

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION**

|                                  |   |                            |
|----------------------------------|---|----------------------------|
| EMERGING AUTOMOTIVE LLC,         | § |                            |
|                                  | § |                            |
| Plaintiff,                       | § |                            |
|                                  | § |                            |
| v.                               | § | CASE NO. 2:23-CV-00437-JRG |
|                                  | § | (Lead Case)                |
| KIA CORPORATION and KIA AMERICA, | § |                            |
| INC.,                            | § |                            |
|                                  | § |                            |
| Defendants.                      | § |                            |

**CLAIM CONSTRUCTION ORDER**

In these consolidated patent cases,<sup>1</sup> Plaintiff Emerging Automotive LLC alleges infringement by Defendants Kia Corporation, Kia America, Inc., Toyota Motor Corporation, Toyota Motor North America, Inc, and Toyota Motor Sales, U.S.A. Inc., of claims from U.S. Patents 9,171,268, 9,365,188, 10,407,026, and 11,738,659. The '188 Patent, '026 Patent, and '659 Patent, which the parties refer to as the “e-key” patents, are related and share the same specification. *See* '659 Patent at [63]. Generally, these patents concern generating, transmitting, and using electronic keys to access and operate vehicles. The '268 Patent, which Plaintiff only asserts against Toyota, “relates to systems and methods for managing user profiles for vehicles and exchange of information with cloud-based processing systems.” '268 Patent at 1:32–34.

The parties present 14 groups of terms for construction. Having considered the parties’ briefing, along with arguments made at a February 14, 2025 hearing, the Court resolves those disputes as follows.

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<sup>1</sup> The member case is No. 2:23-CV-00434-JRG.

## I. BACKGROUND

### A. U.S. Patent 9,365,188

The '188 Patent concerns generating and using electronic keys, or e-keys, for vehicles. Claim 1, for example, recites a method performed by a server that includes generating an e-key for a vehicle, transmitting the e-key to a recipient, and then receiving data regarding vehicle use and violations about the conditions of the use. '188 Patent at [57]. Claim 1 recites:

1. A method, comprising:

receiving, by a server, a request from a user via a user account that has a vehicle associated therewith to generate an electronic key (e-key) for an identified recipient to use the vehicle, the request includes identifying information for enabling sending of the e-key to the recipient via an electronic transmission, the request includes a condition of use of the vehicle as set by the user via the user account;

generating, by the server, the e-key, the e-key being assigned with the condition of use of the vehicle;

transmitting, by the server, the e-key to the recipient using the identifying information so that a device of the recipient is implemented to use the e-key;

transmitting, by the server, data to the vehicle to enable use of the vehicle via the e-key; and

receiving, by the server, use data regarding use of the vehicle for when the vehicle is used via the e-key;

wherein the use data identifies information regarding the use of the vehicle, and the information identifies a violation of the condition of use;

wherein the server processes logic for generating the e-key and processes logic for analyzing the data regarding use of the vehicle when the e-key is used for the vehicle, the server or other servers connected to the server being accessible over the Internet, the vehicle having wireless communication systems for communicating with the server or other servers and

for communicating with devices local to the vehicle.

'188 Patent at 49:29–57.

**B. U.S. Patent 10,407,026**

The '026 Patent, which is related to the '188 Patent and shares the same disclosure, concerns a vehicle configured to communicate with a server of a cloud system to enable access to use the vehicle via one or more electronic keys. The vehicle includes electronics, communications circuitry, a subsystem for unlocking the vehicle, and a subsystem for starting the vehicle. The circuitry communicates with the server and a mobile device, and receives requests from the mobile device for unlocking the vehicle.

The requests include unique access codes associated with privileges for use of the vehicle. The vehicle can receive information from the server to authenticate the request. If the request is authentic, the mobile device receives data to enable an electronic key to use the vehicle, and the vehicle's electronics instruct "the subsystem" to enable unlocking and starting of the vehicle.

Claim 1, which is exemplary, recites:

1. A vehicle configured to communicate with a server of a cloud system to enable access to use the vehicle via one or more electronic keys, comprising,  
electronics of the vehicle;  
a subsystem of the vehicle for enabling unlocking of the vehicle, the subsystem being interfaced with the electronics;  
a subsystem of the vehicle for enabling starting of the vehicle for use of the vehicle; and  
communications circuitry of the vehicle interfaced with electronics of the vehicle, the communications circuitry being programmable to communicate with the server of the cloud system and communicate with a mobile device;  
wherein the communications circuitry of the vehicle is

configured to receive a request from the mobile device for unlocking of the vehicle, the request from the mobile device including a unique access code obtained by the mobile device from the server to enable sending the request to the vehicle, wherein the unique access code is associated with privileges for use of the vehicle, the privileges are defined for the unique access code, the vehicle is configured to receive information from the server to authenticate the request by the mobile device, and if the request is authentic, and the mobile device is provided with data to enable an electronic key to use the vehicle and the electronics of the vehicle instructs the subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle for use of the vehicle via the electronic key consistent with the privileges of the unique access code.

'026 Patent at 51:61–52:25.

