

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

VERIZON CONNECT, INC.
Petitioner,

v.

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

Case No. IPR2023-01162

**SUPPLEMENTAL DECLARATION OF JOSEPH C.
McALEXANDER ^{III} IN SUPPORT OF PATENT OWNER'S RESPONSE TO
PETITION FOR *INTER PARTES* REVIEW**

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

I. INTRODUCTION

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

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

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

II. QUALIFICATIONS

4. I submitted a Declaration in this proceeding signed on December 8, 2023, and identified as Exhibit 2002.

5. I provided my qualifications in Exhibit 2002, which have not substantively changed since that time. This declaration supplements my prior declaration at Exhibit 2002.

III. MATERIALS CONSIDERED

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

1001	U.S. Patent No. 8,032,278 to Flick (the '278 Patent)
1002	Declaration of Dr. Azim Eskandarian
1003	U.S. Patent No. 6,756,885 to Flick
1004	U.S. Patent No. 6,606,561 to Flick
1005	U.S. Patent Application Publication No. 2006/0161315 to Lewis
1006	U.S. Patent Application Publication No. 2003/0182003 to Underdahl
1007	U.S. Patent No. 6,011,460 to Flick
1008	U.S. Patent No. 6,812,829 to Flick
1009	File History of Application No. 11/773,272, which issued as U.S. Patent No. 8,032,278 to Flick
1010	03-25-2021 Order Granting the Reexamination (Appl. No. 90/014,675)

1011	06-21-2021 Examiner's Non-Final Office Action (Appl. No. 90/014,675)
1012	08-21-2021 Declaration of Joseph C. McAlexander, III
1013	08-23-2021 Response to Non-Final Office Action (Appl. No. 90/014,675)
1014	04-01-2022 Patent Owner's Appeal Brief (Appl. No. 90/014,675)
1015	12-01-2022 Decision on Appeal (Appl. No. 90/014,675)
1016	Application No. 11/076,259 to Flick
1017	Application No. 10/383,496 to Flick
1018	Application No. 09/859,972 to Flick
1019	Application No. 60/264,811 to Flick
1020	Application No. 60/258,005 to Flick
1021	Application No. 60/251,552 to Flick
1022	Application No. 60/252,125 to Flick
1023	Application No. 60/236,890 to Flick
1024	Application No. 60/246,463 to Flick
1025	Application No. 60/222,777 to Flick
1026	Application No. 60/205,178 to Flick
1027	10-03-2014 Plaintiff's Opposition to CalAmp's Motion for Claim Construction, 6:13-cv-1950-ORL-40-DAB
1028	02-20-2015 Order on Claim Construction, 6:13-cv-1950-ORL-40-DAB
1029	<i>In Ex parte A. James Smith, Jr.</i> , 2010 WL 3269939 (BPAI August 17, 2010).
2001	Declaration of Kenneth Flick
2002	Declaration of Mr. Joseph C. McAlexander, III
2003	Curriculum Vitae of Mr. Joseph C. McAlexander, III

2004	Decision Granting Institution of <i>Inter Partes</i> Review; Paper 11, IPR2023-00504 (July 25, 2023)
2005	<i>Ex parte Omega Patents, LLC</i> , No. 2018-008119 (Nov. 3, 2018)
2006	D.I. 34, Claim Construction Order, <i>Omega Patents, LLC v. Firstech, LLC</i> , No. 2:20-cv-03144 (W.D. Wash. Nov. 22, 2021) (“ <i>Firstech-CC</i> ”)
2007	<i>Omega Patents, LLC v. CalAmp Corp.</i> , 920 F.3d 1337 (Fed. Cir. 2019) (<i>CalAmp-I</i>)
2008	<i>Omega Patents, LLC v. CalAmp Corp.</i> , 13 F.4th 1361 (Fed. Cir. 2021) (<i>CalAmp-II</i>)
2009	Ex Parte Reexamination Certificate for U.S. Patent No. 8,032,278 issued May 17, 2023
2010	D.I. 297-1, Deposition of Galin Chen, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13- cv-1950 (M.D. Fla. September 24, 2019)
2011	D.I. 297-4, Deposition of Peter Hergesheimer, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13- cv-1950 (M.D. Fla. September 24, 2019)
2012	D.I. 297-5, Deposition of Stephen Hall, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13- cv-1950 (M.D. Fla. September 24, 2019)
2013	U.S. Patent No. 6,636,790 to Lightner
2014	U.S. Patent No. 6,611,740 to Lowrey
2015	U.S. Patent No. 6,957,133 to Hunt
2016	U.S. 6,732,031 to Lightner
2017	U.S. 7,174,243 to Lightner
2018	Prosecution File History of U.S. Patent Application Publication No. 2006/0161315 to Lewis
2019	Declaration of Mr. Christian Tregillis
2020	D.I. 145-43, PL47, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2021	D.I. 145-19, PL1, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2022	D.I. 145-20, PL2, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)

