

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PLATFORM SCIENCE, INC.,
Petitioner,

v.

OMNITRACS, LLC,
Patent Owner.

IPR2021-00187
Patent 9,147,335 B2

Before BART A. GERSTENBLITH, JAMES J. MAYBERRY, and
FREDERICK C. LANEY, *Administrative Patent Judges*.

LANEY, *Administrative Patent Judge*.

DECISION
Final Written Decision
Determining All Challenged Claims Unpatentable
35 U.S.C. § 318(a)
Dismissing Petitioner's Motion to Strike
37 C.F.R. § 42.64(c)

I. INTRODUCTION

A. *Background*

Platform Science, Inc. (“Petitioner”) filed a Petition (Paper 2, “Pet.”) requesting institution of *inter partes* review of claims 1–22 (“Challenged Claims”) of U.S. Patent No. 9,147,335 B2 (Ex. 1001, “the ’335 patent”). Omnitrac, LLC (“Patent Owner”) filed a Preliminary Response. Paper 8. Pursuant to 35 U.S.C. § 314, we instituted this proceeding. Paper 10 (“Institution Decision” or “Inst. Dec.”).

Patent Owner subsequently filed a Patent Owner’s Response. Paper 15 (“PO Resp.”). Petitioner filed a Reply to Patent Owner’s Response. Paper 20 (“Pet. Reply”). And Patent Owner filed a Sur-reply. Paper 22 (“PO Sur-reply”).

Additionally, Petitioner filed a Motion to Strike. Paper 25. Patent Owner subsequently filed an opposition to the Motion to Strike. Paper 26.

An oral argument was held on March 16, 2022, and a transcript of the argument has been entered into the record. Paper 32 (“Tr.”).¹

After studying the parties’ arguments and supporting evidence, we determine that Petitioner has proved by a preponderance of the evidence that the Challenged Claims are unpatentable. 35 U.S.C. § 316(e); 37 C.F.R.

¹ Patent Owner and Petitioner filed a joint list of objections to the opposing parties’ demonstrative exhibits. Paper 31. As we explained at the oral hearing, “demonstratives cannot be used to either introduce new evidence or new arguments. The Board will not rely on the parties’ demonstratives to reach its decision in . . . this matter. Instead, the demonstratives are simply tools to help the parties with their presentations during [the] hearing.” Tr. 5:26–6:5. Thus, the parties have noted their objections, but we dismiss them as moot because demonstrative exhibits are not evidence and we do not rely on them in rendering this Final Written Decision.

§ 42.1(d) (2020). Additionally, for the reasons explained herein we dismiss as moot Petitioner’s Motion to Strike.

B. Related Proceedings

Petitioner and Patent Owner identify the following related matter: *Omnitracs, LLC and XRS Corp. v. Platform Science, Inc.*, 20-cv-0958 (S.D. Cal.). Pet. 68; Paper 5 (Patent Owner Omnitracs, LLC’s Mandatory Notices Pursuant to 37 C.F.R. § 42.8), 2.

C. Real Parties in Interest

Petitioner identifies Platform Science, Inc. as the real party in interest. Pet. 68. Patent Owner identifies Omnitracs, LLC and XRS Corporation as the real parties in interest. Paper 5, 2.

D. The Asserted Grounds of Unpatentability and Declaration Evidence

Petitioner challenges the patentability of claims 1–22 of the ’335 patent on the following grounds:

Claim(s) Challenged	35 U.S.C. §²	Reference(s)/Basis
1–22	103(a)	Moses ³
1–22	103(a)	Levesque ⁴

Pet. 2. Petitioner submits a Declaration of Scott Andrews (Ex. 1003), a Supplemental Declaration of Scott Andrews (Ex. 1010), and a Declaration of

² The Leahy-Smith America Invents Act (“AIA”) includes revisions to 35 U.S.C. § 103 that became effective on March 16, 2013. Because the ’335 patent has an effective filing date before March 16, 2013, we apply the pre-AIA version of the statutory basis for unpatentability.

³ U.S. Patent App. No. 2006/0047543 A1, pub. Mar. 2, 2006 (Ex. 1005, “Moses”).

⁴ U.S. Patent No. 7,525,421 B2, iss. Apr. 28, 2009 (Ex. 1006, “Levesque”).

Darrin Demchuk (Ex. 1012). Patent Owner submits a Declaration of Joseph C. McAlexander III (Ex. 2007).

E. The '335 Patent

The '335 patent, as its title suggests, generally relates to a system for generating real-time alert notifications. Ex. 1001, code (54). The '335 patent suggests that, prior to the claimed invention, there were systems for tracking, managing, and maintaining a fleet of portable assets that generally monitored various performance parameters of the portable assets and the individuals responsible for the portable asset. *Id.* at 1:16–21. The asset tracking systems generated large volumes of real-time data that was saved to a back-end host system for processing and interpreting, which may have included events and observations for the portable assets that related to safety, compliance, fuel consumption, location, and workflow. *Id.* at 1:31–38.

The '335 patent indicates “a key challenge” with the previous asset tracking systems, however, was ensuring that they presented the user with the most relevant information at any particular instant. Ex. 1001, 1:39–42. Previous asset tracking systems, according to the '335 patent, had “no effective way to provide timely, relevant notifications/action recommendations based on detected conditions (e.g., based on real-time events/observations) that require immediate attention by fleet owners.” *Id.* at 1:44–48. The '335 patent describes the problem with earlier tracking systems as being that they required a user to manually interpret the collected data to take the appropriate corrective action and, given the volume of data and complexity of the issues, that was an “extremely difficult task.” *Id.* at 1:48–52. As a result, the '335 patent states that it was “desirable to be able

to automatically review and analyze events and provide recommendations in real-time based on the analysis.” *Id.* at 1:53–55.

The ’335 patent summarizes an embodiment of the claimed invention to address the problems with the previous asset management systems as follows. The system includes a database and processing engine that cooperate together to generate real-time alert notifications. Ex. 1001, 1:66–2:6. The database receives real-time event information and the processing engine analyzes the event information with respect to a plurality of stored events. *Id.* at 1:66–2:2. The processing engine determines whether the event information meets a defined condition and, if so, an appropriate prescriptive action is selected to forward to a user. *Id.* at 2:3–6.

Figure 4, reproduced below, is illustrative of this exemplary embodiment.

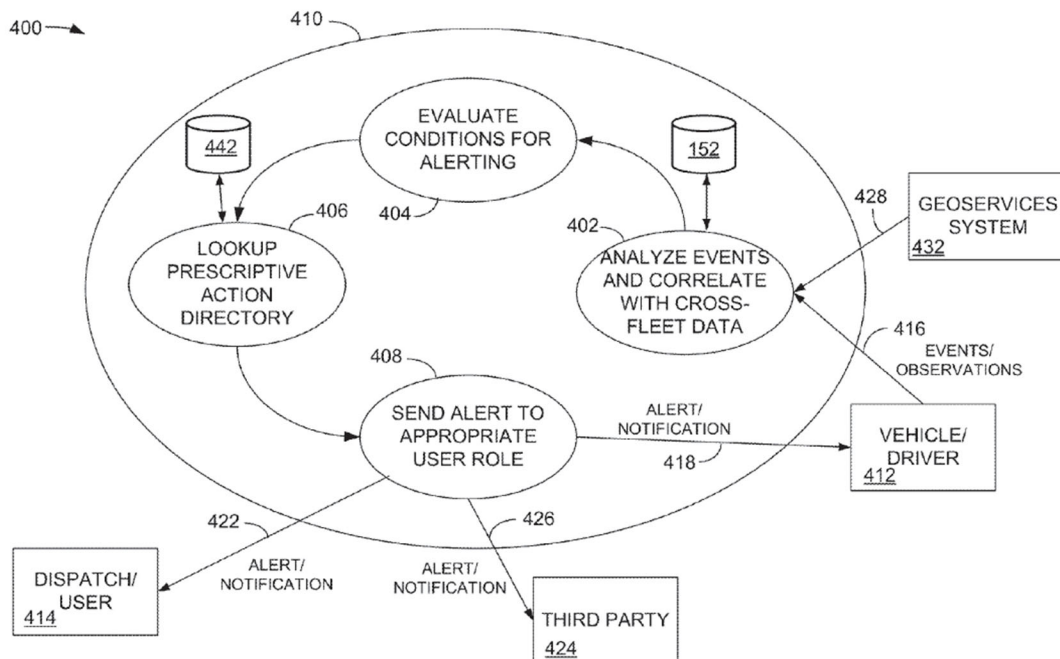


FIG. 4

Figure 4 is a block diagram in which “system 400 generates real-time proactive alert notifications and recommendations to different user roles based on evaluation of trigger events, observations and historical data.”

Ex. 1001, 7:28–33. The diagram describes system 400 using a state diagram that illustrates the various states of the analysis and processing. *Id.* at 7:33–36.

In first state 402,

the system 400 receives events and observations 416 relating to a vehicle, a driver, or a combination [thereof] . . . [that are] analyze[d] and evaluate[d] . . . as they flow through the system 400 by correlating the events/observations 416 with data relevant to the analysis to determine whether the analyzed events/observations 416 meet a defined condition.

Id. at 8:6–14. “A defined condition may be one in which the events/observations 416 are considered to be such that an event notification is warranted.” *Id.* at 8:14–16. For example, safety data associated with a particular location “can be data relating to the subject driver and parameters that currently or will soon likely affect the subject driver at the subject location.” *Id.* at 8:18–21. Data warehouse 152 makes all of the data available for analysis. *Id.* at 8:33–35.

In second state 404, based on event type, different event conditions can be evaluated to determine whether to provide an alert or notification using rules for evaluation, which can be predetermined or user-configurable. Ex. 1001, 8:36–39. “On the basis of the evaluation performed in state 404, the system 400 can determine if there is an urgent/timely alert or notification,” which may be sent to the vehicle or driver 412; to the dispatch or user role 414; or to a third party 424. *Id.* at 8:50–56. “Details on what the

alert should entail the audience for the alert, and the medium for the alert will be user configurable.” *Id.* at 8:56–58.

In third state 406, “system 400 maintains and accesses a directory 442 of prescriptive actions associated with different event types and trigger conditions.” Ex. 1001, 8:62–64. At this stage, the system “determines if there are recommended actions that can be taken based on the alert condition, and if so,” at fourth state 408, “forwards these recommended actions to the correct entity.” *Id.* at 8:67–9:3. The recommended actions taken from directory 442 of prescriptive actions may be user maintained and associated with specific event types. *Id.* at 9:13–15. “The system 400 can then lookup the recommended actions from the directory 442 based on events/observations 416 and, if applicable, user-defined thresholds, to determine the correct or appropriate prescriptive action.” *Id.* at 9:15–19. The prescriptive actions may be directed to a particular user of the system, such as a driver, a dispatcher and a third party. *Id.* at 9:4–5.