**C. U.S. Patent 11,738,659**

The '659 Patent's claims concern a vehicle with similar hardware to the '026 Patent, but the request received from the mobile device has "coded data" (rather than a unique access code) associated with privileges for the vehicle's use. Claim 1 recites:

1. A sub-system of a vehicle, the vehicle having an on-board computer interfaced with the sub-system for processing instructions to enable use of an electronic key (eKey), the sub-system comprising:
  - memory associated with the on-board computer of the vehicle having program instructions for instructing unlocking and starting of the vehicle; and
  - communications circuitry of the vehicle interfaced with the on-board computer of the vehicle and the sub-system, the communications circuitry is configured to process program instructions to enable communication with a server, the communications circuitry includes wireless communication circuitry for enabling local connection with a mobile device, the mobile device is configured to use the eKey for said

unlocking and said starting the vehicle;

wherein the wireless communications circuitry of the vehicle is configured to receive coded data from the mobile device when using the eKey, the coded data enables functions of said eKey for said unlocking and use of the vehicle, the coded data is associated to the eKey for use by the mobile device, and the coded data includes privilege settings associated with the eKey for limiting types of use of the vehicle when using the eKey with the vehicle;

wherein use of the vehicle using the eKey is tracked to identify and log actions taken using the vehicle while the eKey is used.

'659 Patent at 52:12–39.

**D. U.S. Patent 9,171,268**

The '268 Patent, which Plaintiff only asserts against the Toyota defendants in the member case, relates to providing an option of vehicles near a location identified by the request and then detecting a user's proximity to a selected vehicle. A user's profile is transferred to, and automatically sets user preferences of, the vehicle. The method deactivates the user profile when use of the vehicle is discontinued. '268 Patent at [57]. Claim 10, for example, recites:

10. A method, comprising,
  - receiving, at a server, information for a user profile of a user, the user profile defining one or more settings that are preferred to be set in vehicles if the vehicles support the settings;
  - identifying a selected vehicle for applying the user profile, the selected vehicle having a plurality of settable settings, the selected vehicle being one of a plurality of vehicles identified as available by the server;
  - determining, by the server, applicable settings for the selected vehicle, the applicable settings being settings that are preferred to be set as identified from the user profile and are compatible with settings that are settable in the selected vehicle; and

sending, by the server, the applicable settings for programming to the selected vehicle, wherein the applicable settings are programmed on the selected vehicle after receipt by the selected vehicle over a wireless connection, wherein the method is executed by the server, the server including a processor;

wherein the selected vehicle includes vehicle electronics for applying the programming to cause the applicable settings to be activated on the selected vehicle and communication circuitry for communicating via the wireless connection.

'268 Patent at 33:1–26.

## II. LEGAL STANDARDS

### A. Generally

“[T]he claims of a patent define the invention to which the patentee is entitled the right to exclude.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*). As such, if the parties dispute the scope of the claims, the court must determine their meaning. *See, e.g., Verizon Servs. Corp. v. Vonage Holdings Corp.*, 503 F.3d 1295, 1317 (Fed. Cir. 2007) (Gajarsa, J., concurring in part); *see also Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 390 (1996), *aff'g*, 52 F.3d 967, 976 (Fed. Cir. 1995) (*en banc*).

Claim construction, however, “is not an obligatory exercise in redundancy.” *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997). Rather, “[c]laim construction is a matter of [resolving] disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims . . . .” *Id.* A court need not “repeat or restate every claim term in order to comply with the ruling that claim construction is for the court.” *Id.*

When construing claims, “[t]here is a heavy presumption that claim terms are to be given their ordinary and customary meaning.” *Aventis Pharm. Inc. v. Amino Chems. Ltd.*, 715 F.3d 1363,

1373 (Fed. Cir. 2013) (citing *Phillips*, 415 F.3d at 1312–13). Courts must therefore “look to the words of the claims themselves . . . to define the scope of the patented invention.” *Id.* (citations omitted). The “ordinary and customary meaning of a claim term is the meaning that the term would have to a person of ordinary skill in the art in question at the time of the invention, *i.e.*, as of the effective filing date of the patent application.” *Phillips*, 415 F.3d at 1313. This “person of ordinary skill in the art is deemed to read the claim term not only in the context of the particular claim in which the disputed term appears, but in the context of the entire patent, including the specification.” *Id.*

Intrinsic evidence is the primary resource for claim construction. *See Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1348 (Fed. Cir. 2010) (citing *Phillips*, 415 F.3d at 1312). For certain claim terms, “the ordinary meaning of claim language as understood by a person of skill in the art may be readily apparent even to lay judges, and claim construction in such cases involves little more than the application of the widely accepted meaning of commonly understood words.” *Phillips*, 415 F.3d at 1314; *see also Medrad, Inc. v. MRI Devices Corp.*, 401 F.3d 1313, 1319 (Fed. Cir. 2005) (“We cannot look at the ordinary meaning of the term . . . in a vacuum. Rather, we must look at the ordinary meaning in the context of the written description and the prosecution history.”). But for claim terms with less-apparent meanings, courts consider “those sources available to the public that show what a person of skill in the art would have understood disputed claim language to mean . . . [including] the words of the claims themselves, the remainder of the specification, the prosecution history, and extrinsic evidence concerning relevant scientific principles, the meaning of technical terms, and the state of the art.” *Phillips*, 415 F.3d at 1314.

