Brown Rudnick)	2:15-cv-01276- JRG-RSP	EDTX, Marshall	2015 - 2017	P,t
(Patents related to audio device integration systems)				
Blitzsafe* v Toyota (*firm: Brown Rudnick)	2:15-cv-01277- JRG-RSP	EDTX, Marshall	2015 - 2017	P,t
(Patents related to audio device integration systems)				
Blitzsafe* v VW (*firm: Brown Rudnick)	2:15-cv-01278- JRG-RSP	EDTX, Marshall	2015 - 2017	P,t
(Patents related to audio device integration systems)				
3rd Eye Surveillance* v Stealth (*firm: Kennedy Law)	6:14-cv-00162 JDL	EDTX, Tyler	2015 - 2016	P
(Patents related to real-time image processing to response agency)				
3rd Eye Surveillance* v Vision Video (*firm: Kennedy Law)	6:14-cv-00161- JDL	EDTX, Tyler	2015 - 2016	P
(Patents related to real-time image processing to response agency)				
3rd Eye Surveillance* v Ft Worth / e-Watch (*firm: Kennedy Law)	6:14-cv-00725	EDTX, Tyler	2015 - 2017	P,t,TH
(Patents related to real-time image processing to response agency)				
3rd Eye Surveillance* v United States (*firm: Kennedy Law)	1:15-cv-00501- CFL	Court of Federal Claims, DC	2015 -	P,t,TH
(Patents related to real-time image processing to response agency)				
Hitachi v TPV* (*firm: O'Melveny & Myers)	2:14-cv-1121- JRG-RSP	EDTX, Marshall	2015 - 2016	P
(Patent related to LCD power and signal board arrangement)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Nidec Motor v Broad Ocean Motor* (*firm: Locke Lord)	2:15-cv-00443	EDTX, Marshall	2016	P
(Patent related to blower motor control for HVAC)				
TracBeam* v T-Mobile (*firm: Dovel & Luner)	6:14-cv-678-RWS	EDTX, Tyler	2016	P,t
(Patents related to geographic location estimates)				
SMS v Emerson* (*firm: Davidson Berquist)	2:15-cv-00032-RWS-RSP	EDTX, Marshall	2016	P
(Patent related to a method of monitoring a protected space)				
Prong v Sorias* (*firm: Gottlieb, Rackman & Reisman)	IPR2015-01317	USPTO PTAB	2016	P
(Patent related to attachable mobile charger)				
Skyline Software Systems v Duane Morris* (*firm: Venable)	2015-08868	Circuit Court Fairfax County	2016	P
(3D mapping technology)				
SignalQuest v Oncque* (*firm: Duane Morris)	11-cv-00392-JL	NH	2016	P
(Patents related to vibration switches)				
TiVo v Samsung* (*firm: Fish & Richardson)	2:15-CV-1503	EDTX, Marshall	2016	P
(Patent related to multimedia signal processing)				
MLC Intellectual Property v. Micron* (*firm: Fish & Richardson)	5:14-cv-03657 SI	ND CA	2014	P,t
(Patent related to multilevel cell storage)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Richtek v uPi* (*firm: Hogan Lovells)	C 09-05659 WHA LB	NDCA, SF	2016	P
(Patents related to converter channel current balance and PWM circuit)				
Paice* v VW, Porsche, Audi (*firm: Fish & Richardson)	337-TA-998	ITC	2016 – 2017	P
(Patents related to hybrid vehicle technology)				
Biosonix v Hydrowave* (*firm: Bradley)	4:16-cv-00139- RC	EDTX, Sherman	2016 - 2017	P
(Patent related to underwater sound listening and generation)				
Univ of S FL* v Fujifilm (*firm: Dickinson Wright)	8:16-cv-01194- MSS-TGW	MDFL, Tampa	2017	P
(Patent related to Workstation Interface – Digital Mammography)				
Univ of S FL * v BRIT (*firm: Dickinson Wright)	8:16-cv-03109- MSS-TGW	MDFL, Tampa	2017	P,t