2023	D.I. 145-34, PL18, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2024	D.I. 145-36, PL20, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2025	D.I. 145-59, PL73, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2026	Master And Cross-License Agreement, dated May 12, 2007, between Omega R&D, Omega Patents and Directed Electronics, Inc.
2027	D.I. 145-38, PL22, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2028	D.I. 145-80, PL99, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2029	D.I. 145-54, PL68, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2030	D.I. 145-53, PL67, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2031	D.I. 145-67, PL81, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2032	D.I. 144, Jury Verdict, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Sep. 30, 2019)
2033	D.I. 310, Jury Verdict, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb. 24, 2016)
2034	Omega Royalty Report (April 2023)
2035	Prosecution History of Ser. No. 90/013,587 (RX1)
2036	Prosecution History of Ser. No. 90/013,851 (RX2)
2037	Prosecution History of Ser. No. 90/014,309 (RX3)
2038	Prosecution History of Ser. No. 90/014,419 (RX4)
2039	Prosecution History of Ser. No. 90/014,675 (RX5)
2040	D.I. 145-28, PL11, <i>Omega Patents, LLC v. CalAmp Corp.</i> , No. 6:13-cv-1950 (M.D. Fla. Feb 25, 2016)
2041	RESERVED

2042	U.S. Patent No. 7,149,623 to Flick
2043	U.S. Patent No. 6,028,537 to Suman et al.
Paper 12	Institution Decision

7. 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.

8. 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.

9. 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. A POSA AT THE TIME OF FILING THE ‘278 PATENT TREATED MULTI—VEHICLE COMPATIBILITY AS SEPARATE AND DISTINCT FROM TRACKER TECHNOLOGY

10. I understand Mr. Flick has testified that he recognized, during the development of his tracker technology, that he could combine multi-vehicle compatibility with his tracker technology, resulting in the ‘278 Patent. EX2001 at ¶11-13.

11. Previous to Mr. Flick’s recognition of this novel combination of multi-vehicle compatibility with tracker technology, Mr. Flick and POSAs treated multi-vehicle compatibility and tracker technology as separate and distinct.

12. At the time of invention of the ‘278 Patent, GPS in vehicles was relatively new. Similarly, multi-vehicle compatibility in vehicle data bus communications was also relatively new. Data bus communication products were designed for specific vehicle models because original equipment manufacturers (OEMs) often used model- or platform-specific data bus components that differed even within the same OEM for different vehicle models. Multi-vehicle compatibility was a concern, particularly for aftermarket vehicle products, because there was a need to address multiple vehicles, platforms and OEMs. As noted by Mr. Flick (‘278 Patent, 2:38-41), the addition of a download interface further enhanced multi-vehicle compatibility, giving aftermarket providers the ability to provide compatibility for data bus communication products that was not available at the time of the original

manufacture or programming. One significant benefit of Mr. Flick's multi-vehicle compatibility with a downloading interface was the ability to avoid having multiple SKUs (stock keeping units), thereby reducing the number of units required by aftermarket installers to maintain in stock. This reduction in stock requirement translated directly to a lower cost. This advantage related to stocking was also recognized by CalAmp engineers in the past litigation as a motivation for multi-vehicle compatibility. EX2011, 46:25-47:19.

13. POSAs working with GPS in vehicles were concerned with basic operability and compatibility of location tracking, wireless communications of data, and relative speed, particularly for fleet operators. Multi-vehicle compatibility via the databus coupled with a download interface was not a consideration for POSAs working in vehicular GPS or tracking systems (*e.g.*, fleet operators) given the relative age and maturity of the GPS technology as well as differing aims of the GPS technology when compared to multi-vehicle compatibility. I am unaware of a commercial product that merged these two different technologies, as claimed in the '278 Patent, prior to the development of CalAmp's infringing products discussed in more detail below—development which (according to CalAmp's design documents) began in late 2010. EX2023, p. 1.