## **B. Indefiniteness**

“[A] patent is invalid for indefiniteness if its claims, read in light of the specification

delineating the patent, and the prosecution history, fail to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). The claims “must be precise enough to afford clear notice of what is claimed” while recognizing that “some modicum of uncertainty” is inherent due to the limitations of language. *Id.* at 908. “Indefiniteness must be proven by clear and convincing evidence.” *Sonix Tech. Co. v. Publ’ns Int’l, Ltd.*, 844 F.3d 1370, 1377 (Fed. Cir. 2017).

### **III. THE LEVEL OF ORDINARY SKILL IN THE ART**

The level of ordinary skill in the art is the skill level of a hypothetical person who is presumed to have known the relevant art at the time of the invention. *In re GPAC*, 57 F.3d 1573, 1579 (Fed. Cir. 1995). In resolving the appropriate level of ordinary skill, courts consider the types of and solutions to problems encountered in the art, the speed of innovation, the sophistication of the technology, and the education of workers active in the field. *Id.* Importantly, “[a] person of ordinary skill in the art is also a person of ordinary creativity, not an automaton.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007).

Here, the parties’ experts generally agree on the appropriate level of skill in the art. Plaintiff’s expert characterizes a skilled artisan as one with “a bachelor’s or graduate degree in computer science, computer engineering, or electrical engineering, or a similar discipline together with knowledge of cloud-based computing [and] two or three years of experience in the field relating to distributed technology.” Malek Decl., Dkt. No. 132-6 ¶ 20. Defendants’ expert considers the proper level of skill “a four year undergraduate degree in electrical engineering, automotive engineering, or a closely related field and . . . two years of experience in the fields of access control systems, vehicle electronics, and/or cryptography.” Shoemake Decl., Dkt. No. 134-1 ¶ 37. Neither party, however, suggests resolving the disputes turns on resolving the differences between the

parties’ experts’ proposed levels of ordinary skill.

**IV. THE DISPUTED TERMS**

- A. Term 1: “electronic key”/“eKey”/“e-key” (’026 Patent, Claims 1, 2, 6, 13, 15; ’659 Patent, Claims 1, 3, 4, 12, 13, 20; ’188 Patent, Claims 1, 11, 16, 17; ’268 Patent, Claims 10, 18)**

| Plaintiff’s Construction  | Defendants’ Construction   |
|---------------------------|--|
| No construction necessary | “electronic data that can be used to operate a vehicle consistent with privileges or conditions” |

This dispute concerns whether an “e-key” for a vehicle, in the context of these patents, must enable all of the vehicle’s functions.<sup>2</sup> Plaintiff contends that it doesn’t, pointing to the specification’s disclosure that “the e-key provide[s] access to at least one of operating functions of the vehicle, or opening the vehicle, or starting the vehicle, using user interfaces of the vehicle, or turning-off the vehicle, or combinations thereof.” Dkt. No. 132 at 5 (citing ’026 Patent at 4:9–14). But in Defendants’ view, “[n]o vehicle owner would expect to receive a ring of keys, each capable of enabling a single function of their vehicle.” Dkt. No. 134 at 3.

The Court agrees with Plaintiff. For one, the specification clearly contemplates that an e-key might provide access to only, for example, opening or starting the vehicle. *See* ’026 Patent at 4:9–14. Defendants, however, call this excerpt a continuation of the discussion in column 3 that separately says there’s an e-key and conditions of use, and that the language to which Plaintiff points is about what capabilities may or may not be allowed by the conditions of use. Hr’g Tr., Dkt. No. 166 at 11:25–12:6. The Court disagrees, as the specific “conditions” listed in column 3 are geographic restrictions, speed restrictions, occupancy restrictions, time frames of use, and time

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<sup>2</sup> There is no assertion that “electronic key,” “eKey,” and “e-key” should have different constructions.

expirations of use. *See* '026 Patent at 3:57–61. The nature of these “conditions” is fundamentally different from the listed operating functions in column 4. That is, they do not, as Defendants suggest, seem to limit otherwise full use of the vehicle to only one or some of operating, opening, starting, using interfaces of, or turning off the vehicle. Moreover, nothing in either column would lead one to believe these two excerpts are somehow connected such that implementing the “conditions” listed in column 3 somehow restricts otherwise full use of the vehicle to the operating functions identified in column 4.

Defendants also point to the claim language for support. Dkt. No. 134 at 2 (“the asserted claims recite that an e-key enables ‘use’ of a vehicle, subject to privileges or conditions”). But while that claim language might limit the invention as a whole, it doesn’t limit the stand-alone meaning of “e-key.” Moreover, even if Defendants are correct in asserting the scope of “e-key” must be broad enough to then be limited by the “privileges or conditions,” that alone does not require “e-key” to include *all* operating functions of the vehicle. For example, an e-key could allow only access to the vehicle, but subject to a condition of only daytime access for a new driver.

Finally, Defendants’ construction is based on the perspective of an ordinary vehicle owner or operator rather than a skilled artisan as they define one. *See* Dkt. No. 134 at 3 (asserting “[n]o vehicle owner would expect to receive a ring a keys, each capable of enabling a single function of their vehicle”). But even if that is the correct perspective, there are well-known examples of different keys used for different functions of the same vehicle, such as a valet key that allows driving the vehicle but doesn’t open storage compartments. Accordingly, the Court rejects Defendants’ contention and construes these terms as “electronic data that enables one or more functions of the vehicle.”

