UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

TRIMBLE INC.
935 Stewart Drive
Sunnyvale, CA 94085

and

INNOVATIVE SOFTWARE ENGINEERING, LLC,
2850 Coral Court, Suite 100
Coralville, Iowa 52241,

Plaintiffs,

v.

PERDIEMCO, LLC,
3208 Q St. NW
Washington, DC 20007,

Defendant.

Civil Action No. 1:19-cv-02028-JDB

SECOND AMENDED COMPLAINT FOR DECLARATORY JUDGMENT AND DEMAND FOR TRIAL BY JURY ON ALL ISSUES SO TRIABLE

I. INTRODUCTION AND SUMMARY OF THE CASE

1. This complaint for declaratory judgment of noninfringement ("Second Amended Declaratory Judgment Complaint") arises from Defendant PerdiemCo, LLC's ("PDC's") unwarranted and unfounded allegations that Trimble Inc.'s ("Trimble's") and its subsidiaries', including Innovative Software Engineering, LLC's ("ISE's"), products infringe at least fifteen patents held by PDC ("patents at issue"). PDC has repeatedly threatened Trimble with lawsuits asserting patent infringement by Trimble products, including at least: (a) ISE's eFleetSuite software and electronic driver log products and other Trimble electronic hours of service logging products ("Trimble ELD Products"); and (b) Trimble's GeoManager, Ag Software/Farmer Pro, and Locate2Protect (L2P) products ("Trimble Geofencing Products") (collectively "Trimble ELD and Geofencing Products").

2. PDC's actions have created a real and immediate controversy between PDC and Trimble as to whether Trimble products and/or services infringe a series of related patents owned

by PDC. The facts supporting that there is a real, immediate, and justiciable controversy include, but are not limited to: (a) PDC sent a letter to ISE asserting that "PDC has concluded that your products and services infringe the PDC Patents," identifying nine issued patents (and two then-pending patent applications that had not yet issued at that time) and attaching an unfiled, draft complaint for patent infringement that alleges that ISE infringes those same nine patents; (b) PDC has provided "evidence of use" charts that allegedly show Trimble's own infringement and/or otherwise identified patents that PDC alleges that Trimble infringes through Trimble's ELD and Geofencing Products, including all of the nine patents originally identified in the letter to ISE ***and*** two additional, more recent patents that have issued from the two patent applications identified in PDC's initial letter; (c) PDC has further notified Trimble about and accused Trimble of infringing additional patents that have issued from applications filed after PDC sent its initial letter; (d) PDC has orally threatened suit against Trimble, including in the Eastern District of Texas; (e) PDC has identified to Trimble ISE customers that it alleges infringe its patents based on those customers' use of ISE's products; (f) before Trimble filed any suit against PDC, it identified patent litigation counsel that it was retaining to file suit against Trimble; and (g) after Trimble filed its Declaratory Judgment Complaint in California and later its Declaratory Judgment Complaint in this District, PDC continued to assert that Trimble infringed the original nine patents, as well as six additional later-issued patents, even going so far as to file multiple infringement suits against Trimble asserting five of those patents, despite the pendency of cases here in this District and in California.

3. All of the patents that PDC alleges that Trimble infringes are from a single patent family. All have a common specification that focuses on specific techniques for "geofencing" applications and systems that implement geofences. Geofences are electronic systems that use GPS or other systems to track an object's location in order to determine when that location matches a specified set of characteristics (*e.g.*, if an object enters or leaves some geographic perimeter) and then send notifications or alerts regarding the object. For clarity, the concept of geofences has been known for ***decades***, and PDC does not and cannot claim to have invented the

idea of geofences. Instead, PDC's patent specification describes specific improvements on known geofencing technology that it claims (incorrectly, even for these limited improvements) to have invented.

4. Approximately four years ago, in 2015, PDC filed lawsuits on some of the patents at issue against multiple companies, along with other related patents that PDC has not raised against Trimble. During those prior disputes, ***every single challenged claim*** of ***every single patent*** that PDC asserted was subject to one or more decisions by the United States Patent and Trademark Office's ("PTO's") Patent Trial and Appeal Board ("PTAB") instituting *inter partes* review of the claims, except for those which PDC admitted were invalid before the PTAB could institute such review proceedings. For those claims where review was instituted, this means that the PTAB found that it was more likely than not that at least one of the challenged claims was invalid and therefore agreed to conduct full review proceedings.

5. The results of the initial final determinations as to patentability of the PTAB on PDC's first round of patents are telling: Where it reached such decisions, the PTAB uniformly declared all of PDC's challenged patent claims unpatentable.

6. Rather than letting all of its claims reach decisions declaring them unpatentable, however, PDC engaged in a three-part strategy: (a) it disclaimed (*i.e.*, it renounced the validity of) some claims, avoiding any formal PTAB finding of invalidity for those claims (or even institution, in some cases); (b) it settled with the accused infringers who had filed *inter partes* review proceedings before the PTAB could issue decisions on many of the claims; and (c) it eventually settled the remainder of its pending lawsuits for, on information and belief, nuisance value amounts.

7. Having largely lost the first round of its patents, PDC then turned its attention to prosecuting a new wave of continuation applications that claim priority back to an original filing made on December 23, 2005. Many of these new applications, however, include patent claims that go well beyond the geofencing products and applications described in the patent specification, instead attempting to cover "electronic driver log" products and services. The

PTO has continued to allow these new applications to issue as patents and has often done so with relatively sparse prosecution records, despite the lack of connection between the original specification and the newly-submitted claims, and despite events in the *inter partes* review proceedings following PDC's 2015 suits.

8. Electronic driver logs are used to protect the public safety on our roads and highways. Among other federally-mandated requirements for electronic driver logs, their required functionalities include logging of long-haul truck drivers' hours of service (*i.e.*, driving hours) and locations, in order to ensure that exhausted and road-weary drivers do not present a public safety hazard. Many electronic driver log products also provide notifications of any potentially-dangerous driving situations or behaviors (such as, *e.g.*, hard stops caused by sudden braking). The United States Federal Motor Carrier Safety's regulations regarding electronic driver logs are found in 49 CFR 395.15 (for the older AOBRD standard) and 49 CFR 395.20-395.38 (for the new ELD standard). Electronic driver log products are sometimes referred to as "Electronic Logging Devices" or "ELDs."

9. Although some (but certainly not all) ELD products include geofencing functionality, the two are not synonymous; instead, these are ***different*** type of functionalities. In other words, electronic driver logging functionality is distinct from geofencing functionality, and the two should ***not*** be confused.

10. PDC now asserts that it has patents covering ***all*** devices or services that implement the federal ELD safety regulations, meaning that all companies that provide ELD-compliant devices or services necessarily infringe its patents and must pay a licensing fee. In short, PDC asserts that companies cannot comply with federal safety laws without having to pay PDC first.

11. Trimble and ISE have repeatedly informed PDC that they believe that they do not infringe the claims of the patents at issue and that such claims are invalid for multiple reasons, including based on prior art and because (particularly for the ELD claims) the claims at issue are not supported by any sufficient disclosure in the patent specification. PDC nevertheless only

grew more strident in its threats in the months after it sent it original notice letter to ISE. Accordingly, Trimble and ISE sought a declaration from the Northern District of California, where Trimble is headquartered, that Trimble's products do not infringe eleven PDC patents. As discussed below, the California court dismissed Trimble and ISE's claims for lack of personal jurisdiction. Trimble is appealing that decision, but meanwhile re-filed its complaint in this District on July 9, 2019.

12. In the original Declaratory Judgment Complaint in this District, Trimble and ISE sought a declaration from this Court that their products do not infringe the thirteen PDC patents at issue,[1] specifically United States Patent Numbers: 8,149,113 ("the '113 patent"); 9,319,471 ("the '471 patent"); 9,485,314 ("the '314 patent"); 9,621,661 ("the '661 patent"); 9,680,941 ("the '941 patent"); 9,871,874 ("the '874 patent"); 9,954,961 ("the '961 patent"); 10,021,198 ("the '198 patent"); 10,104,189 ("the '189 patent"); 10,148,774 ("the '774 patent"); 10,171,950 ("the '950 patent"); 10,277,689 ("the '689 patent"); and 10,284,662 ("the '662 patent"). The patents at issue are attached to this Second Amended Declaratory Judgment Complaint as Attachments A to M.

13. On August 13, 2019, PDC filed a complaint against Trimble in the Eastern District of Texas, asserting that Trimble infringed four PDC patents: the '874 patent, the '941 patent, the '662 patent, and United States Patent Number 10,382,966 ("the '966 patent"), a patent that had issued on that same day. The '874 patent, the '941 patent, and the '662 patent were already part of Trimble's Declaratory Judgment Complaint in this District. The '966 patent—*i.e.*, the new PDC patent that issued the same day that Trimble filed its First Amended Complaint—is attached to this Second Amended Declaratory Judgment Complaint as Attachment N.

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[1] Four additional PDC patents have issued since Trimble and ISE previously filed their suit in California, bringing the total from eleven to fifteen, but at the time of Trimble filed its initial Declaratory Judgment Complaint in this district, only thirteen of the now fifteen patents had issued..

14. On August 27, 2019, PDC filed yet ***another*** compliant against Trimble in the Eastern District of Texas, asserting another newly-issued patent, United States Patent Number 10,397,789 ("the '789 patent"). The '789 patent, the new PDC patent that issued on the same day that this Second Amended complaint is being filed—is attached to this Second Amended Declaratory Judgment Complaint as Attachment Q.

15. Trimble and ISE therefore now file this Second Amended Declaratory Judgment Complaint and seek a declaration from this Court that their products do not infringe the fifteen PDC patents at issue.

16. Despite the clear invalidity of many of the claims of the patents at issue, Trimble and ISE do not here present declaratory judgment claims for invalidity because doing so would risk estopping them under 35 U.S.C. § 315(a) from presenting such arguments before the PTAB. The omission of such claims here should not be taken as any admission by Trimble and ISE as to the validity of any PDC patent. Trimble and ISE reserve the right to seek a declaratory judgment in reply to any counterclaim of infringement by ISE, as is permitted without risk of estoppel under 35 U.S.C. § 315.

II. CASE HISTORY

17. On January 29, 2019, Plaintiffs Trimble Inc. ("Trimble") and Innovative Software Engineering, LLC ("ISE") filed a declaratory judgment lawsuit against Defendant PerdiemCo, LLC ("PDC") in the Northern District of California, alleging that Trimble did not infringe the '113, '471,'314, '661, '941, '874, '961, '198, '189, '774, and '950 patents. *Trimble Inc. and Innovative Software Eng'g, LLC v. PerdiemCo, LLC*, Case No. 5:19-CV-00526-SVK (N.D. Cal.).

18. The '689 patent, the '662 patent and the '966 patent issued after Trimble filed the Northern District of California case.

19. On July 8, 2019, the California court dismissed Trimble and ISE's claims for lack of personal jurisdiction and entered judgment. *Id.* at ECF Nos. 39 and 40 (July 8, 2019).

20. Trimble has appealed the California decision and judgment.

21. Meanwhile, given PDC's threats to file suit in an inconvenient forum (the Eastern District of Texas), Trimble filed this action in Washington D.C., where, as discussed below, PDC resides, transacts business, and undertook the actions that led to Trimble and ISE's claims here.

22. On August 13, 2019, despite the pendency of the Federal Circuit appeal and this case, PDC filed suit against Trimble in the Eastern District of Texas, asserting four patents: three patents that were the subject of Trimble's July 9, 2019 complaint in this District, and the '966 patent.

23. On August 27, 2019, despite the pendency of the Federal Circuit appeal and this case, PDC filed yet another new suit against Trimble in the Eastern District of Texas, now asserting the '789 patent in its own separate action.

24. Trimble will seek to stay this case pending the resolution of the co-pending appeal. If Trimble prevails in its appeal, it will then seek dismissal of this action. If it does not prevail or if the court denies Trimble's proposed stay, Trimble will proceed with this action.

III. PARTIES

25. Trimble is a corporation headquartered in Sunnyvale, California, at 935 Stuart Drive, and incorporated under the laws of Delaware. Trimble has offices in Herndon, Virginia, approximately 25 miles from this Court. Additionally, Trimble has facilities in Williamsburg, Virginia, and Baltimore, Maryland.

26. Trimble and its subsidiaries provide products and solutions to a variety of businesses using GPS technology.

27. Trimble was founded in 1978 by Charlie Trimble and other former Hewlett-Packard personnel. From the beginning, it has developed, and been known for, positioning and navigation products. After the United States government launched the first GPS satellites, Trimble began to engineer GPS products and developed multiple products and technologies based around GPS throughout the 1980s. In 1990, Trimble became the first GPS company to go public and dedicated virtually its entire product line to GPS-based products. In 1998, Trimble was the first company to combine GPS and cellular communications on a single circuit board.

Trimble's GPS technology debuted in Seiko Epson's "Location" device, a combination PDA, wireless phone, and "Personal Navigator" in 1999. In recent years, Trimble has continued to grow its GPS product lines through both internal development efforts and by acquisition, acquiring a number of companies that produce various products related to or employing GPS technology, as discussed in more detail below.

28. Trimble and/or its subsidiaries, including ISE, sell devices and/or services for electronically logging hours of service (HOS) by commercial drivers pursuant to the regulations of the United States Federal Motor Carrier Safety Administration ("FMCSA"), including the ELD regulations and the predecessor AOBRD regulations cited above. Trimble and/or its subsidiaries also sell geofencing devices that are used in various applications, including to determine when an object with a GPS enters or leaves a particular geographic area or zone.

29. Plaintiff Innovative Software Engineering, LLC ("ISE") is a wholly-owned subsidiary with Trimble as its ultimate parent. ISE is an Iowa limited liability company with its headquarters and principal place of business in Coralville, Iowa.

30. Trimble acquired ISE in 2017.

31. PDC is a Texas limited liability company. PDC was registered with the Texas Secretary of State on April 13, 2015, just before PDC started filing patent infringement lawsuits against numerous defendants in Texas.