F. Illustrative Claim

Claims 1, 8, and 17 are independent claims challenged in this proceeding. Claim 1 is illustrative of the claimed subject matter and is reproduced below with Petitioner’s bracketing added for reference and emphasis added to identify the disputed claim limitations:

[1.pre] A system for generating real-time alert notifications, comprising:

[1.a] *a database for receiving in real-time at least one event; and*

[1.b] *a processing engine for analyzing the at least one event with respect to a plurality of stored events, the processing engine being further for:*

[1.c] determining whether the at least one event meets a defined condition;

[1.d] if the at least one event meets the defined condition, *selecting a prescriptive action from a directory of prescriptive actions*, and [1.e] generating in real-time a proactive alert notification with the prescriptive action for a user, [1.f] wherein the prescriptive action is tailored based on a user role and contextual data related to the at least one event; and

[1.g] forwarding the prescriptive action to the user.

Ex. 1001, 10:49–64.

G. Level of Ordinary Skill in the Art

Petitioner, supported by Mr. Andrews’s testimony, proposes that a person of ordinary skill in the art at the time of the invention “would have had at least a Bachelor of Science degree (or equivalent) in . . . electrical engineering, computer engineering, computer science, or a related technical field, and at least 2–3 years of experience in the field of vehicle telematics systems.” Pet. 9–10 (citing Ex. 1003 ¶¶ 25–27). Patent Owner “does not dispute Petitioner’s offered level of ordinary skill in the art” for purposes of this proceeding. PO Resp. 8.

We find Petitioner’s proposal consistent with the level of ordinary skill in the art reflected by the ’335 patent and the prior art of record, *see Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001); *In re GPAC Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995); *In re Oelrich*, 579 F.2d 86, 91 (CCPA 1978), and, therefore, we adopt Petitioner’s unopposed position as to the level of ordinary skill in the art.

H. The Prior Art

Petitioner's unpatentability contentions rely on the following prior art references: Moses and Levesque. Below is a summary description of these references.

1. Moses

Petitioner contends that Moses “qualifies as prior art under 35 USC 102(b) since Moses is a U.S. application that published March 2, 2006, more than a year before the earliest potential priority date of the ’335 patent, December 22, 2011 (‘Critical Date’).” Pet. 2. Moses, titled “Electronic Emergency Response Management System with Automated Rule-Based Alert Notifications and Response Deployment,” is generally related to “systems and methods for databases used in emergency response activities.” Ex. 1005, code (54), ¶ 1. Moses states that “there [was] a need in the art to monitor for a pattern of alerts for the purpose of predicting risks of a terrorist event or accidents to carriers of hazardous materials” and “for assessing whether vulnerable targets are at risk, automating the reporting of threats, and initiating response deployment.” *Id.* ¶ 3. And to address this need, Moses teaches “provid[ing] an electronic emergency response management system with an automated rule-based alert notification and response deployment feature and method for using the same.” *Id.* ¶ 4.

Figure 2, reproduced below, illustrates the operational flow for an exemplary system that Moses teaches.

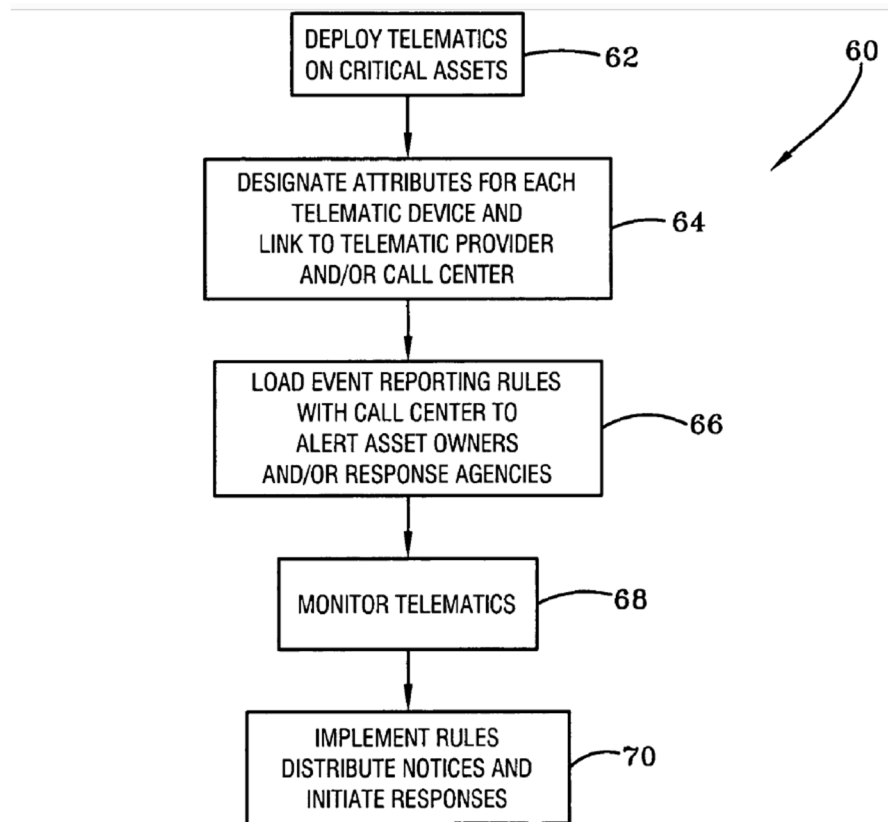


FIG-2

Figure 2 shows “an operational flow chart implemented by the system setting forth the steps for generating alert notifications.” Ex. 1005 ¶ 21. At first step 62, the owner provides a critical asset with telematics devices to generate information about the asset. *Id.* ¶ 38. The following step 64 includes establishing attributes for each telematics device and linking the device to a call center. *Id.* Next step 66 involves a critical asset owner loading event reporting rules with the call center database to alert asset owners and/or response agencies upon the occurrence of certain events associated with the telematics devices; the rules being modifiable on a periodic basis to accommodate additional or alternative conditions observed

by the call center. *Id.* These “rules are installed in a rules engine software program maintained by the processor 29 [shown in Figure 1].” *Id.*

Typically, the asset owners will provide instructions to the call center and preferably the instructions “describe steps to be taken or work to be performed when event messages or data is received from the telematics provider.” *Id.* “At step 68, the various telematics devices are monitored by the telematics provider and/or the call center and at step 70, the call center implements the rules and distributes the notices and initiates responses as instructed by the asset owners.” *Id.*

2. *Levesque*

Petitioner contends that Levesque “qualifies as prior art under 35 USC 102(b) since Levesque is a U.S. patent that issued April 28, 2009, more than a year before the Critical Date.” Pet. 2. Levesque, titled “Event Detection Module,” relates generally to a system and method for detecting events occurring in the environment using an event detection module for detecting and communicating a hazardous event. Ex. 1006, code (54), 1:18–21. Figure 5 in Levesque, reproduced below, is illustrative of such a system and method.

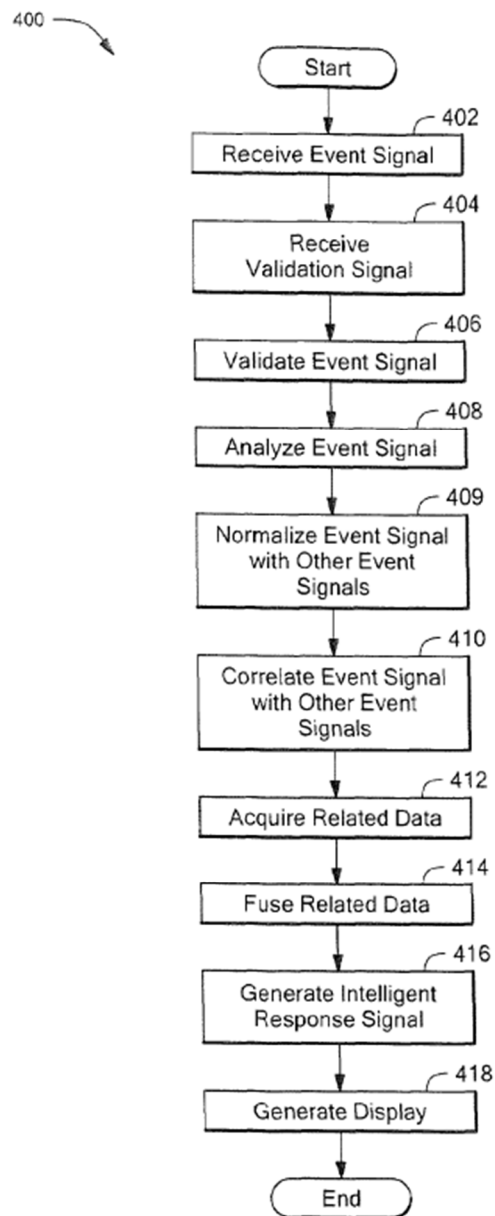


FIG. 5

Figure 5 “is a flow chart of a process for event detection and alert used by the central command center of [Figure] 2.” *Id.* at 3:21–22.

In block 402, the command center receives an event signal from an event module, which includes a sensor that collects event data. Ex. 1006, 4:3–22, 6:66–67. The command center receives a validation signal in

block 404, which is used in block 406 to validate the event signal by determining whether an event has actually occurred, or instead, whether a false alarm has been received in the event signal. *Id.* at 6:38–40, 10:1–5. The resulting validated event is analyzed at block 408 by, for example, an event analysis processor that may determine a characteristic of the event. *Id.* at 6:43–44, 10:6–7. “At block 409, the validated event signal is first normalized and then at block 410 it is correlated with other validated event signals.” *Id.* at 10:9–11. Next, at blocks 412 and 414, related data is acquired from a variety of databases (such as databases 134–142 and 150–156, shown in Figure 2) and fused with the validated event signal. *Id.* at 10:13–17. An intelligent response is then generated at block 416, which can include a variety of information such as “how to respond, how not to respond, a quantity of help needed, a type of help needed . . . required protective gear . . . and an evacuation plan.” *Id.* at 4:32–41, 10:18–21. Finally, at block 418, the validated event data may be displayed. *Id.* at 10:22–24.

II. CLAIM CONSTRUCTION

In this *inter partes* review, claims are construed using the same claim construction standard that would be used to construe the claims in a civil action under 35 U.S.C. § 282(b). *See* 37 C.F.R. § 42.100(b) (2020). The claim construction standard includes construing claims in accordance with the ordinary and customary meaning of such claims as understood by one of ordinary skill in the art at the time of the invention. *See id.*; *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc). In construing claims in accordance with their ordinary and customary meaning, we take into account the specification and prosecution history. *Phillips*, 415 F.3d at

1315–17. However, only terms that are in controversy need to be expressly construed and only to the extent necessary to resolve the controversy. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms that . . . are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)).