**B. Term 2: “the unique access code is associated with privileges for use of the vehicle, the privileges are defined for the unique access code” (’026 Patent, Claim 1)**

**“the e-key being [assigned/associated] with the condition of use for the vehicle” (’188 Patent, Claims 1, 16)**

| Plaintiff’s Construction  | Defendants’ Construction  |
|---------------------------|---|
| No construction necessary | “the unique access code/ekey corresponds to privileges / conditions of use of the vehicle that are defined for the unique access code/ekey” |

The parties purport to dispute “what it means for a unique access code or e-key to be ‘associated with’ or ‘assigned with’ privileges or conditions.” Dkt. No. 134 at 4. Defendants point to the specification’s description explaining how e-keys and privileges can be assigned. *Id.* (citing ’026 Patent at 45:43–46:6, 50:34–42). Plaintiff says “it is self-evident that ‘associated with’ means something different than ‘corresponds to.’” Dkt. No. 132 at 8. It also objects to inclusion of “are defined for” as being applicable to all three phrases.

Defendants have not identified a dispute about the scope of the language. Instead, they simply swap “corresponds to” for “associated with” and “assigned with,” with no explanation as to why they terms are unclear or how that resolves a dispute. They criticize Plaintiff for failing to explain why “corresponds to” is not synonymous with the claim language, Dkt. No. 134 at 4, but that doesn’t establish why construction is necessary to begin with. Accordingly, without a dispute to resolve, the Court rejects Defendants’ construction and will give these terms “plain and ordinary meaning” constructions.

**C. Term 3: “privileges for use of the vehicle” (’026 Patent, Claim 1); “privilege settings for use of the vehicle” (’659 Patent, Claim 18); “condition of use of the vehicle” (’188 Patent, Claims 1, 16)**

| Plaintiff’s Construction  | Defendants’ Construction  |
|---------------------------|---|
| No construction necessary | “permitted uses of the vehicle when using the ekey, such as what type of access, speed limits, geographic restrictions, or the amount of time the e-keys will be valid” |

Plaintiff has three objections to Defendants’ construction. First, there’s no reason to include examples, because they don’t provide further clarity. Dkt. No. 132 at 8. Second, Defendants seek to rewrite all three phrases to mean “permitted uses.” *Id.* at 9. Finally, “when using the key” injects an additional limitation into readily understandable terms. *Id.*; *see also* Dkt. No. 138 at 2 (“Defendants’ argument asks for a requirement that the term be limited to ‘how the vehicle is used after it is accessed.’” (quoting Dkt. No. 134 at 5)).

From Defendants’ perspective, the dispute centers on whether the “privileges” or “conditions of use” can allow what they call “unfettered access.” They say Plaintiff’s “non-construction of these terms invites the incorrect possibility that mere (unrestricted) access alone might be a privilege within the context of the . . . patents.” Dkt. No. 134 at 5. For support, they cite prosecution-history and IPR statements purportedly distinguishing cited references that allow such access.

The Court agrees with Defendants. The patents use “privileges” and “conditions” similarly, and there appears to be no dispute about what “conditions” are. For example, the specification explains various drivers can each have their own user account, “which provides specific privileges (use capabilities, restrictions, limits, parameters, etc.)” ’026 Patent at 36:46–50. Elsewhere, the patents explain conditions of use “define[] one or more privileges associated to use of the e-key.” *Id.* at 4:65–66; *see also id.* at 6:60–63 (describing “use of the vehicle in accordance with conditions

defined in the privilege settings”).

This is consistent with how Plaintiff characterized the invention during a related IPR proceeding. The petitioner challenged claims from the ’026 Patent based in part on U.S. Published Application 2011/0112969 (Zaid), which Plaintiff said was “not directed to privileges or allowing various levels of access to vehicles.” Patent Owner’s Prelim. Resp., Dkt. No. 134-7 at 10. As Plaintiff explained:

In Zaid, a user reserves a vehicle using a server. “[T]he vehicle reservation is communicated to a wireless communication device of the user, “and the wireless communication device receives and caches the reservation.”

After decrypting the reservation, the wireless communication device forwards the decrypted reservation to a “vehicle access kit” of the vehicle. Then, unfettered “vehicle access is provided based on the received reservation.”

*Id.* (internal citations omitted). Plaintiff then emphasized its prosecution remarks that Zaid did not disclose “a unique access code that includes privilege settings set for additionally limiting types of use of the vehicle.” *Id.* at 17. In other words, Plaintiff equated “unfettered access” with the absence, not presence, of “privileges.” Given that, the Court agrees with Defendants that “privileges for use of the vehicle” cannot simply be “unfettered access” to the vehicle, which is the “plain and ordinary meaning” of these phrases on this record.

**D. Term 4: “communications circuitry of the vehicle . . . programmable to communicate with the server of the cloud system and communicate with a mobile device” (’026 patent, Claim 1)**

“the vehicle having wireless communication systems for communicating with the server or other servers and for communicating with devices local to the vehicle” (’188 Patent, Claim 1)

| Plaintiff’s Construction  | Defendants’ Construction   |
|---------------------------|--|
| No construction necessary | “communications circuitry in the vehicle configured to wirelessly communicate with a remote server and also wirelessly communicate with a local mobile device” |

According to Defendants, the parties dispute whether the “communication circuitry” and “communication systems” of these claims (1) must communicate with *both* a remote server and a mobile device, or (2) they need only communicate with a server, which then separately communicates with a mobile device. Dkt. No. 134 at 8. Defendants urge the former based on the claim language, the specification, and the file history. *Id.* at 9–10. But Plaintiff doesn’t dispute that these systems must be able to communicate with both a server *and* a mobile device, which it says is “readily apparent from the claim language without further construction.” Dkt. No. 138 at 3. The Court agrees, but because there is no apparent dispute about the meaning of these phrases, the Court will give them “plain and ordinary meaning” constructions.