32. PDC alleged in both previous lawsuits and in the draft complaint it sent to ISE that PDC has its principal place of business at 505 E Travis Street, Suite 205, Marshall, TX 75670-4258.

33. In actuality, however, as the Northern District of California recognized tacitly in its dismissal order, PDC has only a pretextual presence in Texas.

34. Mr. Babayi, PDC's CEO and sole member, as well as its patent counsel, resides in and conducts PDC's business out of his home office in Washington, D.C. Mr. Babayi lives and works in Washington, D.C.

35. Each of PDC's letters from Mr. Babayi to Trimble were sent from Mr. Babayi's office in Washington, D.C.

36. PDC's presence in Texas is confined to only an unoccupied rental space. Indeed, PDC has no employees or contractors in Texas and has never had any corporate meetings there.

37. According to the Texas Comptroller of Public Accounts, which maintains public information reports filed by companies with the Texas Secretary of State, PDC's Texas Franchise Tax Public Information Report listed its principal office location and mailing address as 416 Zandale Drive SW, Huntsville, Alabama 35801-3461 in 2016, 2017, and 2018. This is the same address of one of the former managing members of PDC, Mark D. Roberts. The only other two managing members of PDC were Darrell Diem, the sole named inventor of the PDC patents, and Mr. Babayi.

38. PDC adjusted its mailing address in the Texas state records to a Texas address only very recently, after Trimble and another declaratory judgment plaintiff contested the extent to which PDC does business in Texas. Until March of 2019, the Texas Secretary of State records listed PDC's address as at Mr. Babayi's in Washington, D.C.: 3208 Q St. NW, Washington, DC 20007.

39. PDC's principal place of business—indeed, the only location where it has any officer or employee conducting company business—is in Washington, D.C.

40. The actions by PDC that led to this lawsuit were undertaken by Mr. Babayi in Washington D.C.

41. PDC is the assignee of a single patent family that includes the patents at issue. These patents claim priority to Provisional Application No. 60/752879, filed on December 23, 2005, and to United States Patent Application No. 11/335,699, which was filed on January 20, 2006, and later issued as United States Patent No. 7,525,425 ("the '425 patent"). The assignment history for the '425 patent on the PTO's website shows that Mr. Diem and "Perdiem LLC" (a predecessor to PDC) transferred the rights to the patent application to Mr. Babayi and Mr. Roberts. Subsequently, in 2011, Messrs. Babayi and Roberts assigned the then-pending and

issued PDC patents and applications to Geofence Data Access Controls LLC, also located at Mr. Roberts' address in Huntsville. On May 12, 2015, Geofence Data Access Controls LLC assigned the then-pending patents and applications to PDC.

IV. SUBJECT MATTER JURISDICTION, PERSONAL JURISDICTION, AND VENUE

42. This Second Amended Declaratory Judgment Complaint includes counts for declaratory relief under the patent laws of the United States, 35 U.S.C. §§ 1, *et seq.*

43. Trimble and ISE seek declaratory relief under 28 U.S.C. §§ 2201 and 2202.

44. This Court has subject matter jurisdiction over the claims alleged in this action under 28 U.S.C. §§ 1331, 1332, 1338, 2201, and 2202 because this Court has exclusive jurisdiction over declaratory judgment claims arising under the patent laws of the United States pursuant to 28 U.S.C. §§ 1331, 1338, 2201, and 2202. Jurisdiction is also proper because Trimble and ISE are citizens of different states than PDC, and the value of the controversy exceeds $75,000.

45. This Court can provide the declaratory relief sought in this Second Amended Declaratory Judgment Complaint because an actual case and controversy exists between the parties within the scope of this Court's jurisdiction pursuant to 28 U.S.C. § 2201. An actual case and controversy exists because PDC has several times accused Trimble and ISE of infringing the PDC patents and indicated its intention to assert its rights under the PDC patents by pursuing claims of infringement against Trimble and ISE based on their ongoing and/or planned activities, and, in the case of some of the patents, has filed suit against Trimble after Trimble initiated declaratory judgment actions against PDC in California and in this District. As discussed below, Trimble and ISE do not infringe and have not infringed any claims of the PDC patents and therefore have a right to engage in the complained-of activity.

46. This Court has personal jurisdiction over PDC because PDC has engaged in actions, including that it has transacted business, in this District, and these actions form the basis for Trimble and ISE's claims against PDC and have created a real, live, immediate, and

justiciable case or controversy between PDC and Trimble and ISE. The details relating to PDC's actions to create this controversy are described in further detail in Sections V(D) and (E) below.

47. Other than an initial notice letter to ISE, PDC and Mr. Babayi have sent all correspondence, infringement charts, and other communications to Trimble or its counsel.

48. Even where Trimble has noted that its subsidiaries have responsibilities for certain of the accused Trimble products that PDC has identified, PDC has maintained that it intends to file suit against Trimble in the Eastern District of Texas because the Trimble parent company (*i.e.*, Trimble Inc.) has facilities there. And, notably, PDC has now made good on that threat, not once, but twice.

49. PDC has thus consciously and purposely directed allegations of infringement, including demand letters and infringement charts, to Trimble from Mr. Babayi and PDC's Washington, D.C. location. PDC's business is primarily, if not entirely, the licensing and enforcement of its patents. On information and belief, PDC has sent notice letters and conducted licensing discussions from Washington, D.C. for many other targets of PDC's enforcement campaigns besides Trimble.

50. PDC has established sufficient minimum contacts with the District of Washington, D.C. such that PDC is subject to specific personal jurisdiction here. Further, the exercise of personal jurisdiction based on these repeated and highly-pertinent contacts does not offend traditional notions of fairness and substantial justice.

51. Specifically, PDC's actions that give rise to this action are based on Mr. Babayi and PDC's actions that occurred in the District of Columbia, meeting the minimum contacts analysis and satisfying District of Columbia Code § 13-423.

52. Further, PDC is subject to general personal jurisdiction in the District of Washington, D.C. because its actual and true principal place of business is here, also satisfying District of Columbia Code § 13-422.

53. Venue is proper under this district under 28 U.S.C. §§ 1391 and 1400, including because, under Ninth and Federal Circuit law, venue in declaratory judgment actions for noninfringement of patents is determined under the general venue statute, 28 U.S.C. § 1391.

54. Under 28 U.S.C. § 1391(b)(1), venue is proper in any judicial district where a defendant resides. An entity with the capacity to sue and be sued, such as PDC, is deemed to reside, if a defendant, in any judicial district in which such defendant is subject to the court's personal jurisdiction with respect to the civil action in question under 28 U.S.C. § 1391(c).

55. As discussed above, PDC is subject to personal jurisdiction with respect to this action, and thus, for the purposes of this action, PDC resides in this District and venue is proper under 28 U.S.C. § 1391.

V. FACTUAL BACKGROUND

56. Trimble is a world leader in solutions related to positioning-centric information, having created positioning-based products for over three decades.

57. Trimble respects and invests in intellectual property and innovation, operating research and development centers in fifteen countries across the world. Trimble invests more than 10% of its revenues in research and development annually, and this investment has generated more than 1,200 unique patents for Trimble and allowed Trimble to create some of the most innovative products in the relevant industries.

A. Trimble And Its ELD Products

58. Trimble and its subsidiaries make and sell devices and services to a number of market segments, but its primary businesses relate to selling GPS and telematics-based solutions (such as those at issue here) to customers in industries such as transportation, construction, agriculture, and land surveying, as well as other industries that can benefit from asset tracking, mapping, and mobile resource management. Founded in 1978, Trimble has grown from a small operation in California to a publicly-traded global business with locations in over thirty countries and annual revenues exceeding $2 billion dollars.

59. One of the things that Trimble's trucking customers need to do is to track their drivers' hours of service (HOS), meaning the time that they have driven and duty hours during particular periods of time. As mentioned above, electronically tracking HOS is a matter of public safety that is mandated by the FMCSA under its ELD regulations.

60. By way of background, the United States FMCSA (within the Department of Transportation) has for decades regulated the number of hours a driver of a commercial vehicle can be on-duty and driving. Since 1998, commercial drivers have been required to maintain a log of their hours of service under the Automatic On-Board Recording Device (AOBRD) standard, 49 CFR § 395.15. These regulations exist to protect the public safety on our nation's roads and highways.

61. Companies developed electronic systems to log drivers' hours of service in order to aid in compliance with the AOBRD standard. Such devices have been on the market since at least the late 1990s. Electronic HOS logging devices connect to a commercial vehicle's engine control module and, amongst other things, sense and record when the vehicle's engine is running, whether the vehicle is in motion or not in motion, miles driven, and hours of driving time. Electronic HOS logging devices keep a record of these events and the driver's duty status (because the driver can drive while they are off-duty, which does not count towards their maximum driving time under FMCSA regulations). To provide electronic HOS logging devices that comply with FMCSA standards, many companies integrate GPS functionality with functionality for sensing telematics connected to the engine itself, allowing accurate tracking of the required information.

62. Electronic HOS logging devices also often integrate with a web-based service in order to store the logs of a fleet of commercial vehicles in a central spot, so that the company that owns the fleet can manage their drivers and the drivers' logs. Additionally, the devices and/or the web-based service allow drivers and administrators to edit log entries to correct errors, such as when a driver forgets to mark that he has gone off-duty and is now taking a truck on a personal errand or to dinner.

63. In 2015, the FMCSA published new regulations that are the successor to the AOBRD standard. The Electronic Logging Device (ELD) standard, memorialized in 49 CFR §§ 395.20-395.38, went into effect on February 16, 2016 and requires compliance by commercial fleets as of December 18, 2017. For carriers that had already implemented the electronic AOBRD-compliant systems in their fleets as of December 18, 2017, however, mandatory compliance with the new ELD regulations is not required until December 16, 2019, meaning that carriers with previously-installed AOBRD-compliant devices can temporarily continue to use those devices without updates to make them ELD-compliant a few years longer than otherwise would have been allowed.

64. Trimble, through both home-grown products and products obtained through a series of acquisitions, has gained a significant and established position supplying electronic HOS logging devices and services that comply with the AOBRD and/or ELD regulations to various segments of the market, including heavy trucking fleets, light truck fleets, and oil and gas fleets.

65. In 2007, for instance, Trimble completed the acquisition of @Road, Inc. ("@Road"), a company that focuses on mobile resource management solutions, which it had begun developing as far back as from the early 1990s into the 2000s. @Road became part of the Trimble Field Service Management business unit. Prior to its acquisition by Trimble, @Road had, since approximately 2000, sold a product that @Road internally called "ILMC" (Internet Location Manager) and marketed under the name "Fleet Manager." ILMC, among other features, logged drivers' hours of service according to the AOBRD standard. Trimble continues today to sell the successor to this product, although it is now sold under the names "Driver Logs" or "HOS" as part of a larger Trimble product called "Fleet Management Solutions."

66. In 2011, Trimble acquired PeopleNet Communications Corp ("PeopleNet"), a privately-held company that was a leader in providing onboard computing and mobile solutions for management of heavy trucking fleets. For years prior to the acquisition, going back to the late 1990s and early 2000s, PeopleNet had developed and sold HOS logging devices that were compliant with the AOBRD standard. Approximately in 1998, the "Intouch G2X" debuted, and

the successor product, now called "eDriver Logs," came to market in approximately 2002. PeopleNet's hours of service logging product is still called eDriver Logs. At the time of the acquisition, PeopleNet's devices were deployed in over a thousand trucking fleets in the United States and Canada. PeopleNet, a Trimble company, is now part of the Trimble Transportation Mobility business unit. PeopleNet's (and now Trimble Transportation Mobility's) main business location is in Minnetonka, Minnesota.

67. In 2012, Trimble acquired GEOTrac Systems Inc. ("GEOTrac"), a privately-held company that has since approximately 2003 provided GPS-related solutions to the oil and gas industry, such as lone worker safety and fleet management applications, including GIS (global information service) mapping. GEOTrac, together with Trimble company TOGS USA, Inc. (collectively, Trimble Oil & Gas Services or "TOGS"), are now a part of the Trimble Transportation Mobility business unit. Part of the reason for this acquisition was to allow GEOTrac and PeopleNet to partner together to supply PeopleNet's solutions, including electronic HOS logging products, to the oil and gas industry. In approximately 2014, TOGS deployed its version of an hours of service logging product, "Trimble Oil and Gas eDriver Logs." GEOTrac and now TOGS is based in Calgary, Alberta and sells to United States customers through a United States Trimble affiliate.

68. In 2017, Trimble and/or its subsidiaries acquired ISE and its eFleetSuite software. ISE was founded in 2002 and has been offering FMCSA-compliant HOS logging eFleetSuite products and/or software since 2004. At the time of the acquisition, ISE was providing HOS logging devices to trucking fleets, as well as licensing its eFleetSuite software and platform to other makers of electronic HOS logging products. As mentioned above, ISE is headquartered in Coralville, Iowa.

69. Trimble and/or its subsidiaries, including ISE, all have provided and are continuing today to provide AOBRD-compliant and/or ELD-compliant electronic HOS logging devices and/or services. These products, as mentioned above, serve an important public safety interest.

B. Trimble And Its Geofencing Products

70. In addition to products that log drivers' hours of service electronically, Trimble also has certain products that implement what are known as "geofences." As mentioned above, geofences, broadly speaking, are products that use positioning data, such as coordinates from a GPS device, and compare that data to virtual geographic "fences" or zones. When a device with GPS or other positioning data enters or exits a designated geographic fence or zone, the system determines that the particular fence or zone occurrence has been triggered and provides a notification or another action of some sort, such as sending a message to users or logging a list of the occurrences of a device entering or exiting particular fences or zones.

71. As an example, a store could put GPS units on shopping carts and program the units with coordinates for a store's perimeter. If a shopping cart exited the perimeter the cart could generate an audible alarm or it could lock the wheels of the cart. Alternatively, a truck could be equipped with a GPS receiver and wireless telephone modem, allowing a message to be sent if a truck enters or exits a particular location or stops within a certain distance of a particular spot.