Petitioner contends that the terms in the Challenged Claims are properly understood to have their ordinary and customary meaning. Pet. 2. Patent Owner does not dispute this contention. *See generally* PO Resp. Therefore, because no controversy regarding claim construction exists, it is not necessary for us to construe expressly any claim term.

III. OBVIOUSNESS ANALYSIS

Petitioner contends that claims 1–22 of the ’335 patent are unpatentable under 35 U.S.C. § 103 (a) in view of either Moses or Levesque. Pet. 11–35, 41–67. For the reasons explained below, based on the complete record, we find Petitioner’s contentions in view of Moses persuasive, and determine that claims 1–22 of the ’335 patent are unpatentable. As a result, because Moses disposes of all of the Challenged Claims, we do not reach Petitioner’s alternative contentions based on Levesque. Therefore, our analysis below focuses on Moses.

A. *Legal Principles*

“A patent for a claimed invention may not be obtained . . . if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.” 35 U.S.C. § 103. The question

of obviousness involves resolving underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when available, objective evidence of nonobviousness such as commercial success, long felt but unsolved needs, and failure of others. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966); *see KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 407 (2007) (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”). We note that the level of ordinary skill in the art was addressed above (*see supra* § I.G), which defines the perspective from which we view the evidence considered for the remaining factors.

The Court in *KSR* set forth “an expansive and flexible approach” to the question of obviousness. *KSR*, 550 U.S. at 415. Whether a patent claiming the combination of prior art elements would have been obvious involves determining whether any improvement amounts to more than the “predictable use of prior art elements according to their established functions.” *Id.* at 417. Reaching this determination, however, requires more than merely showing that the prior art includes separate references covering each separate limitation in a challenged claim. *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). Rather, obviousness additionally requires that a person of ordinary skill at the time of the invention “would have selected and combined those prior art elements in the normal course of research and development to yield the claimed invention.” *Id.* We must “determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue.” *KSR*, 550

U.S. at 418 (citing *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)).

“[W]hen a patent claims a structure already known in the prior art that is altered by the mere substitution of one element for another known in the field, the combination must do more than yield a predictable result.” *Id.* at 416 (citing *United States v. Adams*, 383 U.S. 39, 50–51 (1966)).

B. The Claimed Inventions in View of the Subject Matter Disclosed or Suggested by Moses

1. Independent Claims 1, 8, and 17

Independent claims 1, 8, and 17 recite limitations that are substantially the same. *See* Ex. 1001, 10:49–64, 11:13–27, 12:9–26. In fact, both parties specifically address the limitations recited for claim 1 and rely on substantially the same evidence and arguments for the other independent claims. *See* Pet. 12–25, 30–31, 34–35; PO Resp. 10–29. Therefore, we similarly rely on claim 1, but the analysis applies equally to claims 8 and 17.

Element [1.a] of claim 1 recites, “a database for receiving in real-time at least one event.” Ex. 1001, 10:51. Petitioner identifies database (DB) 14 accessed through call center 12 and the operational description of Moses’s system as disclosing to a skilled artisan that database 14 receives real-time event information, which is provided to call center 12. Pet. 12–15 (citing Ex. 1005, code (57), ¶¶ 12, 17, 32–33, 35, 44; Ex. 1003 ¶¶ 58–61).

Petitioner identifies, for example, that Moses describes database 14 as “monitor[ing] critical assets (CA) . . . to ensure that they are not diverted, and if so what response units need to respond.” *Id.* at 13 (citing Ex. 1005, code (57)). Petitioner contends database 14 receives events in real time via call center 12 because Moses describes, as an example, that “the on-board system of a truck 50a may send *real-time data* via the beacon 54a indicating

that the vehicle is speeding on a particular interstate highway.” *Id.* (citing Ex. 1005 ¶ 32). Petitioner identifies additionally that Moses describes providing “event messages or data” to the call center and that database 14 is maintained by the call center to receive information transmitted from various sensors associated with the critical assets. *Id.* (citing Ex. 1005 ¶¶ 35, 44).

Patent Owner does not dispute Moses discloses a database. PO Resp. 22 (“although *Moses* discusses a ‘database,’ it never discloses a database for receiving events”) (emphasis added and modified from original). Patent Owner instead disputes that the database in Moses receives an “event,” which is “something that happens: occurrence.” *Id.* at 22, 23 n.4 (citing Ex. 2006). Patent Owner argues that “[a]t most, Moses only discloses a database for ‘identifying critical assets, their physical attributes and their physical location,’ *i.e.*, a database for storing factual information.” *Id.* at 22 (citing Ex. 1005 ¶ 17). Patent Owner asserts that “Moses specifically focuses on things other than an event being stored in the database, such as ‘information about population densities, the location of hospitals, water supplies, schools,’ and ‘[p]revailing weather conditions,’” which “makes sense, as the purpose of Moses is to provide first responders relevant factual information so that they can make informed, independent decisions as an emergency situation evolves.” *Id.* at 23 (citing Ex. 1005 ¶¶ 33, 39, 45) (emphasis omitted). Patent Owner states that the Petition is deficient because “information associated with objects or events *is not* the same as information representing the event itself.” *Id.* at 24.

Patent Owner also argues that the events are not received in real-time because “[r]eceiving ‘real-time *data*’ via the beacon’ at the call center in Moses is not the same as a database receiving *events* in real-time.” PO

Resp. 28. Patent Owner asserts that, in Moses, “events are identified *later*: after a processor . . . receives data from [an asset], it then uses that data to ‘recognize’ possible events by ‘predict[ing] the possibility of’ an event. *Id.* (citing Ex. 1005 ¶¶ 31–32). According to Patent Owner, “[t]hese event predictions are inherently not ‘real-time,’ because they rely on data transmitted previously.” *Id.*

Patent Owner fails to address, Petitioner states in reply, that “Moses describes devices that are ‘able to transmit information [] to the database’ and provides an example where an ‘on-board system’ ‘may send real-time data’ ‘indicating that the vehicle is speeding on a particular interstate highway.’” Pet. Reply 1 (alteration by Petitioner) (citing Ex. 1005 ¶¶ 32, 35). Petitioner contends Moses describes another example of transmitting a real-time event—“if a sensor 52a detects that a tanker truck 50a has spilled a large quantity of gasoline, this information is *immediately transmitted* by the beacon 54a to the call center 12.” *Id.* at 2 (citing Ex. 1005 ¶ 32; Ex. 1010 ¶ 5). Petitioner states Patent Owner’s assertion—that events like these are not stored in the call center database—is “baffling” because “[s]imple logic dictates that Moses would need to know that a gasoline spill event occurred, for example, in order to send appropriate response units to ‘clean-up the spill.’” *Id.* (citing Ex. 1005 ¶¶ 31, 33).

Patent Owner argues, however, that Petitioner’s reliance on paragraphs 31, 32, and 35 of Moses is misplaced. PO Sur-reply 3. Patent Owner asserts that Moses’s statement in paragraph 32 (“on-board system of a truck 50a may send real-time *data* via the beacon 54a *indicating* that the vehicle is speeding”) “simply describes transmitting a vehicle’s speed, *i.e.*,

transmitting ‘data’ ‘indicating’ speeding—it is up to the recipient to determine whether the vehicle’s speed is over the speed limit.” *Id.* (citing Ex. 1005 ¶ 32). Regarding paragraph 35, Patent Owner states that “Moses discloses that sensors may be employed to ‘**monitor**’ weather, road conditions[, or] bridge conditions.” *Id.* (citing Ex. 1005 ¶ 35). And addressing paragraph 31, which describes immediately transmitting information about a detected gasoline spill to the call center, Patent Owner criticizes Petitioner for not identifying that the description also states “[t]he processor 29 is programmed to recognize such an event.” *Id.* (citing Ex. 1005 ¶ 31). Patent Owner asserts that additional description shows that “Moses only discloses transmitting data related to spilled fuel; the processor **later** recognizes an event based on that data.” *Id.*

After studying the submissions by both parties, we find Petitioner has shown persuasively that Moses discloses a database for receiving in real time at least one event. Moses describes a “processor-based system [that] links [a] database and communication systems . . . at [a] call center so as to allow for real-time analysis of emergencies, potential emergencies, two-way communications between various units and assets, and planning scenarios.” Ex. 1005 ¶ 12. Moses describes the various units and assets as having installed sensors and a communication device that allows for transmission of operational information to the database maintained by the call center. *Id.* ¶¶ 11, 35. For example, Moses teaches that sensors associated with a truck may communicate information in real-time about “spill[ing] a large quantity of gasoline” or “speeding on a particular interstate highway” to the call center. *Id.* ¶¶ 31–32. These examples disclose, or at least suggest, that the database in Moses receives in real-time an event.

We disagree with Patent Owner's arguments to the contrary. Patent Owner suggests that the phrase "real-time data . . . indicating that [a] vehicle is speeding on a particular interstate highway" in Moses (Ex. 1005 ¶ 32) is limited to simply describing to a skilled artisan that a vehicle's speed is transmitted. PO Sur-reply 3. We find no basis for this position, however. Rather than merely transmitting data that allows a recipient to determine whether the vehicle is speeding, as Patent Owner argues (*see id.*), the phrase states expressly that the real-time data itself indicates the truck is speeding. Thus, at a minimum, that phrase suggests to a skilled artisan that the real-time data sent to the call center database may include specific information identifying that the vehicle is speeding (i.e., the vehicle's on-board system determines that the vehicle is speeding before sending the real-time data indicative of such an occurrence).

Nevertheless, even if we were to agree that the phrase simply describes transmitting a vehicle's speed on a particular highway, we disagree with Patent Owner's assertion that this data is not a recited "event." This is because, in the example Moses describes, the detected speed of a vehicle on a particular highway is still something that is happening (i.e., information of an occurrence), which Patent Owner concedes is within the scope of the plain and ordinary meaning of "event." PO Resp. 23 n.4 (citing Ex. 2006). In other words, the information detected and transmitted is not just associated with the vehicle or an event; it is information of the event itself (i.e., a vehicle traveling on a particular highway at a particular speed). The fact that a processor may further analyze the information detected and transmitted to evaluate whether it meets a defined condition (e.g., traveling within the range of acceptable speeds for the particular highway) *does not*

bar the transmitted information itself from being an event. *See, e.g.*, Ex. 1001, 8:8–16.