**E. Term 5: “transmitting, by the server, the e-key to the recipient using the identifying information so that a device of the recipient is implemented to use the e-key” (’188 Patent, Claim 1)**

| Plaintiff’s Construction  | Defendants’ Construction   |
|---------------------------|--|
| No construction necessary | “transmitting, by the server, the ekey to a device of the recipient so that the device is able to locally communicate the ekey to the vehicle” |

This dispute centers on the meaning of “use the e-key.” With their construction, Defendants

construe that phrase as “locally communicate the e-key to the vehicle,” such as using WiFi or Bluetooth. Dkt. No. 134 at 10. Plaintiff says Defendants’ construction is incorrect because, not only is the claim language straightforward, but the specification describes embodiments in which “the vehicle receives ‘commands’ or ‘control actions’ remotely.” Dkt. No. 132 at 12–13. According to Defendants, however, the excerpts to which Plaintiff cites don’t mention the word “key,” and the only disclosure relating to a key describes sending the key to someone else, like a valet, who would provide the key via direct communication with the vehicle in question. Dkt. No. 134 at 11 (citing ’188 Patent at fig.26, fig.28, fig.29, fig.31A, fig.31B (showing Bob transferring electronic keys to a valet or John)). Defendants also stress the patents “discuss the advantages of direct communication between the recipient device and the vehicle.” Dkt. No. 134 at 10 (citing ’188 Patent at 44:49–45:4).

As discussed *supra*, an e-key is simply electronic data that enables one or more functions of the vehicle. While local communication of that data to the vehicle may be the most common way of using the data, the claims are agnostic as to how that data is transmitted. Although Plaintiff stresses the similarity between e-keys and physical keys, *see* Dkt. No. 132 at 4, clearly there are also important differences. No party suggests, for example, using an e-key requires the user’s device to physically contact the vehicle. Given that, Defendants’ requirement that using an e-key depends on the relative location of the device to the vehicle is unsupported. Accordingly, the Court rejects the “local communication” requirement of Defendants’ position and will give this term a “plain and ordinary meaning” construction.

- F. **Term 6: “a server” / “the server” / “said server”** (’026 Patent, Claims 1, 2, 6, 13, 15; ’659 Patent, Claims 1, 3, 4, 12, 13, 20; ’188 Patent, Claims 1, 11, 16, 17; ’268 Patent, Claims 10, 18)

| Plaintiff’s Construction  | Defendants’ Construction   |
|---------------------------|--|
| No construction necessary | “a networked computer” (the/said refers to the same networked computer)” |

Defendants call the crux of the dispute “whether a claim limitation reciting ‘a server’ and later ‘the server’ must refer to the same server, or whether it can be met by a different server.” Dkt. No. 134 at 12. They say these terms refer to the same “server,” and Plaintiff does not dispute that position in its reply. *See* Dkt. No. 138 at 4 (denying Defendants’ characterization of the dispute). Because there is no dispute to resolve, the Court will give this term a “plain and ordinary meaning” construction while clarifying that “the server” and “said server” refer to the previously recited “server.”

- G. **Term 7: “the vehicle is configured to receive information from the server to authenticate the request by the mobile device, and if the request is authentic, and the mobile device is provided with data to enable an electronic key to use the vehicle and the electronics of the vehicle instructs the subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle for use of the vehicle via the electronic key consistent with the privileges of the unique access code”** (’026 Patent, Claim 1)

| Plaintiff’s Construction  | Defendants’ Construction |
|---------------------------|--------------------------|
| No construction necessary | Indefinite               |

Defendants say this phrase is indefinite because of the “and” that appears after “if the request is authentic.” They call this a “conditional ‘if’ clause that is never closed, instead reciting multiple conditions with no corresponding ‘then’ clause.” Dkt. No. 134 at 14. They say “[t]here are multiple ways to rewrite the claim language to make it coherent, each requiring ignoring an

instance of the word ‘and’ to create the missing ‘then’ clause,” and “[e]ach alternative finds support in the specification.” *Id.* at 14–15. Because each of these alternatives is plausible, a skilled artisan would not understand the claim scope with reasonable certainty. *Id.* at 16. Plaintiff, however, says the claim is readily understandable: “If the request is authentic,” everything recited afterwards happens. Dkt. No. 132 at 17.