V. PETITIONER’S MOTIVATION TO COMBINE FLICK885 AND FLICK561 IS IMPROPER

14. I understand that the PTAB has taken the position that any known problem in the art can serve as a motivation to combine *Flick885* and *Flick561*, and that a POSA would have had reason to combine *Flick885* with *Flick561* to achieve the claimed invention with a reasonable expectation of success. Decision, 40. I understand that the PTAB further reasons that the use of GPS was well known before the priority date of the ‘278 Patent (e.g., as in *Flick561*), and that the GPS module “like the control system disclosed in Flick ‘885, can communicate information about a vehicle to a receiver.” Decision 40-41.

15. I disagree with the position that, simply because two references with different components and different objectives could potentially have the ability to communicate, their combination is (in hindsight) compelled. Taking this unbounded approach would suggest that, at the time of filing of the ‘278 Patent, any or all vehicle-based references should be combinable merely because vehicle devices therein could potentially communicate. This was not my experience at the time, nor am I aware of such rationale serving as a basis for a POSA’s reason or motivation to combine. Indeed, at the time of the ‘278 Patent filing, vehicle manufacturers routinely used different, proprietary protocols and data bus codes, in significant part to protect their products and to maintain a competitive edge over aftermarket

suppliers. This continues today, preventing compatibility across brands and preventing the aftermarket from easily producing replacement components.

16. None of these references previously cited against the ‘278 Patent discloses or suggests combining GPS tracking with multi-vehicle compatibility in a vehicle security system.

17. In fact, Mr. Suman, the inventor of one of the prior art references at the time of the invention (EX2043)—a reference used as a basis for formulating a rejection in a different proceeding—provided evidence that multi-vehicle compatibility was not even a thought to a POSA as a consideration to GPS communication from a vehicle.

18. Mr. Suman, who described himself as a POSA working in the field at the time of the invention, did not recognize the benefits of combining GPS communication in vehicles (*i.e.*, vehicle tracking) and multi-vehicle compatibility (*i.e.*, data bus). EX2035, pp. 1570-1576.

19. Instead, Mr. Flick’s invention was the first to recognize the benefits of combining vehicle tracking with multi-vehicle compatibility. Flick, ¶12.

20. Mr. Suman’s Declaration and Mr. Flick’s Declaration, along with the initial issuance and repeated confirmation of patentability of the ‘278 Patent, is evidence that POSAs, at the time of the invention of the ‘278 Patent, treated GPS

vehicle tracking and data bus with multi-vehicle compatibility as distinct rather than interrelated technologies.

21. In my opinion, *detecting* local vehicle movement in and around the vehicle is not the same as *tracking* a vehicle's geographic movement. As such, in my opinion, the teaching of GPS tracking, as in *Flick561*, does not provide a motivation for looking to an MVCC (Multi-Vehicle Compatible Control), as in *Flick885*. *Id.* In other words, doing something with “movement” does not provide any leading, or motivation, toward a combination of *Flick885* and *Flick561*. *Flick885* and *Flick561* are separate in their teachings, and the only way to provide any such leading or motivation would be by using impermissible hindsight.

22. I disagree that a motivation is simply to make *Flick885* better and then expect a POSA, at the time of invention, to look to *Flick561* for a combination. A POSA, at the time of the invention of the '278 Patent, who started with *Flick885* and the desire to make it better, would not consider turning to *Flick561*, as GPS vehicle tracking was unrelated to multi-vehicle compatibility with a download interface. The only rationale for combining *Flick885* and *Flick561* is impermissible hindsight, using the '278 Patent as a guide.

VI. EVIDENCE OF SECONDARY CONSIDERATIONS

23. It is my understanding that evidence of secondary considerations must be considered when determining obviousness.

24. I was involved as an expert witness in the Omega Patents v. CalAmp Corp. litigation, and in that context, I became familiar with the CalAmp LMU-3000, 3030, 3050 at issue in the litigation and ultimately found to infringe claims 1-6, 8, 11, 12-14, 16, 18, 19 and 21 of the '278 Patent.

