

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TYLER DIVISION

MACROPOINT, LLC,

Plaintiff,

v.

RUIZ FOOD PRODUCTS, INC.,

Defendant.

Civil Action No.: 6:16-cv-01133-RWS-KNM

District Judge Robert W. Schroeder, III

Magistrate Judge K. Nicole Mitchell

REBUTTAL EXPERT REPORT OF IVAN ZATKOVICH

February 15, 2018

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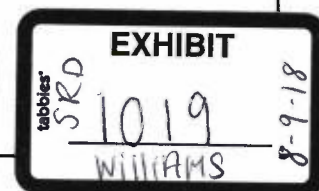


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1. I, Ivan Zatkovich, have been retained by MacroPoint, LLC. (“MacroPoint” or “Plaintiff”) through the law firm of Thompson Hine LLP as an expert witness in the matter of MacroPoint, LLC v. Ruiz Food Products, Inc., Civil Action No. 6:16-cv-01133-RWS-KNM. I have previously submitted an expert report on behalf of MacroPoint regarding infringement of the U.S. Patent No. 8,275,358 (the “358 Patent”) and U.S. Patent No. 9,429,659 (the “659 Patent”) (together, the “Patents-in-Suit”) by Defendant

Ruiz Food Products, Inc. (“Ruiz Foods” or “Defendant”).¹ I submit this report in rebuttal of the Expert Report of Dr. Stephen B. Heppe regarding validity of the Patents-in-Suit.

2. I may supplement my report in light of any additional discovery, opinions by Defendant’s experts, and/or trial testimony. I also may provide rebuttal opinions and testimony in response to Defendant’s experts, and rebuttal testimony in response to any of Defendant’s witnesses. Further, I may use animations, demonstratives, enlargements of actual Exhibits, and other information in order to illustrate my opinions.

1 MATERIALS CONSIDERED FOR THIS REPORT

3. A list of materials I considered in preparing this report are attached as Exhibit A. I have consulted with Mr. R. Christopher Anderson, who I understand to have been engaged to provide an expert opinion in connection with damages in this case.

2 SUMMARY OF OPINIONS

4. It is my understanding that claims 1, 4, 19, and 22 of the ‘358 Patent and claims 2 – 25 and 27 – 30 of the ‘659 Patent (altogether, the “Asserted Claims”) are at issue in this action.

5. Based on my review and analysis of the materials listed in Exhibit A including Dr. Heppe’s report and the prior art references identified therein, as well as my

¹ Expert Report of Ivan Zatkovich Regarding Infringement of U.S. Patent Nos. 8,275,358 and 9,429,659, Jan. 25, 2018.

experience and education, it is my opinion that Defendant and Dr. Heppe have failed to meet their burden to prove by clear and convincing evidence that the Asserted Claims are anticipated by any of the prior art references they have identified.

6. It is my opinion that Defendant and Dr. Heppe have failed to meet their burden to prove by clear and convincing evidence that the Asserted Claims are obvious in view of the prior art references they have identified, individually or in combination.

7. It is my opinion that secondary considerations of non-obviousness, including commercial success, long-felt but unresolved need, failure of others, skepticism by experts, praise by others, teaching away, licensing of the invention, recognition of a problem, and copying by others further support the non-obviousness of the Asserted Claims.

8. Further, Dr. Heppe states without support in a footnote that it is his opinion “that the claims in the ‘358 and ‘659 patents do not appear substantially different from many of the claims” of patents found to be directed to unpatentable subject matter in prior litigation.² I disagree. Dr. Heppe has done nothing to establish that the Asserted Claims of the ‘358 and ‘659 Patents are in any way similar to any claim of patents at issue in the prior litigation. In fact, the claims plainly differ on their face, for example, Claim 1 of the ‘943 Patent, which was identified as representative of the claims in the

² Expert Report of D. Stephen B. Heppe 21, n. 5, Jan. 25, 2018.

prior litigation³ lacks the limitation “request location information of the mobile device comprising the GPS receiver from a location information provider.” [Redacted]

[Redacted]

[Redacted]

[Redacted]

[Redacted] Therefore, it is my opinion that Defendant and Dr. Heppe have not met their burden to prove by clear and convincing evidence that the ‘358 and ‘659 patents are not substantially different from any claim at issue in prior litigation.

3 QUALIFICATIONS

9. I have extensive experience in the field of art relevant to the ‘358 and ‘659 Patents. I expect to testify concerning my qualifications, background and experience relevant to the issues in this investigation. A copy of my *Curriculum Vitae* and Testimony I have provided in the last 5 years is attached as Exhibit B.

10. I am a Principal Consultant of eComp Consultants, a position I have held for over 15 years. I have over 30 years of experience in a diverse set of technologies

³ *MacroPoint, LLC v. FourKites, Inc.*, Mem. of Op. and Order 2, No. 1:15-cv-1002 (N.D. Oh. Nov. 6, 2015) (available in File Wrapper of ‘659 Patent at Protest Under 37 C.F.R. § 1.291 Reference 1 (Jan. 27, 2016)).

including GIS (Geographic Information Systems), GPS, Vehicle Tracking, Electronic Logging Devices, Wireless and Network Communications, and Mobile Applications.

11. eComp Consultants provides professional consulting services relating to computer and technical matters in a wide range of industries including utilities, telecommunications, eCommerce, financial transactions, digital media, and cloud-based services. Such consulting services include working with clients on specific information technology projects, process improvement, project management and other technology issues, as well as providing professional expert witness services.

12. I received a Bachelor's degree in Computer Science, with a minor in Electrical Engineering Digital Circuit Design, from the University of Pittsburgh in 1980. I completed a Master's thesis in Computer Networks from the University of Pittsburgh, the results of which were published in Byte Magazine.

13. In my professional career, I have worked for companies such as Digital Equipment Corp. and GTE/Verizon Telecomm on projects designing, developing and integrating software and hardware for computer networks, wireless, cellular, and telecommunications systems. For example, relevant projects from my career include:

14. Utility Partners – Developed the MobileUP application, a geographic work order and vehicle Tracking System dispatching Field Service personnel and managing Electronic Onboard Recording.

- **Utility Partners** – Developed the MobileUP application, a geographic work order and vehicle tracking system dispatching Field Service personnel and managing Electronic Onboard Recording.

- **GTE/Verizon** – Designed and developed Automated Geolocation, Geographic Mapping and Facilities Management system based on Customer & Equipment location. Developed provisioning systems for mobile phones and cellular networks.
- **GIS Dispatch Mapping (AWAS)** – Implemented Geographic based mobile field services for locating subscribers and displaying routing information on a geographic map.
- **eComp Consultants** – Location based mobile applications including:
 - **Mobile Payments** – developed patents for mobile phone payment and advertising. Technology includes NFC (Near Field Communication) and SMS based transaction authorization. (Android, iPhone)
 - **Cell Mesh Networks** – developed Mesh Network for hyper-local marketing and mobile applications using WiFi direct connect technology (Android, iPhone)

15. I have been frequently called upon to provide my expert opinion on matters concerning patent disputes for over 15 years. I have given testimony as an expert at trial and by deposition, including in areas that relate to the technology described in the patents-in-suit. For example, I was qualified as an expert in geolocation and mobile telecommunications in the following cases:

- **GT Nexus v Intra, Inc.**, 4:11-cv-02145-SBA (N.D. Cal.) – Patent Litigation - Testifying expert providing expertise in systems for Location and Tracking of Cargo and Container shipments using central communication and normalization of tracking and status information.

- ***Progressive v. State Farm***, CBM2012-00003, CBM2013-00004 (PTAB) – Covered Business Method – Expert providing expertise in Electronic OnBoard Recording devices to allow vehicles to record and transmit vehicle location, status, and other characteristics. Provided expert report including rebuttal of a 101 Patentable subject matter challenge.
- ***GeoTag, Inc v. Frontier Communications Corp.***, 2:10-cv-00265 (E.D. Tex.) – Patent Litigation – Testifying expert for 12 defendants for web and mobile based Geolocation applications to identify proximity to and location of Merchants.
- ***Black Hills Media, LLC v. Samsung***, Inv. No. 337-TA-882 (ITC) – ITC Patent Investigation – Analysis of Mobile based location sharing and event driven mobile applications such as AT&T FamilyMap, Google+ Location, and Latitude. Providing infringement assertions against Samsung, LG, and Toshiba (smart phones & mobile tablets).

16. By virtue of the above experience, I have gained a detailed understanding of the technology that is at issue in this case. In addition, my experience with commercial and technical aspects of geolocation and mobile telecommunications is directly relevant to the subject matter of the patents-in-suit.

17. Therefore, I consider myself a person of at least ordinary skill in the art of the '358 and '659 Patents in the 2012 time period, the qualifications of which I have stated below.

4 APPLICABLE LEGAL STANDARDS

18. In expressing opinions on legal issues, I have applied the following legal standards conveyed to me by MacroPoint's counsel. I have additionally reviewed and understand the legal standards set forth in Dr. Heppe's expert report.

4.1 Presumption of validity

19. I understand that the claims in an issued patent are presumed to be valid. I understand that each claim of a patent is presumed valid independently of the validity of other claims.

20. I understand that the burden of establishing invalidity of a patent or any claim thereof rests on the party asserting invalidity. I understand that to overcome the presumption of a claim's validity, the party asserting invalidity must prove invalidity by clear and convincing evidence. I understand that the clear and convincing evidence standard described as a high or very high degree of confidence.

21. I understand that a party seeking to establish invalidity of any claim of a patent with a prior art reference that was considered by the Patent Office Examiner during prosecution of that patent bears the additional burden of overcoming the deference that is due to a qualified government agency presumed to have properly done its job. I understand this deference extends to Patent Examiners, who are assumed to have some expertise in interpreting the references and to be familiar from their work with the level of skill in the art, and whose duty it is to issue only valid patents.

22. I understand that the party asserting invalidity bears the burden of proving that allegedly invalidating art is prior in time to the inventions claimed in the Patents-in-Suit.

23. I understand that because establishing invalidity requires clear and convincing evidence, mere conclusory statements are insufficient to support an invalidity conclusion. I similarly understand that unsupported assertions or opinions lacking a reasonable technical foundation are also insufficient to support an invalidity conclusion.

4.2 Anticipation – 35 U.S.C. § 102

24. I understand that a reference may only anticipate claims of an issued patent, under 35 U.S.C. § 102, if the reference is “prior art” to the patent.

25. I understand that several categories of prior art are defined by subsections of § 102 and that these categories changed somewhat with passage of the America Invents Act (“AIA”). I understand that the effective date, for anticipation and obviousness purposes, of the AIA is March 16, 2013. Thus, any patent filed before that date is evaluated under § 102 as it existed prior to the AIA.

26. I understand that under pre-AIA § 102, a document is prior art to a patent if it was publicly disclosed (*i.e.*, published) prior to the priority date of the patent. By contrast, I also understand that documents that were not publicly disclosed, including documents that were distributed under confidentiality restrictions or under a non-disclosure agreement, are not prior art for purposes of pre-AIA § 102.

27. I understand that prior art described in the specification is considered by the examiner.

28. I understand that mere listing of a reference in an information disclosure statement is not taken as an admission that the reference is prior art against the claims.

29. I understand that for anticipation to exist that each and every limitation of the claim at issue must be identically found in the reference disclosure, as viewed by a person of ordinary skill in the field of invention at the time the invention was made.

30. Anticipation requires that each element of the claim at issue be found, either expressly or inherently, in a single prior art reference, or that the claimed invention was previously known or embodied in a single prior art device or practice. I understand that a limitation is only inherently disclosed by a reference if that limitation is necessarily present in the reference, and it must be so recognized by persons of ordinary skill in the art. I understand inherency may not be established by probabilities, possibilities, suggestions, or inferences that a limitation may be present in the disclosed features of a reference, and that the mere fact that a certain thing may result from a given set of circumstances is not sufficient to show inherency.

31. As I understand it, an example of inherency is that disclosure of water molecules necessarily discloses the presence of hydrogen and oxygen atoms because science dictates that water comprises hydrogen and oxygen. By contrast, disclosure of a motorcycle does not inherently disclose a vehicle with two wheels because some motorcycles have three wheels notwithstanding that we may conventionally think that motorcycles have two wheels. I understand inherency to require "certainty" not "possibility." It is my understanding that a design choice, in the presence of design alternatives, does not establish inherency.

32. Invalidity by anticipation requires that the four corners of a single prior art reference describe every element of the claimed invention, either expressly or inherently, such that a person of ordinary skill in the art could practice the invention without undue experimentation.

4.3 Non-obviousness – 35 U.S.C. § 103

33. I understand that a patent claim is obvious only if the differences between the claim and the prior art are such that the subject matter of the claim as a whole would have been obvious to one of ordinary skill in the art at the time of the invention.

34. I understand that for a patented invention to be invalid as obvious, the accused infringer must identify prior art references that alone or in combination with other references (or the knowledge of a person of ordinary skill in the art) would have rendered the claimed invention obvious to one of ordinary skill in the art at the time of the invention.

35. I understand for a claim to be found obvious every claim limitation must be found present in the combination of the prior art references or POSITA (a Person of Ordinary Skill in the Art) knowledge before the obviousness analysis proceeds.

36. I understand that the factors that should be assessed in the obvious analysis include at least: (1) the scope and content of the prior art; (2) the differences between the prior art and the claim at issue; (3) the level of ordinary skill in the art; and (4) whatever objective evidence may be present as indicia of nonobviousness.

37. I understand that inherent aspects of the prior art not readily known to a person of ordinary skill do not support a finding of obviousness because obviousness cannot be predicated on what is unknown.

38. I understand that an obviousness determination is analyzed from the perspective of one of ordinary skill in the art at the time of the invention. I understand that it is impermissible to use the patent as a template (and reason) for combining prior art references to achieve the claimed invention because that would reflect hindsight bias. This improper practice often takes the form of working backwards from the claims to find references that disclose the claims' limitations and then declaring, without analysis, that the combination would have been obvious because all limitations were known. I understand that the person of ordinary skill in the art at the time the invention was made would need to be motivated to combine references to create the combination of features claimed by the patent independent of the teachings of the patent.

39. It is my understanding that obviousness requires also that a reason must be shown that would have prompted a person of ordinary skill in the art to combine known elements in the fashion claimed by the patents at issue. This reason is often described as a "motivation to combine." A motivation to combine is often absent for a combination when a POSITA would have known that disadvantages to making the combination would have existed. A motivation to combine is also often absent when a POSITA would have been dissuaded from making a combination. This dissuasion can take many forms including statements in printed publications and is often described as a "teaching away."

40. I also understand that if a combination of two or more prior art references is used to render a claimed invention obvious, there must be a reasonable expectation of success in making or practicing the claimed invention based on such combination. I understand that in order for a reference to be proper for use in an obviousness rejection under 35 U.S.C. 103, the reference must be analogous art to the claimed invention.

41. In addition, I understand the obviousness analysis cannot discount at the time of invention, the inventor's insights, and willingness to confront and overcome obstacles, and even serendipity where the pathway to the invention seems to follow the logical steps to produce these patented properties.

4.4 Objective Indicia of Non-obviousness

42. It is my understanding that objective indicia of non-obviousness may be the most pertinent, probative, and revealing evidence available to the decision maker in reaching a conclusion about obviousness. Under certain circumstances, the objective indicia evidence may be particularly strong and entitled to such weight that it may be decisive.

43. I understand that examples of objective indicia that must be considered as part of an obviousness inquiry include:

- (1) commercial success;
- (2) long-felt but unresolved needs;
- (3) failure of others;
- (4) skepticism by experts;
- (5) praise by others;

- (6) teaching away;
- (7) licensing of the invention;
- (8) recognition of a problem (without its resolution); and
- (9) copying of the invention.

44. To the extent any issues of law are raised by Dr. Heppe or Defendant which I have not addressed in this report, I reserve the right to supplement my opinions accordingly.

5 ONE OF ORDINARY SKILL IN THE ART

45. I have been asked to offer my opinion regarding the level of ordinary skill in the art with respect to the '358 and '659 Patents.

46. To assess the level of ordinary skill in the art, I understand one considers the type of problems encountered in the art, the prior solutions to those problems found in prior art references, the rapidity with which innovations are made, the sophistication of the technology, and the level of education of active workers in the field.

47. To assess the level of ordinary skill in the art of the '358 and '659 Patents, I have considered the type of problems encountered in the art, the prior solutions to those problems found in prior art references, the rapidity with which innovations are made, the sophistication of the technology, the level of education of active workers in the field, and my own experience working with those of skill in the art at the time of inventions. In my opinion, a person of ordinary skill in the art of the '358 and '659 Patents in the 2012 time period would have at least a Bachelor's degree in computer science, electrical engineering, or a related discipline and 2 years of experience in the

relevant technical field of geolocation and mobile communications or the equivalent. I am very familiar with people having this level of skill, as discussed in my curriculum vitae and background.

6 OVERVIEW OF THE PATENTS-IN-SUIT

48. Each of the asserted patents in this case disclose novel and inventive systems and methods for tracking, monitoring, and reporting to a requesting party the location of a vehicle or the freight carried by a vehicle. Prior to the invention, conventional vehicle tracking systems required the acquisition and installation of GPS equipment in each vehicle to be tracked. GPS equipment can be costly, and requires the GPS equipment to provide the location information, with attendant costs to deliver this information to the user.

49. The claimed inventions of the asserted patents cleverly leverage the facts that (1) a truck driver typically has with him on his person or in his truck a communications device, such as a mobile phone, that can be used to track his location using a variety of techniques; (2) independent third parties routinely collect this location information about the millions of communications devices already used throughout the country; and (3) a communications device can be correlated to a particular truck by matching the communications device to the truck's driver.

50. MacroPoint's patented tracking technology resolves the prior art problems by providing notice to and obtaining a driver's consent for monitoring the location of his phone, obtaining the location of the driver's phone from a third party with the capability to track it, correlating the location of a vehicle with the location of the driver's phone,

and aggregating and reporting the location of multiple vehicles, regardless of tracking technique. This provides continuous, real-time location information to shippers and customers about all of their shipments, regardless of trucking company, in one integrated service.