(Patent related to Workstation Interface – Digital Mammography)				
Nokia v Apple	337-TA-1038	ITC	2017	P
(Patent related to controllable bias mode oscillator)				
Univ of IL v Micron* (*firm: Fish & Richardson)	2:11-cv-02288- SLD-JAG	CDIL, Rock Falls	2017	P, C
(Patents and contract related to use of deuterium in semiconductor processing)				
ZiiLabs v AMD* (*firm: O’Melveny & Myers)	337-TA-1037	ITC-Shaw	2017	P
(Patents related to graphics processors)				
MTL* v Sandisk (*firm: Tensegrity)	337-TA-1034	ITC-Lord	2017	P,t
(Patents related to flash memory)				
Razberi v Dynacolor* (*firm: McDole Williams)	01-16-0003-3734	AAA	2017 - 2018	C,TS,t, TH
(Arbitration related to contractual obligations)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Seed Spring* v Microsoft (*firm: Dovel)	6:17-cv-427-RWS	EDTX, Tyler	2017	P
(Patents related to Wirelss Location)				
TracBeam* v Microsoft (*firm: Dovel)	6:17-cv-426-RWS	EDTX, Tyler	2017	P
(Patents related to Wirelss Location)				
TracBeam* v Cisco (*firm: Dovel)	6:17-cv-525-RWS	EDTX, Tyler	2017 - 2018	P
(Patents related to Wirelss Location)				
Arris* v Sony (*firm: Fish & Richardson)	337-TA-1060	ITC-Lord	2017	P,t
(Patent related to Broadcast Signals)				
Vivint* v Alarm.com (*firm: Weil)	2:15-cv-00392- CW-BCW	UT	2017 -	P,t
(Patents related to Electronic Message Delivery)				
Blitzsafe* v Bosch (*firm: Brown Rudnick)	2:17-cv-00105- JRG	EDTX, Marshall	2017 - 2019	P,t
(Patents related to audio device integration systems)				
Blitzsafe* v Daimler & Mercedes (*firm: Brown Rudnick)	2:17-cv-00422- JRG	EDTX, Marshall	2017 – 2019	P
(Patents related to audio device integration systems)				
Blitzsafe* v BMW (*firm: Brown Rudnick)	2:17-cv-00418- JRG	EDTX, Marshall	2017 - 2019	P
(Patents related to audio device integration systems)				
Blitzsafe* v Mazda (*firm: Brown Rudnick)	2:17-cv-00423- JRG	EDTX, Marshall	2017 - 2019	P
(Patents related to audio device integration systems)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Blitzsafe* v Mitsubishi (*firm: Brown Rudnick)	2:17-cv-00430-JRG	EDTX, Marshall	2017 - 2019	P
(Patents related to audio device integration systems)				
Blitzsafe* v Subaru (*firm: Brown Rudnick)	2:17-cv-00421-JRG	EDTX, Marshall	2017 - 2019	P,t
(Patents related to audio device integration systems)				
Blitzsafe* v Tata & Jaguar (*firm: Brown Rudnick)	2:17-cv-00424-JRG	EDTX, Marshall	2017 - 2019	P
(Patents related to audio device integration systems)				
Blitzsafe* v Volvo (*firm: Brown Rudnick)	2:17-cv-00420-JRG	EDTX, Marshall	2017 - 2019	P
(Patents related to audio device integration systems)				
AGIS* v Huawei (*firm: Brown Rudnick)	2:17-00513-JRG	EDTX, Marshall	2017 - 2018	P,t
(Patents related to Patents related to interactive remote communications)				
AGIS* v HTC (*firm: Brown Rudnick)	2:17-00514-JRG	EDTX, Marshall	2017 - 2019	P,t
(Patents related to Patents related to interactive remote communications)				
AGIS* v LG (*firm: Brown Rudnick)	2:17-00515-JRG	EDTX, Marshall	2017 - 2019	P,t
(Patents related to Patents related to interactive remote communications)				
AGIS* v Apple (*firm: Brown Rudnick)	2:17-00516-JRG	EDTX, Marshall	2017 - 2019	P,t
(Patents related to Patents related to interactive remote communications)				