72. GPS and other positioning technologies have been used to create so-called geofences for more than twenty years.

73. Trimble and/or its subsidiaries provide geofencing functionality in some of its products, including GeoManager, Trimble Ag Software/Farmer Pro, and Locate2Protect.

74. Trimble's GeoManager was an existing product of @Road dating back to prior to its acquisition by Trimble in 2007. Trimble and/or its subsidiaries continue to sell the GeoManager product since the acquisition.

75. Trimble's Ag Business Solutions group provides, amongst other things, products and services that allow owners of farm equipment (*i.e.* tractors or combines) with remote sensing and control of farm equipment, including GPS location tracking, including Trimble Ag Software and/or Farmer Pro products and/or services that provide geofence functionality.

76. Trimble's Geospatial group sells high-end tools, including surveying equipment, including the Locate2Protect (L2P) products and/or services that provide geofence functionality in order to help protect those high-end surveying tools from being stolen or going missing.

C PDC's First Wave Of Litigations And The Invalidation Of Its Asserted Patents

77. PDC's misguided and largely inconsistent assertions that Trimble and its subsidiaries, including ISE, infringe its patents are by no means the first time that PDC has accused companies of infringing its patents.

78. On May 15, 2015, PDC filed five cases against many defendants that produce telematics products and services, including Telogis, Inc., Teletrac, Inc, Omnivations II, LLC d/b/a Fleetronix, IndusTrack LLC, and Geotab Inc. In these litigations, PDC asserted five patents from the same patent family now at issue through this Second Amended Declaratory Judgment Complaint—specifically United States Patent Nos. 8,223,012; 8,493,207; 8,717,166; 9,003,499; and 9,071,931.

79. On July 2, 2015, PDC filed an additional five cases against more defendants, including Forward Thinking Systems LLC, LiveViewGPS, Inc., ThingTech LLC, TV Management, Inc. d/b/a/ GPS North America, and GPS Logic LLC. In these litigations, PDC asserted the same five patents as it had asserted in its May 15, 2015 suits.

80. Teletrac and other defendants in the related cases filed petitions for *inter partes* review against each of the claims of these five patents that had been asserted by PDC.

81. The PTAB instituted *inter partes* review proceedings for each of the challenged claims for the five PDC patents, finding that it was more likely than not that at least one claim of each patent was unpatentable.

82. Every challenged claim in these five patents from the first litigations was subsequently held unpatentable by the PTAB in a final written decision or was disclaimed (*i.e.*, was renounced and given up, effectively conceding invalidity) by PDC.

83. Meanwhile, on October 26, 2016, PDC filed yet another case against Geotab, asserting an additional three patents beyond the five already asserted: United States Patent Nos. 9,119,033; 9,319,471; and 9,485,314.

84. On December 13, 2016, PDC also filed an additional case against several defendants, including Telular, asserting seven patents against them. Specifically, PDC asserted the following United States Patents against Telular: 8,149,113; 8,223,012; 9,003,499; 9,071,931; 9,199,003; 9,319,471; and 9,485,314. This list includes three patents that overlap with those at issue in this Second Amended Declaratory Judgment Complaint (the '113, '471, and '314 patents), three that overlap with those that had been asserted in PDC's May 2015 round of suits (the '012, '499, and '931 patents), and one additional patent not asserted so far in the 2015 cases or against Trimble (the '003 patent).

85. Telular and the other defendants in this new round of cases, like the accused infringers that had done so before them, filed petitions for *inter partes* review. Specifically, these new petitions challenged: (a) the claims of the '012, '499, and '931 patents that were now asserted against Telular and the other defendants, which had not previously been asserted against or challenged in the first round of proceedings; (b) all claims of the now-asserted '113, '033, '471, and '314 patents; and (c) all claims of related United States Patent 9,621,661, which had been threatened, but not yet asserted in litigation, by PDC.

86. As before, the PTAB instituted *inter partes* review proceedings against all claims challenged in this second round of petitions, finding that it was more likely than not that at least one claim of each patent was unpatentable.

87. Presumably recognizing that many of the '113 patent claims would not survive *inter partes* review and wanting to argue against instituting an *inter partes* review proceeding for the claims it hoped might survive, PDC disclaimed the overwhelming majority (53 of 62) of the claims of that '113 patent before the PTAB could institute a review proceeding.

88. The PTAB nonetheless instituted review of the remaining nine claims. PDC, however, then prevented any invalidity determination on the remaining claims of that and the

other patents in this second round of *inter partes* reviews by settling with the accused infringers who had filed these proceedings for low- and nuisance-value amounts.

89. In sum, the PTAB instituted *inter partes* review proceedings against each of the patent claims previously asserted by PDC, except where PDC thwarted it from doing so by disclaiming claims or reaching low-value settlements before the PTAB could act. Every claim that reached a final written decision has been held unpatentable by the PTAB.

90. PDC then turned its attention to continuing to prosecute continuation and/or divisional applications in the same family, obtaining five more issued patents in 2018 and another issued patent in early 2019.

91. The recent patents prosecuted by Trimble far exceed the scope of the original specification, purporting to read on electronic logging devices, rather than the geofencing functionality that the original specification describes. Importantly, the specification of the patents at issue is focused on GPS and other methods of performing location tracking and/or proximity sensing, whereas the FMCSA standards focus on tracking drivers using connectivity to the engine control module, rather than GPS.

92. Many of the new patent claims prosecuted by PDC also require specific hierarchies of administrators and users of a claimed system, mandating specific levels of hierarchal privilege in order for there to be infringement. For many of the claims, different IDs are tied to these different levels of administrative access or privilege. PDC added such limitations in an attempt to distinguish prior art references that came to light during the *inter partes* review proceedings against previous PDC patents. Such limitations both add a level of specificity not supported by the original patent disclosure and impose limitations of such detail that, even though obvious, few, if any, ELD products will infringe such claims as a practical matter.

D. PDC Asserts That Trimble And ISE Electronic Driver Logging Products Infringe The Patents At Issue As Part Of Another Wave Of Prospective Litigations

93. On approximately October 5, 2018, Robert Babayi, PDC's CEO and patent attorney, sent a "Notice of Infringement of PerdiemCo Patents," along with five exhibits, to ISE.

94. The October 5, 2018 "Notice" is on PDC letterhead and lists Mr. Babayi's address in Washington, D.C.

95. Mr. Babayi's notice asserts "that products and services offered by [ISE] use technology covered by the PDC Patents, specifically, but not limited to, the use of Electronic Logging Devices (ELDs)." PDC's notice states, among other things, "Please let your counsel know that PDC has concluded your products and services infringe the PDC Patents …." PDC further pointed to an attachment, Exhibit 1, listing patents it believes that ISE infringes, "To facilitate the understanding of PDC's patents and to help you determine whether your company infringes any of the other PDC patents, we enclose a summary (see Exhibit 1) of the PDC patents ***that PDC believes cover your company's telematics system, software, and devices***." (Emphasis added.) PDC's letter and its exhibits are attached to this Second Amended Declaratory Judgment Complaint as Attachment O.

96. Mr. Babyi's notice letter (and the draft complaint attached as Exhibit 4 to the notice letter, discussed below) also makes clear that PDC intends to assert its patents against all ELD devices that comply with the federal ELD safety laws will infringe its patents, stating, "It has come to our attention that products and services offered by your company use technology covered by the PDC Patents, specifically, but not limited to, the use of Electronic Logging Devices (ELDs) that are mandated by Department of Transportation Regulations (*see* 49 C.F.R. Part 390)," and "[H]aving thoroughly reviewed the DOT regulations governing electronic logging and reporting, PDC also owns patents that read on ELD tracking services. According to the FMCSA website (https://eld.fmcsa.dot.gov/List), your company has certified to DOT that it complies with ELD regulations." *See* Attachment O.

97. Exhibit 1/Exhibit A to PDC's "Notice of Infringement" to ISE listed nine patents (United States Patent Numbers 8,149,113; 9,319,471; 9,485,314; 9,621,661; 9,680,941; 9,871,874; 9,954,961; 10,021,198; and 10,104,189), as well as two United States patent applications that have since issued as United States Patent Nos. 10,171,950 and 10,148,774. Exhibit 1/Exhibit A also provides PDC's analysis of the listed patents, characterizing the claims as reading on electronic logging devices for capturing records from vehicles.

98. Exhibit 2 to the "Notice of Infringement" is a claim chart for United States Patent No. 9,954,961 that provides some further detail regarding PDC's allegations that ISE's eFleetSuite software and electronic logging devices supposedly infringe the '961 patent.

99. Exhibit 4 to the "Notice of Infringement" is a draft complaint asserting that the eFleetSuite ELD product, which uses ISE's eFleetSuite software, infringes each of United States Patent Numbers 8,149,113; 9,319,471; 9,485,314; 9,621,661; 9,680,941; 9,871,874; 9,954,961; 10,021,198; and 10,104,189. As is clear from the draft complaint, including in Paragraphs 25-29, PDC accuses products based on compliance with the federal ELD safety regulations.

100. Based on letters sent to ISE customers and other information from PDC, PDC's assertions against Trimble and its subsidiaries, including ISE, are part of a second wave of litigations that PDC has been preparing to file against numerous companies. Indeed, EROAD, another maker of FMCSA-compliant electronic logging devices, recently filed a declaratory judgment action indicating that it too has been subjected to threats of an infringement suit from PDC and alleging it does not infringe the same eleven patents at issue here. *EROAD Ltd. v. PerdiemCo LLC*, Case No.6-10-cv-00026 (W.D. Tex., filed January 25, 2019). Additionally, PDC recently filed suit against Insight Mobile Data in the District of Maryland, asserting three patents, all of which are among the fifteen patents that are the subject of this complaint. *PerDiemCo LLC v. Insight Mobile Data, Inc.*, Case No. MDD-8:19-CV-01166 (D. Md., filed May 6, 2019).

101. On October 12, 2018, Trimble's Chief IP Counsel responded to PDC's "Notice of Infringement," explaining that Trimble Inc. is ISE's parent company and that he would serve as the point of contact for Mr. Babayi for handling PDC's assertion:

> "Dear Mr. Babayi,
>
> ISE Fleet Services has forwarded your letter of October 8th to its parent company, Trimble Inc. I will be your contact within the Trimble Legal Department for resolution of this matter. …
>
> … I hope we can have an efficient and productive discussion that is responsive to your claims of patent infringement against ISE.

102. Mr. Babayi's reply, dated October 13, 2018, asserts that Trimble itself infringes PDC's patents: "I am also familiar with Trimble's … ELD and non-ELD products and services ***that PDC believes are infringing its patents*** based on several evidence of use (EOU) charts prepared by third parties to maintain objectivity. I attach one such EOU chart example for all claims of PDC's 196 [sic, should be '961] patent that read on Trimble's eDriver Logs service." (Emphasis added.)

103. This email, as well as all subsequent communications from Mr. Babayi, include a signature block for Mr. Babayi. This signature block identifies Mr. Babayi as the "Patent Attorney" and "CEO of PerdiemCo LLC" and lists his Northern Virginia/Washington, D.C.-area phone number.

104. As indicated, Mr. Babayi's email attaches a chart asserting that Trimble's "eDriver Logs" product infringes the '961 patent.

105. The chart for the '961 patent purports to map the claim limitations against the eDriver Logs service, but in actuality it mixes up multiple different products from many disparate Trimble entities, including Trimble Field Service Management's Driver Logs product, Trimble Transportation Mobility's eDriver Logs, and TOGS' eDriver Logs product, as well as ISE's eFleetSuite software that is used employed in some (but not all) of these Trimble logging products.

106. After Mr. Babayi and Trimble's Chief IP Counsel spoke via telephone on October 16, 2018, with Mr. Babayi taking the call (as well as all subsequent calls) from Washington, D.C., Mr. Babayi sent another email to Trimble (attached to this Second Amended Declaratory Judgment Complaint as Attachment P), asserting that Trimble's ELD products infringe another patent, based on another chart attached to his email.

107. This additional chart asserts that Trimble's "eDriver Logs" infringes claims from United States Patent Application 15/997,254, which has since issued as the '189 patent (mistakenly sometimes referred to in PDC's correspondence as the '198 patent and/or the '196 patent).

108. Again, PDC's chart failed to chart any single Trimble product against every limitation, instead purporting to read the '189 patent against a patchwork of features from disparate Trimble and ISE products, including Driver Logs, eDriver Logs, and eFleetSuite.

109. On November 29, 2018, Mr. Babayi sent Trimble a further email, now stating that United States Patent No. 10,148,774 had issued into a patent and that application number 15/986,677 had been allowed and would be issuing soon. The '677 Application has since issued as United States Patent Number 10,171,950. Mr. Babayi's email also asserts that the new patents were directed to ELDs and that PDC could provide "evidence of use charts" for them.

110. In telephonic discussions with PDC, Mr. Babyi has at least twice indicated PDC's intent to file suit against Trimble in the Eastern District of Texas.

111. Mr. Babyi has additionally sent Trimble an email identifying an ISE customer that PDC alleges infringes its patents based on that customer's use of ISE's eFleetSuite product.

112. PDC additionally wrote to Trimble to identify the patent litigation counsel that it was in the process of retaining to file suit against Trimble. This counsel ultimately defended PDC in Trimble's declaratory judgment suit in the Northern District of California.

113. Through these and other communications, PDC has created a real and immediate controversy between Trimble and PDC regarding, and has additionally put Trimble in reasonable apprehension of a lawsuit against, Trimble's and/or its subsidiaries', including ISE's, alleged

infringement by Trimble ELD Products, including the Trimble FSM Driver Logs, Trimble Transportation Mobility eDriver Logs, Trimble Oil and Gas eDriver Logs, and ISE eFleetSuite software and eFleetSuite ELD products and/or services, based on alleged infringement of the patents at issue.

114. PDC's actions have created a real and immediate controversy between Trimble and PDC regarding Trimble's ELD Products based on alleged infringement of the patents at issue. Trimble risks a lawsuit by continuing to sell or otherwise provide the Trimble ELD Products.