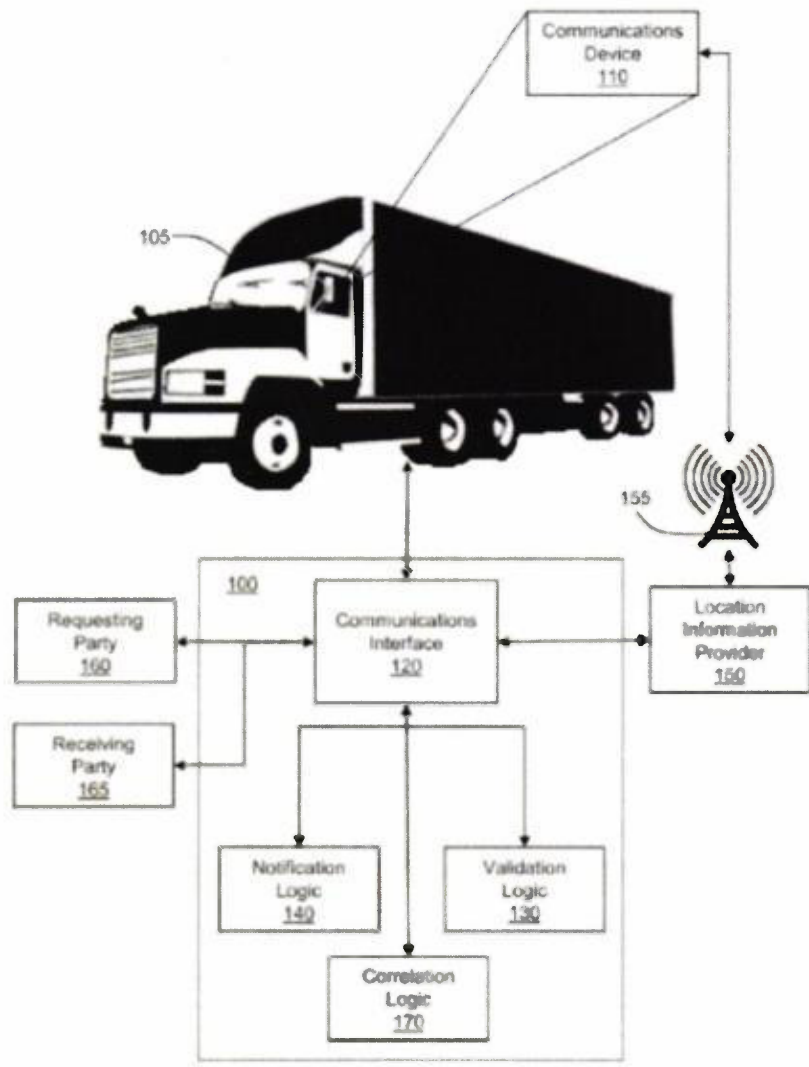


Figure 3

51. Figure 3 of the '659 Patent shows an example of how MacroPoint's invention can be implemented. A third-party Location Information Provider (such as a

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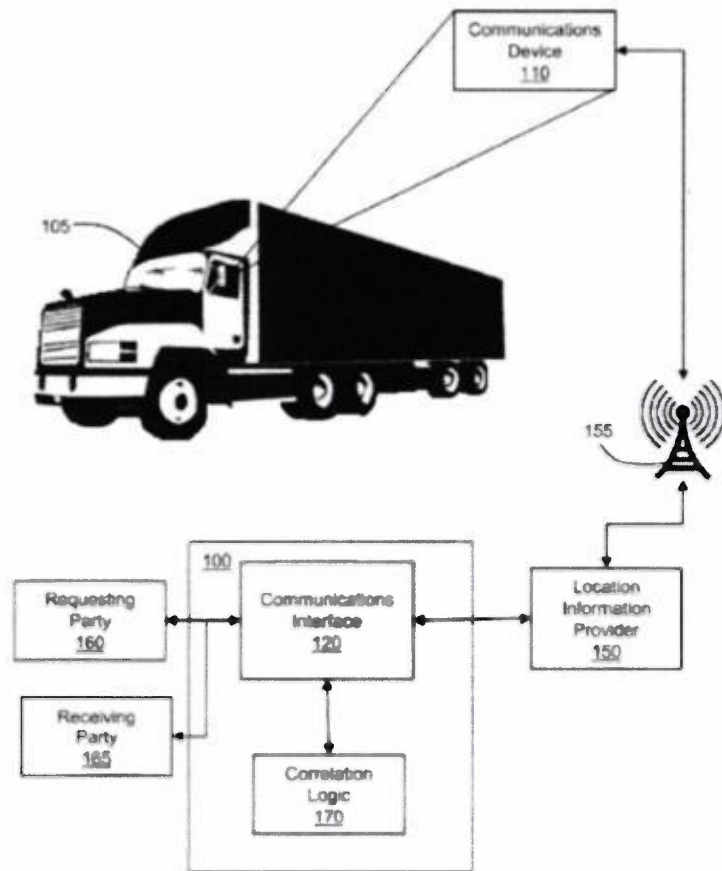
cellular services provider) can determine the location of a communications device using GPS or radiolocation techniques that analyze the device's position based on its relationship to surrounding cellular towers. (See '659 Patent at 6:60-8:16; '358 Patent at 1:41-51.)

52. The system then correlates the device's location to a particular truck using computers programmed with customized "correlation logic" that indicates which driver is in which vehicle. (See '659 Patent at 5:7-6:48; '358 Patent, 1:49-51 and 10:58-62.)

53. To address any issues regarding privacy, the system uses "notification logic" that informs the driver his location may be seen by others and "validation logic" that ensures the driver consents to sharing his location. (See '659 Patent at 8:26-10:49; '358 Patent at 11:31-51.) Various parties can then request or receive the truck's location from the third-party location service provider. ('659 Patent at 5:25-54; '358 Patent at 5:22-55.) For example, MacroPoint could request the information and then provide it to a shipper or customer.

54. The invention provides several advantages over prior art systems. It provides continuous information about any truck's location, allowing a shipper to know exactly where its goods are at any time. It allows shippers to efficiently go to a single source, such as MacroPoint, to obtain information about all shipments across all trucking companies. It can also process location data using multiple and distinct types of tracking technology—*e.g.*, GPS, radiolocation, etc.—unlike prior art systems in which each trucking company's system was limited to a single technology. (See '659 Patent at 8:17-24; '358 Patent at 1:41-51.)

6.1 Summary of the '659 Patent



55. Discussing an exemplary embodiment of the '659 patent, Figure 1 of the '659 Patent (above) illustrates certain key features of the claimed system. In the '659 Patent, system 100 monitors the location of a communication device 110 located in vehicle 105. System 100 includes a communications interface 120 that communicates with external devices via electronic signals and correlation logic 170 that correlates the vehicle 105 and the device 110. A Location Information Provider 150 has access to the location of device 110 and may be, for example, a wireless service provider that provides wireless service in a network 155. The location information provided to the receiving

party comes from Location Information Provider 150, and not from communications device 110.

6.2 Summary of the '358 Patent

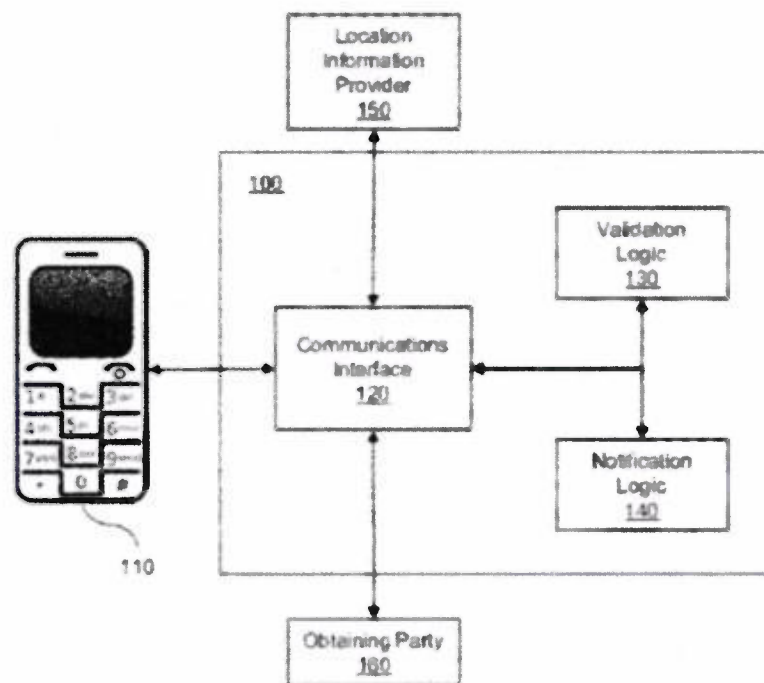
56. The subject matter of the '358 Patent is similar to that of the '659 Patent, but is more particularly focused on obtaining consent from the user of the mobile device to tracking location information.

57. There are industry guidelines (the *Best Practices and Guidelines for Location-Based Services* developed by the International Association for the Wireless Telecommunications industry (CTIA), hereinafter, the "CTIA Guidelines") that are intended to promote and protect user privacy in Location-Based Services ("LBS").⁴ The CTIA Guidelines are incorporated by reference in the specification of the '358 Patent. ('358 Patent at 1:58-62.) The CTIA Guidelines are also discussed in the '358 Patent. ('358 Patent at 1:58-2:3.)

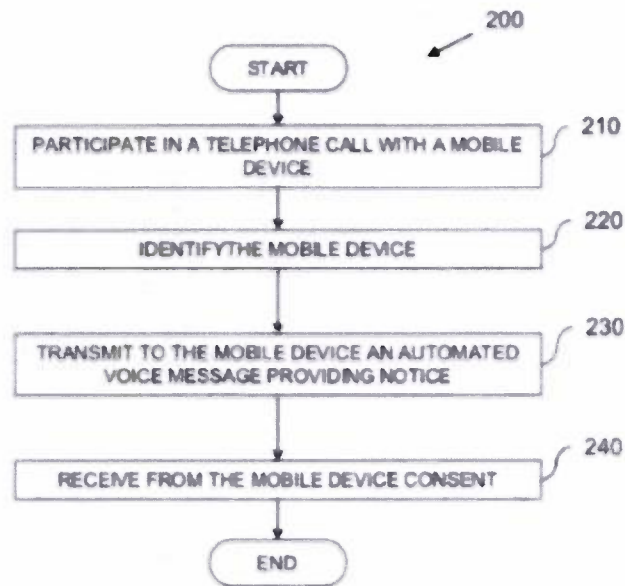
58. The CTIA Guidelines primarily focus on the user whose location information is used or disclosed. The CTIA Guidelines define an LBS Provider as "an application creator/provider, an aggregator of location information, [or] a carrier providing network location information." (RUIZ_004475.) Under the CTIA Guidelines,

⁴ The '358 Patent refers to this document as the "CTIA Guidelines" so I will do the same.

LBS providers must ensure that users: (1) *receive meaningful notice* about how location information will be used, disclosed and protected so that users can make informed decisions whether or not to use the LBS and thus will have control over their location information; and (2) consent to the use or disclosure of location information, and **LBS Providers bear the burden of demonstrating such consent.** (RUIZ_004475.)



59. Figure 1 of the '358 Patent (above) shows an exemplary system 100 for providing user notification and receiving user consent to obtaining location information of a mobile device 110 associated with the user, while Figure 2 of the '358 patent (below) shows an exemplary method for providing user notification and receiving user consent to obtaining location information of a mobile device.



60. The '358 Patent teaches both a method and a system to *ensure* compliance with the guidelines by, for example, participating in a telephone call with the mobile device, identifying the mobile device during the call, transmitting to the mobile device an automated voice message providing the required notice or a location at which to find that notice during the call, and receiving from the mobile device the required consent for obtaining location information during the call. As the '358 Patent states, "Obtaining the identifier associated with the mobile device ... ensures that the right party, the user, is notified that location information of the mobile device ... will be used and that the right party, the user, consents to the use of the location information." ('358 Patent at 4:6-10.) The asserted system claims of the '358 Patent recite a "communication interface," "validation logic," and "notification logic" for providing these functionalities.

7 CLAIM CONSTRUCTION

61. I understand that the Court has issued an order construing certain terms of the claims of the patents-in-suit. Memorandum Opinion and Order (Feb. 14, 2018) ECF No. 75 (the “Claim Construction Order”). Attached as Exhibit C is a chart of the claim constructions issued by the Court, and attached as Appendix A to its order. I have reviewed these constructions and have conducted my validity analyses consistent with the meanings of the claim terms as they have been construed. For any terms that have not been construed by the Court, I have applied to that term the plain and ordinary meaning to one of ordinary skill in the art for that term.

62. Throughout this document, I may refer to the elements of claims by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibits B and C to that report.

8 ANTICIPATION ANALYSIS

63. In my opinion, the asserted claims of the ‘358 and ‘659 Patents are neither invalid as anticipated under § 102 nor as obvious under § 103. None of the references relied upon by Dr. Hepe change my opinion.

8.1 ‘358 ANTICIPATION ANALYSIS

64. Dr. Hepe opines that three references anticipated each asserted claim of the ‘358 Patent; *i.e.*, claims 1, 4, 19 and 22. Dr. Hepe refers to these references as “CTIA,” “TechnoCom White Paper,” and “Enterprise.” I will refer to Dr. Hepe’s CTIA

reference as the “CTIA Guidelines” because the ‘358 Patent refers to that reference in that way. *See* ‘358 Patent at 1:58-61.

65. I disagree with all of Dr. Heppe’s anticipation conclusions. I have been told by counsel that for a claim to be anticipated by a reference, that reference must be prior art and that every claim limitation must be disclosed, explicitly or inherently, in that reference.

66. My review of these references leads me to conclude that each of Dr. Heppe’s references does not disclose – expressly or inherently – several limitations within each asserted claim. Therefore, none of Dr. Heppe’s references anticipate any asserted claim. I discuss the limitations that are missing in these references below.

67. For most missing limitations, Dr. Heppe does not opine that the missing limitation would have been obvious.

68. In the few instances that Dr. Heppe opines that a missing limitation would have been obvious, I disagree. One reason for my disagreement is that Dr. Heppe’s obviousness analysis reflects hindsight bias because it starts from the claimed invention, works backward to identify limitations of the claimed invention in references or that such limitations would have been obvious over POSITA knowledge, and then concludes that combining the limitations would have been obvious.

69. Additionally, Dr. Heppe has not established that any of his references are prior art to the ‘358 Patent. The patent application that matured into the ‘358 Patent was filed on March 1, 2012. Because this date is prior to the AIA effective date for

anticipation and obviousness purposes (March 16, 2013), I have been told that pre-AIA rules for anticipation and obviousness apply to the '358 Patent.

70. Under pre-AIA prior art rules, I understand that a document that was not publicly disclosed, such as a confidential document, is not prior art.⁵ If a reference is not prior art, it could not have anticipated (nor rendered obvious, as discussed later) any asserted claim.

71. Therefore, Dr. Hepe cannot establish, to a high or very high degree of certainty, that any of his anticipation references were publicly available before the priority date of the '358 Patent. Additionally, two of Dr. Hepe's references are unambiguously marked "Confidential" so these documents are confidential rather than public documents. Dr. Hepe has not offered any opinions on the Confidential designation on two references or the veracity of the publication dates for any reference .

72. Additionally, for the reasons discussed below, each of Dr. Hepe's anticipation references did not disclose – expressly or inherently – or would have rendered obvious multiple limitations in any asserted claim. The shortcomings of these references are discussed below. Therefore, even if any of Dr. Hepe's references are

⁵ I have not been told what the post-AIA rules for prior art are, possibly because they do not pertain to my work on the '358 and '659 Patents.

determined to be prior art, they neither anticipate nor would have rendered obvious any asserted claim.

73. A detailed explanation of my conclusions, and the bases for my conclusions, is provided below.

8.1.1 CTIA Guidelines⁶

74. Dr. Heppe opined that the CTIA Guidelines renders the '358 Patent invalid as anticipated. I disagree for the reasons discussed below.

8.1.1.1 Publication Date not Established with High or Very High Certainty

75. In my opinion, Defendant and Dr. Heppe have failed to meet their burden to prove by clear and convincing evidence that the CTIA Guidelines are prior art to the '358 Patent.

76. Dr. Heppe opined that the CTIA Guidelines were prior art, apparently based on Dr. Heppe's version of that document carrying a 2010 copyright notice.^{7,8} Dr.

⁶ RUIZ-004473-82.

⁷ See Heppe Opening Report at paragraph 20 (including the CTIA Guidelines in the list of what Dr. Heppe terms "prior art references."). See also Table of Contents entry XI (listing "Prior Art References" including the CTIA Guidelines).

⁸ Although the '358 Patent discloses the existence of a document named "CTIA Guidelines" (see '358 Patent at 1:58-61), and incorporates that document by reference, the '358 Patent does not provide a revision identifier for that document, and the CTIA Guidelines was not included in the prosecution history of the

Heppe did not offer any opinions on why the 2010 copyright date *reliably* established the publication date of the reference, and he did not offer any further basis for his conclusion that the CTIA Guidelines was prior art to the '358 Patent.

77. In my opinion, the mere existence of a date on a document, absent more, does not establish with the requisite high or very high degree of certainty that the date *reliably* reflects the date on which the document was publicly disclosed. Therefore, Dr. Heppe has not established by clear and convincing evidence that the CTIA Guidelines was prior art to the '358 Patent.

8.1.1.2 Overview of Reference

78. The CTIA Guidelines is policy document. It describes recommended social and business policies around location-based data collection from mobile devices. The CTIA Guidelines do not describe technical solutions for providing notice or for receiving consent. Indeed, the CTIA Guidelines claim to be "technology-neutral." See CTIA Guidelines at RUIZ-004475.

79. The CTIA Guidelines discuss at length various philosophies about circumstances in which mobile device users should be notified before location-based data was collected from the mobile device. For example, the CTIA Guidelines recommends

'358 Patent, so we cannot know with any certainty whether the version of the CTIA Guidelines relied upon by Dr. Heppe is the version referenced in the '358 Patent.

that “LBS Providers must ensure that users receive meaningful notice about how location information will be used, disclosed and protected so that users can make informed decisions whether or not to use the LBS and thus will have control over their location information. RUIZ-004475.

80. The CTIA Guidelines also discuss at length philosophies about users providing consent to their location-based data being collected. For example, the CTIA Guidelines recommends that “LBS Providers must ensure that users consent to the user or disclosure of location information, and LBS Providers bear the burden of demonstrating such consent. Users must have the right to revoke consent or terminate the LBS at any time. RUIZ-004475.