AGIS* v ZTE (*firm: Brown Rudnick)	2:17-00517-JRG	EDTX, Marshall	2017 - 2019	P
(Patents related to Patents related to interactive remote communications)				
Arya v Dufossat* (*firm: Robert Sueiro)	4:16-cv-03595	SDYX, Houston	2017 -	TS,C,t
(Dispute related to Trade Secrets)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Seven Networks v Samsung* (*firm: Fish & Richardson)	2:17-cv-00441-JRG	EDTX, Marshall	2017 - 2018	P,t
(Patents related to Power Management of Mobile Networks)				
ZF Micro Solutions* v. Tat Investment (*firm: Berger)	1-09-CV-134970	Santa Clara County	2018	C,t,TH
(Business tort, unfair practice)				
Univ of S FL* v Fujifilm (*firm: Dickinson Wright)	3:18-cv-00215-AVC	Connecticut	2018	P,t
(Patent related to Workstation Interface – Digital Mammography)				
Univ of S FL* v BRIT (*firm: Dickinson Wright)	3:18-CV-0250-K	NDTX, Dallas	2018 - 2019	P,t
(Patent related to Workstation Interface – Digital Mammography)				
Cypress Insurance v Hynix* (*firm: Bird Marella)	C17-467 RAJ	WDWA, Seattle	2018 - 2019	C,t,TH
(Contract dispute related to product delivery)				
Belliveau* v BARCO (*firm: McKool)	1:17-CV-00379-SS	WDTX, Austin	2018	C,t
(Patent portfolio licensing dispute)				
MPS* v Intersil (*firm: Perkins)	16-1125-LPS	DE	2018 - 2021	TS,t
(Trade Secret dispute)				
GoGo v Squire Patton Boggs* (*firm: Cozen O'Connor)	2016-L-007789	Cook County, IL	2018 - 2019	P
(Patent Malpractice claim)				
X2Y* v Intel (*firm: Dovel)	3:18-cv-1394-HZ	DOR, Portland	2018 - 2020	P
(Patents related to package layer metalization)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Power Integration* v ON Semi (*firm: Fish & Richardson)	5:16-cv-06371-BLF	NDCA, San Jose	2019	P,t
(Patents related to power converter regulation)				
ON Semi v Power Integration* (*firm: Fish & Richardson)	1:17-cv-00247-LPS-CJB	DE	2019	P,t
(Patents related to power converter regulation)				
Semcon* v Amazon (*firm: Brown Rudnick)	2:18-CV-00192-JRG	EDTX, Marshall	2019	P
(Patent related to Adaptive Power Control)				
Semcon* v Asustek (*firm: Brown Rudnick)	2:18-CV-00193-JRG	EDTX, Marshall	2019	P
(Patent related to adaptive power control)				
Semcon* v Kyocera (*firm: Brown Rudnick)	2:18-CV-00197-JRG	EDTX, Marshall	2019	P
(Patent related to adaptive power control)				
Innovation Sciences* v Amazon (*firm: Davidson Berquist)	4:18-cv-00474-ALM	EDTX, Sherman	2019 - 2020	P,t,TH
(Patent related to Internet communication)				
Innovation Sciences* v HTC (*firm: Davidson Berquist)	4:18-cv-00476-ALM	EDTX, Sherman	2019 - 2020	P,t
(Patent related to Internet communication)				
Innovation Sciences* v Resideo (*firm: Davidson Berquist)	4:18-cv-00475-ALM	EDTX, Sherman	2019 - 2020	P,t
(Patent related to Internet communication)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Innovation Sciences* v Vector (*firm: Davidson Berquist)	4:18-cv-00477-ALM	EDTX, Sherman	2019	P
(Patent related to Internet communication)				
CXT* v JC Penny (*firm: Brown Rudnick)	2:18-cv-00171-RWS-RSP (lead) 2:18-CV-233-RWS-RSP	EDTX, Marshall	2019 - 2020	P,t
(Patents related to storage management and information distribution)				
Photonics* v Lenovo (*firm: Brown Rudnick)	1:18-cv-00489-MN	DE	2019	P