Resolving this dispute turns on whether there really are three reasonable alternatives, as Defendants suggest. They present the three alternatives as:

| Alternative | Condition   | Result  | Support                      |
|-------------|---|---|------------------------------|
| 1           | <i>if the request is authentic . . .</i>  | <del>and</del> [then] the mobile device is provided with data to enable an electronic key to use the vehicle and the electronics of the vehicle instructs the subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle for use of the vehicle via the electronic key consistent with the privileges of the unique access code.” | ’026 Patent at [57], 2:43–52 |
| 2           | <i>if the request is authentic, and the mobile device is provided with data to enable an electronic key to use the vehicle . . .</i>  | <del>and</del> [then] the electronics of the vehicle instructs the subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle for use of the vehicle via the electronic key consistent with the privileges of the unique access code.”  | ’026 Patent at 44:35–45:21   |
| 3           | <i>if the request is authentic, and the mobile device is provided with data to enable an electronic key to use the vehicle and the electronics of the vehicle instructs the subsystem of the vehicle to enable unlocking of the vehicle . . .</i> | <del>and</del> [then] enable starting of the vehicle for use of the vehicle via the electronic key consistent with the privileges of the unique access code.”   | ’026 Patent at 44:35–45:21   |

See Dkt. No. 134 at 15–16; see also Shoemake Decl., Dkt. No. 134-1 ¶¶ 59–60.

The parties agree Alternative 1 is reasonable and supported by the specification. Notably,

the Abstract supports only this interpretation. *See* '026 Patent at [57] (“[I]f the request is authentic, the mobile device is provided with data to enable an electronic key to use the vehicle . . .”).

The question is whether one or both of Alternatives 2 and 3 are also reasonable and supported by the specification. Defendants point broadly to column 44, line 35 through column 45, line 21, Dkt. No. 134 at 15, but the Court fails to see how that section treats anything other than “if the request is authentic” as a condition. Moreover, it would be odd to read this language as providing a mobile device with data enabling an e-key *regardless* of whether the request is authentic, which both Alternative 2 and 3 contemplate. As such, the Court finds only Alternative 1 a reasonable interpretation of this language based on consideration of the claim language and the specification.

Under *Novo Indus., L.P. v. Micro Molds Corp.*, 350 F.3d 1348, 1357 (Fed. Cir. 2003), the question then becomes whether the prosecution history suggests a different interpretation. Defendants assert it does, so correction is inappropriate. They emphasize Plaintiff tried to amend the claim during prosecution to remove the “and” after “if the request is authentic,” which would have aligned the language with Alternative 1, but the examiner rejected that amendment as broadening the claim’s scope. Dkt. No. 134 at 16. That different interpretation, however, would be the claim as written, which Defendants agree contains an error. And it would be odd to interpret *Novo* (and other cases about judicially correcting claims) as requiring that “the prosecution history does not suggest a different interpretation of the claims, even including interpretations that render the claim indefinite.” Regardless, to the extent the prosecution history supports a *reasonable* interpretation, it supports only the interpretation now urged by Plaintiff, as that was the result Plaintiff was trying to reach. Accordingly, the Court judicially corrects this language to Plaintiff’s construction of “if the request is authentic, the mobile device is provided . . .”

H. **Term 8: “a subsystem of the vehicle for enabling unlocking of the vehicle . . . a subsystem of the vehicle for enabling starting of the vehicle for use of the vehicle . . . the electronics of the vehicle instructs the subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle” (’026 Patent, Claim 1)**

| Plaintiff’s Construction  | Toyota’s Construction |
|---------------------------|-----------------------|
| No construction necessary | Indefinite            |

This is an antecedent-basis dispute. Specifically, Defendants assert ambiguity as to which of the previously recited systems in the same limitation is “instructed” by the electronics, or whether both are. Dkt. No. 134 at 18–19. Plaintiff says there is only one logical way to read the claim—that the electronics instruct the “enabling” subsystem and the electronic key (rather than the other subsystem) “enables starting of the vehicle for use of the vehicle.” Dkt. No. 132 at 19. Defendants call that position nonsensical because it ignores that electronics instruct the subsystem to both “enable unlocking of the vehicle and enable starting of the vehicle.” Dkt. No. 134 at 19–20. Moreover, they say Plaintiff “confuses the issue” by asserting Claim 1 recites “use” in two ways—“one relating to unlocking and one relating to starting.” *Id.* at 20.

This limitation is not indefinite. The claim read in its entirety shows the electronics are instructing each of the two recited subsystems. It starts by reciting four structural components: (1) electronics; (2) a first subsystem “for unlocking of the vehicle”; (3) a second subsystem “for enabling starting of the vehicle for use of the vehicle”; and (4) communications circuitry. ’026 Patent at 51:64–52:7. The last limitation—the “wherein” clause—explains how the four structural components work together. Notably, the “wherein” clause includes language perfectly tracking the previously recited functions of the two subsystems—“for unlocking of the vehicle” and “for enabling starting of the vehicle for use of the vehicle.” *Compare* ’026 Patent at 51:65–66, *with id.* at 52:22–

23; *id.* at 52:1–2, *with id.* at 52:23–24.

During the hearing, Defendants asserted the specification supports two other reasonable interpretations of the claim language. For example, Defendants asserted the claim language could mean the “starting” subsystem performs both functions, Hr’g Tr., Dkt. No. 166 at 58:13–17, but that would render the “unlocking” subsystem pointless. Similarly, Plaintiff’s “construction”—that the electronics instruct the “enabling” subsystem and the electronic key enables starting of the vehicle—would also render recitation of the second subsystem superfluous because it doesn’t otherwise appear in the claim or have any purpose.

Defendants also asserted an interpretation in which the unlocking subsystem enables unlocking and then “interfaces” with the starting subsystem to enable starting of the vehicle. Hr’g Tr., Dkt. No. 166 at 55:6–11. For support, they cited the patent’s explanation that “[t]he vehicle includes electronics and a subsystem of the vehicle for enabling unlocking of the vehicle. The subsystem is interfaced with the electronics and a subsystem of the vehicle for enabling starting of the vehicle for use of the vehicle.” ’026 Patent at 2:28–33. The claims, however, recite no such interfacing, except that “electronics” interface with the communications circuitry.