81. The CTIA Guidelines discuss policy implications of five usage scenarios (a wireless carrier, an application developer, a mobile device manufacturer, a data aggregator, and a wireless carrier that facilitates application developer access to location data) and discusses which party in each usage scenario is responsible for providing notice and ensuring user consent. RUIZ-004476. In each usage scenario, a responsible party is identified, while technical mechanisms for providing notice and receiving consent are not provided.

82. The CTIA Guidelines intentionally avoid taking positions or even making recommendations on how notice should be provided and how consent should be ensured. For example, the CTIA Guidelines state, “The form, placement, terminology use, manner of delivery, timing and frequency of such notice depends on the nature of the [location-based service].” RUIZ-004478.

83. At most, the CTIA Guidelines disclose concepts and policy expectations but does not disclose implementations or technical details. The CTIA Guidelines disclose the purpose of the document (RUIZ-004475), the parties to which the guidelines should apply (RUIZ-004476), policies associated with notice (RUIZ-004477-48), policies associated with consent (RUIZ-004479-80), and miscellaneous issues such as secure data retention (RUIZ-004481-82).

84. Because the CTIA Guidelines provide no implementation details or technical recommendations, other than explaining high-level concepts such as notice and consent, a POSITA would not find the CTIA Guidelines to be an informative or educational reference. Accordingly, as discussed below, the CTIA Guidelines differs substantially from any asserted claim of the '358 Patent.

85. My discussion of the CTIA Guidelines continues with a discussion of undisclosed and non-obvious limitations below.

8.1.1.3 Claim 1

86. I refer to the elements of claim 1 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. *See* Expert Report of Ivan Zatkovich Regarding Infringement, Exh. C 2–5 (Jan. 25, 2018). Claim 1 requires the following elements: claim 1.1, claim 1.2, claim 1.3, claims 1.4 or 1.5, and claim 1.6. To the extent the preamble is found to be limiting, claim 1 also requires claim 1.0. As discussed below, many of these limitations were not disclosed, expressly or inherently, in the CTIA Guidelines, so Dr. Heppe cannot show that claim 1

was anticipated by the CTIA Guidelines. The undisclosed limitations also would not have been obvious over the CTIA Guidelines. My bases for these conclusions follow.

8.1.1.3.1 Claim 1.0 - preamble – CTIA Guidelines Does Not Disclose a Computer-Implemented Method for Receiving User Consent ...

87. Claim 1.0 states “[a] computer implemented method for receiving consent from a user of a mobile device to obtaining location information of the mobile device.” Although it is my opinion that the preamble is not limiting, if the Court should find that the preamble is limiting, Dr. Hepe has not established that claim 1.0 is disclosed by the CTIA Guidelines. Therefore, claim 1 was not anticipated by the CTIA Guidelines for at least this reason.

88. Additionally, Dr. Hepe did not opine that claim 1.0 would have been obvious over the CTIA Guidelines. Therefore, Dr. Hepe did not establish that claim 1 would have been obvious over the CTIA Guidelines for at least this reason.

89. Dr. Hepe’s analysis of claim 1 and the CTIA Guidelines does not include an opinion that the CTIA Guidelines disclose a computer-implemented method as recited in the preamble of claim 1.

90. The preamble of claim 1 recites a computer-implemented method, so the CTIA Guidelines can only anticipate claim 1 if that reference discloses the claimed computer-implemented method. Dr. Hepe has offered no such opinion and my review of the CTIA Guidelines leads me to conclude that the reference contains no such disclosure because the CTIA Guidelines discloses social and business policy

recommendations related to acquiring and using location-based data but does not discuss technical solutions for providing notice and receiving consent related to that data.

91. Dr. Heppe opined that the CTIA Guidelines disclose “the concept of a computer method whereby a mobile device user consents to location tracking of the mobile device.” *See* Heppe Opening Report at paragraph 121. Dr. Heppe’s reference to “the concept of a computer method” is unclear. After the sentence quoted above, Dr. Heppe cites to passages in the CTIA Guidelines that could also be implemented with or without computers. *See id.*

92. To the extent Dr. Heppe cites these passages for the proposition that the CTIA Guidelines necessarily disclose a computer-implemented method for performing the steps of claim 1, I disagree. For example, some of Dr. Heppe’s cited passages in paragraph 121 concern the general notions of providing “meaningful notice” and receiving consent, each of which could be accomplished with non-computerized solutions. Indeed, the CTIA Guidelines (including the portions cited by Dr. Heppe) go out of their way to be technology agnostic including a business model not involving technology for at least some aspects of providing notice and receiving consent. “[T]he Guidelines are technology-neutral and apply regardless of the technology ... *or the business model* employed to provide LBS” (emphasis added). *See* Heppe Opening Report at paragraph 121, citing CITA Guidelines at RUIZ-004475. Therefore, Dr. Heppe’s citation to broad and generalized language in the CTIA Guidelines does not reflect necessary disclosure of a computer-implemented method.

93. To the extent that Dr. Heppe's opinions could be understood to mean that any disclosure of a computer-implemented method is sufficient to support an invalidity argument through anticipation, I disagree. More specifically, Dr. Heppe opines that "CTIA also discloses interactive voice response systems and methods (RUIZ-004479), which is a computer-implemented method for receiving consent." *See* Heppe Opening Report at paragraph 122. The '358 Patent claims a computer-implemented method for, among other things, particular ways for providing notice and receiving consent. Mere disclosure of an IVR for some functions does not disclose a computer-implemented method for all limitations.

94. To the extent that Dr. Heppe's identification of the CTIA Guidelines disclosing a "411 LBS" could be understood to inherently reflect a computer-implemented method (*see* Heppe Opening Report at paragraph 122), it is my opinion that such disclosure would not reflect the requisite computer-implemented method because various ways of implementing what might be termed a "411 LBS" exist and some of those ways would not necessarily utilize a computer-implemented method.

95. Moreover, Dr. Heppe did not opine that a "411 LBS" inherently disclosed the claimed computer-implemented method. *See* Heppe Opening Report at paragraph 123 (discussing claim 1.1 not claim 1.0).

96. For each of these reasons, I conclude that Dr. Heppe has not established that claim 1.0 is disclosed by clear and convincing evidence in the CTIA Guidelines.⁹ Accordingly, the CTIA Guidelines neither anticipates nor would have rendered obvious claim 1, and therefore also neither anticipates nor would have rendered obvious claim 4, which depends from claim 1.

8.1.1.3.2 Claim 1.2 – CTIA Guidelines Does Not Disclose Obtaining an Identifier within the Telephone Call

97. Claim 1 of the '358 Patent requires “within the telephone call, identifying the mobile device at least in part by obtaining an identifier associated with the mobile device.” As discussed below, Dr. Heppe has not established that claim 1.2 is disclosed by the CTIA Guidelines. Therefore, claim 1 was not anticipated by the CTIA Guidelines for at least this reason.

98. Additionally, Dr. Heppe did not opine that claim 1.2 would have been obvious over the CTIA Guidelines. Therefore, Dr. Heppe did not establish that claim 1 would have been obvious over the CTIA Guidelines for at least this reason.

⁹ I note also that Dr. Heppe did not opine that claim 1.0 would have been obvious. See Heppe at paragraphs 121-22 (discussing claim 1.0). By contrast, Dr. Heppe opines that other limitations were obvious if they were not anticipated. See, e.g., Dr. Heppe’s analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not anticipated). My opinions about obviousness conclusions Dr. Heppe did provide are discussed separately below.

99. Dr. Heppe's analysis of claim 1 and the CTIA Guidelines does not identify any portion of the CTIA Guidelines that discloses claim 1.2. The present limitation concerns identifying a mobile device by obtaining an identifier associated with that device within the telephone call.

100. I note that the parties have proposed constructions of the phrase "within the telephone call," and that Dr. Heppe analyzed claim 1.2 under Plaintiff's construction, and I address that aspect of the present limitation below.¹⁰

101. At most, Dr. Heppe cites portions of the CTIA Guidelines that reflect possession of an identifier without discussing how or when that identifier was acquired. I am referring specifically to his citations to "linked by phone number" and "information that identifies a specific device." See Heppe Opening Report at paragraph 126 ("CTIA Guidelines teaches location information for specific devices that are 'linked' by phone number, userID, or other unique identifiers,"). These disclosures do not reflect how the identifier was acquired; *i.e.*, during a call, before a call, or in any way related to a telephone call.

¹⁰ I also note that Dr. Heppe chose to analyze claim 1.2 under Plaintiff's construction but generally did not analyze other claims under either party's constructions. To the extent that Dr. Heppe offered opinions under some constructions but not others, and offered those opinions on some claims but not others, I understand that Dr. Heppe will not offer invalidity-related opinions for constructions and/or claims in which opinions were not offered in his opening invalidity report. If Dr. Heppe offers claim construction based invalidity opinions outside his opening report, I will seek to supplement my rebuttal report to respond to Dr. Heppe's new opinions.

102. Dr. Heppe further opines that claim 1.2 is disclosed by the CTIA Guidelines under Defendant's (or Plaintiff's) construction of "within the phone call" by that reference disclosing a user providing their name during a call but I disagree. As a preliminary matter, Dr. Heppe cites to RUIZ_004476 in support of his opinion but at most that page discloses "linked by name," which does not support an anticipation conclusion as discussed above. My review of the CTIA Guidelines leads me to conclude that this reference does not disclose a user providing their name during a call. Thus, Dr. Heppe has not established the presence of claim 1.2 for this reason as well.

103. To the extent Dr. Heppe's opinions could be understood to concern inherency, I disagree that the cited passages inherently disclose claim 1.2. The "linked by phone number" and "information that identifies a specific device" could refer to a phone number that is known for reasons other than it being obtained during (or before) a telephone call. For example, the phone number disclosed by the CTIA Guidelines could be obtained from a phone book or business card. Because these other reasons reflect that claim 1.2 was not necessarily disclosed by the cited portions of the CTIA Guidelines, claim 1.2 was not inherently disclosed by that reference.

104. For each of these reasons, Dr. Heppe has not established that claim 1.2 is disclosed by clear and convincing evidence by the CTIA Guidelines.¹¹ Accordingly, the CTIA Guidelines neither anticipates nor would have rendered obvious claim 1, and therefore also neither anticipates nor would have rendered obvious claim 4, which depends from claim 1.

8.1.1.3.3 Claim 1.3 – CTIA Guidelines Does Not Disclose Transmitting ... During the Telephone Call an Automated Voice Message ...

105. Claim 1 of the '358 Patent requires “transmitting to the mobile device during the telephone call an automated voice message communicating to the user of the mobile device at least one of . . .” As discussed below, Dr. Heppe has not established that claim 1.3 is disclosed by the CTIA Guidelines. Therefore, claim 1 was not anticipated by the CTIA Guidelines for at least this reason.

106. Additionally, Dr. Heppe did not opine that claim 1.3 would have been obvious over the CTIA Guidelines. Therefore, Dr. Heppe did not establish that claim 1 would have been obvious over the CTIA Guidelines for at least this reason.

¹¹ I note also that Dr. Heppe did not opine that claim 1.2 would have been obvious. See Heppe Opening Report at paragraphs 126-28 (discussing claim 1.2). By contrast, Dr. Heppe opines that other limitations were obvious. See, e.g., Dr. Heppe’s analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines). Therefore, I have nothing to rebut on the issue of whether claim 1.2 would have been obvious. My opinions about obviousness of entire claims are discussed separately below.

107. Dr. Heppe's analysis of claim 1 and the CTIA Guidelines does not identify any portion of the CTIA Guidelines that discloses this claim limitation. Dr. Heppe analyzed claim 1.3 in conjunction with claims 1.4 and 1.5. *See* Heppe Opening Report at paragraph 129. Therefore, I address Dr. Heppe's arguments specific to claim 1.4 or 1.5 below.

108. For the reasons discussed below, I conclude that Dr. Heppe has not established that claim 1.3 is disclosed by clear and convincing evidence by the CTIA Guidelines.¹² Accordingly, the CTIA Guidelines neither anticipates nor would have rendered obvious claim 1, and therefore also neither anticipates nor would have rendered obvious claim 4, which depends from claim 1.

8.1.1.3.4 Claim 1.4 – CTIA Guidelines Does Not Disclose a Notice ...

109. Claim 1.4 requires "a notice including information indicating that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed." As discussed below, Dr. Heppe has not established that claim 1.4 is disclosed by the CTIA Guidelines. As

¹² I note also that Dr. Heppe did not opine that claim 1.2 would have been obvious. *See* Heppe Opening Report at paragraphs 126-28 (discussing claim 1.2). By contrast, Dr. Heppe opines that other limitations were obvious. *See, e.g.*, Dr. Heppe's analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines). Therefore, I have nothing to rebut on the issue of whether claim 1.2 would have been obvious. My opinions about obviousness of entire claims are discussed separately below.

further discussed below, claim 1.5 is not disclosed by the CTIA Guidelines as an alternative to claim 1.4. Therefore, claim 1 was not anticipated by the CTIA Guidelines for at least this reason.

110. Additionally, Dr. Heppe did not opine that claim 1.4 would have been obvious over the CTIA Guidelines. Therefore, Dr. Heppe did not establish that claim 1 would have been obvious over the CTIA Guidelines for at least this reason.

111. Dr. Heppe's analysis of claim 1 and the CTIA Guidelines does not identify any portion of the CTIA Guidelines that discloses "a notice including information indicating that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed," as recited in claim 1.4, consistent with claim 1.3; *i.e.*, communicated by an automated voice message transmitted during the telephone call. Although Dr. Heppe concludes to the contrary, I disagree with his conclusions for the reasons discussed next.

112. Dr. Heppe begins his analysis of claim 1.4 by observing that the "CTIA Guidelines specifically teaches the provision of notice regarding consenting to location information of the mobile device." *See* Heppe Opening Report at paragraph 130, citing RUIZ-004477.¹³ But, claim 1.4 of the '358 Patent does not recite "notice" in the abstract;

¹³ Dr. Heppe also seems to suggest, in paragraph 131, that negative disclosures in the CTIA Guidelines ("not dictating] the form, placement, terminology used or manner of delivery notices") associated with notice somehow (*i.e.*, inherently) reflects an affirmative disclosure of the notice of claim 1.4. These negative disclosures leave much to the

it recites notice provided through the approach recited in claim 1.4. Neither the quoted passage from the CTIA Guidelines nor the remainder of Dr. Heppe's cited page from that reference disclose the approach recited in claim 1.4.

113. Dr. Heppe also cites to portions of the CTIA Guidelines concerning consent, rather than notice, as supporting his conclusion that the claimed method of providing notice was disclosed by that reference. *See id.* at paragraph 132, quoting the CTIA Guidelines at RUIZ-004479 ("Users may manifest consent to those terms and conditions electronically by clicking 'I accept', verbally by authorizing the disclosure to a customer service representative; through an IVR system or any other system reasonably calculated to confirm consent.") None of the quoted disclosures reflect receiving notice, rather than consent, during a telephone call.

114. Dr. Heppe seems to recognize the shortcoming in this reference, because he implicitly acknowledges it when he says, "[t]hus, if the consent is given through use of an IVR system, it logically follows that the notice or request for permission would likewise be done through that same IVR system." I understand that the standard for

imagination as to what is unsaid in the CTIA Guidelines. I understand that inherent disclosures must necessarily reflect the presence of the claimed limitation, and that does not exist in this instance. For example, a paper notice would fall within the scope of Dr. Heppe's cited portions of the CTIA Guidelines but this paper notice would not disclose the details of claim 1.4 because it would not be, for example, notice delivered by an automated voice message. Therefore, I disagree with Dr. Heppe's conclusions as to claim 1.4.

anticipation is not whether a limitation “logically follows” from a disclosure in a reference but whether the reference expressly or inherently discloses the limitation.

115. As I discussed above, and as Dr. Hepe implicitly concedes, claim 1.4 is not expressly disclosed by the CTIA Guidelines. Therefore, the CTIA Guidelines could only anticipate claim 1 if that reference inherently disclosed claim 1.4. I note that Dr. Hepe does not state that this limitation is inherently disclosed, so he cannot establish anticipation for at least that reason. Additionally, the CTIA Guidelines, including the cited passages concerning consent through an IVR system, do not inherently disclose receiving the claimed form of notice because the reference’s disclosures do not *necessarily* disclose the claimed form of notice.

116. A simple example, consistent with our real-life experiences, demonstrates the shortcomings of Dr. Hepe’s inherency analysis. Credit card customers have received, since before the priority date of the ‘358 Patent, credit cards in the mail that can be activated through an IVR system. Notice of the terms for those credit cards is typically provided in paper form within the envelope containing the credit card. The credit card customer can call a phone number to activate the card, and the act of activating the card by phone or other method reflects consent to the terms, associated with the credit card, included on paper within the envelope. The existence of this example establishes that disclosure of consent through an IVR system does not necessarily disclose that *notice* is provided by the IVR system, notwithstanding Dr. Hepe’s opinion to the contrary. Thus, claim 1.4 was not inherently disclosed by the CTIA Guidelines.

117. Dr. Heppe continues by opining that, in the absence of an express or inherent disclosure of claim 1.4, claim 1.4 would have been obvious in view of the CTIA Guidelines. I disagree with Dr. Heppe's analysis and his conclusion because it is apparent from Dr. Heppe's report that he started from the patented invention and worked backwards to achieve his obviousness conclusion. I have been told that such an approach is an improper approach to obviousness analysis because it reflects "hindsight bias."

118. Dr. Heppe's obviousness analysis for claim 1.4 starts from an assumption that an automated message provides the required notice (*i.e.*, claim 1.3), continues by opining that only two ways exist to provide notice (the two ways reflected in claims 1.4 and 1.5), and unsurprisingly concludes "[t]his matches the claim language," as shown below.

An IVR system is understood to comprise automated voice messages, and from a logical perspective, there are only two ways to signal the required notice using an automated voice message: a) an explicit recitation of the required notice; or b) a verbal pointer or reference to where the notice can be found. This matches the claim language.

Heppe Opening Report at paragraph 134.

119. As seen above, Dr. Heppe's analysis starts from the assumption that an IVR system is used for providing notice – a form of starting from the claimed invention. But, one contribution that the '358 Patent makes is its use of an automated message when providing "a notice ..." or providing "a location at which to find the notice" Dr. Heppe critically omits any consideration of whether it would have been obvious to use his "IVR system" to provide either form of notice when seeking consent to such notice.

Thus, Dr. Heppe's analysis cannot show that claims 1.3 through 1.5 would have been obvious in view of the CTIA Guidelines.