(Patents related to GDS-II Layout)				
Quest NetTech Corp* v Apple (*firm: Brown Rudnick)	2:19-CV-00118-JRG	EDTX, Marshall	2019 - 2020	P
(Patent related to programmable credit card system)				
Pilot, Inc.* v Schumacher (*firm: Bradford)	1:19-cv-05982-EEC	NDIL, Eastern Div	2019 - 2921	P
(Patents related to battery chargers)				
Vocalife* v Amazon (*firm: Brown Rudnick)	2:19-cv-00123-JRG	EDTX, Marshall	2019 - 2020	P,t,TH
(Patent related to microphone array)				
Semcon* v Vuitton (*firm: Brown Rudnick)	2:19-CV-00122-JRG	EDTX, Marshall	2019	P,t
(Patent related to adaptive power control)				
Semcon* v Shenzhen (*firm: Brown Rudnick)	2:18-CV-00196-JRG	EDTX, Marshall	2019	P,t
(Patent related to adaptive power control)				
Ultravision* v GoVision (*firm: Brown Rudnick)	2:18-cv-00100-JRG-RSP	EDTX, Marshall	2019	P
(Patents related to modular display panels and LED lighting)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Ultravision* v Shenzhen (*firm: Brown Rudnick)	2:18-cv-00103- JRG-RSP	EDTX, Marshall	2019	P
(Patents related to modular display panels and LED lighting)				
Ultravision* v Aoto (*firm: Brown Rudnick)	2:18-cv-00113- JRG-RSP	EDTX, Marshall	2019	P
(Patents related to modular display panels and LED lighting)				
Ultravision* v Leyard (*firm: Brown Rudnick)	2:18-cv-00102- JRG-RSP	EDTX, Marshall	2019	P
(Patents related to modular display panels and LED lighting)				
Ultravision* v NEC (*firm: Brown Rudnick)	2:18-cv-00150- JRG-RSP	EDTX, Marshall	2019	P
(Patents related to Modular Display Panels and LED lighting)				
Ultravision* v Prismaflex (*firm: Brown Rudnick)	2:18-cv-00108- JRG-RSP	EDTX, Marshall	2019	P
(Patents related to modular display panels and LED lighting)				
Ultravision* v Unilumin (*firm: Brown Rudnick)	2:18-cv-00116- JRG-RSP	EDTX, Marshall	2019	P
(Patents related to modular display panels and LED lighting)				
Ultravision* v Yaham (*firm: Brown Rudnick)	2:18-cv-00118- JRG-RSP	EDTX, Marshall	2019	P
(Patents related to modular display panels and LED lighting)				
Ultravision* v Absen (*firm: Brown Rudnick)	2:18-cv-00112- JRG-RSP	EDTX, Marshall	2019	P
(Patents related to modular display panels and LED lighting)				
Birchett* v City of Fort Worth (*firm: Kennedy Law)	DC-19-06941	Dallas County	2019	C,t
(Whistleblower)				
Innovation Sciences* v HTC (*firm: Davidson Berquist)	337-TA-1180	ITC	2020 - 2021	P,t
(Patent related to wireless communication)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Innovation Sciences* v Resideo (*firm: Davidson Berquist)	337-TA-1180	ITC	2020	P,t
(Patent related to Internet communication)				
CXT* v Neiman Marcus (*firm: Brown Rudnick)	2:19-cv-00270-RWS-RSP	EDTX, Marshall	2020	P
(Patents related to storage management and information distribution)				
CXT* v General Nutrition (*firm: Brown Rudnick)	2:19-cv-00271-RWS-RSP	EDTX, Marshall	2020	P
(Patents related to storage management and information distribution)				
CXT* v Steven Madden (*firm: Brown Rudnick)	2:19-cv-00272-RWS-RSP	EDTX, Marshall	2020	P
(Patents related to storage management and information distribution)				
Consolidated* v Amazon (*firm: Devlin Law)	1:19-cv-01715-RGA	DE	2020 – 2021	P,t
(Patents related to on-line shopping)				