In short, a skilled artisan would be reasonably certain the recitation of “the electronics of the vehicle instructs the subsystem” refers to both previously recited subsystems. Accordingly, the Court construes this phrase as “the electronics of the vehicle instructs the respective subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle.”

I. **Term 9: “the vehicle sends data to the server during the use of the electronic key on the vehicle, the data including at least use metrics of the vehicle, the use metrics being stored by the server as history of use for the electronic key” (’026 Patent, Claim 13)**

“use of the vehicle using the eKey is tracked to identify and log actions taken using the vehicle while the eKey is used” (’659 Patent, Claim 1)

“use data regarding use of the vehicle for when the vehicle is used via the e-key” (’188 Patent, Claims 1, 16)

| Plaintiff’s Construction  | Defendants’ Construction  |
|---------------------------|---|
| No construction necessary | “tracking vehicle use metrics to determine whether the vehicle is used consistent with the privileges/conditions of the electronic key” |

Plaintiff says each of these phrases is readily understandable, and objects to Defendants’ requirement of “determin[ing] whether the vehicle is used consistent with the privileges/conditions of the electronic key.” Dkt. No. 132 at 23. Defendants respond that their construction is “grounded in the specification,” and properly captures the meaning of these terms considering the intrinsic record. Dkt. No. 134 at 22.

The Court agrees with Plaintiff. Although Defendants say their construction properly captures the meaning of these terms, they fail to show why that meaning is otherwise in doubt. None of these phrases requires “determin[ing] whether the vehicle is used consistent” with privileges or conditions. Notably, the first paragraph of Defendants’ argument relies heavily on other claim language, Dkt. No. 134 at 21–22, but if other claims include limitations that can be fairly characterized as “determin[ing] whether the vehicle is used consistent” with the privileges, that weighs against including such a requirement in this phrase. Accordingly, the Court rejects Defendants’ position and will give these phrases “plain and ordinary meaning” constructions.

**J. Term 10: “settings that should or may be made to the vehicle when using the e-key” (’188 Patent, Claim 17)**

| Emerging Auto’s Construction | Defendants’ Construction |
|------------------------------|--------------------------|
| No construction necessary    | Indefinite               |

Claim 17, which depends from independent Claim 16, requires the step of “learning the patterns, by a process executed by the server, to provide recommendations to the recipient or to an account of the recipient, for settings that should or may be made to the vehicle when using the e-key.” ’188 Patent at 51:44–47. Defendants say the last half of this limitation is “highly subjective and, on its face, provides little guidance to one of skill in the art.” Dkt. No. 134 at 22 (citing *Interval Licensing LLC v. AOL, Inc.*, 766 F.3d 1364, 1371 (Fed. Cir. 2014)). The patent, say Defendants, “does not provide any ‘objective indication’ for what renders a setting that ‘should or may be made’ to the vehicle.” *Id.* Moreover, the patent doesn’t define the difference between “should” and “may,” or provide any threshold or condition that separates the two. *Id.* at 23–24.

The Court rejects that position. The disputed phrase modifies “recommendations.” The method need only provide recommendations that settings “should or may” be changed. It doesn’t matter if those recommendations are advisable or wise—only that they are made. As for the difference between “should” and “may,” Defendants recognize the distinction in their briefing—one is permissive and the other is not. Dkt. No. 134 at 23. This phrase is not indefinite, and the Court will give it a “plain and ordinary meaning” construction.

**K. Term 11: “wherein the vehicle is configured to receive or securely store information from the server to perform authentication or verification that the coded data received from the mobile device should activate the eKey” (’659 Patent, Claim 3)**

| Plaintiff’s Construction  | Defendants’ Construction |
|---------------------------|--------------------------|
| No construction necessary | Indefinite               |

Defendants question whether the phrase “that the coded data . . .” modifies just “verification,” or whether it modifies the longer phrase “authentication or verification.” As they present it, a skilled artisan would not know whether the claim requires:

- (1) “(authentication [e.g., via user login]) or (verification that the coded data received from the mobile device should activate the eKey)” or
- (2) “(authentication or verification) (that the coded data received from the mobile device should activate the eKey).”

Dkt. No. 134 at 24 (colored text in original). Because, in their view, both interpretations have different scope and are supported by the intrinsic evidence, a skilled artisan would not understand this limitation with reasonable certainty. *Id.*

Plaintiff says “that the coded data . . .” modifies “authentication or verification,” the second of Defendants’ options, because that’s the only reasonable way to read the claim language. It points to the prosecution history and the abstract, the latter of which explains “the vehicle is configured to receive information from the servers to authenticate the request by the mobile device.” Dkt. No. 132 at 25 (quoting ’659 Patent at [57]).

To start, the Court agrees with Defendants that their first reading of this language is reasonable. The limitation only requires that “the vehicle is configured to receive . . . information from the server to perform authentication.” Figure 1 shows an “on board vehicle login interface,”

and the patent explains:

The user may also interact with the vehicle login system directly on or near the vehicle. The user supplies login credentials to a vehicle login interface which are sent to the remote distributed or centralized user login authentication system or onboard vehicle authentication system. The processing logic receiving the login credentials processes the data and returns an authentication response to the user attempting to log in.