120. Dr. Heppe continues by opining that only two ways exist to provide notice using that system (the two ways taught by the '358 Patent): through an automated message or through a "reference to where the notice can be found."

121. I disagree. The credit card example using paper notice, that I discussed above, is a way of using an IVR system to provide consent (with paper) that is not included in Dr. Heppe's "only two ways." Thus, I disagree that disclosing an IVR system necessarily discloses providing notice or a location of that notice through an automated message.

122. Dr. Heppe does not provide any opinion why someone prior to the '358 Patent would have found it obvious to use a "pointer or reference to where the notice can be found" in an automated message.

123. For each of these reasons, I conclude that Dr. Heppe has not established that claim 1.4 is disclosed or would have been obvious by clear and convincing evidence by the CTIA Guidelines. Additionally, as discussed below, claim 1.5 is neither disclosed nor would have been obvious over the CTIA Guidelines as an alternative to claim 1.4. Accordingly, the CTIA Guidelines neither anticipates nor would have rendered obvious claim 1, and therefore also neither anticipates nor would have rendered obvious claim 4, which depends from claim 1.

8.1.1.3.5 Claim 1.5 – CTIA Guidelines Does Not Disclose a Location at which to Find the Notice ...

124. Claim 1.5 requires “a location at which to find the notice, wherein the location at which to find the notice is represented by a web address corresponding to a website where, during the telephone call, the user can find the notice indicating to the user that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed.” As discussed below, Dr. Hepe has not established that claim 1.5 is disclosed by the CTIA Guidelines. As discussed above, claim 1.4 is not disclosed by the CTIA Guidelines as an alternative to claim 1.5. Therefore, claim 1 was not anticipated by the CTIA Guidelines.

125. Additionally, to the extent that Dr. Hepe’s analysis for claim 1.5 could be understood to include an obviousness opinion, it is my opinion that Dr. Hepe has not established that claim 1.5 would have been obvious over the CTIA Guidelines for the same reasons that he did not establish that claim 1.4 would have been obvious over the CTIA Guidelines.

126. Dr. Hepe’s analysis of claim 1 and the CTIA Guidelines does not identify any portion of the CTIA Guidelines that discloses “a location at which to find the notice, wherein the location at which to find the notice is represented by a web address corresponding to a website where, during the telephone call, the user can find the notice indicating to the user that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed,” as recited in claim 1.5.

127. At most, Dr. Hepe's cited passages in the CTIA Guidelines, associated with other limitations, disclose “electronic” notice, which differs from the present

limitation at least because the electronic notice is not described as involving a location at which to find the notice.

128. For each of these reasons, I conclude that Dr. Heppe has not established that claim 1.5 is disclosed or would have been rendered obvious by clear and convincing evidence by the CTIA Guidelines.¹⁴ Additionally, as discussed above, claim 1.4 is neither disclosed nor would have been obvious over the CTIA Guidelines as an alternative to claim 1.5. Accordingly, the CTIA Guidelines neither anticipate nor would have rendered obvious claim 1, and therefore also neither anticipate nor would have rendered obvious claim 4, which depends from claim 1.

129. In summary, Dr. Heppe has not shown that the CTIA Guidelines anticipated or would have rendered obvious claim 1 for the multiple reasons discussed above. Because claim 4 depends from claim 1, claim 4 also was neither anticipated by nor would have been obvious over the CTIA Guidelines for at least the same reasons. My opinions concerning the remaining asserted claims follow.

¹⁴ I note also that Dr. Heppe did not opine that claim 1.2 would have been obvious. *See* Heppe Opening Report at paragraphs 126-28 (discussing claim 1.2). By contrast, Dr. Heppe opines that other limitations were obvious. *See, e.g.*, Dr. Heppe's analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines). Therefore, I have nothing to rebut on the issue of whether claim 1.2 would have been obvious. My opinions about obviousness of entire claims are discussed separately below.

8.1.1.4 Claim 4

130. I refer to the elements of claim 4 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. *See* Infringement Report, Exh. C 6–7. Claim 4 requires the following elements: claim 4.0 and claim 4.1 or claim 4.2. As discussed below, none of these limitations were disclosed, expressly or inherently, in the CTIA Guidelines, so Dr. Hepe cannot show that claim 4 was anticipated by the CTIA Guidelines. Dr. Hepe does not opine that claims 4.0, 4.1, or 4.2 would have been obvious over the CTIA Guidelines. Thus, claim 4 was not obvious over the CTIA Guidelines. My bases for these conclusions follow.

8.1.1.4.1 Claim 4.0 – CTIA Guidelines Does Not Disclose Claim 1 so it also Does Not Disclose Claim 4

131. Claim 4.0 requires “[t]he method of claim 1, wherein the receiving from the mobile device a signal including data indicating consent for obtaining the location information of the mobile device includes at least one of [claim 4.1 and 4.2].” For the reasons discussed below in conjunction with claims 4.1 and 4.2, Dr. Hepe has not established that claim 4.0 is disclosed by clear and convincing evidence by the CTIA

Guidelines.¹⁵ Accordingly, the CTIA Guidelines neither anticipate nor would have rendered obvious claim 4 for at least this reason.

132. Claim 4 depends from claim 1, so claim 4 includes all limitations of claim 1. As discussed above, I concluded that Dr. Heppe has not established that claim 1 was anticipated by or would have been obvious in view of the CTIA Guidelines. Therefore, claim 4 was neither anticipated by the CTIA Guidelines nor would have been rendered obvious by the CTIA Guidelines for at least those reasons.

133. Additional reasons specific to claims 4.1 and 4.2 are discussed below.

8.1.1.4.2 Claim 4.1 – CTIA Guidelines Does Not Disclose Receiving Data Indicating ... an Action ...

134. Claim 4.1 requires “receiving data indicating that the user of the mobile device has performed an action on the mobile device.” As discussed below, Dr. Heppe has not established that claim 4.1 is disclosed by the CTIA Guidelines. As further discussed below, claim 4.2 is not disclosed by the CTIA Guidelines as an alternative to claim 4.1. Therefore, claim 4 was not anticipated by the CTIA Guidelines.

¹⁵ I note also that Dr. Heppe did not opine that claim 4.0 would have been obvious. See Heppe Opening Report at paragraphs 137-39 (discussing claim 4). By contrast, Dr. Heppe opines that other limitations were obvious. See, e.g., Dr. Heppe’s analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines). My opinions about obviousness of entire claims are discussed separately below.

135. Additionally, Dr. Heppe did not opine that claim 4.1 would have been obvious over the CTIA Guidelines. *See* Heppe Opening Report at paragraph 137-39 (discussing claim 4). Therefore, Dr. Heppe did not establish that claim 4 would have been obvious over the CTIA Guidelines for at least this reason.

136. Dr. Heppe's analysis of claim 4 and the CTIA Guidelines does not identify any portion of the CTIA Guidelines that discloses "receiving data indicating that the user of the mobile device has performed an action on the mobile device," as recited in limitation 4.1.

137. Dr. Heppe has not shown that claim 4.1 is *necessarily* disclosed by the CTIA Guidelines because Dr. Heppe cites to, at most, "the use of IVR technology for consent ..." without "receiving data indicating . . . an action on the mobile device." *See* Heppe Opening Report at paragraph 138. *I.e.*, the current claim is more specific than Dr. Heppe's cited disclosures for claim 4.1. Therefore, Dr. Heppe did not establish that the CTIA Guidelines disclosed claim 4.1.

138. Additionally, Dr. Heppe implicitly opined that an IVR system *inherently* transmits the claimed "data indicating that the user of the mobile device has performed an action on the mobile device" without establishing that such data is necessarily present in an IVR system. *See* Heppe Opening Report at paragraph 138.

139. I disagree that an IVR system necessarily transmits a signal with the characteristics recited in claim 4.1. For example, some IVR systems receive and process user input on a mobile device rather than transmitting user input to a server that receives and processes user input.

140. Dr. Heppe does not acknowledge that the IVR system upon which his opinion relies is the product of a design choice and that alternative design choices are available. As previously discussed, a design choice cannot support inherency where design alternatives are possible.¹⁶ Thus, disclosure of an IVR system does not inherently disclose claim 4.1.

141. For each of these reasons, I conclude that Dr. Heppe has not established that claim 4.1 is disclosed by clear and convincing evidence by the CTIA Guidelines.¹⁷ Additionally, as discussed below, the CTIA Guidelines neither discloses nor would have rendered obvious claim 4.2 as an alternative to claim 4.1. Accordingly, the CTIA Guidelines neither anticipates nor would have rendered obvious claim 4.

8.1.1.4.3 Claim 4.2 – CTIA Guidelines Does Not Disclose Receiving a Voice

Command ...

142. Claim 4.2 requires “receiving a voice command from the mobile device.” As discussed below, Dr. Heppe has not established that claim 4.2 is disclosed by the

¹⁶ I note that Dr. Heppe frequently cites design choices in support of inherency conclusions. Instead of establishing inherency, it is my opinion that such design choices establish that such elements are not inherently disclosed by the reference.

¹⁷ I note also that Dr. Heppe did not opine that claim 4.1 would have been obvious. See Heppe Opening Report at paragraphs 137-39 (discussing claim 4). By contrast, Dr. Heppe opines that other limitations were obvious. See, e.g., Dr. Heppe’s analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines. My opinions about obviousness of entire claims are discussed separately below.

CTIA Guidelines. As further discussed above, claim 4.1 is not disclosed by the CTIA Guidelines as an alternative to claim 4.2. Therefore, claim 4 was not anticipated by the CTIA Guidelines.

143. Additionally, Dr. Heppe did not opine that claim 4.2 would have been obvious over the CTIA Guidelines. *See* Heppe Opening Report at paragraph 137-39 (discussing claim 4). Therefore, Dr. Heppe did not establish that claim 4 would have been obvious over the CTIA Guidelines for at least this reason.

144. Dr. Heppe's analysis of claim 4 and the CTIA Guidelines does not identify any portion of the CTIA Guidelines that discloses "receiving a voice command from the mobile device," as recited in claim 4.2.

145. Dr. Heppe has not shown that claim 4.2 is disclosed by the CTIA Guidelines because Dr. Heppe cites to, at most, receiving consent through an IVR system without indicating consent by a user speaking a voice command. *I.e.*, the current limitation is more specific than Dr. Heppe's cited disclosures for this limitation. Therefore, Dr. Heppe did not establish that the CTIA Guidelines disclosed the present limitation.

146. Again, Dr. Heppe's conclusion is implicitly an inherency argument founded on a design choice, so I disagree with his conclusion. For example, an IVR system could receive keypad input from a user rather than voice commands from the user. An IVR system utilizing keypad input would not disclose the claimed step of "receiving a voice command from the mobile device." Based on the availability of (at least) this design alternative, claim 4.2 is not inherently disclosed by an IVR system.

147. For each of these reasons, I conclude that Dr. Heppe has not established that claim 4.2 is disclosed by clear and convincing evidence by the CTIA Guidelines.¹⁸ Additionally, as discussed above, the CTIA Guidelines neither discloses nor would have rendered obvious claim 4.1 as an alternative to claim 4.2. Accordingly, the CTIA Guidelines neither anticipated nor would have rendered obvious claim 4.

8.1.1.5 Claim 19

148. I refer to the elements of claim 19 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. *See* Infringement Report, Exh. C 8–12. Claim 19 requires the following elements: claim 19.1, claim 19.2, claim 19.3, claims 19.4 or 19.5, claim 19.6, and claim 19.7. To the extent the preamble is found to be limiting, claim 19 also requires claim 19.0 (the preamble). As discussed below, many of these limitations were not disclosed, expressly or inherently, in the CTIA Guidelines, so Dr. Heppe cannot show that claim 19 was anticipated by the CTIA Guidelines. The undisclosed limitations also would not have been obvious over the CTIA Guidelines. My bases for these conclusions follow.

¹⁸ I note also that Dr. Heppe did not opine that claim 4.2 would have been obvious. *See* Heppe Opening Report at paragraphs 137-139 (discussing claim 1.2). By contrast, Dr. Heppe opines that other limitations were obvious. *See, e.g.*, Dr. Heppe's analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines). My opinions about obviousness of entire claims are discussed separately below.

8.1.1.5.1 Claim 19.2 – CTIA Guidelines Does Not Disclose Validation Logic ...

149. Claim 19.2 requires “a validation logic configured to, within the telephone call, identify the mobile device at least in part by obtaining an identifier associated with the mobile device.” Dr. Heppe’s analysis of claim 19.2 relies on his analysis of claim 1.2. Because I disagree with Dr. Heppe’s analysis of claim 1.2, I disagree with his analysis of claim 19.2 for the same reasons, as discussed above. Therefore, Dr. Heppe has not established that claim 19.2 is disclosed by the CTIA Guidelines. Additionally, Dr. Heppe did not opine that claim 19.2 would have been obvious in view of the CTIA Guidelines. *See* Heppe Opening Report at paragraph 146. Therefore, claim 19 was neither anticipated by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines for at least these reasons.

8.1.1.5.2 Claim 19.3 – CTIA Guidelines Does Not Disclose Notification Logic ...

150. Claim 19.3 requires “a notification logic configured to communicate during the telephone call an automated voice message communicating including at least one of [claim 19.4 and claim 19.5].” As discussed below, Dr. Heppe has not established that claim 19.3 is disclosed by the CTIA Guidelines. Additionally, Dr. Heppe did not opine that claim 19.3 would have been obvious in view of the CTIA Guidelines. Therefore, claim 19 was neither anticipated by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines for at least these reasons.

151. My independent analysis of the CTIA Guidelines leads me to conclude that this reference does not disclose the claimed “notification logic” or “a notification

logic configured to communicate during the telephone call an automated voice message including at least one of: [claims 19.4 and 19.5].” As previously discussed, the CTIA Guidelines state social and business policy goals rather than technology solutions for meeting those goals. At most, Dr. Hepe cites to an “IVR system,” but this portion of the CTIA Guidelines concern manifesting consent rather than transmitting an automated voice message; *i.e.*, notice. *See* Hepe Opening Report at paragraph 149. Therefore, the CTIA Guidelines do not disclose claim 19.3

8.1.1.5.3 Claim 19.4 – CTIA Guidelines Does Not Disclose Notice Including

Information Indicating ... that Consenting ... would Result in the Location Information ... Being Disclosed

152. Claim 19.4 requires “a notice including information indicating to the user of the mobile device that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed.” As discussed below, claim 19.4 is neither disclosed by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines. As further discussed below, claim 19.5 is neither disclosed by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines, as an alternative to claim 19.4. Therefore, claim 19 was neither anticipated by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines for at least these reasons.

153. As previously discussed in conjunction with claim 19.3, Dr. Hepe’s analysis of that limitation does not establish that the CTIA Guidelines discloses “notification logic configured to communicate ... an automated voice message” so that

that reference also cannot disclose that the claimed “automated voice message” includes claim 19.4.

154. Dr. Heppe’s obviousness analysis for claim 19.4 starts from an assumption that an automated message provides the required notice (*i.e.*, claim 19.3), continues by opining that only two ways exist to provide notice (the two ways reflected in claims 19.4 and 19.5), and unsurprisingly concludes “[t]his matches the claim language,” as shown below.

An IVR system is understood to comprise automated voice messages, and from a logical perspective, there are only two ways to signal the required notice using an automated voice message: a) an explicit recitation of the required notice; or b) a verbal pointer or reference to where the notice can be found. This matches the claim language.

Heppe Opening Report at paragraph 149.

155. As seen above, Dr. Heppe’s analysis starts from the assumption that an IVR system is used for providing notice – a form of starting from the claimed invention. But, one contribution that the ‘358 Patent makes is its use of an automated message when providing “a notice ...” or providing “a location at which to find the notice” Dr. Heppe critically omits any consideration of whether it would have been obvious to use his “IVR system” to provide either form of notice when seeking consent to such notice. Thus, Dr. Heppe’s analysis cannot show that claims 19.3 through 19.5 would have been obvious in view of the CTIA Guidelines.

8.1.1.5.4 Claim 19.5 – CTIA Guidelines Does Not Disclose a Location at which to

Find the Notice ...

156. Claim 19.5 requires “wherein the communications interface is further configured to, during the telephone call, receive from the mobile device data indicating the user consent for obtaining the location information of the mobile device.” As discussed below, claim 19.5 is neither disclosed by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines. As further discussed above, claim 19.4 is neither disclosed by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines, as an alternative to claim 19.5. Therefore, claim 19 was neither anticipated by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines for at least this reason.

157. Dr. Hepe’s analysis of claim 19.5 and the CTIA Guidelines does not identify any portion of the CTIA Guidelines that discloses “a location at which to find the notice, wherein the location at which to find the notice is represented by a web address corresponding to a website where, during the telephone call, the user of the mobile device can find the notice including information indicating to the user of the mobile device that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed,” as recited in claim 19.5.

158. As previously discussed in conjunction with claim 19.3, Dr. Hepe’s analysis of that limitation does not establish that the CTIA Guidelines discloses “notification logic configured to communicate ... an automated voice message” so that that reference also cannot disclose that the claimed “automated voice message” includes claim 19.5.

159. Dr. Heppe's obviousness analysis for claim 19.5 starts from an assumption that an automated message provides the required notice (*i.e.*, claim 19.3), continues by opining that only two ways exist to provide notice (the two ways reflected in claims 19.4 and 19.5), and unsurprisingly concludes "[t]his matches the claim language," as shown below.

An IVR system is understood to comprise automated voice messages, and from a logical perspective, there are only two ways to signal the required notice using an automated voice message: a) an explicit recitation of the required notice; or b) a verbal pointer or reference to where the notice can be found. This matches the claim language.

Heppe Opening Report at paragraph 149.

160. As seen above, Dr. Heppe's analysis starts from the assumption that an IVR system is used for providing notice – a form of starting from the claimed invention. But, one contribution that the '358 Patent makes is its use of an automated message when providing "a notice ..." or providing "a location at which to find the notice" Dr. Heppe critically omits any consideration of whether it would have been obvious to use his "IVR system" to provide either form of notice when seeking consent to such notice. Thus, Dr. Heppe's analysis cannot show that claims 19.3 through 19.5 would have been obvious in view of the CTIA Guidelines.

8.1.1.5.5 Claim 19.6 – CTIA Guidelines Does Not Disclose a Communications

Interface Configured to Transmit ... the Automated Voice Message ...