Consolidated* v Ford (*firm: Devlin Law)	1:19-cv-01916-RGA	DE	2020 - 2021	P,t
(Patents related to on-line shopping)				
Consolidated* v JC Penney (*firm: Devlin Law)	1:19-cv-01918-RGA	DE	2020 - 2021	P,t
(Patents related to on-line shopping)				
Consolidated* v Ebay (*firm: Devlin Law)	1:19-cv-01580-RGA	DE	2020 - 2021	P,t
(Patents related to on-line shopping)				
Consolidated* v Walmart (*firm: Devlin Law)	1:19-cv-01581-RGA	DE	2020 - 2021	P,t
(Patents related to on-line shopping)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Semcon* v TCT Mobile (*firm: Brown Rudnick)	2:18-CV-00194-JRG	EDTX, Marshall	2020	P
(Patent related to adaptive power control)				
BNR v Samsung* (*firm: Fish & Richardson)	2:19-cv-00286-JRG	EDTX, Marshall	2020	P
(Patents related to portable communication devices)				
AGIS* v Google (*firm: BRudnick, Fabricant)	2:19-cv-00361-JRG	EDTX, Marshall	2020 -	P,t
(Patents related to interactive remote communications)				
AGIS* v Waze (*firm: BRudnick, Fabricant)	2:19-cv-00359-JRG	EDTX, Marshall	2020 -	P,t
(Patents related to interactive remote communications)				
Burke* v City of Fort Worth (*firm: Kennedy Law)	DC-19-07239	Dallas County	2020 -	C,t
(Whistleblower)				
Infinera v Oyster Optics* (*firm: Davidson Berquist)	IPR2020-00325	PTAB	2020	P,t
(Patent related to fiber optic telecommunications)				
Blitzsafe* v GM (*firm: Fabricant)	2:19-cv-00377-JRG	EDTX, Marshall	2020	P,t
(Patents related to audio device integration systems)				
Blitzsafe* v FCA (*firm: Fabricant)	2:19-cv-00378-JRG	EDTX, Marshall	2020	P,t
(Patents related to audio device integration systems)				
Kuster v Western Digital* (*firm: Shearman & Sterling)	6:20-cv-00563	WDTX, Waco	2020 -	P,t
(Patent related to memory stack storage)				
TruSun* v Eaton (*firm: Duane Morris)	6:19-cv-00656-ADA	WDTX, Waco	2020 - 2022	P,t
(Patent related to a light-generating system)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
RJR v PMI* (*firm: Latham Watkins)	1:20-cv-00393- LO-TCB	EDVA, Alexandria	2020 - 2022	P,t,TH
(Patents related to e-cigarette controls)				
Koss* v Apple et al (*firm: K L Gates)	6:20-cv-00665	WDTX, Waco	2020 - 2022	P,t
(Patents related to Wireless Headphones)				
Koss* v Bose (*firm: K L Gates)	6:20-cv-00661	WDTX, Waco	2020 -	P
(Patents related to Wireless Headphones)				
Ipcom v Sprint et al (Nokia*) (*Alston Bird)	2:20-cv-321	EDTX, Marshall	2020 - 2022	P
(Patents related to CDMA communication)				
Ipcom v Verizon et al (Nokia*) (*Alston Bird)	2:20-cv-323	EDTX, Marshall	2020 - 2022	P
(Patents related to CDMA communication)				
Pilot* v CarKu (*firm: Bradford / Sheridan)	7131799991	Amazon Arbitration	2020	P,t
(Patent related to jump starters)				
MPS* v Meraki (*firm: Perkins Coie)	6:2020cv00876- ADA	WDTX, Waco	2020 - 2022	P,TS,C
(Patents related to synchronous rectifier control)				
AGIS* v Uber (*firm: Fabricant)	2:21-cv-00026- JRG-RSP)	EDTX, Marshall	2021	P
(Patents related to interactive remote communications)				
AGIS* v WhatsApp (*firm: Fabricant)	2:21-cv-00029- JRG-RSP)	EDTX, Marshall	2021	P
(Patents related to interactive remote communications)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