E. PDC Further Asserts That Trimble's Geofencing Products Infringe More Than Half Of The Patents At Issue

115. On December 3, 2018, Mr. Babayi sent an email to Trimble that asserts that "[PerdiemCo's] patent portfolio can be classified into ELD patents and geofencing patents." Mr. Babayi's email also asserts that, separate from any infringement of the ELD patents, a separate category of Trimble geofencing products, including the Locate2Protect (L2P) product, supposedly infringe PDC's geofencing patents.

116. Mr. Babayi's email includes an attachment that more specifically identifies six PDC patents that PDC considers to be its "geofencing patents": the '113, '314, '661, '941, '874, and '198 patents. These six patents identified by PDC are a subset of the thirteen (now fifteen) patents PDC asserts against the Trimble ELD Products. In other words, according to PDC, of the thirteen (now fifteen) patents that PDC asserts cover electronic HOS logging devices, six or more of these patents also cover geofencing.

117. On December 3 and 4, 2018, Mr. Babayi provided to Trimble three more charts supposedly evidencing that Trimble's GeoManager product infringes the '941 and '874 patents and that Trimble's Locate2Protect and Farmer Pro products infringe the '198 patent.

118. As mentioned above, PDC has repeatedly indicated PDC's intent to file suit against Trimble in the Eastern District of Texas. These statements have pertained to the Trimble Geofencing Products, in addition to the Trimble ELD Products.

119. PDC's actions have created a real and immediate controversy between Trimble and PDC regarding Trimble's Geofencing Products, including the GeoManager, Locate2Protect, and Farmer Pro products, based on the alleged infringement of the '113, '314, '661, '941, '874, and '198 patents.

F. PDC Levies Additional Allegations About Later-Issued Patents

120. After the Northern District of California case commenced, PDC identified in phone and written communications two additional patent applications, which had been allowed at the time but which had not yet issued, to Trimble, implying that PDC would also assert these additional patents when they issued. These two applications shortly thereafter became the '689 patent (Application No. 16/198,330) and the '662 patent (Application No. 16/224,447).

121. PDC later asserted in a letter from its outside counsel that Trimble and ISE's ELD products infringe the '689 and '662 patents. Trimble included the '689 and '662 patents as part of its initial Complaint in this District.

122. Later, on August 13, 2019, the '966 patent (Application No. 16/244,401) issued, and PDC filed an infringement suit against Trimble on the same day asserting that patent. Prior to issuance of the '966 patent, PDC asserted in communications that Trimble would infringe the '966 patent upon its issuance. Trimble included the '966 patent in its First Amended Complaint in this District.

123. On August 27, 2019, the '789 patent (which issued from Application No. 16,238,810) issued, and PDC filed an infringement suit against Trimble in Texas on the same day asserting that patent. Prior to issuance of the '789 patent, PDC asserted in communications that Trimble would infringe the '789 patent upon its issuance. In the August 27th Texas complaint, PDC asserts that Trimble Geofencing and ELD products infringe the '789 patent.

VI. THE ASSERTED PATENTS

A. United States Patent No. 8,149,113

124. The '113 patent is entitled "Apparatus and Method for Conveying Location Event Information Based on Access Codes." It issued on April 3, 2012 from an application filed on

April 22, 2009. The ’113 patent recites sixty-two claims directed to specific techniques for conveying information related to object location, zone information, and/or object location event information.

125. PDC disclaimed most of the claims of the ’113 patent, specifically claims 1-3, 7-44, 46-56, and 59, during an *inter partes* review proceeding before the PTAB (IPR2017-0969), as described above. The PTAB dismissed IPR2017-969 prior to issuing a final written decision on the remaining nine claims after PDC settled the related litigation. This means that only claims 4-6, 45, 57, 58, and 60-62 are currently in force today.

126. Claim 60, the sole independent claim that has not been cancelled, recites:

> A method for conveying information among a plurality of computing devices associated with a plurality of users including a first user, a second user, and a third user, the method comprising:
>
> > associating an administrator that specifies an access privilege to the first user as an authorized user associated with a first user identification code selected from a group of users associated with a plurality of user identification codes including the first user identification code;
> >
> > granting access to at least one of object location information, zone information or object location event information based on the access privilege of the authorized user;
> >
> > defining a zone within a coordinate system, said zone having a coordinate within a defined coordinate system;
> >
> > providing an interface to a computing device associated with the first user to define an object location event based upon a relationship between the zone and a location of a computing device associated with the second user, an occurrence of the object location event producing object location event information; and
> >
> > conveying at least one of object location information, zone information or the object location event information to a computing device associated with the third user.

127. PDC asserts that the ’113 patent covers both geofencing and ELD functionality.

128. The draft complaint PDC sent to ISE asserts ISE’s infringement of claims 4-6, 45, and 60-63 of the ’113 patent.

129. PDC, in communications to Trimble, asserted that the ’113 patent is one of the patents covering Trimble ELD Products and also identified the ’113 patent as covering Trimble Geofencing Products.

B. United States Patent No. 9,319,471

130. The ’471 patent is entitled “Object Location Tracking System Based on Relative Coordinate Systems Using Proximity Location Information Sources.” It issued on April 19, 2016 from an application filed on February 23, 2015. It recites twenty claims, with claims 1, 8 and 12 being independent.

131. During an *inter partes* review proceeding challenging the claims of the ’471 patent, the PTAB instituted an *inter partes* review of all twenty claims (IPR2017-973). The PTAB dismissed IPR2017-793 prior to issuing a written decision after PDC settled its litigation against the petitioners.

132. Claim 1 of the ’471 patent recites:

> A tracking system comprising:
>
> > one or more servers capable of communicating object location information to a group comprising a plurality of users having user IDs, said group having a group ID, said group being one of a plurality of groups each having corresponding group IDs and user IDs, said object location information relating to a plurality of mobile objects having object IDs, wherein a first object ID of a first mobile object of said plurality of mobile objects is associated with a first location information source that provides a first location information corresponding to first coordinates of said first mobile object within a first coordinate system, and wherein a second object ID of a second mobile object of said plurality of mobile objects is associated with a second location information source that provides a second location information corresponding to second coordinates of said second mobile object within a second coordinate system, said second coordinates being relative to said first coordinates based on proximity of the first mobile object to the second mobile object, the one or more servers being configured to:
> >
> > define first level administrative privileges to control user membership in said group;
> >
> > define second level administrative privileges to control conveyance of said object location information to said group;

> check the first level administrative privileges before associating a user ID with a group ID of said group;
>
> check the second level administrative privileges before associating said first object ID and said second object ID with said group ID of said group;
>
> provide one or more interfaces for setting at least one of a zone, an event, or an alert;
>
> receive a request to set a zone;
>
> receive a request to set an event based upon said zone and said object location information;
>
> receive a request to set an alert based upon said event, said alert being associated with an access privilege, said request identifying said group as being the recipient of said alert;
>
> check the second level administrative privileges before setting said zone, said event, and said alert;
>
> store said zone, said event and said alert in one or more databases; receive object IDs and object location information;
>
> compare said object IDs and said object location information with said zone and said event to determine whether to send said alert to said group; and
>
> cause the alert to be sent to said group based on said access privilege.

133. PDC asserts that the ’471 patent covers ELD functionality.

134. The draft complaint that PDC sent to ISE asserts ISE’s infringement of the ’471 patent.

135. PDC, in communications to Trimble, asserted that the ’471 patent is one of the patents covering Trimble ELD Products.

C. United States Patent No. 9,485,314

136. The ’314 patent is entitled “Multi-Level Privilege Notification System Operated Based on Indoor Location Information Received from a Location Information Sources.” It issued on November 1, 2016 from an application filed on February 23, 2015. It recites eighteen claims, with claim 1 being independent.

137. During an *inter partes* review proceeding challenging the claims of the ’314 patent, the PTAB instituted an *inter partes* review of all eighteen claims (IPR2017-968). The

PTAB dismissed IPR2017-968 prior to issuing a written decision after PDC settled its litigation against the petitioners.

138. Claim 1 of the ’314 patent recites:

> A method for conveying location information relating to a plurality of mobile objects among a plurality of user groups comprising different users of a plurality of computing devices other than mobile objects, said users comprising an administrator, an authorized user different from the administrator, and a second user different from the authorized user, wherein the administrator specifies a user group associated with an authorized user ID and an object ID different from the authorized user ID, the method comprising the following steps executed in one or more servers configured to:
>
> associate a second user ID different from the authorized user ID with the user group based on the authorized user ID;
>
> receive a zone information after a user group is specified, said zone information containing information about at least one coordinate of a zone;
>
> receive an event information about an event related to the zone and a location of a mobile object that is independent of the zone;
>
> provide one or more interfaces for setting a group notification for the user group including specifying the second user associated the second user ID as the recipient of the group notification;
>
> receive at least one location information of the mobile object associated with the object ID;
>
> determine occurrence of the event based on the zone and the at least one location information; and
>
> cause the group notification to be sent to the second user when the event occurs;
>
> wherein the one or more servers are further configured to:
>
> define a first level administrative privilege to control user membership in the user group;
>
> define a second level administrative privileges to control conveyance of said object location information to the user group based on the first level administrative privilege;
>
> check the first level administrative privileges before adding the authorized user to the user group;

> check the second level administrative privilege before providing one or more interfaces for setting the group notification and adding the second user to the user group; and
>
> determine occurrence of the event based on the second level administrative privilege.

139. PDC asserts that the ’314 patent covers both geofencing and ELD functionality.

140. The draft complaint PDC sent to ISE asserts ISE’s infringement of the ’314 patent.

141. PDC, in communications to Trimble, asserted that the ’314 patent is one of the patents covering Trimble ELD Products and also identified the ’314 patent as covering Trimble Geofencing Products.

D. United States Patent No. 9,621,661

142. The ’661 patent is entitled “Notification System for Occurrences of Group Events Based on Zone and Location of Mobile Devices.” It issued on April 11, 2017 from an application filed on July 1, 2016. It recites twenty claims, with claims 1 and 17 being independent.

143. During an *inter partes* review proceeding challenging the claims of the ’661 patent, the PTAB instituted an *inter partes* review of all twenty claims (IPR2017-1269). The PTAB dismissed IPR2017-1269 prior to issuing a written decision after PDC settled its litigation on related patents against the petitioners.

144. Claim 1 of the ’661 patent recites:

> A notification system for sending notifications upon occurrences of events associated with a plurality of mobile devices of user groups having corresponding group identification codes that identify the user groups, each user group comprising one or more users, each user having a user identification code associated with a corresponding group identification code, the user identification code identifying the user; wherein said events occur based on mobile device locations relative to zones that are independent of the mobile device locations, said system comprising:
>
> one or more servers configured to:
>
> check a first level administrative privilege to control user membership in the user groups, said user groups being defined by a first administrator having the first level administrative privilege, said

first level administrative privilege being used to authorize a user in each user group to be a second administrator of a user group of said user groups, each second administrator having a second level administrative privilege associated with the corresponding user group;

control conveyance of event information about one or more events based on one or more information access codes specified by the second administrator of the user group, said one or more information access codes specifying one or more users in the user group having access to the event information, wherein the first level administrative privilege is used to administer a first information sharing environment (ISE) and the second level administrative privilege is used to administer a corresponding second ISE of a plurality of second ISEs created within the first ISE, said first and second ISEs comprising a computing network where the conveyance of the event information from the one or more servers to the corresponding user groups is controlled or configured, wherein each second ISE is configured to be administered independent of other second ISEs and the first ISE based on the one or more information access codes;

check the first level administrative privilege before authorizing the user to be the second administrator of the user group;

provide interfaces for setting zones, events and notifications for the user groups based on corresponding second level administrative privileges associated with the second administrators of the user groups;

check the second level administrative privilege before providing one or more interfaces for setting a zone, an event and a notification for the user group;

receive a request to set the zone for the user group after the user group is defined by the first administrator;

receive a request to set the event for the user group after the setting of the zone;

receive a request to set the notification for the user group, said request identifying a recipient of the notification according to said one or more information access codes;

determine a mobile device location comprising mobile device location information other than the event information;

compare the zone and the mobile device location to determine whether the event occurs;

if the event occurs, cause the notification to be sent to the recipient of the notification.

145. PDC asserts that the ’661 patent covers both geofencing and ELD functionality.

146. The draft complaint PDC sent to ISE asserts ISE's infringement of the '661 patent.

147. PDC, in communications to Trimble, asserted that the '661 patent is one of the patents covering ELD products. In subsequent communications, PDC also identified the '661 patent as covering geofencing.

E. United States Patent No. 9,680,941

148. The '941 patent is entitled "Location Tracking System Conveying Event Information Based on Administrator Authorizations." It issued on June 13, 2017 from an application filed on February 23, 2015. It recites twenty-two claims, with claim 1 being independent.

149. Claim 1 of the '941 patent recites:

> A location tracking system comprising:
>
> one or more servers capable of receiving identifiers and location information for a plurality of mobile devices having corresponding mobile device identification codes that identify each mobile device;
>
> the one or more servers configured to:
>
> store in one or more databases information for groups of users of mobile devices based on corresponding group identification codes that identify each group, each user in a group having a user identification code associated with a corresponding group identification code in the one or more databases, the user identification code identifying the user, said groups being defined by a first administrator having a first level of administrative privilege, said first level of administrative privilege being used to authorize a user in each group to be a second administrator of a plurality of second administrators, each second administrator having a corresponding second level of administrative privilege associated with a group;
>
> store in the one or more databases information for the plurality of second administrators, each second administrator using the corresponding second level of administrative privilege after a corresponding group is defined by the first administrator to specify one or more information access codes, said one or more information access codes specifying one or more users in the corresponding group having access 1) to location information and 2) to event information other than location information, wherein the location information corresponds to a coordinate of a mobile device within a coordinate system corresponding to a map as determined by the location information source associated with the mobile device; and wherein the event information comprises at

> least one of a condition that relates a mobile device location information to a zone where the occurrence of the event causes an alert to be sent when a mobile device crosses a boundary associated with the zone, wherein the first administrator defines the corresponding group independent of a location of a zone;
>
> control access to the location information and the event information in order to protect the privacy of the location information and the event information based on the one or more information access codes;
>
> check the first level of administrative privilege to authorize the second administrator having a second level of administrative privilege to be associated with the group;
>
> check the second level of administrative privilege to control conveyance of the location and the event information regarding the group using the one or more information access codes;
>
> provide one or more interfaces configured to receive information related to a zone, an event, and an alert for the group;
>
> receive a request to set a zone for the group, the zone having a boundary that is independent of where mobile devices are located;
>
> receive a request to set an event for the group;
>
> receive a request to set an alert for the group, the request identifying a recipient of the alert;
>
> store the group's zone, event and alert in the one or more databases;
>
> receive identifiers and the location information for mobile devices in the group;
>
> compare the identifiers and location information with the group's zone and event to determine whether to send the group's alert;
>
> cause the group's alert to be sent; and
>
> convey the location information based on the one or more information access codes specified for the group under said second level of administrative privilege.