161. Claim 19.6 requires "wherein the communications interface is configured to transmit during the telephone call the automated voice message to the mobile device."

As discussed below, claim 19.6 is neither disclosed by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines. Therefore, claim 19 was neither anticipated by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines for at least these reasons.

162. Dr. Hepe merely cites to his analysis of claim 1.3 in support of his conclusion that claim 19.6 was disclosed by the CTIA Guidelines. *See* Hepe Opening Report at paragraph 150 (citing Hepe Opening Report at paragraphs 67-71). I disagree for the same reasons I discussed in conjunction with claim 1.3. I note that Dr. Hepe does not opine that claim 19.6 would have been obvious, so I have nothing to rebut on that issue. *See id.*

8.1.1.5.6 Claim 19.7 – CTIA Guidelines Does Not Disclose a Communications

***Interface Further Configured to, During the Telephone Call, Receive ...
Consent ...***

163. Claim 19.7 requires “wherein the communications interface is further configured to, during the telephone call, receive from the mobile device data indicating the user consent for obtaining the location information of the mobile device.” Dr. Hepe opined that claim 19.7 would have been obvious over the CTIA Guidelines. As discussed below, Dr. Hepe has not established that claim 19.7 would have been obvious over the CTIA Guidelines. Additionally, Dr. Hepe did not opine that claim 19.7 was disclosed by the CTIA Guidelines. Therefore, claim 19 was neither anticipated by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines for at least these reasons.

164. I note that Dr. Hepe merely restates his opinions for claim 1.6 in his discussion of claim 19.7. See Hepe Opening Report at paragraphs 151-52. I disagree with his analysis and conclusions related to disclosure and obviousness for the same reasons I disagreed with those opinions for claim 1.6. Therefore, Dr. Hepe has neither established that claim 1.6 was disclosed by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines.

8.1.1.6 Claim 22

8.1.1.6.1 Claim 22.0 (preamble) – CTIA Guidelines Does Not Disclose Claim 19 so it also Does Not Disclose Claim 22

165. I refer to the elements of claim 22 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. See Infringement Report, Exh. C 13–14. Claim 22.0 requires “[t]he system of claim 19, wherein the data indicating the user consent for obtaining the location information of the mobile device includes at least one of [claim 22.1 and claim 22.2].” As discussed below, Dr. Hepe has not established that claim 22.0 is disclosed by the CTIA Guidelines. Additionally, Dr. Hepe did not opine that claim 22.0 would have been obvious in view of the CTIA Guidelines. Therefore, claim 19 was neither anticipated by the CTIA Guidelines nor would have been obvious over the CTIA Guidelines for at least these reasons.

166. Claim 22 depends from claim 19, so claim 22 includes all limitations of claim 19. As discussed above, I concluded that Dr. Hepe has not established that claim

19 was anticipated by the CTIA Guidelines. Therefore, claim 22 was not anticipated by the CTIA Guidelines for at least the same reasons.

167. Additional reasons specific to limitations 22.1 and 22.2 are discussed below.

8.1.1.6.2 Claim 22.1 – CTIA Guidelines Does Not Disclose Receiving Data Indicating ... an Action was Performed ...

168. Claim 22.1 requires “data indicating that an action was performed on the mobile device.” Dr. Heppe opined that claim 22.1 was disclosed by the CTIA Guidelines but only cited to his analysis of claim 4 in support of that conclusion. *See* Heppe Opening Report at paragraph 153-54.

169. I disagree that claim 22.1 was disclosed by the CTIA Guidelines for the reasons I discussed in conjunction with claim 4.1. I also note that Dr. Heppe did not opine that claim 22.1 or claim 4.1 would have been obvious over the CTIA Guidelines.

8.1.1.6.3 Claim 22.2 – CTIA Guidelines Does Not Disclose a Voice Command from the Mobile Device

170. Claim 22.2 requires “a voice command from the mobile device.” As discussed below, Dr. Heppe has not established that claim 22.2 is disclosed by the CTIA Guidelines. As further discussed above, claim 22.1 is not disclosed by the CTIA Guidelines as an alternative to claim 22.2. Therefore, claim 22 was not anticipated by the CTIA Guidelines.

171. Additionally, Dr. Heppe did not opine that claim 22.2 would have been obvious over the CTIA Guidelines. *See* Heppe Opening Report at paragraph 153-54. Therefore, Dr. Heppe did not establish that claim 22 would have been obvious over the CTIA Guidelines for at least this reason.

172. Dr. Heppe's analysis of claim 22 and the CTIA Guidelines does not identify any portion of the CTIA Guidelines that discloses "a voice command from the mobile device," as recited in claim 22.2. Dr. Heppe has not shown that claim 22.2 is disclosed by the CTIA Guidelines because Dr. Heppe cites to, at most, receiving consent through an IVR system without indicating consent by a user speaking a voice command. *I.e.*, the current limitation is more specific than Dr. Heppe's cited disclosures for this limitation. Therefore, Dr. Heppe did not establish that the CTIA Guidelines disclosed the present limitation.

8.1.2 TechnoCom White Paper¹⁹

8.1.2.1 Overview of Reference

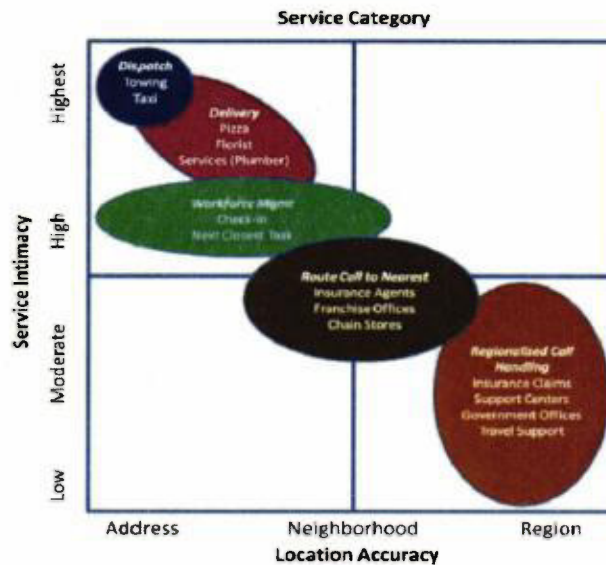
173. The TechnoCom White Paper is a seven-page reference that focuses on describing the benefits of including caller ID functionality into call center environments

¹⁹ RUIZ-005605-11.

or IVR implementations. By adding caller ID functionality, the TechnoCom White Paper asserts that operators of such systems “can save money and increase profits.”

RUIZ_005605. Almost the entire body of this reference concerns reasons for using caller ID and ways that caller ID functionality can be implemented. The TechnoCom White Paper has no meaningful discussion of IVR system design or implementation. At most, the TechnoCom White Paper has a few, anecdotal mentions of IVR systems as use cases where caller ID could be useful.

174. By contrast, the substantial focus of the TechnoCom White Paper is on the benefits that can arise from knowing a caller’s location rather than mechanisms for providing notice for and consent to location-based data gathering. The TechnoCom White Paper briefly discusses how call centers may automatically determine location of incoming *callers* to an IVR system by using one of three sources: (1) manual entry by caller, (2) database look-up, and (3) computed wireless location. RUIZ-005605–5611, 5607 ;see also ‘659 Patent File Wrapper, *Applicant’s Reply to Office Action of April 27, 2016* at 15 (Jan. 4, 2016) (the “Protest Response”). An example of TechnoCom White Papers subject matter is illustrated in the image below, taken from that reference.



175. RUIZ__005606 (illustrating how different markets, such as an automobile towing service or an insurance company, would want different levels of location specificity).

176. The TechnoCom White Paper has a paragraph discussing privacy concerns with collection of location-based data. See “Mobile Caller Location Privacy Considerations” on RUIZ_005611. However, this paragraph is simply a restatement of the type of social policy goals expressed in the CTIA Guidelines rather than a discussion of technical solutions for providing notice to and receiving consent from mobile device users, related to location-based data collection, during a call. The TechnoCom White Paper does not disclose receiving a signal that indicates that consent was given to the transmission of location information. See Protest Response at 16-17.

177. It is my opinion that a POSITA reading the TechnoCom White Paper would only take from that paper that (1) collecting location-based data is helpful for

examples provided in that paper such as 911 service and pizza delivery; (2) that wireless devices require extra technical steps such as triangulation to determine location relative to landline devices; and (3) IVR systems would benefit from location-based data so that the IVR systems could route calls to geographically beneficial sales or support personnel.

178. I disagree with Dr. Heppe's opinions that any asserted claim was disclosed by the TechnoCom White Paper, expressly or inherently, or that any asserted claim would have been obvious. Unless someone were to start from the asserted claims and work backwards, using the asserted claims as a template, they would not arrive at any asserted claim starting from the TechnoCom White Paper.

8.1.2.2 Claim 1

179. I refer to the elements of claim 1 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. *See* Infringement Report, Exh. C 2–5. Claim 1 requires the following elements: claim 1.1, claim 1.2, claim 1.3, claims 1.4 or 1.5, and claim 1.6. To the extent the preamble is found to be limiting, claim 1 also requires claim 1.0. As discussed below, many of these limitations were not disclosed, expressly or inherently, in the TechnoCom White Paper, so Dr. Heppe cannot show that claim 1 was anticipated by the TechnoCom White Paper. The undisclosed limitations also would not have been obvious over the TechnoCom White Paper. My bases for these conclusions follow.

8.1.2.2.1 Claim 1.0 (preamble) – TechnoCom White Paper Does Not Disclose a Computer-Implemented Method for Receiving User Consent ...

180. To the extent the preamble is found to be limiting, claim 1.0 requires “[a] computer implemented method for receiving consent from a user of a mobile device to obtaining location information of the mobile device.” As discussed below, Dr. Hepe has not established that claim 1.0 is disclosed by the TechnoCom White Paper. Therefore, claim 1 was not anticipated by the TechnoCom White Paper for at least this reason.

181. Additionally, Dr. Hepe did not opine that claim 1.0 would have been obvious over the TechnoCom White Paper. Therefore, Dr. Hepe did not establish that claim 1 would have been obvious over the TechnoCom White Paper for at least this reason.

182. Dr. Hepe’s analysis of claim 1 and the TechnoCom White Paper does not include an opinion that the TechnoCom White Paper discloses a computer-implemented method as recited in the preamble of claim 1.

183. The preamble of claim 1 recites a computer-implemented method, so, to the extent the preamble is found to be limiting, the TechnoCom White Paper can only anticipate claim 1 if that reference discloses the claimed computer-implemented method. Dr. Hepe has offered no such opinion. *See* Hepe Opening Report at paragraph 156 (discussing the preamble but no discussion of computer-implemented method in analysis of preamble); Appendix A at 1-2 (no discussion of a computer-implemented method).

184. For each of these reasons, I conclude that Dr. Heppe has not established that claim 1.0 is disclosed by clear and convincing evidence in the TechnoCom White Paper.²⁰ Accordingly, the TechnoCom White Paper neither anticipates nor would have rendered obvious claim 1, and therefore also neither anticipates nor would have rendered obvious claim 4, which depends from claim 1.

185.

*8.1.2.2.2 Claim 1.3 – TechnoCom White Paper Does Not Disclose Transmitting ...
During the Telephone Call an Automated Voice Message ...*

186. Claim 1.3 requires “transmitting to the mobile device during the telephone call an automated voice message communicating to the user of the mobile device at least one of [claim 1.4 and claim 1.5].” I refer to this element as Claim 1.3. As discussed below, Dr. Heppe has not established that claim 1.3 is disclosed by the TechnoCom White Paper. Therefore, claim 1 was not anticipated by the TechnoCom White Paper for at least this reason.

²⁰ I note also that Dr. Heppe did not opine that claim 1.0 would have been obvious. See Heppe Opening Report at paragraphs 156 (discussing claim 1.0). By contrast, Dr. Heppe opines that other limitations were obvious if they were not anticipated. See, e.g., Dr. Heppe’s analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not anticipated. My opinions about obviousness conclusions Dr. Heppe did provide are discussed separately below.

187. Additionally, Dr. Heppe did not opine that claim 1.3 would have been obvious over the TechnoCom White Paper. *See* Heppe Opening Report at paragraph 158; Appendix A at 5. Therefore, claim 1 would not have been obvious over the TechnoCom White Paper for at least this reason.

188. Dr. Heppe's analysis of claim 1 and the TechnoCom White Paper does not identify any portion of the TechnoCom White Paper that discloses "transmitting to the mobile device during the telephone call an automated voice message communicating to the user of the mobile device at least one of [claim 1.4 or 1.5]," as recited in claim 1.3.

189. As discussed above in the Overview section for this reference, a POSITA reading the TechnoCom White Paper would not take from that reference any specific details of using an IVR system, much less using the IVR system for notice and consent related to location-based data collection.

190. The only discussion that the TechnoCom White Paper has of using an IVR system with location-based data collection is that location-based data collection would enhance an IVR system – not that an IVR system could be used for providing notice to and consent for location-based data collection. To suggest otherwise is simply incorrect.

191. The TechnoCom White Paper is similarly unsupportive of Dr. Heppe's obviousness conclusions related to the asserted patents. At most, this reference merely acknowledges that location-based data collection was known, that consent is needed before collecting such data, and acknowledges that IVR systems in some form exist – points that could hardly be disputed – but the TechnoCom White Paper does nothing to suggest that an IVR system can be used for notice and consent associated with location-

based data collection. Indeed, the two concepts are completely separate in this reference. Therefore, the TechnoCom White Paper would not have rendered claims 1.3-1.5 obvious.

192. Thus, Dr. Heppe's characterizations of the TechnoCom White Paper as disclosing or rendering obvious notice and consent limitations within claims 1.3-1.5 are misplaced. A discussion of specific mischaracterizations follows.

193. Although Dr. Heppe cites to a portion of the TechnoCom White Paper that mentions "optimizing the caller experience requires IVR logic" (Heppe Opening Report at paragraph 159, citing RUIZ_005611), and Dr. Heppe opines that this passage discloses the present limitation, I disagree.

194. Dr. Heppe's description of the quoted passage reflects a mischaracterization of that passage. The quoted passage does not concern using IVR logic for notice and consent but instead concerns the benefits from having location-based information. When the surrounding context to the cited passage is considered, the true meaning of the cited passage is apparent:

Across the range of available telephony services, the technologies available to determine caller location range from very accurate, as with the registered address of a home phone or the global positioning system (GPS) location of a mobile caller; to less precise zip code or prefix-based location that might yield the caller's neighborhood; or simply an unknown location. Optimizing the caller experience requires IVR logic and operator-assisted work flows designed with a thorough understanding of the range and availability of location information. A good design that leverages the value from caller location and handles the exceptions effectively can yield substantial enterprise and customer benefits. The sections that follow describe in more detail the benefits of mobile caller location as well as some practical considerations for its effective application.

RUIZ_005606.

195. Another portion of the TechnoCom White Paper that Dr. Heppe cites for the present limitation does not disclose an automated voice message but instead merely discloses that consent must be requested and granted (without disclosing how such consent would be sought or received). *See* Heppe Opening Report at paragraph 159, citing RUIZ_005611. Thus, this cited portion does not support Dr. Heppe's conclusion.

196. A third portion of the TechoCom White Paper that Dr. Heppe cites for the present limitation – “automating the answer to this question” – at most discloses a reason for using location-based data rather than having a customer service person ask this question, which is not relevant to the asserted claims. *See* Heppe Opening Report at paragraph 159, citing RUIZ-005605. Thus, this cited portion also does not support Dr. Heppe's conclusion.

197. Nonetheless, Dr. Heppe summarily states that the TechnoCom White Paper teaches “using an automated voice message comprising either a notice of disclosure or a location at which to find the notice” *See* Heppe Opening Report at paragraph 159. Dr. Heppe does not cite to any portion of the TechnoCom White Paper in support of this conclusion.

198. Dr. Heppe also concludes that “[t]hus, it is inherent in TechnoCom White Paper that the request for tracking (or notice) would be via IVR call.” Heppe Exhibit A at 5 (claim 1.3-1.5). I disagree. Dr. Heppe's inherency opinion has no basis for the reasons discussed above. The only IVR-related disclosure he cites does not concern notices and consent as discussed above. Moreover, Dr. Heppe's inherency theory

requires that an IVR system necessarily discloses notice through an automated message; design alternatives exist such as merely using the IVR system for consent rather than consent and notice. Thus, Dr. Heppe has not established that the present limitation was inherently disclosed in the TechnoCom White Paper.

199. Dr. Heppe further opines that using an IVR system for notice would have been obvious in view of the TechnoCom White Paper. *See* Heppe Opening Report at paragraph 159. As discussed above, the TechnoCom White Paper's only support for an obviousness opinion is that it discloses that location-based data collection like 911 services existed and that IVR systems would be enhanced with location-based data, but these are irrelevant to whether the asserted claims are obvious.

200. For the reasons discussed below, I conclude that Dr. Heppe has not established that claim 1.3 is disclosed by clear and convincing evidence by the TechnoCom White Paper.²¹ Accordingly, the TechnoCom White Paper neither anticipates nor would have rendered obvious claim 1, and therefore also neither anticipates nor would have rendered obvious claim 4, which depends from claim 1.

8.1.2.2.3 Claim 1.4 – TechnoCom White Paper Does Not Disclose a Notice ...

²¹ I note also that Dr. Heppe did not opine that claim 1.3 would have been obvious. *See* Heppe Opening Report at paragraphs 126-28 (discussing claim 1.3). By contrast, Dr. Heppe opines that other limitations were obvious. *See, e.g.*, Dr. Heppe's analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines). My opinions about obviousness of entire claims are discussed separately below.

201. Claim 1.4 requires “a notice including information indicating that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed.” As discussed below, Dr. Hepe has not established that claim 1.4 is disclosed by the TechnoCom White Paper. As further discussed below, claim 1.5 is not disclosed by the TechnoCom White Paper as an alternative to claim 1.4. Therefore, claim 1 was not anticipated by the TechnoCom White Paper.

202. Dr. Hepe’s analysis of claim 1 and the TechnoCom White Paper does not identify any portion of the TechnoCom White Paper that discloses “a notice including information indicating that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed,” as recited in claim 1.4, for the same reason that he has not established that claim 1.3 was disclosed by the TechnoCom White Paper as discussed above.