We also find a lack of support for Patent Owner’s assertion that Petitioner cannot properly rely on Moses’s description—of the call center database receiving an immediate transmission by the sensor associated with a tanker truck to report a detected gasoline spill—to show an event received in real time. PO Sur-reply 3. Although there is no dispute “Moses . . . discloses transmitting data related to spilled fuel [detected by a tanker truck’s sensor],” Patent Owner argues that the information is not an event received by the database because the call center’s processor only recognizes the event after the data is received. *Id.* This is so, Patent Owner argues, because Moses states that the call center’s processor is “programmed to recognize such an event.” *Id.* (citing Ex. 1005 ¶ 31). That statement, however, does not for undermining Petitioner’s contention that the reported fuel-spill data is an event received in real-time by the database. On the contrary, we find that the statement supports Petitioner’s contention because Moses expressly refers to the received fuel-spill data as “an event.” Ex. 1005 ¶ 31. The statement, in context, also suggests a skilled artisan would have viewed the detected and reported fuel-spill to be an exemplary event that Moses teaches can be addressed with the disclosed system because the system is able to recognize the received event and form a communication that facilitates the appropriate response(s) needed to immediately address the event (i.e., get the proper personnel to extinguish any resulting fires and clean-up the spill). *See* Ex. 1005 ¶ 31.

Furthermore, we do not agree with Patent Owner’s assertion that the detected gasoline spill data transmitted by the truck’s sensor in Moses

cannot itself be the “event” received by the database, even before being recognized as such by the call center processor, because that data is specific to what the sensor has actually detected to be happening (i.e., the occurrence of a fuel spill). Rather than just being general information about a fuel spill, which Moses’s processor later uses to create an event as Patent Owner proposes, the transmitted information itself identifies a specific fuel spill occurrence (i.e., event) that the truck associated with the sensor has experienced and Moses discloses a database for receiving in real-time this information or event.

We therefore are persuaded, based on the complete record, that the evidence from Moses cited by Petitioner discloses or suggests Element [1.a].

Element [1.b] of claim 1 recites, “a processing engine for analyzing the at least one event with respect to a plurality of stored events.” Ex. 1001, 10:52–53. Petitioner contends that a skilled artisan “would have understood that Moses includes a processor 29 that analyzes event data with respect to a plurality of stored events.” Pet. 18 (citing Ex. 1003 ¶ 70). As support, Petitioner contends that Moses discloses that processor 29 is programmed to continuously monitor the event data communicated by the sensors associated with critical assets and recognize whether one or more of the particularly defined events has occurred. *Id.* at 15–17 (citing Ex. 1005 ¶¶ 26, 31, 32, 43; Ex. 1003 ¶¶ 64–70). Petitioner contends the following is an example from Moses that illustrates analyzing at least one event with respect to a plurality of stored events:

The processor 29 may also be programmed to monitor multiple critical assets in conjunction with other current events and predict the possibility of a terrorist event. For example, if it is detected that four gasoline tanker trucks-critical assets-are

diverted from their expected route of travel and are converging upon a civic landmark—a critical asset classified as a vulnerable target—, the processor 29 can automatically issue alert notices to authorities to stop the trucks in transit, block off the suspected target area, and alert the appropriate units capable of responding to a potential conflagration.

Id. at 17 (citing Ex. 1005 ¶ 32). Patent Owner does not dispute Petitioner’s contention that the cited evidence from Moses discloses this element.

We determine, based on the full record and for the reasons explained by Petitioner, that Petitioner has shown persuasively Moses discloses or suggests element [1.b] to a skilled artisan.

Element [1.c] of claim 1 recites, “determining whether the at least one event meets a defined condition.” Ex. 1001, 10:55–56. Petitioner contends Moses discloses this limitation because it teaches that processor 29 will continuously monitor the sensor data provided by the assets to determine whether event data, either alone or collectively, meets a defined condition. Pet. 18–20 (citing Ex. 1005 ¶¶ 31, 32, 42; Ex. 1003 ¶¶ 73–78). For example, Moses states that “if a sensor 52a detects that a tanker truck 50a has spilled a large quantity of gasoline, this information is immediately transmitted by the beacon 54a to the call center 12 [and] [t]he processor 29 is programmed to recognize such an event.” *Id.* at 18–19 (citing Ex. 1005 ¶ 31). Petitioner contends a skilled artisan would view the spillage of a large quantity of gasoline to be an example of a “defined condition” that processor 29 is programmed to determine occurred from the event data provided by sensor 52a. *Id.* at 19 (citing Ex. 1003 ¶¶ 73–74). Patent Owner does not dispute Petitioner’s contention that Moses discloses this element.

We determine, based on the full record and for the reasons explained by Petitioner, that Petitioner has shown persuasively Moses discloses or suggests element [1.c] to a skilled artisan.

Element [1.d] recites, “if the at least one event meets the defined condition, selecting a prescriptive action from a directory of prescriptive actions.” Ex. 1001, 10:57–59. Because Moses discloses that processor 29 is capable of detecting whether four gasoline tanker trucks are off-route and converging upon a sensitive location from the event data provided by the trucks’ sensors and, in response thereto, automatically providing an alert notice to the appropriate personnel to either stop the trucks in transit or block off the sensitive location, Petitioner contends a skilled artisan would view Moses’s system to suggest a processor programed to select a prescriptive action if event data is determined to meet a defined condition. Pet. 20–21 (citing Ex. 1005 ¶ 32; Ex. 1003 ¶¶ 79–85).

In addition, Petitioner contends Moses’s use of a rule-based system that is configured to implement “designated plans” depending on an analysis of the received event data shows processor 29 may select a prescriptive action from a directory of prescriptive actions. *Id.* at 21 (citing Ex. 1005 ¶ 36). This is so, Petitioner contends, because Moses teaches that the designated plans may be instructions describing steps to be taken or work to be performed when event messages are received and a skilled artisan “would have understood that response instructions (*i.e.*, ‘proscriptive actions’) ‘installed in a rules engine software program’ qualify as a ‘directory’ or other data repository.” *Id.* (citing Ex. 1005 ¶ 38; Ex. 1003 ¶¶ 83–85); *see also id.* at 21–22 (citing Ex. 1005 ¶¶ 43–44; Ex. 1003 ¶ 85).

Patent Owner argues that Petitioner fails to show Moses discloses “prescriptive actions” and, as a result, fails to establish Moses discloses a directory of prescriptive actions. *See* PO Resp. 10–22. In particular, Patent Owner asserts that, rather than disclosing the selection of a “prescriptive action,” “Moses only discloses ‘issu[ing] alert notices’ of events.” *Id.* at 10. Patent Owner asserts that “Petitioner’s argument requires construing ‘prescriptive action’ in a way that would eliminate the requirement of a prescriptive action and allow a mere notification to satisfy the claims.” *Id.* Patent Owner asserts “[a]t a minimum, a ‘prescriptive action’ must be an action that someone is required to perform, not just any response initiated by the system.” *Id.* at 11.

Rather than disclosing prescriptive actions, Patent Owner asserts that Moses describes a system for initiating a response by the call center to alert emergency response personnel of potential events so that different authorities can respond appropriately. PO Resp. 11. Patent Owner asserts that Moses focuses on alerting owners and first responders throughout the specification and that the alert notices provide factual information or other types of alerts to first responders. *Id.* at 11–12 (citing Ex. 1005 ¶¶ 15, 26, 32, 37, 38). “With this information,” Patent Owner asserts that “first responders independently make *their own* decisions on how to respond to an emergency—not based on prescriptive actions transmitted to them by the system.” *Id.* at 12 (citing Ex. 1005 ¶¶ 32, 37, 38).

As further validation that “Moses does not disclose or even contemplate prescriptive actions,” Patent Owner notes that, in an exemplary response deployment scenario involving a poison inhalation hazard, Moses describes that “a local law enforcement agency will receive an ‘*alert*’ that

only includes ‘contact information for the closest public and private responders who specialize in poison inhalation hazards.’” PO Resp. 13 (citing Ex. 1005 ¶ 42). Patent Owner asserts that “[i]t is then up to the local law enforcement to decide how to dispatch the poison inhalation specialists.” *Id.* (citing Ex. 1005 ¶ 42). Patent Owner concludes that this establishes “any reference to ‘response deployment’ features by Moses simply discloses providing relevant factual data to first responders who then must independently determine how to ‘dispatch’ relevant resources.” *Id.* at 14.

Patent Owner argues that Petitioner’s reliance on paragraph 32 of Moses as evidence it discloses prescriptive actions is misplaced because Moses does not indicate the identified actions—“stop the trucks in transit” or “block off the suspected target area” —are forwarded by the system. PO Resp. 14 (citing Pet. 20–21; Ex. 1005 ¶ 32). Instead, Patent Owner asserts, “those actions are merely examples of what a user *can* do *after* the processor in Moses ‘automatically issue[s] alert notices.’” *Id.* (citing Ex. 1005 ¶ 32). As further support for this assertion, Patent Owner characterizes paragraph 33 in Moses as “explain[ing] that the call center database in Moses contains information that authorities can use to determine the appropriate response.” *Id.* at 14–15 (citing Ex. 1005 ¶ 33). But, Patent Owner concludes, “Moses’s system itself does not provide any such instructions to authorities, nor does Moses explain how this would be done using its system.” *Id.* (citing Ex. 1005 ¶¶ 32, 37, 38).

Patent Owner next argues that the description of a “rules engine” in paragraph 38 likewise cannot be relied upon properly to support a finding that Moses discloses a system that provides prescriptive actions. PO Resp. 15–16. Patent Owner asserts that paragraph 38 “only discusses rules that

govern how the call center sends notices to authorities to initiate responses—it does not describe sending authorities *any* particular prescriptive action to take.” *Id.* at 16 (citing Ex. 1005 ¶ 38). Patent Owner states that “[n]owhere in Moses does it provide any example of a prescriptive action for a user resulting from this rules engine.” *Id.*

Patent Owner argues further that “Petitioner’s argument also would eliminate the claimed requirement of a ‘directory’ from which the prescriptive action is selected, neither of which is shown by Moses’s notification.” PO Resp. 17. Patent Owner asserts that Petitioner’s reliance on the described “designated plans” and the instructions provided by the owners of the emergency response resources to show Moses suggests the use of a “directory” to a skilled artisan are unfounded. *Id.* at 17–22. Patent Owner asserts that Moses does not describe either the plans or the owner instructions as including prescriptive actions and Petitioner fails to explain how Moses could be modified to include a prescriptive action directory. *Id.*

In the Reply, Petitioner “recap[s]” how its contentions show Moses discloses a directory of prescriptive actions:

Moses discloses a “directory of prescriptive actions.” Moses describes both “generating alert notifications and deploying pre-designated responses” and a rule-based system where “designated plans may be implemented in the event of suspicious activity or scenarios.” These “pre-designated responses”/“designated plans” are implemented via “response rules” which are provided by, e.g., “asset owners” and describe the “steps to be taken.” Moses’s system handles multiple asset owners and their respective rules. In sum, Moses’s system includes a directory of prescriptive actions (i.e., response rules, which describe the steps to be taken for different roles as indicated by each asset owner).

* * *

Moreover, Moses describes that “the call center implements the rules and distributes the notices and initiates responses as instructed by the asset owners.” Moses provides alerts/notices as well as initiates responses as discussed above and in the Petition. Such responses can even include mobilizing response units among other “steps to be taken” in response to particular reported events.