One E-Way* v Apple (*firm: Knobbe Martin)	2:20-cv-06339- JSK-PD	CDCA	2021 -	P,t
(Patent related to Bluetooth Headphones)				
BMW v Omega Patents* (*firm: Allen Dyer)	IPR2021-00181	PTAB	2021 -	P,t
(Patent related to remote start)				
Pilot* v The NOCO Co (*firm: Bradford / Sheridan)	2:20-cv-01452- SRB	AZ	2021 -	P,t
(Patents related to auto chargers)				
Express Mobile* v Atlassian (*firm: Mololamken)	6:20-cv-00805- ADA	WDTX, Austin	2021 -	P
(Patents related to browser-based web site generation)				
AGIS* v Lyft (*firm: Fabricant)	2:21-cv-00024- JRG-RSP	EDTX, Marshall NDCA	2021 - 2022	P
(Patents related to interactive remote communications)				
AGIS* v T-Mobile (*firm: Fabricant)	2:21-cv-00072- JRG-RSP	EDTX, Marshall	2021	P
(Patents related to interactive remote communications)				
Altria* v RJR (*firm: Weil Gotshal)	1:20-cv-00472	MDNC	2021 - 2022	P,t,TH
(Patents related to e-cig)				
Altria* v RJR (*firm: Weil Gotshal)	IPR2021-00650 IPR2021-00652 IPR2021-00725 IPR2021-00744 IPR2021-00745 IPR2021-00746 IPR2021-00747 IPR2021-00793	PTAB	2021 - 2022	P,t,TH
(Patents related to e-cig control)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
One E-Way* v Apple (*firm: Knobbe Martin)	IPR2021-00283 IPR2021-00286	PTAB	2021 - 2022	P,t
(Patent related to Bluetooth Headphones)				
Kiwi Connection* v Anker (*firm: Bradford)	8519300821	Amazon Arbitration	2021	P,t
(Patent related to bidirectional connector)				
Kiwi Connection* v JBL (*firm: Bradford)	8674855301	Amazon Arbitration	2021	P,t
(Patent related to bidirectional connector)				
Platform Science v Omnitracs* (*firm: Kirkland & Ellis)	IPR2020-0187 IPR2020-1517 IPR2020-1518	PTAB	2021 – 2022	P,t
(Patent related to critical event reporting)				
Netlist v Samsung* (*firm: Bird Marella)	8:20-cv-993-MCS	CDCA, Southern	2021	C,t
(Contract dispute)				
Monterey Research* v (*firm: Desmarais)	IPR 2021-00119 IPR 2021-00120 IPR 2021-00172	PTAB	2021 - 2022	P,t
(Patents related to semiconductor processing)				
Apple / Bose v Koss* (*firm: K L Gates)	IPR2021-00255 IPR2021-00297 IPR2021-00305 IPR2021-00381 IPR2021-00592	PTAB	2021 - 2022	P,t
(Patents related to Wireless Headphones)				
Vocalife* v Amazon2 (*firm: Fabricant)	2 :20-cv-00401- JRG-RSP	EDTX, Marshall	2021 - 2023	P,t
(Patent related to microphone array)				
Vocalife* v Google (*firm: Fabricant)	2 :21-cv-00124- JRG-RSP	EDTX, Marshall	2021 - 2023	P,t
(Patent related to microphone array)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Luxshare* v Amphenol (*firm: K L Gates)	IPR2022-00132	PTAB	2021 - 2022	P,t
(Patent related to high performance connector)				
Vervain v Micron* (*firm: Orrick)	6:20-cv-487- ADA	WDTX, Waco	2021 - 2023	P,t
(Patents related to MLC & SLC endurance)				
Express Mobile* v Dropbox (*firm: Mololamken)	3:21-cv-01145	NDCA	2021 -	P
(Patents related to browser-based web site generation)				
Lexmark v Universal Imaging* (*firm: Allen Dyer)	8:18-cv-1047-T- 17AEP	MDFL, Tampa	2021 -	P
(Patents related to printer cartridge authentication)				
Pilot* v The NOCO Co (*firm: Bradford / Sheridan)	IPR2021-00777 IPR2021-01232 IPR2023-00167 IPR2023-00810	PTAB	2021 -	P,t
(Patents related to auto chargers)				
Delta T* v MacroAir (*firm: Latham/VedderPrice)	5:20-cv-00728- GW-GJS	CDCA, LA	2022 - 2023	P