150. PDC asserts that the '941 patent covers both geofencing and ELD functionality.

151. The draft complaint PDC sent to ISE asserts ISE's infringement of the '941 patent.

152. PDC, in communications to Trimble, asserted that the '941 patent is one of the patents covering Trimble ELD Products and also identified the '941 patent as covering Trimble

Geofencing Products. Further, PDC also sent to Trimble an "evidence of use" chart alleging infringement of the '941 patent by GeoManager.

153. On August 13, 2019, PDC filed suit in the Eastern District of Texas asserting that Trimble's Geomanager Geofencing Products infringe the '941 patent.

F. United States Patent No. 9,871,874

154. The '874 patent is entitled "Multi-Level Database Management System and Method for an Object Tracking Service that Protects User Privacy." It issued on January 16, 2018 from an application filed on April 10, 2017. It recites forty-nine claims, with claims 1, 11 and 44 being independent.

155. Claim 1 of the '874 patent recites:

> A database management system used in a mobile device tracking service that tracks locations of a plurality of mobile devices identified by corresponding device identification codes (DID codes) in one or more databases, said database management system accessing the one or more databases by one or more centralized or distributed servers controlled under a first level of administrative privilege of an administrator of the mobile device tracking service, the mobile device tracking service being provided to a plurality of users who are identified by corresponding user identification codes (UID codes) who track the plurality of mobile devices, said plurality of users including users who are allowed to receive certain alerts relating to the locations of the tracked mobile devices and users who are not allowed to receive the certain alerts, the one or more servers being configured to:
>
> > check the first level of administrative privilege of the administrator before the administrator performs a first set of administrative functions that include:
> >
> > specifying a plurality of groups of users of the plurality of users who track the plurality of mobile devices, including a group identified by a group identification code (GID code), said group being associated with a first mobile device identified by a first DID code and a second mobile device identified by a different second DID code and one or more users identified by corresponding UID codes in the group identified by the GID code, said UID codes being different from each other and the first and second DID codes;
> >
> > controlling user membership in the groups;
> >
> > specifying an authorized user ID code (AUID code) that identifies an authorized user other than the administrator in the group identified by the GID code;

giving a second level of administrative privilege to the authorized user to perform a second set of administrative functions, wherein the administrator having the first level of administrative privilege does not perform the second set of administrative functions performed under the second level of administrative privilege given to the authorized user;

check a first level of access control based on the AUID code before the administrator gives the second level administrative privilege to the authorized user; and

check the second level of administrative privilege of the authorized user before the authorized user performs the second set of administrative functions that includes:

i. setting an event for the group that occurs when the first mobile device or the second mobile device crosses a zone comprising a boundary location on a reference coordinate system that is defined after the group is specified; and

ii. specifying an information access code comprising an access list that identifies by corresponding UID codes which users of the plurality of the users are allowed to receive 1) location information from a first location information source associated with the first DID code or a second location information source associated with the second DID code over a wireless network and 2) event information other than location information conveyed when the database management system determines that the event has occurred, wherein the location of the zone is independent of locations of the plurality of mobile devices, and wherein the access list comprises one or more UID codes that identify one or more users as recipients who are allowed to receive an alert when the event occurs such that any user who is not identified on the access list is not a recipient of the alert when the event occurs, wherein the alert is only conveyed to the one or more recipients of the alert identified on the access list when the event occurs;

receive the location information of the first and second mobile devices identified by the first DID code and the second DID code;

determine whether to send the alert based on a comparison of the location of the zone with the location information of the first or second mobile devices in the group;

check a second level of access control based on one or more UID codes in the access list to cause the alert to be sent to the one or more recipients identified on the access list such that only identified users of the plurality of users can receive the alert when the event occurs, and

convey the location information of the first or second mobile devices to one or more recipients identified on the access list such that only identified users of the plurality of users can receive the location information.

156. PDC asserts that the ’874 patent covers both geofencing and ELD functionality.

157. The draft complaint PDC sent to ISE asserts ISE’s infringement of the ’874 patent.

158. PDC, in communications to Trimble, asserted that the ’874 patent is one of the patents covering Trimble ELD Products and also identified the ’874 patent as covering Trimble Geofencing Products. Additionally, PDC sent to Trimble an “evidence of use” chart alleging infringement of the ’874 patent by GeoManager.

159. On August 13, 2019, PDC filed suit in the Eastern District of Texas asserting that Trimble’s Geomanager Geofencing Products infringe the ’874 patent.

G. United States Patent No. 9,954,961

160. The ’961 patent is entitled “Method for Logging Times and Locations of Carriers of Objects or Electronic Logging Devices (ELDs) or Sensors in Identified User, Driver or Vehicle Sub-Groups Within a Group or Fleet.” It issued on April 24, 2018 from an application filed on December 20, 2017. It recites forty-one claims, with claims 1, and 33 being independent.

161. Claim 1 of the ’961 patent recites:

> An access control method executed in one or more servers having access to a central or distributed database management system (DBMS) of an internet service provider (ISP) having one or more administrators each having a corresponding level of administrative privilege to administer a tracking service that tracks locatable objects that are subject to periods of movements and periods of non-movements of objects, wherein the tracking service sends notifications to authorized users of the ISP when events occur based on locations of objects that are identified in the DBMS by corresponding object IDs (OIDs), wherein the locations are determined by one or more location information sources (LISs), and wherein the DBMS identifies users who are authorized to use the tracking service after they log into the ISP with their authorized user IDs and corresponding passwords, the method comprising steps executed by one or more processors in the one or more servers that are configured to:
>
> [(a)] provide a first administrator with a first level of administrative privilege to control access privileges of those authorized users who are logged into the ISP, wherein the first administrator exercises the first level of administrative privilege by identifying a group with a group ID (GID) that is associated in the DBMS with a first user sub-group ID (SGID) of a first user sub-group within

the group, wherein the first user sub-group includes different first authorized user and second authorized users other than the administrator who are identified by corresponding first and second authorized user IDs, wherein the DBMS further associates the first user SGID with a first object SGID of a first object sub-group comprising a first object having a first OID associated with a first LIS and a second object having a second OID associated with a second LIS, wherein the first and second LISs provide corresponding locations of the first and the second objects at a first time and at a second time as determined based on the same or different coordinate references;

(b) check the first level of administrative privilege before providing a first administrator interface to associate the first authorized user ID with the GID thereby providing the first authorized user a second level of administrative privilege to identify one or more sub-groups within the group identified by the GID, wherein the first authorized user exercises the second level of administrative privilege to limit access to a first notification sent after the events occur by specifying a first information access code, wherein the first information access code comprises a first access control list that identifies one or more recipients of the first notification such that anyone who is not identified on the first access control list is not allowed to be a recipient of the first notification;

(c) check the second level of administrative privilege before providing one or more first user interfaces other than the administrator interface to the first authorized user to 1) set a first event condition to determine occurrence of the same or different events based on corresponding first or second determined location of the first or the second object at the first and second times and 2) add the second authorized user ID on the first access control list, thereby identifying the second authorized user as a recipient of the first notification; and

(d) cause the first notification to be sent when it is determined that the first event condition is met based on a comparison of the first determined location by either the first LIS or the second LIS at the first time with the second determined location by either the first LIS or the second LIS at the second time, wherein the first notification is only sent to the one or more recipients that are authorized by the first authorized user to have access to the first notification when the first event condition is met.

162. PDC asserts that the ’961 patent covers ELD functionality.

163. The draft complaint PDC sent to ISE asserts ISE’s infringement of the ’961 patent.

164. PDC, in communications to Trimble, asserted that the ’961 patent is one of the patents covering Trimble ELD Products. PDC additionally sent to Trimble “evidence of use”

charts alleging infringement of the ’961 patent by Trimble ELD Products.

H. United States Patent No. 10,021,198

165. The ’198 patent is entitled “Software-Based Mobile Tracking Service with Video Streaming When Events Occur.” It issued on July 10, 2018 from an application filed on March 8, 2018. It recites twenty claims, with claims 1 and 20 being independent.

166. Claim 1 of the ’198 patent recites:

> A method for controlling conveyance of location and tracking information provided as an Internet service, comprising:
>
> providing a computer server connected to the Internet, said computer server executing first database management system software that maintains a database of location and tracking information about a first information sharing environment used by a plurality of authorized users;
>
> providing one or more first administrative privileges used by a first administrator to maintain said first information sharing environment, said one or more first administrative privileges being used to: a) define a plurality of second information sharing environments corresponding to a plurality of purchasers of said Internet service, b) provide each authorized user of said plurality of authorized users a respective user account name and password to use as part of a login process, and c) assign each authorized user of said plurality of authorized users to only one of said second information sharing environments of said plurality of second information sharing environments, said plurality of second information environments coexisting independent of each other within said first information sharing environment;
>
> providing second administrative privileges used to maintain said plurality of second information sharing environments to a plurality of second administrators, said second administrative privileges being used to: a) define one or more groups within a respective second information sharing environment, and b) assign each authorized user of the respective second information sharing environment to one or more of said groups;
>
> providing a plurality of second database management system software that executes on a plurality of computing devices of said plurality of authorized users, said plurality of second database management system software interfacing with said first database management system software, each second database management system software of said plurality of second database management system software enabling a first authorized user of said plurality of authorized users to: a) define an event condition based on an object location information corresponding to a location of an object and a zone information corresponding to a zone, and b) define an event information access code that is a first access list that specifies one or more authorized users of said plurality

> of users to be provided an event information comprising an alert when said event condition has been met, said object location being a coordinate within a coordinate system provided by a location information source, said zone having a boundary defined by a plurality of coordinates within said coordinate system;
>
> monitoring by said first database management system software said object location information; determining by said first database management system software said event condition has been met; and
>
> conveying by said first database management system software said alert to said second database management software of only those authorized users included on said first access list.

167. PDC asserts that the ’198 patent covers both geofencing and ELD functionality.

168. The draft complaint PDC sent to ISE asserts ISE’s infringement of the ’198 patent.

169. PDC, in communications to Trimble, asserted that the ’198 patent is one of the patents covering Trimble ELD Products and identified the ’198 patent as covering Trimble Geofencing Products. Further, PDC also sent to Trimble an “evidence of use” chart alleging infringement of the ’198 patent by Farmer Pro and Locate2Protect.

I. United States Patent No. 10,104,189

170. The ’189 patent is entitled “Method for Controlling Conveyance of Event Information by an Administrator of a Plurality of Electronic Logging Devices (ELDs).” It issued on October 16, 2018 from an application filed on June 4, 2018. It recites thirty-three claims, with claim 1 being independent.

171. Claim 1 of the ’189 patent recites:

> A method for controlling conveyance of event information by an administrator of a plurality of electronic logging devices (the ELD administrator) associated with users accounts in a database management system application (DBSMA) executed in one or more central or distributed servers that provide a user interface to an administrator of drivers of vehicles in an organization or a company (the Driver administrator) who is given access to an administrator account in the DBSMA by the ELD administrator to classify a first database (DB) based on corresponding one or more roles of authorized users in the company or the organization, a first role classifying authorized users as drivers of vehicles, the method comprising the steps of:

a. interfacing over one or more wireless networks with an ELD used in a vehicle that executes a location tracking application (LTA) which periodically receives location information from a GPS device associated with an ELD ID that identifies the ELD in the first DB, the LTA being configured to:

   i. turn a tracking mode of the ELD on and off by a driver who uses the ELD to log into a driver user account in the DBMSA with a driver user ID and a password,

   ii. receive sensor information from one or more sensors associated with the ELD ID that sense when a vehicle that uses the ELD is powered on,

   iii. record a group event information after the vehicle is powered on, the group event information indicating a period of movement and a period of non-movement of the driver as determined based on the location information received from the GPS device after the driver turns on the tracking mode, and

   iv. provide an ELD interface that allows the driver to edit a file stored in the ELD that contains the recorded group event information after the driver logs into the driver user account;

b. interfacing over one or more wired or wireless networks with a computing device that is configured to enable the Driver administrator to log into the administrator account with an administrator ID and a password to access the DBSMA in order to:

   i. identify a group of a first vehicle and a second vehicle in the first DB by a group ID (GID), the group including authorized users identified by corresponding user IDs (UIDs) associated with the GID,

   ii. classify a first authorized user identified by a first UID as a first driver of the first vehicle which uses a first ELD identified by a first ELD ID associated with the GID;

   iii. classify a second authorized user identified by a second UID as a second driver of the second vehicle which uses a second ELD identified by a second ELD ID associated with the GID,

   iv. receive a first group event information indicating a period of movement and a period of non-movement of the first driver,

   v. receive a second group event information indicating a period of movement and a period of non-movement of the second driver, and

   vi. send a notification based on an information access code comprising an access list that identifies one or more recipients of the first or the second group event information such that the notification is sent only to the one or more recipients.