Pet. Reply 7–8 (citing Pet. 20–22; Ex. 1005 ¶¶ 14, 31, 36, 38–39, 41, 43–44; Ex. 1010 ¶¶ 15, 17) (citations in excerpt omitted). Petitioner states further that “Moses’s system includes a directory of prescriptive actions because it has to have *response rules* that describe the steps to be taken *for each* asset owner.” *Id.* at 10 (citing Pet. 20–22, 23–25 (discussing different actions for different user roles, e.g., responder types); Ex. 1010 ¶ 23; Ex. 1005 ¶¶ 14, 36, 38–40, 43–44).

Petitioner argues that Patent Owner “mischaracterizes Moses by rewording passages in its explanation.” Pet. Reply 9. Petitioner notes, for example, Patent Owner changed Moses’s statement “the call center ... distributes the notices and initiates responses” (Ex. 1005 ¶ 38) to “the call center sends notices to authorities to initiate responses” and argued that this passage “does not describe sending authorities any particular prescriptive action to take.” *Id.* (citing PO Resp. 15–16). Petitioner asserts that “[t]his rewording eliminates the clear teaching that Moses’s call center does both: distributing notices and initiating responses.” *Id.* (citing Ex. 1010 ¶ 21).

Petitioner argues additionally that Patent Owner incorrectly represents that “[n]owhere in Moses does it provide any example of a prescriptive action for a user resulting from this rules engine.” Pet. Reply 9 (citing PO Resp. 16). Petitioner contends first that “Moses describes an alert sent to police, which [Patent Owner] notes as coming from this rules engine, that

includes ‘response information;’” thus, “in addition to initiating responses, Moses’s notices/alerts can even provide a prescriptive action by way of ‘response information.’” *Id.* (citing Ex. 1005 ¶¶ 32, 39; PO Resp. 16; Ex. 2008, 126:7–127:7; Ex. 1003 ¶¶ 79–85, 90–94; Pet. 20–22; Ex. 1010 ¶ 22). And second, Petitioner contends that “Moses describes rules throughout the specification including the rules engine and how ‘the call center implements the rules and distributes the notices and initiates responses as instructed by the asset owners’” and “how response rules are loaded and used to cause ‘the call center [to] mobilize[] the response unit and notif[y] resource owners and response agencies . . . based upon implementation of the previously loaded response rules.’” *Id.* at 10 (citing Ex. 1005 ¶¶ 38, 41, 43). Petitioner asserts that a skilled artisan “would have recognized that Moses’s response rules are loaded/installed into Moses’ rules engine.” *Id.* (citing Ex. 1003 ¶¶ 83–85; Ex. 1010 ¶ 22).

After studying the submissions by both parties, we find Petitioner has shown persuasively that Moses discloses, if an event meets the defined condition, selecting a prescriptive action from a directory of prescriptive actions. Moses teaches that “system 10 can be . . . enhanced with the use of an automated rule-based alert notification *and response deployment* feature.” Ex. 1005 ¶ 35 (emphasis added). In paragraph 38 cited by Petitioner, Moses explains that the call center implements rules, which “are installed in a rules engine software program maintained by the processor 29,” to distribute “notices *and initiate[] responses* as instructed” and that the instructions “preferably describe steps to be taken or work to be performed when event messages or data is received from the telematics provider.” Ex. 1005 ¶ 38 (emphasis added). As an example of initiating a response or response

deployment, Moses teaches that, when processor 29 detects an event such as gasoline tankers deviating from their expected route and heading toward a vulnerable target, “processor 29 can automatically issue alert notices to authorities *to stop the trucks in transit* [or] block off the suspected target area.” *Id.* ¶ 32 (emphasis added).

As an initial matter, we disagree with Patent Owner that a prescriptive action must be an action that someone *is required* to perform. PO Resp. 10. Although we agree with Patent Owner that a prescriptive action is an action to be performed, the ’335 patent does not support Patent Owner’s assertion that the action is mandatory. For example, the ’335 patent describes the disclosed system as being able to “*suggest* prescriptive actions,” such as “to *suggest* rest” for a driver during periods most prone to safety violations. Ex. 1001, 7:64–8:1, 9:46–51 (emphases added). The ’335 patent similarly describes the directory of prescriptive actions as having “*recommended* actions.” *Id.* at 9:13–22. Therefore, we apply an understanding of prescriptive action that is inclusive of recommended and suggested actions to be taken.

Patent Owner notably suggests that a skilled artisan would recognize the term “alert” to be something distinctly different than a prescriptive action (PO Resp. 11–12), but the ’335 patent suggests that this is simply not true. In fact, the ’335 patent notes that prescriptive actions may also be “referred to as proactive notifications and *alerts*.” Ex. 1001, 8:4–5 (emphasis added). We do not intend to suggest the term “alert” is synonymous with “prescriptive actions” in Moses. Instead, we raise this issue to highlight that “alert” would be understood by skilled artisans to have a broad meaning that is inclusive rather than limiting. Unless there is a clear indication otherwise

provided either expressly or by the context of its use in Moses, we decline to accept Patent Owner's assertion that Moses does not suggest prescriptive actions because Moses repeatedly refers to providing "alerts." *See, e.g.*, PO Resp. 11–12.

For example, Patent Owner argues that Moses's description of the system's ability to "initiate responses" is too vague to suggest providing prescriptive actions because Moses "describe[s] a system for initiating a response by the call center to **alert** emergency response personnel of potential terrorist events so that different authorities . . . can respond appropriately." PO Resp. 11. Patent Owner argues that Moses's use of "alert" would be understood by a skilled artisan to be limited to providing a notice *without any recommendation or suggestion of an action to be taken*. This argument is unavailing, however, because none of the evidence Patent Owner provides from Moses clearly indicates the alerts are intended to be limited in the manner Patent Owner suggests. In particular, Patent Owner identifies that Moses describes its system as being capable of: (1) "applying . . . [a] set of rules"; and "generat[e] at least one **alert** based upon . . . the rules"; (2) "coordinating all the activities of the call center 12 such as . . . **alerting** the appropriate authorities"; (3) providing an "**alert** notification to owners of critical assets and governmental agencies which are likely responsible to respond to problems with the critical asset on behalf of the public interest"; and (4) allowing a "critical asset owner [to] load event reporting rules with the call center database to **alert** asset owners and/or response agencies upon the occurrence of certain events associated with the telematics devices." *Id.* at 11–12 (citing Ex. 1005 ¶¶ 15, 26, 37, 38).

Notably, none of the above statements from Moses suggests the *content* of an alert is limited to only providing factual information.

Patent Owner’s argument that Moses’s description of processor 29 having the ability to “automatically issue alert notices to authorities to stop the trucks in transit [and] block off the suspected target area” (Ex. 1005 ¶ 32) cannot be relied upon properly to show a prescriptive action is ineffective. PO Resp. 14. Contrary to Patent Owner’s assertion that “nothing in Moses indicates” those prescriptive actions are “selected and forwarded by the system” (*id.*), Moses describes a system that is “enhanced with the use of an automated rule-based alert notification and *response deployment* system.” Ex. 1005 ¶ 35 (emphasis added).

In the gasoline tanker example, paragraph 32, Moses expressly states that “processor 29 . . . automatically issue[s] alert notices to authorities *to stop the trucks* in transit.” Ex. 1005 ¶ 32. The processor 29 does not alert authorities of the underlying facts so that the authorities may take appropriate actions, such as stopping the trucks. “Stop the trucks” is the alert notice Moses teaches to automatically issue to authorities, which is a message instructing the authorities to perform an action. This is what paragraph 32 teaches a skilled artisan when viewing Moses in its entirety.

More specifically, Moses teaches that its system enables “[c]ommunications between the critical asset owner 52, critical assets 50 and agencies representing the various emergency response units . . . [to be] enhanced by providing a rule-based system in the processor 29 so that *designated plans may be implemented* in the event of suspicious activity or scenarios.” *Id.* ¶ 36 (emphasis added). Moses teaches that its system includes a module “directed to owners of response resources, such as

governmental agencies and the like, *so that they may receive event notices from the call center and respond in a pre-determined manner* to ensure that the appropriate resources are delivered to the critical asset or vulnerable target in an efficient and responsive way.” *Id.* ¶ 37 (emphasis added). Moses teaches that its system includes telematic devices associated with assets to be monitored to detect abnormal events and allows asset owners to “load event reporting rules . . . to alert asset owners and/or response agencies upon the occurrence of certain events associated with the telematics devices.” *Id.* ¶ 38. Moses teaches that its system allows asset owners to provide instructions that “describe *steps to be taken or work to be performed* when event messages or data is received.” *Id.* (emphasis added). Moses teaches that its system includes “a response deployment module” that “*mobilizes the response unit . . . based upon implementation of the previously loaded response rules*” provided by governmental agencies or response agencies. *Id.* ¶ 43 (emphasis added).

In view of the above teachings by Moses, we are persuaded that a skilled artisan would recognize that Moses discloses a system that follows a defined set of rules based on implementing designated plans for responding to a predefined event(s) to automatically select and forward alert notices to authorities that include prescriptive actions—i.e., “to stop the trucks in transit [and] block off the suspected target area.” Ex. 1005 ¶ 32; *see* Pet. 20–21 (relying, in part, on Ex. 1005 ¶ 32). Furthermore, Patent Owner’s assertion that those prescriptive actions are “merely examples of what a user *can* do *after* the processor in Moses ‘automatically issue[s] alert notices’ (PO Resp. 14) is undermined by Moses’s express teachings about

its system's ability to "mobilize" response units, implement designated plans, and initiate response deployments in a pre-determined manner.

Lastly, Patent Owner mischaracterizes Petitioner's contention to argue it eliminates the claimed requirement of a "directory." In particular, Patent Owner states that Petitioner "contends that the[] 'designated plans' are the claimed 'directory' of prescriptive actions to be undertaken." PO Resp. 17. Patent Owner then argues Moses does not demonstrate that "designated plans" include prescriptive actions. *Id.* at 17–18.

We agree with Petitioner, however, considering Moses in its entirety demonstrates that a skilled artisan would understand "designated plans" in Moses to refer to the predefined rules and the predefined responses that users of the system can load into the database to enable the automated rule-based alert notification and response deployment system. Pet. Reply 11 (citing Ex. 1010 ¶ 24; Pet. 20–22; Ex. 1011, 93:8–95:13, 95:14–96:5). Petitioner's contention is that Moses discloses a "directory of prescriptive actions" because a skilled artisan "would have understood that response instructions (*i.e.*, 'proscriptive actions') 'installed in a rules engine software program' qualify as a 'directory.'" Pet. 21 (citing Ex. 1003 ¶¶ 83–85). Although Petitioner states that the designated plans include prescriptive actions, Petitioner relies on Moses's disclosure of a rules-based system that allows users to define the steps to be taken or work to be performed for a defined event(s) in accordance with a designated plan to demonstrate why a skilled artisan would view Moses to suggest a "directory of prescriptive actions." *Id.* Stated differently, "Moses's system includes a directory of prescriptive actions because it has to have **response rules** that describe the steps to be taken **for each** asset owner." Pet. Reply 10. Petitioner

persuasively demonstrates Moses suggests to a skilled artisan the use of a directory of prescriptive actions.