(Patents related to fan sensors and control)				
MPS* v Dong & Sheng (*firm: Perkins Coie)	4 :20-cv-6752- JSW	NCCA, Oakland	2022 - 2023	P, TS
(Patents related to synchronous rectifier control)				
Vocalife* v Sonos (*firm: Fabricant)	2 :21-cv-00129- JRG	EDTX, Marshall	2022	P,t
(Patent related to microphone array)				
Vocalife* v Bose (*firm: Fabricant)	2 :21-cv-00128- JRG	EDTX, Marshall	2022	P,t
(Patent related to microphone array)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Enovsys* v T-Mobile (*firm: Eichmann)	2:21-cv-00368-JRG	EDTX, Marshall	2022	P,t
(Patents related to precise location determination and secure disclosure)				
Enovsys* v Verizon (*firm: Eichmann)	2:21-cv-00315-JRG-RSP	EDTX, Marshall	2022	P,t
(Patents related to precise location determination and secure disclosure)				
Lyft v AGIS* (*firm: Fabricant)	5 :21-cv-04653-BLF	NDCA, San Jose	2022 - 2023	P
(Patents related to interactive remote communications)				
Vocalife* v Amazon (*firm: Fabricant)	IPR2021-01331	PTAB	2022	P,t
(Patent related to microphone array)				
MPS* v Meraki (*firm: Perkins Coie)	4:22-cv-01986 JSW	NDCA, Oakland	2022 - 2023	P,TS,C
(Patents related to synchronous rectifier control)				
Signode v Polychem* (*firm: Latham)	1 :22-cv-00519-UNA	DE	2022 -	P
(Patents related to a strapping apparatus)				
Pilot* v Hulkman (*firm: BRADFORD)	10427111251	Amazon Arbitration	2022	P,t
(Patent related to jump starters)				
Netlist v Samsung* (*firm: Fish & Richardson)	2:21-cv-463	EDTX, Marshall	2022 -	P
(Patents related to DIMM DDR3 signal timing, power management, and rank multiplication)				
Orange* v Autel (*firm: Sughrue Mion)	2 :21-cv-240	EDTX, Marshall	2022 - 2023	P
(Patent related to Tire Pressure Monitoring Systems)				
Bell Power v MPS* (*firm: Perkins Coie)	6 :21-cv-00655-ADA	WDTX, Waco	2022 -	P
(Patents related to power converter/regulator control)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
VPR v Jupiter* (*firm: Noroozi PC)	2:20-CV-02185-DJH	AZ	2023 -	P
(Patent related to electronic vape device with air flow sensor)				
Multimodal* v Guangdong (*firm: Fabricant)	2:21-cv-00436-JRG-RSP	EDTX, Marshall	2023 -	P
(Patents related to communication over a network, call completion)				
Multimodal v ZTE (*firm: Fabricant)	2:21-cv-00437-JRG-RSP	EDTX, Marshall	2023 -	P
(Patents related to communication over a network, call completion)				
Entropic* v Charter Communications et al. (*firm: K L Gates)	2 :22-cv-00125-JRG	EDTX, Marshall	2022 -	P
(Patents related to modems and broadband content distribution)				
Oasis Tooling* v Global Foundries U.S. (*firm: Kramer Levin)	22-00312-CJB	DE	2022 -	P
(Patents related to chip design process workflow)				
Oasis Tooling* v Siemens Industry Software (*firm: Kramer Levin)	22-00151-CJB	DE	2022 -	P
(Patents related to chip design process workflow)				
AGIS* ITC (*firm: Fabricant)	337-TA-1347	ITC	2023	P
(Patents related to Location-Sharing Systems)				
Monterey* v Nanya (*firm: Desmarais)	19-2090-NIQA-LAS	DE	2023 -	P
(Patents directed to semiconductor technology)				
Geotab v Omega* (*firm: Allen Dyer)	IPR2023-00504	PTAB	2023	P
(Patent related to vehicle tracking)				