172. PDC asserts that the ’189 patent covers ELD functionality.

173. The draft complaint PDC sent to ISE asserts ISE’s infringement of the ’189 patent.

174. PDC, in communications to Trimble, asserted that the ’189 patent is one of the patents covering Trimble ELD Products. Further, PDC also sent to Trimble an “evidence of use” chart alleging infringement of the ’189 patent by “Trimble eDriver Logs,” but in reality charting a variety of different Trimble ELD products, including Driver Logs, TOGs eDriver Logs, PeopleNet eDriver Logs, and eFleetSuite.

J. United States Patent No. 10,148,774

175. The ’774 patent is entitled “Method for Controlling Conveyance of Electronically Logged Information Originated by Drivers of Vehicles.” It issued on December 4, 2018 from an application filed on June 1, 2018. It recites thirty-three claims, with claim 1 being independent.

176. Claim 1 of the ’774 patent recites:

> A method for controlling conveyance of event information by an authorized user classified as an administrator by a database management system application (DBSMA) executed in one or more central or distributed servers that provide a user interface to the administrator to access an administrator user account in the DBSMA to classify a database (DB) based on corresponding one or more roles of authorized users in a company or an organization who have corresponding user accounts in the DBSMA, a first role classifying a plurality of authorized users as drivers of vehicles, the method comprising the steps of:
>
> a. using in each vehicle an electronic logging device (ELD) having a wireless communication interface with one or more networks to cause execution of a location tracking application (LTA) which periodically receives location information from a GPS device associated with an ELD ID that identifies the ELD in the DB, the LTA being configured to:
>
> i. turn a tracking mode of the ELD on and off by a driver who uses the ELD to log into a driver user account with a driver user ID and a driver password,
>
> ii. receive a sensor information from one or more sensors associated with the ELD ID that sense when a vehicle that uses the ELD is powered on,
>
> iii. record a group event information after the vehicle is powered on, the group event information indicating a period of

movement and a period of non-movement of the driver as determined based on the location information received from the GPS device after the driver turns on the tracking mode, and

iv. provide an ELD interface that allows the driver to edit a file stored in the ELD that contains the recorded group event information after the driver logs into the driver user account;

b. using a computing device that has a communication interface with one or more wired or wireless networks to log into the administrator user account with an administrator user ID and an administrator password to access the DBSMA in order to:

i. identify a group of a first vehicle and a second vehicle in the first DB by a group ID (GID), the group including authorized users identified by corresponding user IDs (UIDs) associated with the GID,

ii. classify a first authorized user identified by a first UID as a first driver of the first vehicle which uses a first ELD identified by a first ELD ID associated with the GID;

iii. classify a second authorized user identified by a second UID as a second driver of the second vehicle which uses a second ELD identified by a second ELD ID associated with the GID,

iv. receive a first group event information indicating a period of movement and a period of non-movement of the first driver,

v. receive a second group event information indicating a period of movement and a period of non-movement of the second driver, and

vi. send a notification based on an information access code comprising an access list that identifies one or more recipients of the first or the second group event information such that the notification is sent only to the one or more recipients.

177. PDC asserts that the ’774 patent covers ELD functionality.

178. PDC, in communications to Trimble, asserted that the ’774 patent is one of the patents covering Trimble ELD Products. Further, PDC also sent to Trimble emails identifying the claims of the ’774 patent as being directed to “ELD Subscriber” functionality; in other words, PDC asserts that the ’774 patent is directed to subscriber-side ELD functionality.

K. United States Patent No. 10,171,950

179. The ’950 patent is entitled “Electronic Logging Device (ELD).” It issued on January 1, 2019 from an application filed on May 22, 2018. It recites forty-four claims, with claims 1 and 23 being independent.

180. Claim 1 of the ’950 patent recites:

> A computing device used in a vehicle, comprising:
>
> a sensor interface configured to receive a plurality of sensor information from one or more sensors that sense physical characteristics including sensing when the vehicle is powered on;
>
> a GPS receiver configured to provide a plurality of location information after the vehicle is powered on;
>
> a storage device configured to store information in a document indicating a period of movement or a period of non-movement of the vehicle as determined based on the plurality of location information provided by the GPS receiver periodically;
>
> a processor configured to access the storage device while executing a location tracking application (LTA), said LTA being configured to track vehicle locations by recording the period of movement or the period of non-movement of the vehicle after a specified event condition is met, said specified event condition being met based on a first sensor information comprising one or more first physical characteristics: wherein the LTA provides:
>
> i. a log-in user interface configured to enable a driver of the vehicle to log into the LTA based on an access code assigned [] by an administrator of one or more groups of vehicles or drivers,
>
> ii. a first user interface configured to enable the driver to edit the document after the driver logs in, and
>
> iii. a second user interface configured to enable the driver to turn off a tracking mode of the vehicle;
>
> a wireless email interlace [sic] configured to transmit an e-mail containing the information indicating the period of movement or the period of non-movement of the vehicle;
>
> Bluetooth interface configured to transmit the information indicating the period of movement or the period of non-movement of the vehicle to a Bluetooth device; and
>
> a display device configured to display the period of movement or the period of non-movement of the vehicle.

181. PDC asserts that the ’950 patent covers ELD functionality.

182. PDC, in communications to Trimble, asserted that the ’950 patent is one of the patents covering Trimble ELD Products. Further, PDC also sent to Trimble emails identifying the claims of the ’950 patent as being directed to an “ELD,” meaning an in-truck ELD device.

L. United States Patent No. 10,277,689

183. The ’689 patent is entitled “Method For Controlling Conveyance Of Events By Driver Administrator Of Vehicles Equipped With ELDs.” It issued on April 30, 2019 from an application filed on November 21, 2018. It recites thirty-two claims, with claim 1 being independent.

184. Claim 1 of the ’689 patent recites:

> A method for controlling conveyance of event information in a tracking service provided to authorized users who track vehicles that use a plurality of electronic logging devices (ELDs),
>
> wherein an ELD administrator of the tracking service provides access to user accounts in a first database management system application (DBMSA) executed by one or more central or distributed servers that provide user interfaces to the authorized users to log into to their respective user accounts, said DBMSA having access to a first database (DB) that identifies the ELDs by corresponding ELD IDs, the vehicles by corresponding Vehicles IDs (VIDs), the authorized users including drivers of a group of vehicles by corresponding User IDs (UIDs), and the group by a group ID (GID),
>
> wherein a Driver administrator of the group is given a privilege to access an administrator account in the first DBSMA by the ELD administrator, the method comprising the steps of:
>
> a. interfacing over one or more wireless networks with the plurality of ELDs including a first ELD and a second ELD that are respectively identified by a first ELD ID and a second ELD ID, wherein each ELD comprises one or more processors that execute a location tracking application (LTA), said each ELD being configured to:
>
> i. receive a power up sensor information from one or more sensors that indicate a vehicle in the group that uses the ELD is powered up by a driver of the vehicle, said power up sensor information being received in order to record one or more driving events after the driver logs into a driver user account via the ELD;
>
> ii. periodically receive location information from a location information source (LIS) used by the ELD;

iii. log location information received from the LIS, said location information indicating where driving event conditions for occurrence of driving events are met;

iv. record a driving event information related to a first driving event that occurs based on a first driving event condition, wherein the recorded driving event information comprises a logged location information that indicates where the first driving event occurs;

v. provide a log-in interface via the LTA that allows the driver to log into the driver user account in the first DBMSA with a driver user ID and a driver password to access the recorded driving event, and

vi. provide an ELD interface via the LTA that allows the driver to edit the recorded driving event information after the driver logs into the driver user account; and

b. interfacing over one or more wired or wireless networks with a computing device that is configured to enable the Driver administrator to log into the administrator account by providing an administrator ID and an administrator password in order to:

i. identify a first vehicle by a first VID and a second vehicle by a second VID, said first VID and second VID being associated with the GID,

ii. specify a first authorized user identified by a first UID as a first driver of the first vehicle which uses the first ELD,

iii. specify a second authorized user identified by a second UID as a second driver of the second vehicle which uses the second ELD, and

iv. specify one or more recipients who are authorized to receive recorded driving event information;

c. receiving a first recorded driving event information from the first ELD containing the first UID;

d. receiving a second recorded driving event information from the second ELD containing the second UID driver; and

e. sending notifications to one or more recipients who are authorized by the Driver administrator to receive the first recorded driving event information or the second recorded driving event information.

185. PDC asserts that the ’689 patent covers ELD functionality.

186. PDC, in communications to Trimble, asserted that the ’689 patent is one of the patents that covers Trimble ELD Products.

M. United States Patent No. 10,284,662

187. The ’662 patent is entitled “Electronic Logging Device (ELD) For Tracking Driver Of A Vehicle In Different Tracking Modes.” It issued on May 7, 2019 from an application filed on December 18, 2018. It recites twenty claims, with claim 1 being independent.

188. Claim 1 of the ’662 patent recites:

> A computing device having a device ID configured to track a driver that uses the computing device in a vehicle, the computing device comprising:
>
> one or more wireless interfaces configured to interface with a network that provides access to a driver user account of the driver in a database management system application (DBMSA) administered by an administrator that maintains a database (DB) that identifies the computing device with the device ID;
>
> a location tracking software application (LTA) executed in the computing device, wherein the LTA records driving event information related to driving events that occur if the driver powers on and drives the vehicle, said driving event information comprising driving event location information associated with the device ID, said driving events including a power-on driving event that occurs when the LTA determines that the vehicle is powered on, the LTA being configured to:
>
> provide a log-in interface that allows the driver to log into the driver user account with a driver user ID and a driver password to access the recorded driving events information,
>
> log driving event location information corresponding to locations of the driving events,
>
> record a first driving event information based on a movement driving event which occurs after the power-on driving event by meeting a first driving event condition, said first driving event condition being met when the LTA determines that the vehicle is moving, wherein the recorded first driving event information comprises a logged driving event location information that corresponds to a location of the movement driving event,
>
> provide a first user interface that allows the driver to edit the recorded driving event information after the driver logs into the driver user account, and
>
> cause the recorded driving event information to be transmitted to the DBMSA using the one or more wireless interfaces; and

> a display that is configured to display the recorded driving event information.

189. PDC asserts that the ’662 patent covers ELD functionality.

190. PDC, in communications to Trimble, asserted that the ’662 patent is one of the patents that covers Trimble ELD Products.

191. On August 13, 2019, PDC filed suit in the Eastern District of Texas asserting that eFleetSuite ELD Products infringe the ’662 patent.

N. United States Patent No. 10,382,966

192. The ’966 patent is entitled “Computing Device Carried By A Vehicle For Tracking Driving Events In A Zone Using Location And Event Log Files.” It issued on August 13, 2019 from an application filed on January 10, 2019. It recites twenty claims, with claims 1 and 13 being independent.

193. Claim 1 of the ’966 patent recites:

> A method for tracking driving events in a zone, the method being performed in a mobile computing device (MCD) having a wireless interface, a storage device and a display, the method comprising the steps of:
>
> > receiving location information from a source comprising one or more wireless devices that are used to locate a driver of a vehicle that carries the MCD;
> >
> > communicating with a database management system application (DBMSA) over a network of computing devices using the wireless interface to access a driver account of the driver having a driver ID and password;
> >
> > receiving an indication that the vehicle is powered on to cause locating the driver and recording driver locations at a first rate, wherein the driver locations are recorded into an event log file stored in the storage device containing recorded times and locations of a movement driving event and recorded times and locations of a non-movement driving event,
> >
> > receiving access authorization to the driver account based on the driver ID and password transmitted in a log-in request over the network before providing a user interface on the MCD that enables the driver to 1) access the stored event log file in the storage device, 2) write or enter additional information in the accessed event log file and 2) authorize the event log file to be conveyed with the additional information;

> conveying the event log file over the network using the wireless interface based on a first ID of a first authorized recipient, and
>
> showing the recorded times of the movement driving event and the non-movement driving event on the display.

194. PDC asserts that the ’966 patent covers ELD functionality.

195. PDC, in communications to Trimble during the Summer of 2019, asserted that the ’966 patent—once issued—would be one of the patents that covers Trimble ELD Products.

196. On August 13, 2019, PDC filed suit in the Eastern District of Texas asserting that Trimble’s eFleetSuite ELD Products infringe the ’966 patent.

O. United States Patent No. 10,397,789

197. The ’789 patent is entitled “Method For Controlling Conveyance Of Event Information About Carriers Of Mobile Devices Based On Location Information Received From Location Information Sources Used By The Mobile Devices.” It issued on August 27, 2019 from an application filed on January 3, 2019. It recites twenty claims, with claims 1, 12, and 17 being independent.

198. Claim 1 of the ’789 patent recites:

> A method for controlling conveyance of event notifications based on a first level of administrative privileges used by a tracking service administrator of a tracking service provided over a first network of computing device to authorized users who track mobile devices identified in a database (DB) by mobile device IDs (DIDs), wherein the mobile devices are carried by corresponding carriers, including objects, vehicles, animals or persons identified by carrier IDs (CIDs) in groups identified by corresponding group IDs (GIDs) in the DB, the method comprising the steps of:
>
> (a) using the first level of administrative privileges to provides access authorization to user accounts of the tracking service in response to received log in requests that contain IDs and passwords of the authorized users of the groups;
>
> (b) based on the login requests, providing access authorization to the user accounts using a first database management system application (DBMSA) executed on one or more central or distributed servers configured to use the DBMSA for performing functions based on multiple levels of administrative privileges including the first level of administrative privileges;
>
> (c) based on the first level of administrative privileges, giving a second level of administrative privileges to perform group administrative

functions in a group identified by a GID, which are not performed using the first level of administrative privileges, wherein members of the group include 1) a group administrator having a group administrator account who is authorized by the tracking service administrator to use the second level of administrative privileges and 2) an authorized user in the group having a user account who is not authorized to use the second level of administrative privileges;

(d) providing access authorization to the administrator account before performing the group administrative functions using the second level of administrative privileges;

(e) interfacing over one or more wireless networks with 1) a first mobile device identified by a first DID to receive a first location information comprising information indicating 1) locations of a first carrier of the first mobile device having a first CID and 2) a first movement by the first carrier and 2) a second mobile device identified by a second DID to receive a second information comprising information indicating 1) locations of a second carrier of the second mobile device having a second CID and ii) a second movement by the second carrier; and

(f) interfacing over the first network with one or more computing devices to enable the group administrator to log into the administrator account to perform the group administrative functions, including:

i) setting a zone identified by a zone ID (ZID) for the group, wherein a location of the zone is independent of the locations of the first carrier or the second carrier,

ii) setting a first event condition for a first group event that occurs if it is determined that the first event condition is met based on the locations of the first carrier or the second carrier within or relative to the zone,

iii) setting a second event condition for a second group event that occurs if it is determined that the second group event condition is met based on the first movement or the second movement, and

iv) specifying an access list comprising one or more IDs that identify one or more recipients including the authorized user of the group who are authorized to access event notifications whenever the first group event or the second group event occurs; and

(g) giving access to the event notifications based on the access list.