We therefore are persuaded, based on the complete record, that the evidence from Moses cited by Petitioner discloses or suggests Element [1.d].

Element [1.e] recites, “generating in real-time a proactive alert notification with the prescriptive action for a user.” Ex. 1001, 10:59–61. Petitioner contends that Moses “describes that its system ‘proactively communicate[s] the potential threat to the appropriate authority,’” which may include generating in real time “a prescriptive action for a user, such as stopping a truck in transit or blocking off an area.” Pet. 22–23 (citing Ex. 1005 ¶¶ 12, 31, 32, 34, 42; Ex. 1003 ¶¶ 86–89). Patent Owner does not dispute Petitioner’s contention that Moses discloses this element.

We determine, based on the full record and for the reasons explained by Petitioner, that Petitioner has shown persuasively that Moses discloses or suggests element [1.e] to a skilled artisan.

Element [1.f] recites, “wherein the prescriptive action is tailored based on a user role and contextual data related to the at least one event.” Ex. 1001, 10:61–62. Petitioner contends that Moses discloses that the prescriptive actions are “tailored both on a user role (*e.g.*, owner of a trucking company that owns the truck in interest, or a particular emergency response unit) and on contextual data (*e.g.*, ambient weather, road conditions) related to the event in question.” Pet. 23 (citing Ex. 1003 ¶¶ 90–94); *see id.* at 23–25 (citing Ex. 1005 ¶¶ 32, 38, 39, 44; Ex. 1003 ¶¶ 90–94) (addressing element [1.f]). Patent Owner does not dispute that the evidence cited by Petitioner from Moses discloses or suggests this element.

We determine, based on the full record and for the reasons explained by Petitioner, that Petitioner has shown persuasively that Moses discloses or suggests element [1.f] to a skilled artisan.

The last element, [1.g], of claim 1 recites, “forwarding the prescriptive action to the user.” Ex. 1001, 10:62–63. Petitioner contends that because Moses teaches automatically sending alert notices to authorities to take particular action, such as stop a truck in transit or block off a particular area, a skilled artisan would recognize the prescriptive actions were forwarded to a user (i.e., the authorities). Pet. 25 (citing Ex. 1005 ¶ 32; Ex. 1003 ¶¶ 95–96). Patent Owner does not dispute Petitioner’s contention that Moses discloses this element.

We determine, based on the full record and for the reasons explained by Petitioner, that Petitioner has shown persuasively that Moses discloses or suggests element [1.g] to a skilled artisan.

Therefore, for the foregoing reasons and based on the complete record, Petitioner has established by a preponderance of the evidence that Moses shows or suggests to skilled artisans each and every element of independent claim 1. And as noted above, independent claims 8 and 17 include substantially similar elements as elements [1.a]–[1.g] of claim 1. *See* Ex. 1001, 11:13–27, 12:9–26. For independent claims 8 and 17, Petitioner relies on the same evidence and contentions to show Moses discloses each of the substantially similar claim elements. *See* Pet. 30–31, 34–35. Likewise, Patent Owner contends the same deficiencies asserted against claim 1 apply to Petitioner’s unpatentability contentions of claims 8 and 17. *See* PO Resp. 10–29. As a result, for the same reasons discussed in the context of claim 1 and based on the complete record, Petitioner has

established by a preponderance of the evidence that Moses shows or suggests to skilled artisans each and every element of independent claims 8 and 17.

2. *Claims 2, 9, and 18*

Dependent claims 2, 9, and 18 recite limitations that are substantially the same. *See* Ex. 1001, 10:65–67, 11:28–30, 12:27–28. In fact, both parties specifically address the limitations recited for claim 2 and rely on substantially the same evidence and arguments for the other dependent claims. *See* Pet. 25–26, 31, 35; PO Resp. 33–34. Therefore, we similarly focus on claim 2, but the analysis applies equally to claims 9 and 18.

Claim 2 recites, “wherein the at least one event relates to vehicle performance or driver performance in an asset tracking system.” Ex. 1001, 10:65–67. Petitioner contends that Moses demonstrates that a skilled artisan would view the disclosed system as an asset tracking system because Moses states that “system 10 may . . . be used to facilitate the tracking and monitoring of critical assets (CA).” Pet. 26 (citing Ex. 1005 ¶ 29; Ex. 1003 ¶ 98). Petitioner contends that Moses discloses two events that relate to driver performance: (1) data indicating the detection of an “unauthorized driver” occurrence; and (2) data indicating the detection of the occurrence of a “driver off-route.” *Id.* (citing Ex. 1005 ¶¶ 39, 42). Petitioner contends that a skilled artisan “would have understood that event information indicating that a driver is ‘unauthorized’ or ‘off-route’ relates to driver performance.” *Id.* (citing Ex. 1003 ¶ 100).

In addition, Petitioner identifies that Moses discloses detecting the speeds as well as sudden decelerations occurring with a tracked vehicle. Pet. 26 (citing 1005 ¶ 30; Ex. 1003 ¶ 102). Petitioner contends a skilled artisan

would recognize those detected speed and/or sudden deceleration occurrences to be events related to vehicle performance. *Id.*

Besides repeating its argument that Moses does not disclose a database that receives events, which we have already rejected (*see supra* § III.B.1), Patent Owner asserts that Petitioner’s contention is deficient because “[n]either the speed of a vehicle nor how quickly deceleration occurs is related to vehicle performance.” PO Resp. 33 (citing Ex. 2007 ¶ 60). Patent Owner asserts that a skilled artisan “would understand that vehicle performance data relates to the operability of a vehicle.” *Id.* (citing Ex. 2007 ¶ 61). Patent Owner states, “[c]ontrary to Petitioner’s assertion, both of those categories of data relate to the *driver*, not the *vehicle*.” *Id.*

Similarly, Patent Owner argues that the “data related to a driver being ‘unauthorized’ or ‘off-route’ is not related to driver performance” because “these are unrelated to how a driver is performing, but rather related to whether a critical asset is misused.” PO Resp. 34. Patent Owner asserts that a skilled artisan “would understand that driver performance data relates to a driver’s ability to perform their job.” *Id.* (Ex. 2007 ¶ 61). Patent Owner suggests that this understanding of driver performance is consistent with the examples of driver performance provided by the ’335 patent. *Id.* (citing Ex. 1001, 4:59–60).

After studying the submissions by both parties, we find Petitioner has shown persuasively that Moses discloses at least one event that relates to driver performance in an asset tracking system. Specifically, the data received by the database in Moses that indicates the detection of an occurrence of a “driver off-route” is an event that relates to driver performance in an asset tracking system. We disagree with Patent Owner’s

argument that a “driver off-route” event is not *related* to driver performance. Even under Patent Owner’s proposed interpretation of driver performance—data that relates to a driver’s ability to perform their job—“driver off-route” data qualifies because whether a driver can stay on route (and the consistency with which the driver can stay on route) is certainly related to a driver’s ability to perform their job. Although Patent Owner argues that a “driver off-route” event cannot be analogized to the “lane departure event” the ’335 patent states is related to driver performance (PO Sur-reply 11), we disagree because a “driver off-route” event is simply a more extensive version of that example.

We determine, therefore, based on the full record, that Petitioner has shown persuasively that Moses discloses or suggests to a skilled artisan at least one event relates to vehicle performance or driver performance in an asset tracking system. As a result, for the same reasons discussed in the context of claim 2, Petitioner has established by a preponderance of the evidence that Moses shows or suggests to skilled artisans the limitations of dependent claims 2, 9, and 18.

3. *Claims 5, 12, and 21*

Dependent claims 5, 12, and 21 recite limitations that are substantially the same. *See* Ex. 1001, 11: 5–6, 11:34–35, 12:33–34. In fact, both parties specifically address the limitations recited for claim 5 and rely on substantially the same evidence and arguments for the other dependent claims. *See* Pet. 27–28, 31, 35; PO Resp. 34–35. Therefore, we similarly focus on claim 5, but the analysis applies equally to claims 12 and 21.

Claim 5 recites, “wherein the plurality of stored events are collected over a period of time.” Ex. 1001, 11: 5–6. Petitioner contends the

Emergency Response Management System (“ERMS”) in Moses discloses this limitation “in that [it] collects received event information including ‘locational information [that] is updated instantaneously by a wireless communications link so that the location of the emergency response unit, the resources/inventory of the stationary unit and the location of the critical asset is known at all times.’” Pet. 27–28 (citing Ex. 1005 ¶ 7). Petitioner contends that “[t]he ERMS uses this collected information to ‘periodically update the [critical asset] database component.’” *Id.* at 28 (citing Ex. 1005 ¶ 17). As a result, Petitioner reasons, a skilled artisan “would have understood, because the location of the critical asset ‘is known at all times’ and that such ‘locational information’ is used to ‘periodically update the . . . database,’ that the stored event information is necessarily received ‘over a period of time.’” *Id.* (citing Ex. 1003 ¶¶ 110–114); *see also id.* at 17–18 (contending that a person having ordinary skill in the art “would have understood that the ‘plurality of stored events’ includes the location and direction of the trucks”).

Besides repeating its argument that Moses does not disclose a database that receives events, which we have already rejected (*see supra* § III.B.1), Patent Owner asserts that Petitioner’s contention is deficient because “a ***continuous distribution*** of ‘locational information’ does not disclose ***discrete*** ‘stored events’ over a period of time.” PO Resp. 35. “This distinction is clear,” according to Patent Owner, because the ’335 patent uses events stored over time to “detect behavioral patterns and provide real-time prescriptive actions.” *Id.* (citing Ex. 1001, 8:1–5). Because the “continuous updating of ‘locational information’ in Moses does not achieve this same function of detecting behavioral patterns,” Patent Owner asserts that

“Petitioner erroneously assumes that ‘locational information’ which is ‘updated instantaneously’ and ‘is known at all times’ discloses this limitation.” *Id.*

After studying the submissions by both parties, we find Petitioner has shown persuasively that Moses discloses the plurality of stored events are collected over a period of time. Patent Owner’s alleged deficiency with Petitioner’s contention is unavailing because it is premised on limitations that are not present in claim 5 and, thus, are not commensurate with the scope of the claim. Nothing in claim 5 requires *discrete* stored events over a period of time; nor is there a functional requirement requiring stored events to be used to detect behavioral patterns.