25. Based on the advertising, consumer requirements documentation, and the schematics, the LMU-3000, 3030, 3050 products embodied the claimed features of the '278 Patent and are coextensive with them.

26. For example, all independent claims of the '278 Patent recite "a multi-vehicle compatible tracking unit for a vehicle comprising a vehicle data bus extending throughout the vehicle," which was the stated functionality of the infringing CalAmp products in the initial development documents. *See* EX2023, p. 4 ("OBD-3000 Plug-on OBD-II product for a value added GPS tracking and cellular communication product.")

27. Notably, claim 12 of the '278 Patent is a claim that depends from claim 1, combining all elements of the vehicle tracking unit within a single housing. The standard vehicle OBDII connector provided both power and access to the vehicle's data bus. Thus, the CalAmp products were benefited by the merger of an OBDII

interface for multiple vehicles, a download interface, vehicle tracking (GPS), and wireless communication (cellular) technologies in a single housing, allowing simple installation of these two separate technologies, as noted by CalAmp in 2010 (several years after the '278 Patent was filed): "The OBD-3000 product is derived roughly from the LMU-2600 with an OBDII interface added and physical design to plug directly onto the OBDII connector." *See* EX2023, p. 4.

28. In reviewing the information available for the LMU-3000, 3030, 3050 products, certain product features were claimed and promoted by CalAmp. For example, I considered the "Advantage[s]" touted by CalAmp in its marketing literature for the LMU-3000, which included the following: (1) "superior GPS & cellular quality;" (2) "built-in cellular and GPS antenna for easy installation;" (3) "built-in OBD-II connector to read vehicle data bus;" (4) "built-in accelerometer for driver behavior capabilities and impact detection;" (5) "pre-impact data capture capabilities;" and (6) "power sleep mode." *See* EX2021.

29. Advantages (1)-(3) all relate directly to '278 Patent claimed features. In particular, all claims of the '278 Patent recite a tracking unit for a data bus and include a vehicle position determining device (GPS) and a wireless communications device (cellular).

30. The CalAmp LMU-3000 sales literature heavily touted providing "over-the-air" updates and upgrades. *See* EX2021. This references the claimed

download interface, and particular to over-the-air updates, the wireless interface. *Id.* The literature also referenced the claimed wired download interface via a serial connection. *Id.*

31. CalAmp's brochure also references "advantages" (4)-(6), which are not overtly claimed (though all involve the claimed controller), but these were insignificant given the goals for the technology. The sales literature referenced the inclusion of the accelerometer "for driver behavior capabilities and impact detection" as "advantage" (4). The inclusion of an accelerometer for use primarily for impact detection is not relevant to the aims of the infringing product, e.g. vehicle tracking and multi-vehicle data bus compatibility. Moreover, information related to driver behavior and impact like that provided by an accelerometer would also be accessible with the inclusion of GPS and access to parameters on the vehicle's data bus, as claimed in the '278 Patent. For example, information analogous to that from the accelerometer could also be accessed from the vehicle's data bus, including vehicle speed data, throttle position data, brake position data and the deployment of airbags. Notably, the accelerometer included in CalAmp's schematics is a generic component (ST Microelectronics LIS3DH¹) of nominal cost (currently retailing at \$1.26).² Accordingly, the "features" provided by the generic accelerometer were

¹ See EX2040, p. 4.

² <https://estore.st.com/en/products/mems-and-sensors/accelerometers/lis3dh.html>

incidental and redundant to the capabilities of the claimed product and therefore insignificant.

32. Similarly, the data capture and power/sleep capabilities described as “advantages” (5)-(6) were simply features that could be provided by the ST Microelectronics 32F103REY6 microprocessor³ that was included with the LMU-3000. GPS data and accelerometer data were saved in RAM memory of the microprocessor along with OBD II data, rendering this “advantage” simply a byproduct of using the off-the-shelf microprocessor and thus insignificant.

VII. CONCLUSION

33. 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.

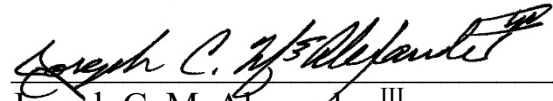
34. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful

³ See EX2040, p. 4.

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 14th day of May 2024.

Respectfully submitted,



Joseph C. McAlexander^{III}