199. Claim 17 of the ’789 patent recites:

A method for tracking driving events comprising steps of:

(a) using a server to execute a database management system application (DBMSA) that performs functions based on multiple levels of administrative privileges including a first level of administrative

> privileges of a tracking service provider having a system administrator that uses the first level of administrative privileges for maintaining a database (DB) that identifies users of the tracking service by identification codes (IDs);
>
> (b) using the first level of administrative privileges to 1) create company groups based on company IDs of companies, 2) authorize a company group to use a second level of administrative privileges, which is not used by the system administrator, and 3) create an administrator account for a company administrator of the company who is authorized to use the second level of administrative privileges;
>
> (c) based on a received company administrator ID in a request to log into the administrator account, providing access authorization to the administrator account before providing one or more user interfaces that receive an access list from the company administrator using the second level of administrative privileges, the access list identifying one or more authorize recipients of event information who are not authorized to use the second level of administrative privileges;
>
> (d) creating a driver account for a driver of a vehicle based on the second level of administrative privileges which authorizes the driver to log into the driver account based on a driver ID and password to become an authorized user in the company group;
>
> (e) receiving a request to log into the driver account from a mobile computing device (MCD) carried by the vehicle;
>
> (f) receiving driver location information indicating locations of the driver;
>
> (g) receiving driving event information indicating a) the vehicle is powered on, b) times and locations of a movement driving event, c) times and locations of a non-movement driving event, d) additional information entered or written by the driver in an event log file after providing the access authorization to the driver user account;
>
> (h) conveying the driving event information based on the access list.

200. PDC asserts that the ’789 patent covers ELD functionality and geofencing functionality, *e.g.*, that Trimble ELD Products and Trimble Geofencing Products infringe.

201. PDC, in communications to Trimble during the Summer of 2019, asserted that the ’789 patent—once issued—would be one of the patents that covers Trimble ELD Products.

202. On August 27, 2019, PDC filed suit in the Eastern District of Texas asserting that Trimble’s eFleetSuite and FieldMaster Logs ELD Products and Trimble’s GeoManager Geofencing Products infringe the ’789 patent.

FIRST CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '113 PATENT BY TRIMBLE ELD AND GEOFENCING PRODUCTS)

203. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

204. PDC has threatened Trimble and ISE with suits for alleged infringement of the '113 patent by Trimble ELD and Geofencing Products, including by sending an unfiled complaint alleging that ISE's eFleetSuite infringes the '113 patent, by asserting in its communications with Trimble that the '113 patent covers both Trimble ELD and Geofencing Products, and by threatening to file suit against Trimble in the Eastern District of Texas.

205. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD and Geofencing Products infringe the '113 patent.

206. Trimble's ELD and Geofencing Products do not infringe any of claims 4-6, 45, 57, 58, and 60-62 of the '113 patent (*i.e.*, the only remaining claims of that patent that have not been disclaimed by PDC or otherwise invalidated).

207. For example, many or all of the Trimble ELD Products, including at least eFleetSuite, Driver Logs, and eDriver Logs, do not have the specific functionality claimed by the '113 patent, including for calculating and sending notifications or alerts based on geographic zones or zone information according to the recited steps. For instance, these products do not satisfy the steps in claim 60 of "defining a zone within a coordinate system…," "defin[ing] an object location event based upon a relationship between the zone and a location of a computing device associated with the second user, an occurrence of the object location event producing object location event information," and "conveying at least one of the object location information, the zone information, or the object location event information to a computing device associated with the third user."

208. To take an additional example, the Trimble ELD and Geofencing Products do not infringe the '113 patent because the claims require method steps that are performed by multiple

actors, and the requirements to allege a permissible claim of divided infringement are not present here.

209. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD and Geofencing Products do not infringe the ’113 patent.

SECOND CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE ’471 PATENT BY TRIMBLE ELD PRODUCTS)

210. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

211. PDC has threatened Trimble and ISE with suits for alleged infringement of the ’471 patent by Trimble ELD Products, including by sending an unfiled complaint alleging that ISE’s eFleetSuite infringes the ’471 patent, by asserting in its communications with Trimble that the ’471patent covers Trimble ELD Products, and by threatening to file suit against Trimble in the Eastern District of Texas.

212. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE’s Trimble ELD Products infringe the ’471 patent.

213. Trimble’s ELD Products do not infringe the claims of the ’471 patent.

214. For example, many or all of the Trimble ELD Products, including at least eFleetSuite, Driver Logs, and eDriver Logs products, do not have the specific functionality claimed by the ’471 patent, including for calculating and sending notifications or alerts based on geographic zones or zone information according to the recited functions and/or structures. For example, the products are not configured to perform the recited steps of “set[ting] a zone,” “set[ting] an event based upon said zone and said object location information,” “set[ting] an alert based upon said event…,” and “caus[ing] an alert to be sent….”

215. To take an additional example, the Trimble ELD Products do not infringe the ’471 patent because the ’471 claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here.

216. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD Products do not infringe the ’471 patent.

THIRD CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE ’314 PATENT BY TRIMBLE ELD AND GEOFENCING PRODUCTS)

217. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

218. PDC has threatened Trimble and ISE with suits for alleged infringement of the ’314 patent by Trimble ELD and Geofencing Products, including by sending an unfiled complaint alleging that ISE’s eFleetSuite infringes the ’314 patent, by asserting in its communications with Trimble that the ’314 patent covers Trimble ELD and Geofencing Products, and by threatening to file suit against Trimble in the Eastern District of Texas.

219. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE’s Trimble ELD and Geofencing Products infringe the ’314 patent.

220. Trimble’s ELD and Geofencing Products do not infringe the claims of the ’314 patent.

221. For example, many or all of the Trimble ELD Products, including at least eFleetSuite, Driver Logs, and eDriver Logs, do not have the specific functionality claimed by the ’314 patent, including for calculating and sending notifications or alerts based on geographic zones or zone information according to the recited steps of, for example, “receiv[ing] a zone information after a user group is specified…,” “receiv[ing] n event information about an event related to the zone and a location of a mobile object that is independent of the zone,” “determin[ing] occurrence of the event based on the zone and the at least one location

information," and "caus[ing] the group notification to be sent to the second user when the event occurs."

222. To take an additional example, the Trimble ELD and Geofencing Products do not infringe the '314 patent because the claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here.

223. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD and Geofencing Products do not infringe the '314 patent.

FOURTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '661 PATENT BY TRIMBLE ELD AND GEOFENCING PRODUCTS)

224. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

225. PDC has threatened Trimble and ISE with suits for alleged infringement of the '661 patent by Trimble ELD and Geofencing Products, including by sending an unfiled complaint alleging that ISE's eFleetSuite infringes the '661 patent, by asserting in its communications with Trimble that the '661 patent covers Trimble ELD and Geofencing Products, and by threatening to file suit against Trimble in the Eastern District of Texas.

226. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD and Geofencing Products infringe the '661 patent.

227. Trimble's ELD and Geofencing Products do not infringe the claims of the '661 patent.

228. For example, many or all of the Trimble ELD Products, including at least eFleetSuite, Driver Logs, and eDriver Logs, do not have the specific functionality claimed by the '661 patent, including for calculating and sending notifications or alerts based on geographic zones or zone information according to the recited steps and/or structures. For instance, these

products are not configured to perform the steps of "set[ting] the zone for the user group after the user group is defined by the first administrator," "set[ting] the event for the user group after the setting of the zone," "set[ting] the notification for the user group, said request identifying a recipient of the notification…," "determin[ing] a mobile device location…," "compar[ing] the zone and the mobile device location to determine whether the event occurs," and "if the event occurs, caus[ing[the notification to be sent to the recipient…."

229. To take an additional example, the Trimble ELD and Geofencing Products do not infringe the '661 patent because the claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here.

230. As a further example, the Trimble ELD and Geofencing Products do not infringe because the claims require hierarchical levels of administrative access and/or control with a separate "first level of administrative privilege" for a first administrator and "second level of administrative privilege associated with the second administrators," and the Trimble ELD and Geofencing Products do not split the administrator functions in the manner claimed.

231. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD and Geofencing Products do not infringe the '661 patent.

FIFTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '941 PATENT BY TRIMBLE ELD AND GEOFENCING PRODUCTS)

232. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

233. PDC has threatened Trimble and ISE with suits for alleged infringement of the '941 patent by Trimble ELD and Geofencing Products, including by sending an unfiled complaint alleging that ISE's eFleetSuite infringes the '941 patent, sending to Trimble a chart asserting that GeoManager infringes the '941 patent, by asserting in its communications with

Trimble that the ’941 patent Trimble ELD and Geofencing Products, and by threatening to file suit against Trimble in the Eastern District of Texas.

234. After Trimble filed its Declaratory Judgment Complaint in this District, PDC filed suit in the Eastern District of Texas asserting that Trimble’s Geomanager Geofencing Products infringe the ’941 patent.

235. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE’s Trimble ELD and Geofencing Products infringe the ’941 patent.

236. The Trimble ELD and Geofencing Products do not infringe the claims of the ’941 patent.

237. For example, many or all of the Trimble ELD Products, including at least eFleetSuite, Driver Logs, and eDriver Logs, do not have the functionality claimed by the ’941 patent, including for calculating and sending notifications or alerts based on geographic zones or zone information according to the recited structures. For example, these products are not configured to perform the steps of “set[ting] a zone for the group, the zone having a boundary that is independent of where mobile devices are located,” “set[ting] an event for the group,” “set[ting] an alert for the group, the request identifying a recipient of the alert,” “compar[ing] the identifiers and location information with the group's zone and event to determine whether to send the group's alert,” and “caus[ing] the group’s alert to be sent.”

238. To take an additional example, the Trimble ELD and Geofencing Products do not infringe the ’941 patent because the claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here.

239. As a further example, the Trimble ELD and Geofencing Products do not infringe because the claims require separate and hierarchical levels of administrative access and/or control with a separate “first level of administrative privilege” and “second level of

administrative privilege," and the Trimble ELD and Geofencing Products do not split the administrator functions in the manner claimed.

240. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD and Geofencing Products do not infringe the '941 patent.

SIXTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '874 PATENT BY TRIMBLE ELD AND GEOFENCING PRODUCTS)

241. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

242. PDC has threatened Trimble and ISE with suits for alleged infringement of the '874 patent by Trimble ELD and Geofencing Products, including by sending an unfiled complaint alleging that ISE's eFleetSuite infringes the '874 patent, sending to Trimble a chart asserting that GeoManager infringes the '874 patent and by asserting in its communications with Trimble that the '874 patent covers Trimble ELD and Geofencing Products, and by threatening to file suit against Trimble in the Eastern District of Texas.

243. After Trimble filed its Declaratory Judgment Complaint in this District, PDC filed suit in the Eastern District of Texas asserting that Trimble's Geomanager Geofencing Products infringe the '874 patent.

244. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD and Geofencing Products infringe the '874 patent.

245. Trimble's ELD and Geofencing Products do not infringe the claims of the '874 patent.

246. For example, many or all of the Trimble ELD Products, including at least eFleetSuite, Driver Logs, and eDriver Logs, do not have the functionality claimed by the '874 patent, including for calculating and sending notifications or alerts based on geographic zones or zone information according to steps and/or the recited structures. For instance, these products

are not configured to perform the steps of "receiv[ing] the location information…," "determin[ing] whether to send the alert based on a comparison of the location of the zone with the location information…," and "caus[ing] the alert to be sent to the one or more recipients identified on the access list such that only identified users of the plurality of users can receive the alert when the event occurs" in claim 1; or the steps in claim 11 and 44 of specifying "an event condition based on the mobile object locations that causes a group event to occur," "determin[ing] which users of the plurality of users can receive the notification information when the group event occurs," and "sending the notification information when the database management system determines that the group event has occurred; the notification information being sent to the one or more recipients identified on the access list…."

247. To take an additional example, the Trimble ELD and Geofencing Products do not infringe the '874 patent because the claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here.

248. As a further example, the Trimble ELD and Geofencing Products do not infringe because the claims require a specific and separate, hierarchical "first level of administrative privilege" and "second level of administrative privilege, where the user with the "first level of administrative privilege" does not perform functions assigned to users with the "second level of administrative privilege," but the Trimble ELD and Geofencing Products do not split the administrator functions in the manner claimed.

249. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD and Geofencing Products do not infringe the '874 patent.

SEVENTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '961 PATENT BY TRIMBLE ELD PRODUCTS)

250. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

251. PDC has threatened Trimble and ISE with suits for alleged infringement of the ’961 patent by Trimble ELD Products, including by sending an unfiled complaint alleging that ISE’s eFleetSuite infringes the ’961 patent, by sending to Trimble “evidence of use” charts alleging that Trimble’s ELD Products and eFleetSuite infringe the ’961 patent, by asserting in its communications with Trimble that the ’961 patent covers Trimble ELD Products, and by threatening to file suit against Trimble in the Eastern District of Texas.

252. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE’s Trimble ELD Products infringe the ’961 patent.

253. Notably, PDC’s claim charts for the ’961 patent jumble Trimble products in a mix-and-match approach that is not permissible to prove patent infringement.