We determine, therefore, based on the full record, that Petitioner has shown persuasively that Moses discloses or suggests to a skilled artisan a plurality of stored events are collected over a period of time. As a result, for the same reasons discussed in the context of claim 5, Petitioner has established by a preponderance of the evidence that Moses shows or suggests to skilled artisans the limitations of dependent claims 5, 12, and 21.

4. *Claim 16*

Claim 16 recites, “wherein the user is a driver of a vehicle, and wherein the proactive alert notification is sent to the driver while operating the vehicle.” Ex. 1001, 12:6–8. Petitioner contends that Moses discloses or renders obvious this limitation. Pet. 32 (citing Ex. 1003 ¶¶ 139–141). Petitioner notes that Moses clearly states that the emergency response unit (“ERU”) may be a mobile vehicle, such as an “ambulance.” *Id.* at 33 (citing Ex. 1005 ¶ 25). Petitioner contends that “Moses explains that, in response to received event information (*e.g.*, ‘a speeding truck, containing a particular

hazardous material, near a school or stadium,’ [Ex. 1005] ¶ 32), its ERMS will generate and forward an ‘alert notification’ to appropriate response units.” *Id.* at 32. Petitioner refers to two examples Moses describes, as support, in which the ERMS processor is programmed to recognize an event and “immediately dispatch an appropriate form of communication via the [communication device] of the appropriate response units” that can perform a desired prescriptive action (*e.g.*, extinguish a fire, clean-up a spill, stop a truck in transit, block off the suspected target area). *Id.* at 32–33 (citing Ex. 1005 ¶¶ 31, 32).

Petitioner contends that, from Moses disclosure, a skilled artisan “would have understood that such a mobile ERU may be a vehicle, which necessarily requires a driver to operate” and “that the proactive alert notification sent by Moses’[s] ERMS to a mobile ERU would at least include a response location (*e.g.*, a street address), which would be directed to the driver operating the mobile ERU so that he/she could drive the mobile response unit to that location identified in the alert.” Pet. 33 (citing Ex. 1003 ¶ 140). As a result, Petitioner concludes, “when Moses’[s] processor 29 automatically issued an alert to a mobile ERU (*e.g.*, vehicle), that alert would in fact be directed to a driver of the vehicle while operating the vehicle. *Id.* at 33–34 (citing Ex. 1003 ¶ 141).

Besides repeating its argument that Moses does not disclose a database that receives events, which we have already rejected (*see supra* § III.B.1), Patent Owner argues that “Petitioner erroneously interprets this limitation to apply to any driver of any vehicle.” PO Resp. 30. Patent Owner asserts that “[t]he ’335 patent distinguishes between the particular possible users of the system: a driver, a dispatcher, and a third party” and,

when “[i]nterpreted in light of the specification, the plain and ordinary meaning of ‘driver’ in Claim 16 is necessarily the driver of the vehicle from which event or observations were received.” *Id.* at 31 (citing Ex. 1001, 4:61–63, 8:6–8, 8:52–54, Fig. 4); *see also* PO Sur-reply 13–14. In view of this proposed interpretation, Patent Owner argues that Petitioner’s evidence is deficient because “data is received *from* the driver or vehicle carrying the critical asset, but the users alerted in Moses are *not* the driver or vehicle carrying the critical asset.” *Id.* at 32 (citing Ex. 1005 ¶¶ 25, 29, Fig. 1).

After studying the submissions by both parties, we find Petitioner has shown persuasively that Moses discloses or suggests that the user may be a driver of a vehicle and the proactive alert notification may be sent to the driver while operating the vehicle. Patent Owner’s alleged deficiency with Petitioner’s contention lacks merit because it is premised on limitations that do not exist in claim 16 and, thus, are not commensurate with the scope of the claim.

Although Patent Owner asserts the “plain and ordinary meaning” of the term “driver” means “the driver of the vehicle from which event or observations were received,” Patent Owner has no support for this assertion. And it is evident from Patent Owner’s proposed interpretation that the term “driver” has a meaning independent of *the added limitations* because Patent Owner actually uses the term in its proposed construction. Of course, “driver” is a common, non-technical term, which the context of the ’335 patent demonstrates is being used to describe an operator of a vehicle, rather than, e.g., a golf club. There is no support in the ’335 patent, however, to justify using the term “driver” to limit the term “event” to information specific to the operation of the vehicle the driver is operating. For example,

Patent Owner cites column 4, lines 61–63, of the '335 patent which states, “a history of all driver events in the vicinity of the subject driver *can be* analyzed and a proactive notification sent to the subject driver warning the subject driver to raise their awareness in that vicinity.” Ex. 1001, 4:60–63 (emphasis added). Far from providing a clear intention to limit the term “driver” in the manner Patent Owner proposes, that excerpt at least suggests events and observations from *other* drivers in *other* vehicles can be used. And none of the other evidence Patent Owner cites from the '335 patent is any more supportive. Because there is insufficient basis to justify importing the additional limitations Patent Owner seeks to impose on the term “driver,” Patent Owner’s arguments relying on those added limitation are unfounded.

We find, therefore, based on the full record, that Petitioner has shown persuasively that Moses discloses or suggests to a skilled artisan that the user may be a driver of a vehicle and the proactive alert notification may be sent to the driver while operating the vehicle, as claim 16 recites. As a result, Petitioner has established by a preponderance of the evidence that Moses shows or suggests to skilled artisans the limitation dependent claim 16.

5. *Claims 3, 4, 6, 7, 10, 11, 13–15, 19, 20, and 22*

Petitioner asserts, with detailed citations to the record, that Moses discloses or suggests the subject matter of dependent claims 3, 4, 6, 7, 10, 11, 13–15, 19, 20, and 22. Pet. 26–29, 31–32, 35. Patent Owner does not dispute Petitioner’s contentions regarding the additional subject matter recited by these claims. We find, based on the full record and for the reasons explained by Petitioner, that Petitioner has shown persuasively that

Moses discloses or suggests each of the limitations recited by claims 3, 4, 6, 7, 10, 11, 13–15, 19, 20, and 22.

C. Patent Owner’s Objective Indicia Evidence

We next turn to Patent Owner’s objective evidence of nonobviousness and Petitioner’s rebuttal evidence. Objective evidence of nonobviousness, when present, must be considered as part of an obviousness inquiry.

Transocean Offshore Deepwater Drilling, Inc. v. Maersk Drilling USA, Inc., 699 F.3d 1340, 1349 (Fed. Cir. 2012). Notwithstanding what the teachings of the prior art would have suggested to one of ordinary skill in the art, the totality of the evidence submitted, including objective evidence of nonobviousness, may lead to a conclusion that one or more of the challenged claims would not have been obvious to one of ordinary skill in the art. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984).

However, “[i]n order to accord substantial weight to secondary considerations in an obviousness analysis, the evidence of secondary considerations must have a nexus to the claims, i.e., there must be a legally and factually sufficient connection between the evidence and the patented invention.” *Fox Factory, Inc. v. SRAM, LLC*, 944 F.3d 1366, 1373 (Fed. Cir. 2019), *cert. denied*, 141 S. Ct. 373 (2020). A patent owner is entitled to a presumption of nexus “when [it] shows that the asserted objective evidence is tied to a specific product and that product ‘embodies the claimed features, and is coextensive with them.’” *Id.* (quoting *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1072 (Fed. Cir. 2018)) (emphasis added). On the other hand, the patentee is not entitled to a presumption of nexus if the patented invention is only a component of a commercially successful

machine or process. *Fox Factory*, 944 F.3d at 1373 (reaffirming the importance of the “coextensiveness” requirement).

“[T]he purpose of the coextensiveness requirement is to ensure that nexus is only presumed when the product tied to the evidence of secondary considerations ‘is the invention disclosed and claimed.’” *Fox Factory*, 944 F.3d at 1374 (quoting *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F.2d 1387, 1392 (Fed. Cir. 1988)). “[T]he degree of correspondence between a product and a patent claim falls along a spectrum. At one end of the spectrum lies perfect or near perfect correspondence. At the other end lies no or very little correspondence.” *Id.*

Applying *Fox Factory*, the Board uses a two-step analysis in evaluating nexus between the claimed invention and objective evidence of nonobviousness. *Lectrosonics, Inc. v. Zaxcom, Inc.*, IPR2018-01129, Paper 33 at 33 (PTAB Jan. 24, 2020) (precedential). We first consider whether a patent owner has demonstrated “that its products are coextensive (or nearly coextensive) with the challenged claims,” resulting in a rebuttable presumption of nexus. *Id.* If not, that does not end the inquiry; “the patent owner is still afforded an opportunity to prove nexus by showing that the evidence of secondary considerations is the ‘direct result of the unique characteristics of the claimed invention.’” *Id.* (quoting *Fox Factory*, 944 F.3d at 1373–75).

“The patentee bears the burden of showing that a nexus exists.” *Fox Factory*, 944 F.3d at 1373 (quoting *WMS Gaming Inc. v. Int’l Game Tech.*, 184 F.3d 1339, 1359 (Fed. Cir. 1999)).

Patent Owner argues that “the long felt need for improved trucking safety and Petitioner’s promotion of Omnitracs’ invention—which the

Petition ignores—confirm that the invention claimed by '335 patent is not obvious.” PO Resp. 53. We address each in turn beginning with commercial success.

1. Commercial Success

Before discussing any evidence of commercial success, we must determine whether Patent Owner has established a nexus between Petitioner’s Connected Vehicle Platform system (hereafter “CVP System”) and the claimed invention. In so doing, we first address whether Patent Owner has established a rebuttable presumption of nexus.

As stated in *Fox Factory*, “presuming nexus is appropriate when the patentee shows that the asserted objective evidence is tied to a specific product and that product embodies the claimed features, and is coextensive with them.” *Fox Factory*, 944 F.3d at 1373 (quotations omitted). Patent Owner does not assert that the CVP System is entitled to a presumption of nexus. *See generally* PO Resp. 55–61. Furthermore, Patent Owner does not provide any evidence or argument to even suggest that the CVP System and the claimed invention are coextensive. *Id.* Exhibit 2015 evidences that the CVP System includes a myriad of features that would allegedly provide important benefits to its customers. Therefore, Patent Owner is not entitled to a presumption of nexus because, even presuming the CVP System incorporates the patented invention, it cannot be disputed that the claimed invention is only one of many components included in the CVP System. *See generally* Ex. 2015.