203. Additionally, claim 1.4 would not have been obvious for the reasons discussed in conjunction with claim 1.3.

204. For each of these reasons, I conclude that Dr. Hepe has not established that claim 1.4 is disclosed or would have been obvious by clear and convincing evidence

by the TechnoCom White Paper.²² Additionally, as discussed below, claim 1.5 is neither disclosed nor would have been obvious over the TechnoCom White Paper. Accordingly, the TechnoCom White Paper neither anticipates nor would have rendered obvious claim 1, and therefore also neither anticipates nor would have rendered obvious claim 4, which depends from claim 1.

8.1.2.2.4 Claim 1.5 – TechnoCom White Paper Does Not Disclose a Location at which to Find the Notice ...

205. Claim 1.5 requires “a location at which to find the notice, wherein the location at which to find the notice is represented by a web address corresponding to a website where, during the telephone call, the user can find the notice indicating to the user that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed.” As discussed below, Dr. Hepe has not established that claim 1.5 is disclosed by the TechnoCom White Paper. As further discussed above, claim 1.4 is not disclosed by the TechnoCom White Paper as an alternative to claim 1.5. Therefore, claim 1 was not anticipated by the TechnoCom White Paper.

²² I note also that Dr. Hepe did not opine that claim 1.4 would have been obvious. *See* Hepe Opening Report at paragraphs 126-28 (discussing claim 1.4). By contrast, Dr. Hepe opines that other limitations were obvious. *See, e.g.*, Dr. Hepe’s analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines). My opinions about obviousness of entire claims are discussed separately below.

206. Dr. Heppe's analysis of claim 1 and the TechnoCom White Paper does not identify any portion of the TechnoCom White Paper that discloses "a location at which to find the notice, wherein the location at which to find the notice is represented by a web address corresponding to a website where, during the telephone call, the user can find the notice indicating to the user that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed," as recited in claim 1.5.

207. I reached this conclusion for the same reason that I concluded that claim 1.3 is not disclosed by the TechnoCom White Paper as discussed above. Therefore, Dr. Heppe has not established that the present limitation is disclosed by the present reference.

208. For each of these reasons, I conclude that Dr. Heppe has not established that claim 1.5 is disclosed by clear and convincing evidence by the TechnoCom White Paper.²³ Additionally, as discussed above, claim 1.4 is neither disclosed nor would have been obvious over the TechnoCom White Paper. Accordingly, the TechnoCom White Paper neither anticipates nor would have rendered obvious claim 1, and therefore also

²³ I note also that Dr. Heppe did not opine that claim 1.5 would have been obvious. *See* Heppe Opening Report at paragraphs 159-61 (discussing claims 1.3-1.5). By contrast, Dr. Heppe opines that other limitations were obvious. *See, e.g.,* Dr. Heppe's analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines). Therefore, I have nothing to rebut on the issue of whether claim 1.5 would have been obvious. My opinions about obviousness of entire claims are discussed separately below.

neither anticipates nor would have rendered obvious claim 4, which depends from claim 1.

8.1.2.2.5 Claim 1.6 – TechnoCom White Paper Does Not Disclose Receiving ...

During the Telephone Call ... a Signal Indicating Consent ...

209. Claim 1.6 requires “receiving from the mobile device during the telephone call a signal including data indicating consent for obtaining the location information of the mobile device.” As discussed below, Dr. Heppe has not established that claim 1.6 is disclosed by the TechnoCom White Paper. Additionally, Dr. Heppe did not opine that claim 1.6 would have been obvious over the TechnoCom White Paper. Therefore, claim 1 was neither disclosed nor would have been obvious over the TechnoCom White Paper.

210. I note at the outset that Dr. Heppe’s opinion for claim 1.6 is ambiguous as to whether he is opining about disclosure or obviousness of that claim. Specifically, Dr. Heppe states, “The same is true for consent to location tracking, again using IVR.” *I.e.*, claim 1.6. Because Dr. Heppe opined that claims 1.3-1.5 (the preceding analysis) were disclosed, or in the alternative would have been obvious, his opinion appears to be that claim 1.6 was disclosed or would have been obvious. I disagree for the reasons discussed next.

211. Dr. Heppe cites several passages in support of his opinion that claim 1.6 was disclosed by the TechnoCom White Paper but none of these passages support his conclusion.

212. Dr. Heppe states at first that, “The TechnoCom White Paper notes ‘[t]he caller’s consent may be obtained temporarily for a onetime use or persistently for recurring uses,’” citing the TechnoCom White Paper at RUIZ-005611. *See* Heppe Opening Report at paragraph 160. This citation from the TechnoCom White Paper does not support Dr. Heppe’s conclusion because it merely observes that consent may be obtained for one-time use or for persistent use, without discussing how consent may be acquired. The ‘358 Patent discloses systems and methods for, among other things, obtaining consent during a phone call as recited in claim 1.6. The above-cited passage doesn’t disclose claim 1.6.

213. Dr. Heppe’s second quoted passage from the TechnoCom White Paper is similarly unhelpful. He cites to the following quotation: “Any dialogue with the customer that includes ‘Where are you?’ can find cost savings, operating efficiencies and enhanced customer service by *automating* the answer to this question.” This citation does not support Dr. Heppe’s conclusion or even relate to IVR-like functionality because the cited passage, when read in context, plainly concerns the benefit that would accrue from acquiring location-based data during a customer service call rather than starting a customer service call with the question, “Where are you?”

Enterprises and individuals have become accustomed to knowing “who” is calling by virtue of ubiquitous caller ID that accompanies wireline and wireless phone calls. Similar insight about “where” a caller is located is also now available for call center and IVR applications. This information can be used to improve dispatched services, automate call routing to the nearest service point, or help the caller “find the nearest”. Any dialog with the customer that includes “Where are you?” can find cost savings,

operating efficiencies and enhanced customer service by automating the answer to this question.

RUIZ-005605.

214. Dr. Heppe also observes that, “Here, TechnoCom White Paper explains that it is advantageous to have automation.” *See* Heppe Opening Report at paragraph 160. But, claim 1.6 does not recite automation in general, it recites a specific approach to receiving consent.

215. Dr. Heppe continues with other statements not related to claim 1.6.: “It also references that ‘[s]ome caller location automation solutions have used telephone area code and prefix effectively for years.’” Heppe Opening Report at paragraph 160. That opinion does not establish that claim 1.6 was disclosed in the TechnoCom White Paper.

216. Dr. Heppe returns to claim 1.6 by stating, “Thus, this automation can apply to granting consent which would include a signal with data via IVR technology. All of this would necessarily take place within the call since IVR requires an established connection.” Several unjustified logical leaps exist within this passage. I disagree with each, so I disagree with Dr. Heppe’s conclusion.

217. A first logical leap in the above-quoted statement is Dr. Heppe opines that because automation in the form of caller ID can be applied to customer service calls, to avoid the question, “Where are you?”, automation in the form of an IVR call can apply to other situations such as claim 1.6. By Dr. Heppe’s logic, any form of automation would necessarily render obvious any other form of automation. I must disagree to such a proposition.

218. The issue is whether claim 1.6 was disclosed or would have been obvious. The mere fact that caller ID, as a form of automation, was known to exist does not by itself render claim 1.6 (or other forms of automation) obvious because claim 1.6 does not concern caller ID.

219. To the extent that Dr. Heppe could be understood to suggest that claim 1.6 would have been obvious because it is analogous to caller ID, I disagree. Claim 1.6 is not analogous to caller ID so it does not support an obvious-by-analogy conclusion.

220. The second logical leap in Dr. Heppe's above-quoted passage is that the existing IVR call that arose from Dr. Heppe's first logical leap could naturally be employed to receive consent because an ongoing call was already in existence. But, as discussed above, Dr. Heppe relied on an incorrect logical leap (that the existence of caller ID meant that other forms of automation would have been obvious) in the first quoted sentence to allow a conclusion that the existing IVR session could be used to receive consent. I disagree.

221. Again, in summary, Dr. Heppe opines that the existence of caller ID would have rendered obvious "receiving ... during the telephone call a signal including data indicating consent for obtaining the location information of the mobile device. I disagree for the reasons stated above.

222. Dr. Heppe closes with a summary statement that reflects the shortcomings of his approach: "In my opinion, IVR technology inherently involves automated voice messages. Therefore, it is my opinion that TechnoCom White Paper inherently anticipates claim 1 [or would have rendered it obvious]." Heppe Opening Report at

paragraph 161. But, as discussed above, the '358 Patent does not claim IVR technology in the abstract; it claims specific systems and methods that, among other things, provide notice and receive consent to collecting location-based data.

223. Additionally, it cannot reasonably be said that an IVR system inherently discloses any claim of the '358 Patent because Dr. Heppes IVR system merely reflects one design choice among several design alternatives. I disagree as repeatedly discussed above.

224. In summary, Dr. Heppes has not shown that the TechnoCom White Paper anticipated or would have rendered obvious claim 1 for the reasons discussed above. My opinions concerning the remaining asserted claims follow.

8.1.2.3 Claim 4

225. I refer to the elements of claim 4 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. See Infringement Report, Exh. C 6–7. Claim 4 requires the following elements: claim 4.0 and claim 4.1 or claim 4.2. As discussed below, none of these limitations were disclosed, expressly or inherently, in the TechnoCom White Paper, so Dr. Heppes cannot show that claim 4 was anticipated by the TechnoCom White Paper. My bases for this conclusion follow.

8.1.2.3.1 Claim 4.0 (preamble) – TechnoCom White Paper Does Not Disclose Claim 1 so it also Does Not Disclose Claim 4

226. Claim 4.0 requires “[t]he method of claim 1, wherein the receiving from the mobile device a signal including data indicating consent for obtaining the location information of the mobile device includes at least one of [claim 4.1 and 4.2].” For the reasons discussed below in conjunction with claims 4.1 and 4.2, Dr. Hepe has not established that claim 4.0 is disclosed by clear and convincing evidence by the TechnoCom White Paper.²⁴ Accordingly, the TechnoCom White Paper neither anticipates nor would have rendered obvious claim 4 for at least this reason.

227. Claim 4 depends from claim 1, so claim 4 includes all limitations of claim 1. As discussed above, I concluded that Dr. Hepe has not established that claim 1 was anticipated by the TechnoCom White Paper or would have been obvious over the TechnoCom White Paper. Therefore, claim 4 was neither anticipated by the TechnoCom White Paper nor obvious over the TechnoCom White Paper for at least those reasons.

228. Additional reasons specific to claims 4.1 and 4.2 are discussed below.

8.1.2.3.2 Claim 4.1 – TechnoCom White Paper Does Not Disclose Receiving Data Indicating ... an Action ...

²⁴ I note also that Dr. Hepe did not opine that claim 4.0 would have been obvious. See Hepe Opening Report at paragraph 162 (discussing claim 4.0). By contrast, Dr. Hepe opines that other limitations were obvious. See, e.g., Dr. Hepe’s analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines). My opinions about obviousness of entire claims are discussed separately below.

229. Claim 4.1 requires “receiving data indicating that the user of the mobile device has performed an action on the mobile device.” As discussed below, Dr. Heppe has not established that claim 4.1 is disclosed by the TechnoCom White Paper. As further discussed below, claim 4.2 is not disclosed by the TechnoCom White Paper as an alternative to claim 4.1. Therefore, claim 4 was not anticipated by the TechnoCom White Paper.

230. Additionally, Dr. Heppe did not opine that claim 4.1 would have been obvious over the TechnoCom White Paper. *See* Heppe Opening Report at paragraph 162 (Claim 4). Therefore, Dr. Heppe did not establish that claim 4 would have been obvious over the TechnoCom White Paper for at least this reason.

231. Dr. Heppe’s analysis of claim 4 and the TechnoCom White Paper does not identify any portion of the TechnoCom White Paper that discloses “receiving data indicating that the user of the mobile device has performed an action on the mobile device,” as recited in claim 4.1.

232. Dr. Heppe's conclusions associated with claim 4.1 are incorrect and misleading for the same reasons that they are incorrect and misleading for claim 4.0 as discussed above. I.e., the only disclosure of IVR within the TechnoCom White Paper concerned how IVR could be enhanced with location-based data collection. Nothing in the presence reference disclosed using an IVR system for notice to and consent for location-based data collection. Although Dr. Heppe states that “[t]his is taught in TechnoCom White Paper ...,” that is simply not correct. At most, again, Dr. Heppe implicitly argues inherency as applied to a design choice to reach a conclusion that the

present element was disclosed by the present reference. The error of this approach is evident.

233. For each of these reasons, I conclude that Dr. Heppe has not established that claim 4.1 is disclosed by clear and convincing evidence by the TechnoCom White Paper.²⁵ Additionally, as discussed below, the TechnoCom White Paper neither discloses nor would have rendered obvious claim 4.2 as an alternative to claim 4.1. Accordingly, the TechnoCom White Paper neither anticipates nor would have rendered obvious claim 4.

8.1.2.3.3 Claim 4.2 – TechnoCom White Paper Does Not Disclose Receiving a Voice Command ...

234. Claim 4.2 requires “receiving a voice command from the mobile device.” As discussed below, Dr. Heppe has not established that claim 4.2 is disclosed by the TechnoCom White Paper. As further discussed above, claim 4.1 is not disclosed by the TechnoCom White Paper as an alternative to claim 4.2. Therefore, claim 4 was not anticipated by the TechnoCom White Paper.

²⁵ I note also that Dr. Heppe did not opine that claim 4.1 would have been obvious. See Heppe Opening Report at paragraph 162 (discussing claim 4.1). By contrast, Dr. Heppe opines that other limitations were obvious. See, e.g., Dr. Heppe’s analysis of claim 1.1 at paragraph 125 (opining that claim 1.1 would have been obvious if it was not disclosed by the CTIA Guidelines. My opinions about obviousness of entire claims are discussed separately below.

235. Additionally, Dr. Heppe did not opine that claim 4.2 would have been obvious over the TechnoCom White Paper. *See* Heppe Opening Report at paragraph 162. Therefore, Dr. Heppe did not establish that claim 4 would have been obvious over the TechnoCom White Paper for at least this reason.

236. Dr. Heppe's analysis of claim 4 and the TechnoCom White Paper does not identify any portion of the TechnoCom White Paper that discloses "receiving a voice command from the mobile device," as recited in limitation 4.2. Accordingly, the TechnoCom White Paper neither anticipates nor would have rendered obvious claim 4.

8.1.2.4 Claim 19

8.1.2.4.1 Claim 19.1 – TechnoCom White Paper Does Not Disclose a Communication Interface Configured to Participate in a Telephone Call ...

237. Claim 19.1 requires "a communications interface configured to participate in a telephone call with the mobile device." As discussed below, Dr. Heppe has not established that claim 19.1 is disclosed by the TechnoCom White Paper.

238. Dr. Heppe's analysis of claim 19.1 relies on his analysis of claim 1. *See* Heppe Opening Report at paragraph 163. I disagree with Dr. Heppe's analysis and conclusions for the reasons I discussed in conjunction with claim 1.1. Therefore, claim 19 was neither anticipated by the TechnoCom White Paper nor would have been obvious over the TechnoCom White Paper for at least this reason

8.1.2.4.2 Claim 19.3 – TechnoCom White Paper Does Not Disclose Notification Logic

...

239. Claim 19.3 requires “a notification logic configured to communicate during the telephone call an automated voice message communicating including at least one of [claim 19.4 and claim 19.5].”

240. Dr. Hepe’s analysis of claim 19.3 relies on his analysis of claim 1. *See* Hepe Opening Report at paragraph 163. I disagree with Dr. Hepe’s analysis and conclusions for the reasons I discussed in conjunction with claim 1.3. Therefore, claim 19 was neither anticipated by the TechnoCom White Paper nor would have been obvious over the TechnoCom White Paper for at least this reason.

8.1.2.4.3 Claim 19.4 – TechnoCom White Paper Does Not Disclose Notice Including Information Indicating ... that Consenting ... would Result in the Location Information ... Being Disclosed

241. Claim 19.4 requires “a notice including information indicating to the user of the mobile device that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed.” As discussed below, Dr. Hepe has not established that claim 19.4 is disclosed by the TechnoCom White Paper.

242. Dr. Hepe’s analysis of claim 19.4 relies on his analysis of claim 1. *See* Hepe Opening Report at paragraph 163. I disagree with Dr. Hepe’s analysis and conclusions for the reasons I discussed in conjunction with claim 1.4. Therefore, claim 19 was neither anticipated by the TechnoCom White Paper nor would have been obvious over the TechnoCom White Paper for at least this reason.

8.1.2.4.4 Claim 19.5 – TechnoCom White Paper Does Not Disclose a Location at which to Find the Notice ...

243. Claim 19.5 requires “wherein the communications interface is further configured to, during the telephone call, receive from the mobile device data indicating the user consent for obtaining the location information of the mobile device.” As discussed below, Dr. Hepe has not established that claim 19.5 is disclosed by the TechnoCom White Paper.

244. Dr. Hepe’s analysis of claim 19.5 relies on his analysis of claim 1. *See* Hepe Opening Report at paragraph 163. I disagree with Dr. Hepe’s analysis and conclusions for the reasons I discussed in conjunction with claim 1.5. Therefore, claim 19 was neither anticipated by the TechnoCom White Paper nor would have been obvious over the TechnoCom White Paper for at least this reason.

8.1.2.4.5 Claim 19.6 – TechnoCom White Paper Does Not Disclose a Communications Interface Configured to Transmit ... the Automated Voice Message ...

245. Claim 19.6 requires “wherein the communications interface is configured to transmit during the telephone call the automated voice message to the mobile device.” As discussed below, Dr. Hepe has not established that claim 19.6 is disclosed by the TechnoCom White Paper.

246. Dr. Hepe’s analysis of claim 19.6 relies on his analysis of claim 1. *See* Hepe Opening Report at paragraph 163. I disagree with Dr. Hepe’s analysis and conclusions for the reasons I discussed in conjunction with claim 1.3. Therefore, claim

19 was neither anticipated by the TechnoCom White Paper nor would have been obvious over the TechnoCom White Paper for at least this reason.

8.1.2.4.6 Claim 19.7 – TechnoCom White Paper Does Not Disclose a Communications Interface Further Configured to, During the Telephone Call, Receive ... Consent ...

247. Claim 19.7 requires “wherein the communications interface is further configured to, during the telephone call, receive from the mobile device data indicating the user consent for obtaining the location information of the mobile device.” As discussed below, Dr. Hepe has not established that claim 19.7 is disclosed by the TechnoCom White Paper.