254. Regardless, even when considered separately (as they must be), the Trimble ELD Products do not infringe the claims of the ’961 patent.

255. For example, none of Trimble, Trimble’s ELD Products, or customers using Trimble’s ELD Products are an “internet service provider,” as required by all claims of the ’961 patent.

256. To take an additional example, the Trimble ELD Products do not infringe the ’961 patent because the claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here.

257. As a further example, the Trimble ELD Products do not infringe because the claims require separate levels of administrative access and/or control with a separate hierarchical “first administrator having first level of administrative privilege” and “second administrator having a second level of administrative privilege,” but the Trimble ELD Products do not split the administrator functions in the manner claimed.

258. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD Products do not infringe the ’961 patent.

EIGHTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '198 PATENT BY TRIMBLE ELD AND GEOFENCING PRODUCTS)

259. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

260. PDC has threatened Trimble and ISE with suits for alleged infringement of the '198 patent by Trimble ELD and Geofencing Products, including by sending an unfiled complaint alleging that ISE's eFleetSuite infringes the '198 patent, by sending to Trimble a chart asserting that Locate2Protect and/or Farmer Pro infringe the '198 patent, by asserting in its communications with Trimble that the '198 patent covers Trimble ELD and Geofencing Products, and by threatening to file suit against Trimble in the Eastern District of Texas.

261. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD and Geofencing Products infringe the '198 patent.

262. Trimble's ELD and Geofencing Products do not infringe the claims of the '198 patent.

263. For example, many or all of the Trimble ELD Products, including at least eFleetSuite, Driver Logs, and eDriver Logs products, do not have the functionality claimed by the '198 patent, including for calculating and sending notifications or alerts based on geographic zones or zone information according to the recited steps of: "monitoring by said first database management system software said object location information," "determining by said first database management system software said event condition has been met," and "conveying by said first database management system software said alert to said second database management software of only those authorized users included on said first access list" in claim 1; and "a) defin[ing] an event condition based on a sensor information within an identified zone,' 'b) defin[ing] an event information access code that is an access list that specifies one or more authorized users of said plurality of authorized users to be provided an event information comprising an alert when said event condition has been met," and "monitoring said sensor

information to determine whether said event condition has been met; and conveying said alert only to those authorized users included on said access list" in claim 20.

264. As a further example, the Trimble ELD and Geofencing Products do not infringe the '198 patent because none of Trimble, the Trimble ELD and Geofencing Products, or Trimble's customers are not a "tracking Internet Service Provider" required by the claims.

265. To take a further example, the Trimble ELD and Geofencing Products do not infringe the '198 patent because the '198 claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here.

266. As yet another example, the Trimble ELD and Geofencing Products do not infringe because the claims require separate and hierarchical levels of administrative access and/or control with a separate hierarchical "first administrative privileges used by a first administrator" and "second administrative privileges," but the Trimble ELD and Geofencing Products do not split the administrator functions in the manner claimed.

267. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD and Geofencing Products do not infringe the '198 patent.

NINTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '189 PATENT BY TRIMBLE ELD PRODUCTS)

268. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

269. PDC has threatened Trimble and ISE with suits for alleged infringement of the '189 patent by Trimble ELD Products, including by sending to Trimble "evidence of use" charts alleging that Trimble's ELD Products and eFleetSuite infringe the '189 patent, by asserting in its communications with Trimble that the '189 patent covers Trimble ELD Products, and by threatening to file suit against Trimble in the Eastern District of Texas.

270. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD Products infringe the '189 patent.

271. Notably, PDC's claim charts for the '189 patent jumble Trimble products in a mix-and-match approach that is not permissible to prove patent infringement.

272. Regardless, even when considered separately (as they must be), the Trimble's ELD Products do not infringe the claims of the '189 patent.

273. For example, Trimble's ELD Products do not allow tracking to be turned off.

274. To take an additional example, the Trimble ELD Products do not infringe the '189 patent because the claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here.

275. Further, the Trimble ELD do not infringe because the claims require a separate and hierarchical levels of administrative access and/or control with a separate "ELD administrator" and "Driver administrator," but the Trimble ELD do not split the administrator functions in the manner claimed.

276. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD Products do not infringe the '189 patent.

TENTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '774 PATENT BY TRIMBLE ELD PRODUCTS)

277. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

278. PDC has threatened Trimble and ISE with suits for alleged infringement of the '774 patent by Trimble ELD Products, including by asserting in its communications with Trimble that the '774 patent covers Trimble ELD Products, by listing the application that issued into the '774 patent as being directed to ELDs in its notice letter to ISE, by making Trimble

"aware" of the '774 patent prior to and immediately after issuance, and by threatening to file suit against Trimble in the Eastern District of Texas.

279. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD Products infringe the '774 patent.

280. Trimble's ELD Products do not infringe the claims of the '774 patent.

281. For example, Trimble's ELD Products do not allow tracking to be turned off.

282. To take an additional example, the Trimble ELD Products do not infringe the '774 patent because the '774 claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here.

283. As a further example, the Trimble ELD Products do not infringe because the claims require specific associations between IDs and certain information, which the Trimble ELD products do not require.

284. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD Products do not infringe the '774 patent.

ELEVENTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '950 PATENT BY TRIMBLE ELD PRODUCTS)

285. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

286. PDC has threatened Trimble and ISE with suits for alleged infringement of the '950 patent by Trimble ELD Products, including by asserting in its communications with Trimble that the '950 patent covers Trimble ELD Products, by listing the application that issued into the '950 patent as being directed to ELDs in its notice letter to ISE, by making Trimble "aware" of the '950 patent prior to and immediately after issuance, and by threatening to file suit against Trimble in the Eastern District of Texas.

287. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD Products infringe the '950 patent.

288. Trimble's ELD Products do not infringe the claims of the '950 patent.

289. For example, Trimble's ELD Products do not send log data in the format(s) required by the claims—*i.e.*, in a document contained in an e-mail.

290. As an additional example, Trimble's ELD Products and do not use a Bluetooth interface to transmit log data.

291. To take another additional example, Trimble's ELD Products do not allow tracking to be turned off.

292. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD Products do not infringe the '950 patent.

TWELFTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '689 PATENT BY TRIMBLE ELD PRODUCTS)

293. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

294. PDC has implicitly threatened Trimble and ISE with suits for alleged infringement of the '689 patent by Trimble ELD Products, including by asserting in its communications with Trimble that the '689 patent covers Trimble ELD Products, by asserting that Trimble's products infringe the application that issued into the '689 patent in communications to Trimble, and by making Trimble "aware" of the '689 patent/application prior to and after issuance.

295. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD Products infringe the '689 patent.

296. Trimble's ELD Products do not infringe the claims of the '689 patent.

297. For example, Trimble's ELD Products do not have separate vehicle IDs (VIDs) and ELD IDs.

298. Further, the Trimble ELD do not infringe because the claims require a separate and hierarchical levels of administrative access and/or control with a separate "ELD administrator" and "Driver administrator," but the Trimble ELD do not split the administrator functions in the manner claimed.

299. Trimble's ELD Products also do not have dedicated power up sensors that sense when a truck is powered on to initiate recording of driving events after log-in.

300. Trimble's ELD Products also do not have a log-in interface via the LTA that allows the driver to log into the driver user account in the first DBMSA with a driver user ID and a driver password to access the recorded driving event.

301. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD Products do not infringe the '689 patent.

THIRTEENTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '662 PATENT BY TRIMBLE ELD PRODUCTS)

302. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

303. PDC has implicitly threatened Trimble and ISE with suits for alleged infringement of the '662 patent by Trimble ELD Products, including by asserting in its communications with Trimble that the '662 patent covers Trimble ELD Products, by asserting that Trimble's products infringe the application that issued into the '662 patent in communications to Trimble, and by making Trimble "aware" of the '662 patent prior to and after issuance.

304. After Trimble filed its Declaratory Judgment Complaint in this District, PDC filed suit in the Eastern District of Texas asserting that eFleetSuite ELD Products infringe the '662 patent

305. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD Products infringe the '662 patent.

306. Trimble's ELD Products do not infringe the claims of the '662 patent.

307. For example, Trimble's ELD Products do not have device ID configured to track a driver using the device in the vehicle.

308. Trimble's ELD Products also do not have one or more wireless interfaces configured to interface with a network that provides access to a driver user account of the driver in a database management system application (DBMSA) administered by an administrator that maintains a database (DB) that identifies the computing device with the device ID.

309. Trimble's ELD Products also do not have dedicated power up sensors that sense when a truck is powered on to initiate recording of driving events after log-in.

310. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD Products do not infringe the '662 patent.

FOURTEENTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE '966 PATENT BY TRIMBLE ELD PRODUCTS)

311. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

312. PDC has threatened Trimble and ISE with suits for alleged infringement of the '966 patent by Trimble ELD Products, including by asserting in its communications with Trimble that the '966 patent covers Trimble ELD hours of service and/or International Fuel Tax Agreement/International Registration Plan Products, by asserting that Trimble's products infringe the application that issued into the '966 patent in communications to Trimble, and by making Trimble "aware" of the '966 patent prior to issuance.

313. After Trimble filed its Declaratory Judgment Complaint in this District, PDC filed suit in the Eastern District of Texas asserting that eFleetSuite ELD Products infringe the ’966 patent.

314. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE’s Trimble ELD Products infringe the ’966 patent.

315. Trimble’s ELD Products do not infringe the claims of the ’966 patent.

316. For example, Trimble’s ELD Products do not have sources that are wireless devices used to locate the driver of a vehicle and send location information to a mobile computing device in a vehicle.

317. Trimble’s ELD Products also do not use a wireless interface to communicate over a network with a database management system application to provide access to a driver account and do not receive authorization to access the driver account based on a log-in request transmitted over a network.

318. Trimble’s ELD Products also do not have dedicated power-up sensors that sense when a truck is powered on to initiate recording of driving events after log-in.

319. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD Products do not infringe the ’966 patent.

FIFTEENTH CLAIM FOR RELIEF
(DECLARATORY JUDGMENT OF NON-INFRINGEMENT OF THE ’789 PATENT BY TRIMBLE ELD PRODUCTS)

320. The allegations contained in the preceding Paragraphs are incorporated by reference herein.

321. PDC has threatened Trimble and ISE with suits for alleged infringement of the ’789 patent by Trimble ELD Products and/or Geofencing Products, including by asserting in its communications with Trimble that the ’789 patent covers Trimble ELD hours of service products, by asserting that Trimble’s products infringe the application that issued into the ’789

patent in communications to Trimble, and by making Trimble "aware" of the '789 patent prior to issuance.

322. After Trimble filed its Declaratory Judgment Complaint in this District, PDC filed suit in the Eastern District of Texas asserting that eFleetSuite ELD Products infringe the '789 patent.

323. As a result, there is an actual, justiciable, substantial, and immediate controversy between Trimble and ISE, on the one hand, and PDC, on the other, regarding whether Trimble and ISE's Trimble ELD Products infringe the '789 patent.

324. Trimble's ELD Products do not infringe the claims of the '789 patent.

325. For example, many or all of the Trimble ELD Products, including at least eFleetSuite and FieldMaster Logs, do not have the functionality claimed by claims 1 and 12 of the '789 patent, including for calculating and sending notifications or alerts based on geographic zones or zone information according to steps and/or the recited structures. For instance, these products are not configured to perform the steps of "setting a zone…," "setting a first event condition…," and/or "setting a second event condition…."

326. Additionally, Trimble ELD Products do not infringe claim 17 of the '789 patent because the ELD products do not provide driver location information.

327. To take an additional example, the Trimble ELD and Geofencing Products do not infringe the '789 patent because the claims require method steps that are performed by multiple actors, and the requirements to allege a permissible claim of divided infringement are not present here. For example, the claims require that a user with a first level of administrative privilege, which PDC reads as Trimble, performs certain functions, including: "creat[ing] company groups" (claim 17) and "giving second level administrative privileges to perform group administrative functions in a group identified by a GID" (claims 1 and 12). The claims also require that a user with a second level of administrative privilege, *e.g.* one of Trimble's customers, perform other functions, including: providing "an access list," and "creating a driver

account" (claim 17) and "performing group administrative functions," including "setting a zone" and "specifying an access list" (claims 1 and 12).

328. As a further example, the Trimble ELD and Geofencing Products do not infringe the '789 patent because the claims require a specific and separate, hierarchical "first level of administrative privilege" and "second level of administrative privilege, where the user with the "first level of administrative privilege" does not perform functions assigned to users with the "second level of administrative privilege," but the Trimble ELD and Geofencing Products do not split the administrator functions in the manner claimed.

329. Trimble and ISE are entitled to a judgment declaring that the Trimble ELD and Geofencing Products do not infringe the '789 patent.

PRAYER FOR RELIEF

Trimble and ISE respectfully request that this Court enter judgment against PDC as follows:

A. A declaration that the Trimble ELD Products, including Trimble FSM's Driver Logs, Trimble Transportation Mobility/PeopleNet's eDriver Logs, TOGS' eDriver Logs, and ISE's eFleetSuite and related services, do not infringe United States Patent Nos. 8,149,113; 9,319,471; 9,485,314; 9,621,661; 9,680,941; 9,871,874; 9,954,961; 10,021,198; 10,104,189; 10.148,774; 10,171,950; 10,277,689; 10,284,662; 10,382,966; and 10,397,789;

B. A declaration that the Trimble Geofencing Products, including Trimble FSM's GeoManager, Trimble Ag Business Solutions' Ag Software/Farmer Pro, and Trimble Protected's Locate2Protect and related services, do not infringe United States Patent Nos. 8,149,113; 9,485,314; 9,621,661; 9,680,941; 9,871,874; 10,021,198; and 10,397,789;

C. For attorney's fees and costs;

D. Such other and further relief as this Court or a jury may deem just and proper.

JURY TRIAL DEMAND

Pursuant to Fed. R. Civ. P. 38(b), Trimble and ISE hereby demand a trial by jury of all issues so triable.

Dated: August 27, 2019

Respectfully submitted,

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