Of course, our nexus inquiry does not end there because Patent Owner is still afforded an opportunity to prove nexus by showing that the alleged commercial success achieved with the CVP System is in some way a direct

result of the unique characteristics of the claimed invention. But on this front, Patent Owner again fails to provide any foundational basis to establish a link between the claimed invention and the evidence of commercial success. Instead, Patent Owner simply states, “[b]ecause the [CVP System] embodies all the limitations of the independent claims of the ’335 patent, sufficient nexus exists between [Patent Owner’s] commercial success and the claims.” PO Resp. 55. And after Petitioner pointed out that Patent Owner had failed to establish any specific link between the claimed invention and commercial success evidence (Pet. Reply 25–26), Patent Owner responded as follows:

“It is not necessary, however, that the patented invention be solely responsible for the commercial success, in order for this factor to be given weight appropriate to the evidence, along with other pertinent factors.” *Cont’l Can Co. USA v. Monsanto Co.*, 948 F.2d 1264, 1273 (Fed. Cir. 1991); *see also Oren Techs., LLC v. Proppant Express Invs. LLC*, No. 2019-1778, 2021 WL 3120819, at *7 (Fed. Cir. July 23, 2021). As [Patent Owner] explained, [Petitioner’s CVP System] is commercially successful at least in part due to the advertised remote vehicle monitoring functionality. *See Exs. 2016-2023*. This is more than adequate to establish commercial success. *Oren Techs.*, 2021 WL 3120819, at *7.

PO Sur-reply 25–26.

Patent Owner has not persuasively shown by a preponderance of the evidence that commercial success achieved with the CVP System is in some way a result of the claimed invention. When the commercial success evidence is associated with a product that includes multiple critical features, as is the case here, *Fox Factory* makes it abundantly clear that simply showing the product includes the claimed invention is insufficient to support a finding of nexus. In that case, even though no dispute was raised about

whether the alleged commercially successful product embodied the claimed invention, the U.S. Court of Appeals for the Federal Circuit held that, on remand, “to prove nexus between the [challenged claims] and the evidence of secondary considerations,” Patent Owner had the burden of “proving that the evidence of secondary considerations is attributable to the claimed combination . . . , as opposed to, for example, prior art features in isolation or unclaimed features.” *Fox Factory*, 944 F.3d at 1378. Patent Owner has made no attempt to make any showing of this kind in this case.

And Patent Owner misplaces its reliance on *Oren Techs.* for the proposition that simply showing a product embodies the claimed invention “is more than adequate to establish” a nexus to that product’s commercial success. In that case, Oren “established a presumption of nexus” by demonstrating the commercialized product was coextensive with the claimed invention. *Oren Techs.*, 2021 WL 3120819, at *6. As noted above, Patent Owner has made no attempt to argue coextensiveness here; nor does the evidence suggest such an argument would have much merit.

Therefore, because Patent Owner has not persuasively shown any nexus between the CVP System and the claimed invention, we do not give substantial weight to the evidence of commercial success.

2. *Long Felt but Unsolved Need*

Patent Owner argues that its “invention uses real-time alert notifications to solve a long felt but unsolved need for improved safety and asset tracking in the trucking industry.” PO Resp. 54. Relying on the ’335 patent, Patent Owner contends “[p]revious asset tracking systems had ‘no effective way to provide timely, relevant notifications/action recommendations based on detected conditions (e.g., based on real-time

events/observations) that require immediate attention by fleet owners.” *Id.* (citing Ex. 1001, 1:44–48). Without having the ability to immediately detect adverse conditions, Patent Owner contends “massive losses in safety, compliance, fuel consumption, and workflow efficiency” may result. *Id.*

Patent Owner states “[n]either Moses nor Levesque solved this longstanding problem.” PO Resp. 54. As support, Patent Owner notes “the press has widely reported on safety concerns and inefficiencies in the trucking industry through 2015, when the ’335 patent issued,” despite Moses and Levesque being publicly available at least 6 year prior. *Id.* (citing Ex. 2009; Ex. 2010). Patent Owner concludes that “[t]he invention disclosed in the ’335 patent is nonobvious because it addresses this long felt but unsolved need in the trucking industry.” *Id.*

The relevance of long-felt need to the issue of obviousness depends on several factors. First, the need must have been a persistent one that was recognized by those of ordinary skill in the art. *Orthopedic Equip. Co. v. All Orthopedic Appliances, Inc.*, 707 F.2d 1376, 1383 (Fed. Cir. 1983). Second, the long-felt need must not have been satisfied by another before the invention by the patent owner. *Newell Cos. v. Kenney Mfg. Co.*, 864 F.2d 757, 768 (Fed. Cir. 1988). Third, the invention must in fact satisfy the long-felt need. *In re Cavanagh*, 436 F.2d 491, 496 (CCPA 1971). Moreover, an allegation of failure of others is not sufficient to evidence nonobviousness, unless it is shown that widespread efforts of skilled artisans having knowledge of the prior art had failed to find a solution to the problem. *In re Allen*, 324 F.2d 993, 997 (CCPA 1963).

Patent Owner’s evidence falls substantially short of making a persuasive showing that the claimed invention overcame a long-felt,

unresolved need. It is not clear from the evidence in the record that the industrial problem Patent Owner identifies in fact existed, or that skilled artisans knowledgeable in the art had tried and failed in their efforts to find a solution to the problem. The one tangible piece of evidence Patent Owner cites to show that a problem did exist comes from the Specification of the '335 patent, but Patent Owner provides absolutely no evidence demonstrating that problem was also recognized by others in the field of art. Nor does Patent Owner provide any evidence to show the identified problem was a persistent one; in fact, we have no basis to know how long the alleged problem was known before the inventors of the '335 patent disclosed it to the public.

Still further, Patent Owner makes no showing that widespread efforts of skilled artisans having knowledge of the prior art had failed to find a solution to the problem. In fact, although Patent Owner makes the conclusory statement that Moses and Levesque did not solve the problem, in the next sentence, Patent Owner suggests a different problem was being pursued (i.e., “address[ing] national security risks from terrorist attacks and hazardous material accidents”). PO Resp. 54. Finally, Patent Owner offers no proof that the claimed invention has been recognized in any significant way to have actually diminished the alleged long-felt need for improved safety and asset tracking in the trucking industry. Accordingly, we give very little weight to this evidence.

D. Weighing the Graham Factors

“Once all relevant facts are found, the ultimate legal determination [of obviousness] involves the weighing of the fact findings to conclude whether the claimed combination would have been obvious to an ordinary artisan.”

Arctic Cat Inc. v. Bombardier Recreational Prods., Inc., 876 F.3d 1350, 1361 (Fed. Cir. 2017). On balance, considering the complete record before us, Petitioner has established, by a preponderance of the evidence, that claims 1–22 of the ’335 patent would have been obvious in view of Moses.

Regarding claims 1, 8, and 17—the only claims that Patent Owner attempts to map to the CVP System (*see* PO Resp. 56–59)—Petitioner has established that Moses discloses or suggests the subject matter of those claims. The proposed combinations are not based on hindsight reconstruction; rather, they are straightforward and logical. Moses indisputably discloses a response management system with automated rule-based alert notifications and response deployment capabilities. The only arguable differences Patent Owner alleges are whether Moses discloses storing information about something happening/occurrence versus more general information and whether Moses discloses providing responses that recommend a particular action be taken versus responses that are merely informational.

We find Petitioner’s evidence from Moses to be particularly strong that a skilled artisan would have known to store information about occurrences and provide responses including recommended actions. Thus, for all the reasons discussed above (*supra* § III.B.1) and here, we give Petitioner’s evidence of obviousness substantial weight. Additionally, we disagree with most of Patent Owner’s arguments in response and we do not give Patent Owner’s evidence of objective indicia of nonobviousness substantial weight for the reasons discussed above (*supra* § III.C). But, even if we were to have found that Patent Owner established a nexus, given its tenuous connection to the only difference Patent Owner alleges to exist

between the systems disclosed by the prior art and the claimed invention, we find that the evidentiary weight favoring obviousness significantly outweighs the most probative weight that could be given to the objective evidence presented.

We also find that the balance weighs strongly in Petitioner's favor regarding claims 2–7, 9–16, and 18–22 for the same reasons discussed above and additionally because Patent Owner has not established that the CVP System practices any of these claims or that there is a nexus between the objective indicia of nonobviousness and any of these claims.

Accordingly, on balance, considering the complete record before us, Petitioner has established, by a preponderance of the evidence, that claims 1–22 of the '335 patent would have been obvious to one of ordinary skill in the art at the time of the invention.

IV. PETITIONER'S MOTION TO STRIKE

Petitioner filed a Motion to Strike (Paper 25), seeking to strike Exhibit 2025 and the associated portions of Patent Owner's Sur-reply that discuss the exhibit. Exhibit 2025 pertains to Patent Owner's evidence of objective indicia of nonobviousness. Specifically, Patent Owner offers this evidence to show Petitioner's product infringes claim 1, which is immaterially because Patent Owner failed to establish a nexus between the claimed invention and the commercial success of Petitioner's product or long-felt, but unresolved, need (*supra* § III.C). For the reasons given above, even considering the evidence Petitioner seeks to strike, we would still conclude that Petitioner has shown, by a preponderance of the evidence, that the Challenged Claims are unpatentable. Thus, we need not reach Petitioner's Motion to Strike.

Accordingly, we dismiss Petitioner's Motion to Strike as moot.

V. CONCLUSION⁵

For the reasons discussed above, Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–22 of the '335 patent are unpatentable in view of Moses. Our conclusions regarding the Challenged Claims are summarized below:

Claims Challenged	35 U.S.C. §	Reference(s)/Basis	Claims Shown Unpatentable	Claims Not Shown Unpatentable
1–22	103(a)	Moses	1–22	
1–22	103(a) ⁶	Levesque		
Overall Outcome			1–22	

VI. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that claims 1–22 of U.S. Patent No. 9,147,335 B2 are determined to be unpatentable;

⁵ Should Patent Owner wish to pursue amendment of the challenged claims in a reissue or reexamination proceeding subsequent to the issuance of this decision, we draw Patent Owner's attention to the April 2019 *Notice Regarding Options for Amendments by Patent Owner Through Reissue or Reexamination During a Pending AIA Trial Proceeding*. See 84 Fed. Reg. 16654 (Apr. 22, 2019). If Patent Owner chooses to file a reissue application or a request for reexamination of the challenged patent, we remind Patent Owner of its continuing obligation to notify the Board of any such related matters in updated mandatory notices. See 37 C.F.R. §§ 42.8(a)(3), (b)(2).

⁶ As explained above, because Petitioner's challenge based on Moses is dispositive as to the Challenged Claims, we do not reach this asserted ground. See *supra* § III.

FURTHER ORDERED that, pursuant to 35 U.S.C. § 318(b), upon expiration of the time for appeal of this decision, or the termination of any such appeal, a certificate shall issue canceling claims 1–22;

FURTHER ORDERED that Parties’ Objections to Petitioner’s Demonstrative Exhibits (Paper 31) are dismissed as moot;

FURTHER ORDERED that Petitioner’s Motion to Strike (Paper 25) is dismissed as moot; and

FURTHER ORDERED that, because this a Final Written Decision, parties to this proceeding seeking judicial review of this Decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

IPR2021-00187
Patent 9,147,335 B2

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