248. Dr. Hepe’s analysis of claim 19.7 relies on his analysis of claim 1. *See* Hepe Opening Report at paragraph 163. I disagree with Dr. Hepe’s analysis and conclusions for the reasons I discussed in conjunction with claim 1.6. Therefore, claim 19 was not anticipated by the TechnoCom White Paper nor would have been obvious over the TechnoCom White Paper for at least this reason.

8.1.2.5 Claim 22

8.1.2.5.1 Claim 22.0 (preamble) – TechnoCom White Paper Does Not Disclose Claim 19 so it also Does Not Disclose Claim 22

249. I refer to the elements of claim 22 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. *See* Infringement Report, Exh. C 13–14. Claim 22.0 requires “[t]he system of claim 19,

wherein the data indicating the user consent for obtaining the location information of the mobile device includes at least one of [claim 22.1 and claim 22.2].” Dr. Heppe’s analysis of claim 22.0 relies on his analysis of claim 4. *See* Heppe Opening Report at paragraph 164. I disagree with Dr. Heppe’s analysis and conclusions for the reasons I discussed in conjunction with claim 4.0. Therefore, claim 22 was neither anticipated by the TechnoCom White Paper nor would have been obvious over the TechnoCom White Paper for at least this reason.

8.1.2.5.2 Claim 22.1 – TechnoCom White Paper Does Not Disclose Receiving Data Indicating ... an Action was Performed ...

250. Claim 22.1 requires “data indicating that an action was performed on the mobile device.” Dr. Heppe’s analysis of claim 22.1 relies on his analysis of claim 4. *See* Heppe Opening Report at paragraph 164. I disagree with Dr. Heppe’s analysis and conclusions for the reasons I discussed in conjunction with claim 4.1. Therefore, claim 22 was neither anticipated by the TechnoCom White Paper nor would have been obvious over the TechnoCom White Paper for at least this reason.

8.1.2.5.3 Claim 22.2 – TechnoCom White Paper Does Not Disclose a Voice Command from the Mobile Device

251. Claim 22.2 requires “a voice command from the mobile device.” Dr. Heppe’s analysis of claim 22.2 relies on his analysis of claim 4. *See* Heppe Opening Report at paragraph 164. I disagree with Dr. Heppe’s analysis and conclusions for the reasons I discussed in conjunction with claim 4.2. Therefore, claim 22.2 was neither

anticipated by the TechnoCom White Paper nor would have been obvious over the TechnoCom White Paper for at least this reason.

8.1.3 Enterprise²⁶

8.1.3.1 Enterprise is not Prior Art

8.1.3.1.1 Enterprise is a Confidential Document

252. I have been told by counsel that for a reference to be prior art to an issued patent, it must be established that the reference was publicly disclosed (*i.e.*, published) before the priority date of the patent to a high degree of certainty. I have heard this degree of certainty described as “clear and convincing evidence” – a legal phrase – but ultimately, I understand that standard to reflect a high or very high degree of certainty.

253. Each page of Enterprise is stamped “Confidential.” An excerpt from page 1 of Enterprise is shown below. As seen below, this page is unambiguously marked “Proprietary & Confidential.”

²⁶ RUIZ-004502-16.

[RUIZ-0044502]

254. It is my opinion that a document that is marked “Confidential” is not prior art to any degree of certainty without some basis for believing that the confidential designation was incorrect or was only enforced for a period of time. Dr. Heppe has not addressed the confidentiality issue in any way within his expert report.

255. Thus, I disagree with Dr. Heppe’s opinion that Enterprise is prior art for at least this reason.

8.1.3.1.2 Publication Date not Established with High Certainty

256. I have been told by counsel that for a reference to be prior art to an issued patent, it must be established that the publication date of the reference precedes the priority date of the patent to a high degree of certainty. Again, I understand that standard to reflect a high or very high degree of certainty.

257. Dr. Heppe opined that Enterprise was prior art, apparently based on Dr. Heppe’s version of that document carrying a 2010 copyright notice. Dr. Heppe did not offer any opinions on why the 2010 copyright date reflected the publication date of the reference, and he did not offer any further basis for his conclusion that the reference was prior art to the ‘358 Patent.

258. In my opinion, the mere existence of a date on a document, absent more, does not offer the requisite high or very high degree of certainty that the date *reliably* reflects the date on which the document was publicly disclosed. Therefore, I disagree that Dr. Heppe has established that Enterprise is prior art to the '358 Patent.

8.1.3.2 Overview of Reference

259. Enterprise is a “Confidential” document that Dr. Heppe has nonetheless mapped to the asserted claims. Enterprise appears to have been created by TechnoCom, the same company that created the TechnoCom White Paper reference.

260. Enterprise discloses some suggested technical approaches to providing notice prior to collecting location-based data. For example, Enterprise suggests use of a recorded message that notifies a user that a service seeks to use the user’s location-based data. *See* RUIZ-004512.

261. Enterprise discloses techniques for automatically locating incoming *callers* to an IVR system. RUIZ-004502-516 at 508-513, *see also* Protest Response at 176. Enterprise also discloses some suggested technical approaches to providing notice prior to collecting location-based data. For example, Enterprise suggests use of a recorded message that notifies a user that a service seeks to use the user’s location-based data. *See* RUIZ-004502 at 512.

262. Notwithstanding Dr. Heppe’s characterization of Enterprise, that reference conspicuously fails to disclose technical approaches for providing in-call consent to collecting location-based data. Nothing in Enterprise discloses such consent. *See also*

Protest Response at 177. Therefore, Enterprise is of limited use in the field of the '358 Patent.

263. My discussion of Enterprise continues with a discussion of undisclosed limitations below.

8.1.3.3 Claim 1

264. I refer to the elements of claim 1 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. *See* Infringement Report, Exh. C 2–5. Claim 1 requires the following elements: claim claim 1.1, claim 1.2, claim 1.3, claims 1.4 or 1.5, and claim 1.6. To the extent the preamble is found to be limiting, claim 1 also requires claim 1.0. As discussed below, many of these limitations were not disclosed, expressly or inherently, in Enterprise, so Dr. Heppe cannot show that claim 1 was anticipated by Enterprise. The undisclosed limitations also would not have been obvious over Enterprise. My bases for these conclusions follow.

8.1.3.4 Claim 1.2 – Enterprise Does Not Disclose Identifying the Mobile Device

265. Claim 1 of the '358 Patent requires “within the telephone call, identifying the mobile device at least in part by obtaining an identifier associated with the mobile device.” As discussed below, Dr. Heppe has not established that claim 1.2 is disclosed by Enterprise. Therefore, claim 1 was not anticipated by Enterprise for at least this reason.

266. Additionally, Dr. Heppe did not opine that claim 1.2 would have been obvious over Enterprise. Therefore, Dr. Heppe did not establish that claim 1 would have been obvious over Enterprise for at least this reason.

267. Dr. Heppe's analysis of claim 1 and Enterprise does not identify any portion of Enterprise that discloses claim 1.2. The present limitation concerns identifying a mobile device by obtaining an identifier associated with that device within the telephone call. Dr. Heppe references the use of Caller ID only in the case of a landline. See Heppe Opening Report at paragraph 167, citing RUIZ 004509.

268. To the extent Dr. Heppe's opinions could be understood to concern inherency, I disagree that the cited passages inherently disclose claim 1.2. Sending a status notification to a mobile user via SMS does not mean that the system identified the mobile device in the call. See RUIZ 004510. For non-locatable mobile callers, they are treated the same as unlisted or non-published landline callers and they user would be prompted to enter or say their location. See RUIZ 004510. Because claim 1.2 was not necessarily disclosed by the cited portions of Enterprise, claim 1.2 was not inherently disclosed by that reference.

269. For each of these reasons, Dr. Heppe has not established that claim 1.2 is disclosed by clear and convincing evidence by Enterprise. Accordingly, Enterprise neither anticipates nor would have rendered obvious claim 1.

8.1.3.4.1 Claim 1.6 – Enterprise Does Not Disclose Receiving ... During the Telephone Call ... a Signal Indicating Consent ...

270. Claim 1.6 requires “receiving from the mobile device during the telephone call a signal including data indicating consent for obtaining the location information of the mobile device.” As discussed below, Dr. Heppe has not established that claim 1.6 is disclosed by Enterprise. Additionally, Dr. Heppe did not opine that claim 1.6 would have been obvious over Enterprise. Therefore, claim 1 was neither disclosed nor would have been obvious over Enterprise. *See also* Protest Response at 177.

271. Dr. Heppe opined that claim 1.6 was disclosed by Enterprise through its disclosure of “on-demand consent” in RUIZ-004511-13. *See* Heppe Opening Report at paragraph 170.

272. I disagree with Dr. Heppe’s characterization of Enterprise as to claim 1.6. Dr. Heppe’s analysis implicitly relies on an inherency argument, because Enterprise does not expressly disclose an in-call response, reflecting consent to collecting location-based data.

273. Dr. Heppe seems to recognize this shortcoming, because he opines that “[i]t follows that Enterprise then also teaches the automated method of consent to location tracking satisfying ... [claim 1.6].” Heppe Opening Report at paragraph 170. Dr. Heppe did not opine that “Enterprise discloses [claim 1.6]” because Enterprise contains no such disclosure. Additionally, as discussed next, claim 1.6 was not inherent in Enterprise.

274. Enterprise expressly discloses “[o]n-demand consent sought by IVR and granted by caller” but this disclosure does not inherently disclose claim 1.6. RUIZ-

004511 (quoted passage). *See also* Heppe Opening Report at paragraph 170 (relying on the above-quoted passage for claim 1.6).

275. Enterprise expressly discloses many ways to receive on-demand consent, some of which have nothing to do with the '358 Patent. For example, Enterprise discloses that one type of on-demand consent is that a call recipient may send a SMS message in response to a recorded message asking for consent to collect data. RUIZ-004513. Enterprise also discloses that another type of on-demand consent utilizes a web browser to receive consent. *See id.* Enterprise further discloses a third type of on-demand consent utilizes a PIN code that is entered in a *subsequent* call. *See id.* None of Enterprise's examples expressly disclose claim 1.6, which requires "receiving . . . during the telephone call a signal including data indicating consent . . ." Thus, Enterprise does not disclose claim 1.6.

276. Dr. Heppe cites two passages, in support of his disclosure conclusion, that do not support his conclusion because those passages merely concern consent in the abstract rather than consent through a particular (claimed) mechanism. "[Enterprise] expressly contemplates 'on demand consent sought by IVR *and granted by the caller.*'" Heppe Opening Report at paragraph 170 (citing Enterprise at RUIZ-004511). "[Enterprise] also teaches the automated prompt asking "Is that ok?" upon requesting consent to location tracking during said IVR call." *Id.* (citing Enterprise at RUIZ-004512). Dr. Heppe does not address, however, that Enterprise expressly refutes his inherency opinion.

277. As discussed above, Enterprise lists several design alternatives that could be utilized when providing notice and receiving consent (SMS-based responses etc.). None of Enterprise's disclosed design alternatives reflect claim 1.6. To the extent that Dr. Heppe's citation to generalized disclosures such as "on-demand consent" in support of claim 1.6 being disclosed, Enterprise's failure to disclose claim 1.6 precludes an express disclosure of claim 1.6 and Enterprise's recitation of many design alternatives precludes an inherent disclosure of claim 1.6. Thus, claim 1.6 was not disclosed, expressly or inherently, by Enterprise.

278. Dr. Heppe offered no obviousness opinion about claim 1.6. *See* Heppe Opening Report at paragraph 170 (discussing claim 1.6). Therefore, claim 1.6 was neither disclosed nor would have been obvious over Enterprise for the reasons discussed above.

8.1.3.5 Claim 4

279. I refer to the elements of claim 4 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. *See* Infringement Report, Exh. C 6–7. Claim 4 requires the following elements: claim 4.0 and claim 4.1 or claim 4.2. As discussed below, some of these limitations were not disclosed, expressly or inherently, in Enterprise, so Dr. Heppe cannot show that claim 4 was anticipated by Enterprise. My bases for this conclusion follow.

8.1.3.5.1 Claim 4.0 (preamble) – Enterprise Does Not Disclose Claim 1 so it also Does Not Disclose Claim 4

280. Claim 4.0 requires “[t]he method of claim 1, wherein the receiving from the mobile device a signal including data indicating consent for obtaining the location information of the mobile device includes at least one of [claim 4.1 and 4.2].” As discussed below, Dr. Hepe has not established that claim 4.0 is disclosed by Enterprise. Therefore, claim 4 was not anticipated by Enterprise.

281. Additionally, Dr. Hepe did not opine that claim 4.0 would have been obvious over Enterprise. *See* Hepe Opening Report at paragraph 172. Therefore, Dr. Hepe did not establish that claim 4 would have been obvious over Enterprise for at least this reason.

282. Claim 4 depends from claim 1, so claim 4 includes all limitations of claim 1. As discussed above, Dr. Hepe has not established that claim 1 was anticipated by Enterprise or would have been obvious over Enterprise. Therefore, claim 4 was neither anticipated by Enterprise nor would have been obvious over Enterprise for at least those reasons.

283. Additional reasons specific to claims 4.1 and 4.2 are discussed below.

8.1.3.5.2 Claim 4.1 – Enterprise Does Not Disclose Receiving Data Indicating ... an Action ...

284. Claim 4.1 requires “receiving data indicating that the user of the mobile device has performed an action on the mobile device.” As discussed below, Dr. Hepe has not established that claim 4.1 is disclosed by Enterprise. As further discussed below, claim 4.2 is not disclosed by Enterprise as an alternative to claim 4.1. Therefore, claim 4 was not anticipated by the Enterprise.

285. Additionally, Dr. Heppe did not opine that claim 4.1 would have been obvious over Enterprise. *See* Heppe Opening Report at paragraph 172 (Claim 4). Therefore, Dr. Heppe did not establish that claim 4 would have been obvious over Enterprise for at least this reason.

286. Dr. Heppe's analysis of claim 4 and Enterprise does not identify any portion of the TechnoCom White Paper that discloses "receiving data indicating that the user of the mobile device has performed an action on the mobile device," as recited in claim 4.1. Although Dr. Heppe points to a disclosure in Enterprise that could be understood as prompting a user to respond ("is that okay?"), Enterprise expressly discloses multiple design alternatives in response to such a prompt and none of those design alternatives reflect claim 4.1 in view of claim 1 (from which claim 4 depends). *See* Heppe Opening Report at paragraph 172 (Claim 4). I analyzed these design alternatives in conjunction with claim 1.6, above.

287. To the extent that Dr. Heppe opines, "[t]hus, the user would respond with a 'yes' or 'no,' with either a voice or keyboard response," Dr. Heppe is – at best – offering an inherency opinion that is contradicted by Enterprise's express disclosures. *See* Heppe Opening Report at paragraph 172 (Claim 4). Ultimately, Dr. Heppe is reading far more into Enterprise than it discloses – expressly or inherently. The above-quoted statement is simply not in Enterprise and suggesting that it is, or would have been inherent, is simply incorrect and unreasonable.

288. Therefore, I disagree with Dr. Heppe's analysis and conclusion as to claim 4.1. He has neither established that claim 4.1 was disclosed nor that it would have been obvious.

289. For each of these reasons, I conclude that Dr. Heppe has not established that claim 4.1 is disclosed by clear and convincing evidence by Enterprise. Additionally, as discussed below, Enterprise neither discloses nor would have rendered obvious claim 4.2 as an alternative to claim 4.1. Accordingly, Enterprise neither anticipates nor would have rendered obvious claim 4.

8.1.3.5.3 Claim 4.2 – Enterprise Does Not Disclose Receiving a Voice Command ...

290. Claim 4.2 requires "receiving a voice command from the mobile device." Dr. Heppe did not opine that Enterprise disclosed claim 4.2. *See* Heppe Opening Report at paragraph 172 (Claim 4). My review of Enterprise leads me to conclude that Enterprise did not disclose claim 4.2.

291. For each of these reasons, I conclude that Dr. Heppe has not established that claim 4.2 is disclosed by clear and convincing evidence by Enterprise. Additionally, as discussed above, Enterprise neither discloses nor would have rendered obvious claim 4.2 as an alternative to claim 4.1. Accordingly, Enterprise neither anticipates nor would have rendered obvious claim 4.

8.1.3.6 Claim 19

292. I refer to the elements of claim 19 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. *See*

Infringement Report, Exh. C 8–12. Claim 19 requires the following elements: claim 19.1, claim 19.2, claim 19.3, claims 19.4 or 19.5, claim 19.6, and claim 19.7. To the extent the preamble is found to be limiting, claim 19 also requires claim 19.0 (the preamble). As discussed below, many of these limitations were not disclosed, expressly or inherently, in Enterprise, so Dr. Heppe cannot show that claim 19 was anticipated by Enterprise. The undisclosed limitations also would not have been obvious over Enterprise. My bases for these conclusions follow.

293. Dr. Heppe relied on his analysis of claim 1 to support his conclusions for claim 19. *See* Heppe Opening Report at paragraph 173. As discussed above in conjunction with claim 1, I disagree with Dr. Heppe’s analysis of Enterprise as to claim 1 so I disagree with his analysis of claim 19 for at least the same reasons.

8.1.3.6.1 Claim 19.7 – Enterprise Does Not Disclose a Communications Interface

Further Configured to, During the Telephone Call, Receive ... Consent ...

294. Claim 19.7 requires “wherein the communications interface is further configured to, during the telephone call, receive from the mobile device data indicating the user consent for obtaining the location information of the mobile device.” As discussed below, Dr. Heppe has not established that claim 19.7 is disclosed by the Enterprise. Additionally, Dr. Heppe did not opine that claim 19.7 would have been obvious. Therefore, claim 19.7 is neither disclosed by Enterprise nor would have been obvious over Enterprise.

295. As discussed above, Dr. Heppe’s analysis of claim 19 relies on his analysis of claim 1. *See* Heppe Opening Report at paragraph 163. I disagree with Dr.

Heppe's analysis and conclusions for the reasons I discussed in conjunction with claim 1.6. At most, as discussed above, Enterprise discloses design alternatives not reflecting claim 1.6. Therefore, claim 19 was not anticipated by Enterprise nor would have been obvious over Enterprise for at least this reason.