Cases (continued)

CASE ¹	CASE NUMBER	LOCATION	YEAR	TYPE ²
Adv Lighting Concepts* v mate (*firm: Munsch)	IPR2023-01264	PTAB	2023 -	P
(Patent related to LED drivers)				
SitePro* v Waterbridge (*firm: Perkins Coie)	6:23-cv-00115- ADA-DTG	WDTX, Waco	2023 -	P,TS,C
(Patents and Trade Secrets related to remote delivery control)				

Cases (continued)

I have worked with other clients in various areas of my expertise, including “system, product, and process investigation,” “patent valuation,” “product liability and insurance claim investigation,” “quality systems consulting and engineering,” and “IP licensing.” This work generally relates to patents and may involve analysis of products either defensively or offensively. In no case does any of the work involve design of circuits, processes, packaging, software, or systems.

Non-confidentially, I have represented a radiation effects testing company, ICS Radiation Technology. Further, I have worked with investment companies, such as Hatcreek Partners, reviewing potential investment opportunities, and have participated as a technical advisor to nLine Corporation, a company that developed a product for semiconductor wafer inspection using holographic High Aspect Ratio Inspection (HARI) technology. Work associated with each of these matters occurred more than 10 years ago.

These and other non-confidentially related companies are:

The Aspire International Foundation (2019-present)

- Partner;
- Rediscovering and redefining identity and purpose through experiential equine learning programs;
- Not assigned any patents and not engaged in any IP related activities.

Casualty Consulting Group of America (2013-present)

- Partner;
- Assessment of structural damage caused by extreme weather events;
- Not assigned any patents and not engaged in any IP related activities.

VCSY (2013-2020)

- Advisory board Member;
- Technology related to encrypted communication.

Bethel Cannon Group / Bethel Cannon Holdings (2011-present)

- Partner;
- Counseling / Event / Retreat Center / Hunting Lodge;
- Not assigned any patents and not engaged in any IP related activities.

Spirit Song Youth Equestrian Academy / Spirit Song Holdings (2011-present)

- CEO;
- Equine Assisted Learning Program for abused / traumatized youth, families, corporations, and churches;
- Not assigned any patents and not engaged in any IP related activities.

Cases (continued)E³A (2016-present)

- President;
- Certification training of Equine Practitioners;
- Not assigned any patents and not engaged in any IP related activities.

Novo Tellus Capital Partners (2016-2017)

- Novo Tellus is an investment firm. I served as a technical advisor in reviewing the technology and contracts of investment opportunities.

UTAC (2008-2016)

- Technical consultant in matters related to packaging test and assembly, patents, and contracts.

ICS Radiation Technology (1988-2009)

- Consulting work related to nuclear radiation effects testing.

Creative Management Consultants (CMC) (2003-2004)

- Consulting work related to Internet services, such as access service to clients and web site hosting services; providing business co-op services and internet product purchasing sites.

Hatcreek Partners (1999-2003)

- Hatcreek Partners is an investment firm. I served as a technical advisor in reviewing the technology of investment opportunities.

nLine Corporation (1999-2003)

- Member of Technical Advisory Board;
- nLine Corp.'s business related to semiconductor holographic High Aspect Ratio Inspection (HARI) technology.

Texas Instruments (pre 2002)

- Patent evaluation and application consulting.

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