8.1.3.7 Claim 22

8.1.3.7.1 Claim 22.0 (preamble) – Enterprise Does Not Disclose Claim 19 so it also Does Not Disclose Claim 22

296. I refer to the elements of claim 22 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit C to that report. See Infringement Report, Exh. C 13–14. Claim 22.0 requires “[t]he system of claim 19, wherein the data indicating the user consent for obtaining the location information of the mobile device includes at least one of [claim 22.1 and claim 22.2].” As discussed below, Dr. Heppe has not established that claim 22.0 is disclosed by Enterprise. Additionally, Dr. Heppe did not opine that claim 22.0 would have been obvious in view of Enterprise. Therefore, claim 22 was neither anticipated by Enterprise nor would have been obvious over Enterprise for at least these reasons.

297. Claim 22 depends from claim 19, so claim 22 includes all limitations of claim 19. As discussed above, I concluded that Dr. Heppe has not established that claim 19 was anticipated by Enterprise or that it would have been obvious over Enterprise. Therefore, claim 22 was neither anticipated by Enterprise nor would have been obvious over Enterprise for at least the same reasons.

298. Additional reasons specific to limitation 22.2 is discussed below.

8.1.3.7.2 Claim 22.1 Enterprise Does Not Disclose Receiving Data Indicating ... an Action was Performed ...

299. Claim 22.1 requires “data indicating that an action was performed on the mobile device.” As discussed below, Dr. Heppel has not established that claim 22.1 is disclosed by Enterprise. As further discussed below, claim 22.2 is not disclosed by Enterprise as an alternative to claim 22.1. Therefore, claim 22 was not anticipated by the Enterprise. Additionally, Dr. Heppel does not opine that claim 22.1 would have been obvious. Therefore, claim 22.1 is neither disclosed by Enterprise nor would have been obvious over Enterprise.

300. Dr. Heppel’s analysis of claim 22.1 relies on his analysis of claim 4. *See* Heppel Opening Report at paragraph 174. I disagree with Dr. Heppel’s analysis and conclusions about claim 22.1 for the same reasons I discussed in conjunction with claim 4.1. Therefore, claim 22 was neither anticipated by Enterprise nor would have been obvious over Enterprise for at least this reason.

8.1.3.7.3 Claim 22.2 – Enterprise Does Not Disclose a Voice Command from the Mobile Device

301. Claim 22.2 requires “a voice command from the mobile device.” As discussed below, Dr. Heppel has not established that claim 22.1 is disclosed by Enterprise. As further discussed above, claim 22.1 is not disclosed by Enterprise as an alternative to claim 22.2. Therefore, claim 22 was not anticipated by the Enterprise. Additionally, Dr.

Heppe does not opine that claim 22.2 would have been obvious. Therefore, claim 22.2 is neither disclosed by Enterprise nor would have been obvious over Enterprise.

302. Dr. Heppe's analysis of claim 22.2 and Enterprise does not identify any portion of Enterprise that discloses "a location at which to find the notice, wherein the location at which to find the notice is represented by a web address corresponding to a website where, during the telephone call, the user of the mobile device can find the notice including information indicating to the user of the mobile device that consenting to the obtaining of the location information of the mobile device would result in the location information of the mobile device being disclosed," as recited in claim 22.2. Moreover, my analysis of Enterprise leads me to conclude that Enterprise does not disclose claim 22.2.

8.2 '659 ANTICIPATION ANALYSIS

303. Dr. Heppe identifies the single reference, United States Patent No. 8,301,158 to Thomas²⁷ ("Thomas"), that he asserts anticipated claims 2, 12, and 23 of the '659 Patent. Heppe Opening Report at *e.g.* ¶¶203, ¶238, 255, 270. I disagree. As

²⁷ RUIZ-005612 – 636, Exh. AA to Heppe Opening Report.

discussed in detail below, Dr. Heppe has not demonstrated by clear and convincing evidence that Thomas discloses all required elements of the claims.

304. I discuss Dr. Heppe's obviousness conclusions about Thomas separately below.

8.2.1 Prior Art – Thomas

305. Thomas is a patent issued October 30, 2012, entitled Method and System for Location Tracking. (RUIZ-005612).

306. Thomas is directed to "location tracking of computing or communication devices," (Thomas at 1:20-23) and providing notifications as to those devices (Thomas at 7: 14-37).²⁸ As stated in the Abstract, Thomas discloses "[t]echniques for location tracking, location utilization, and dissemination and management of location information" wherein a web server stores the locations of mobile computing devices or associated proximate objects, and enables only authorized users to obtain access the locations via a wired network.

307. Thomas describes a location monitoring system that "manages location information pertaining to a plurality of mobile units" that are "typically attached to objects such as people, vehicles, or containers." (Thomas at 3:68-4:2). A wireless

²⁸ See also Protest Response at 31.

network enables the mobile units to communicate with a location monitor server and the wireless network is coupled to the Internet. (Thomas at 4:2-6). Location information associated with the mobile units is delivered to the location monitoring server through the wireless network and the Internet. (Thomas at 4:6-9).

308. A person of ordinary skill in the art would understand Thomas to disclose a system in which “attached” is interpreted to mean a physical attachment. For example, A person with a cell phone or a truck with a built in mobile device. A person of ordinary skill in the art would not interpret “attached” to mean a driver with a cell phone as attached to a truck or a truck with a built in mobile device as freight.

309. Thomas teaches a location monitoring system and is directed to the authorized location tracking of computing or communication devices including mobile devices. [Thomas:1:20-23]. A person of ordinary skill in the art would understand that the monitoring of Thomas is a direct monitoring of a device. A person of ordinary skill in the art would understand Thomas to disclose a system in which monitoring a driver with a cell phone does not indicate if the driver is driving a particular truck or driving at all. A person of ordinary skill in the art would also understand the monitoring a truck with a device does not indicate what freight is on the truck or if the truck is carrying any freight.

310. In Thomas, “various features provide for the mobile users to control who is able to view their location.” [Thomas 6:38-40]. In the context of a viewer’s server-side request to view location information of a mobile communication device, “[a]ccess is denied if the viewer is not authorized. In one embodiment, the authorization can be controlled by the owner or user of the particular mobile communication device.”

[Thomas 8:33-38]. When a viewer wants to monitor location, but is not pre-authorized to do so, a “monitoring request message is then sent to the particular mobile communication device identified.” [Thomas 9:7-20]. A person of ordinary skill in the art would understand Thomas to disclose a system in which each user authorization must be given consent from the wireless device by the server taught in Thomas. Thomas does not disclose a single consent that the machine or group of machines can then provide to authorized users.

8.2.1.1 In Thomas the location of a mobile phone is not the location of a vehicle

311. The ‘659 Patent discloses the ability to monitor the location of a vehicle or freight carried by the vehicle. The limitation of “monitoring location of at least one of a vehicle or freight carried by the vehicle” is included in the preambles of independent, claim 2, claim 12, and claim 23. These claims are all independent claims. Also, other claims are dependant upon these claims.

312. The ‘659 patent teaches that the system has a vehicle having communication device within the vehicle (4:24-26). And that the system provides logic that correlates the communication device with the vehicle, at least by associating the user of the communications device with the vehicle. For example, the ‘659 discloses a mechanism for registering vehicles within the system and maintaining data fields in a database to associate a registered vehicle with a driver, and a driver with a mobile telephone number [‘659 5:55-6:3, 6:20-48]. The claims also describe identifying the

freight with a freight reference number as taught in claim 3 “a vehicle reference number or a freight reference number associated with the mobile device”.

313. Thomas does not disclose information associated with the mobile phone and how it might be tracked. Thomas teaches in Fig. 7B step 706 “mobile communication device to be monitored is identified” [Thomas 9:1] Thomas specifically monitors mobile devices. However, Thomas provides no ability to register vehicles, and no data structures to associate vehicles with drivers, and drivers with mobile phones.

314. Thomas discloses no system or method of associating the location obtained from a mobile phone or a wireless network that would correspond with the location of freight or a vehicle carrying freight.

315. A person of ordinary skill in the art would understand the location of mobile device as taught by Thomas is insufficient to determine the location of a vehicle. It would be understood that a driver may drive many different vehicles and at a given time may not be driving.

8.2.1.2 In Thomas the Location Information Provider is not disclosed

316. The ‘659 Patent teaches that the location information provider receives requests for location information. The Patent also teaches that the location information provider corresponds to at least one of a wireless service provider, a 3rd party that obtains location information of the mobile device, or a party that has access to the location information but is other than the wireless service provider. [Claim 4]. In addition, the Patent also teaches to provide the ability to monitor the location of vehicle or freight.

[Claim 2.2]. The patent also teaches that the location information provider cannot be a mobile/communication device 110. [‘659 4:32].

317. Thomas describes how a mobile device with a GPS receiver can be used to obtain location information. “Each mobile unit can obtain location information on its location and forward the location information to the location to the monitoring server.” [4:23-25] This means the monitoring server sends a request to the mobile device to receive the location information from the mobile device. However, Thomas does not identify how or if location information originating from a mobile device with a GPS receiver is transmitted to a location information provider.

318. Thomas discloses a wireless network in the summary of the invention as supporting a plurality of mobile computing devices. Thomas depicts the wireless network at 106 in the first image and describes it as “enables the mobile unit 104 to communicate with the location monitor server 102.” This allows the location monitor server to communicate with each mobile computing device supported by the wireless network. Thomas describes another method to obtain location information as from the wireless network where the mobile unit need not participate in obtaining the location information. [4:37-41]. However, this description does not indicate the method of communications with the wireless network and the monitoring server. Therefore, Thomas does not disclose how a wireless network, much less a wireless network provider, is a location information provider configured to receive requests for location information.

319. Thomas does not disclose a 3rd party, aggregator service, or any thing that gathers location information from a wireless network, in order to receive location information requests or transmit location information to requestors.

320. Further, Thomas does not disclose how the wireless network can transmit information used to track freight or a vehicle carrying freight. For example, there is no disclosure of an API which can be used to request location information from an information location provider and to transmit location information. ['659 claim 5]

8.2.1.3 In Thomas consent is not given to transmit location information to the machine

321. The '659 Patent teaches consent given to a machine or group of machines. [Claim 2.0 preamble, claim 2.4]. The machine or group of machines represent a system providing location information to authorized users of the system.

322. Thomas teaches consent to receive location information must be given to each authorized user by the wireless device. Thomas discloses “receive from the mobile phone an access response to the access request, the access response indicating whether or not the requestor is permitted to access the location of the mobile phone.” [Thomas:12:49-56]. Thomas teaches the “requestor” as an authorized user logged onto the server as taught by Thomas. [Thomas: Fig. 6].

323. Thomas does not disclose the server as an authorized user. Thomas teaches an authorized user as one accessing the server. Consequently, the consent to

access the location of the mobile device is not received by the server to be shared with multiple users as taught in the '659 Patent.

324. Further, each authorized user as taught by Thomas must be given consent from the mobile device. '659 Patent teaches that the system is given consent to access the location information. The location information is at least in part used to estimate the location of a vehicle. This location information is then available to authorized users of the system.

325. In addition, as taught by Thomas consent must be received from the mobile device. '659 Patent does not require the mobile device to "send" the indication that consent was given as taught by Thomas. '659 Patent teaches communications with location information providers. The location information providers indicate consent was given.

8.2.2 Claim 2

326. I refer to the elements of claim 2 by a numbering scheme consistent with that used in my report regarding infringement and shown in Exhibit B to that report. *See* Infringement Report, Exh. B 2–6. Claim 2 requires the following elements: claim 2.1, claim 2.2, claim 2.3, claim 2.4, claim 2.5, claim 2.6, and claim 2.7. To the extent the preamble is found to be limiting, claim 2 also requires claim 2.0.

8.2.2.1 Claim 2.0 – preamble – Thomas does not disclose monitoring location of a vehicle or freight

327. To the extent the preamble is found to be limiting, claim 2.0 requires “[a] machine or group of machines for monitoring location of at least one of a vehicle or freight carried by the vehicle . . .” Dr. Heppe asserts that this is disclosed by Thomas. Heppe Opening report at ¶203-204 I disagree. Dr. Heppe has not shown by clear and convincing evidence that Thomas discloses monitoring the location of a vehicle or freight carried by the vehicle. *See* Notice of Allowability at §5; Protest Response at 31, 33.

328. As Dr. Heppe states “Thomas teaches a location monitoring system and is directed to the authorized location *tracking of computing or communication devices* including mobile devices.” Heppe Opening report at ¶204 (emphasis added), *see also* Thomas at 1:20-23. In support of his position, Dr. Heppe points to Thomas at 1:20-23, 1:51-56, 1:63-2:12, 6:38-41, 6:49-57, 7:14-37, as well as to the abstract’s statement that “[e]ach of the mobile computing devices are associated with and proximate to an object whose location is being monitored. Heppe Opening report at ¶204

329. However, Dr. Heppe incorrectly equates an object proximate to a mobile device to be a vehicle or freight carried by a vehicle. Tracking of a computing or communication device is not the same as “monitoring location of at least one of a vehicle or freight carried by the vehicle” as required by claim 2.0. A person of ordinary skill in the art would understand that a mobile device is not a vehicle nor is a mobile device the freight carried by a vehicle. Dr. Heppe therefore incorrectly equates a mobile device to a vehicle or freight carried by a vehicle.

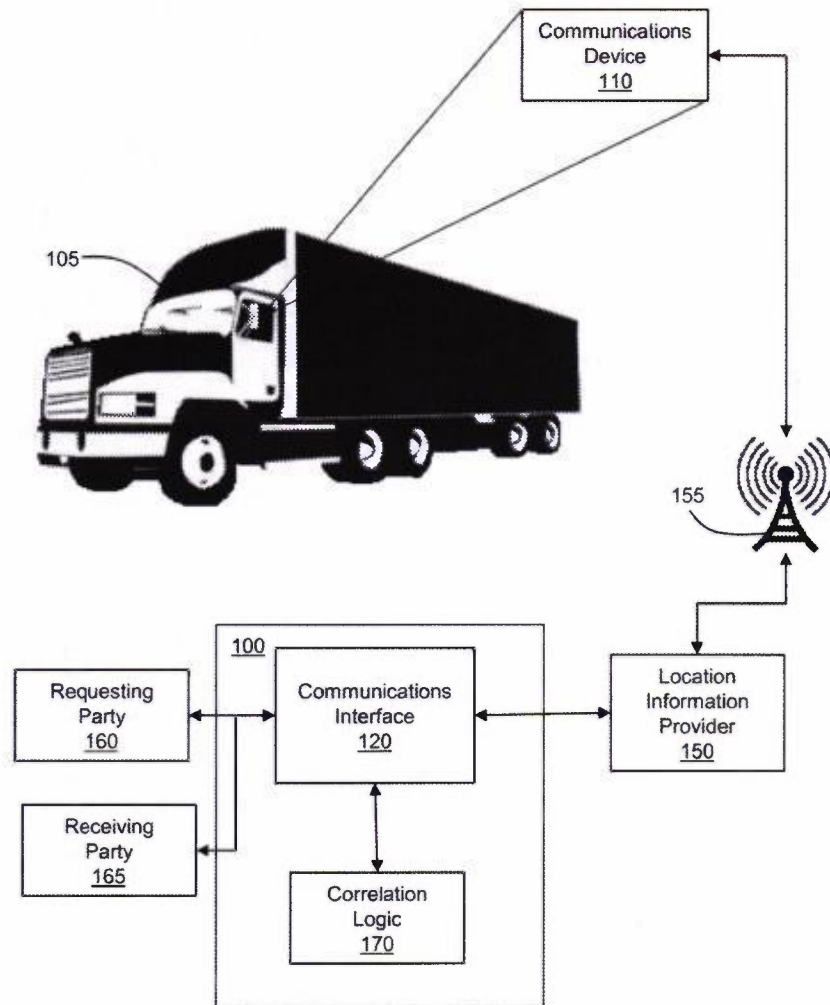


Figure 1

330. As shown in Figure 1 of '659, a party requests the location of a vehicle or the freight carried by the vehicle. Requests are not for the location of a communication device as asserted by Dr. Heppe. The requesting parties as taught in the background of '659 are "carriers, shippers, freight hauling services providers, third-party logistics

service providers and courier services providers as well as other logistics and freight service providers (freight hauling)”.

331. Dr. Heppé fails to show how a proximate to an object associated with a mobile device meets the requirement of this claim element as a vehicle or freight carried by a vehicle. Dr. Heppé asserts no explanation of how a mobile device of a driver is associated with a vehicle or how Thomas teaches changing drivers to a vehicle. He asserts no explanation of how freight is associated with a vehicle or how Thomas teaches freight that is transferred from one vehicle to another. He asserts no explanation of how freight is monitored when it may be split across multiple vehicles or concentrated over fewer vehicles.

332. Dr. Heppé overlooks the basics of logistics involving vehicles and freight carried by vehicles and drivers of the vehicles. As shown in Figure 1 above, correlation logic is applied to provide a requesting party the location information needed to associate a driver with a vehicle and a vehicle with freight.

333. Dr. Heppé did not establish by clear and convincing evidence that Thomas disclosed “monitoring location of at least one of a vehicle or freight carried by the vehicle” required, to the extent the preamble is limiting, by claim 2. Therefore, Thomas does not anticipate independent claim 2 or claims 3–6, 8, and 10–11 because they depend from claim 2.

334. Thomas does not disclose monitoring vehicles or freight carried by vehicles. See section above “In Thomas the location of a mobile phone is not the location of a vehicle.”

8.2.2.2 Claim 2.1 – Thomas does not disclose receiving location information of a mobile device.

335. Claim 2.1 requires, among other limitations, “a server communication transceiver that receives location information of a mobile device.” Dr. Heppe asserts that this is disclosed by Thomas. Heppe Opening report at ¶210-211. I disagree. Thomas does not disclose receiving a request for information regarding the location of the vehicle or the freight carried by the vehicle. *See* Notice of Allowability at §5; Protest Response at 31.

336. Dr. Heppe has not demonstrated that the “server communication transceiver that receives location information of a mobile device.” receiving location information of a mobile device. He asserts each mobile unit can obtain location information on its location and forward the location information to the location monitoring server (web server). The location information can be forwarded to the location monitoring server by a variety of ways. [Heppe Appendix B: page 4] He is asserting each mobile unit can obtain and forward location information. He makes no assertion of “receiving”.

337. Dr. Heppe further asserts Thomas also teaches that the mobile device is GPS configured to receive signals (inherently including data) from GPS satellites, process the signals to determine location, and transmit the location information. [Heppe Opening Report at ¶215] He is asserting the mobile device will transmit the location information. He makes no assertion of “receiving”.