'659 Patent at 19:22–29.

The Court, however, is not convinced the second reading is reasonable. Under that reading, the claimed sub-system authenticates “that the coded data received from the mobile device should activate the eKey.” But the specification does not describe authenticating “coded data.” Plaintiff points to the Abstract, but that refers to authenticating *the request* from a mobile device—not “coded data.” '659 Patent at [57] (“[T]he vehicle is configured to receive information from the server to authenticate the request by the mobile device.”). Plaintiff also points to the prosecution history, but it’s uninformative on the issue.<sup>3</sup>

Much like the evidentiary concepts of “authentication” and “hearsay,” “authentication” and “verification” are different things. “Authentication” refers to ensuring the request or data comes from the device or entity represented to be sending it without regard to the content. *See* Shoemake Decl., Dkt. No. 134-1 ¶ 89 (“An authentication code is typically something that indicates to the recipient whether the message has been tampered with during transit.”). Verifying the data

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<sup>3</sup> In a preliminary amendment without remarks, the applicants amended Claim 4 to recite “the vehicle is configured to receive information from the server to perform authentication or verification that authenticate the coded data received from the mobile device should [[to]] activate the eKey.” Amendment, Dkt. No. 132-8 at EA\_KIA-007169. With that amendment, Plaintiff could have simply been aligning the claim language with the specification.

concerns the content itself. That distinction, considered with the last-antecedent rule,<sup>4</sup> persuades the Court a skilled artisan would be reasonably certain the phrase has the first of the two meanings presented by Defendants. Accordingly, the Court construes this phrase as “wherein the vehicle is configured to receive or securely store information from the server to perform (1) authentication or (2) verification that the coded data received from the mobile device should activate the eKey.”

**L. Term 12: “identifying a selected vehicle for applying the user profile, the selected vehicle having a plurality of settable settings, the selected vehicle being one of a plurality of vehicles identified as available by the server” (’268 Patent, Claim 10)**

| Plaintiff’s Construction  | Toyota’s Construction  |
|---------------------------|--|
| No construction necessary | The server identifies two or more vehicles that are available <b>to the user</b> and identifies one of them as a selected vehicle for applying the user profile, the selected vehicle having two or more settable settings |

The parties have two disputes about this term. First, they dispute whether the server identifies a selected vehicle for applying the user profile. Second, they dispute what it means for a vehicle to be identified as “available.”

*1. Whether the server identifies a selected vehicle for applying the user profile*

Toyota asserts that during prosecution Plaintiff narrowed the limitation “to avoid prior art by adding and emphasizing the feature of the server identifying a vehicle selected from a plurality of available ones.” Dkt. No. 134 at 27. The narrowing amendment, however, only concerned the server identifying a plurality of vehicles as being “available.” ’268 Patent Prosecution History,

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<sup>4</sup> “The ‘rule of the last antecedent’ provides that, absent ‘other,’ contrary ‘indicia of meaning,’ ‘a limiting clause or phrase . . . should ordinarily be read as modifying only the noun or phrase that it immediately follows.’” *Apple Inc. v. United States*, 964 F.3d 1087, 1096 (Fed. Cir. 2020) (quoting *Lockhart v. United States*, 136 S. Ct. 958, 962–63, 194 L. Ed. 2d 48 (2016)).

Dkt. No. 134-5 at 197. Effectively, the amendment added an additional step to the claim requiring that a server first identify a plurality of vehicles as “available” and *then* a vehicle is identified from that server-identified plurality. Toyota cites nothing that suggests the identification of a vehicle from the server-identified plurality must *also* be performed by the server. Accordingly, the Court concludes the identification of a vehicle from the server-identified plurality of available vehicles need not be performed by a server.

2. *What it means for a vehicle to be identified as “available”*

Toyota says “available” in the disputed limitation means “available to apply the user’s profile”—that is, “the vehicle is available for allowing the user to put his settings that are specified in that profile into the vehicle.” Hr’g Tr., Dkt. No. 166 at 73:15–21. Plaintiff, however, considers the vehicle “available” even if it doesn’t satisfy all the user’s profile settings. *Id.* at 76:4–9 (“I think a vehicle is available to the user if the user is able to use the vehicle.”).

The intrinsic record shows “available” simply means something like “available for sharing.” The Abstract, for example, describes the inventions as methods of “providing access to cloud services over the Internet for locating and providing access to a shared vehicle of a shared vehicle network.” ’268 Patent at [57]. Moreover, the specification provides multiple examples of vehicles as “available to the user,” and none of these examples tie “availability” to a user profile. For example, the specification explains:

the servers 350 may receive a request to locate a vehicle on a map from a computing device. The request may be provided with reference to the user’s current location, using GPS or the like. The request is then processed by servers 350, [which] forward *a list of available vehicles proximate to the user* or for the users identified area in operation 362. In operation 364, a selection request is received from the user for a specific vehicle and a reservation is made for the use of the vehicle for a set period of time.

'268 Patent at 18:17–26 (emphasis added). The specification also explains that, “[i]n one embodiment, certain third-party applications can be reviewed by the vehicle site administrators before they are made *available to users for selection*.” *Id.* at 10:56–58 (emphasis added).

Figure 9 is particularly instructive. Figure 9A includes the step of forwarding a list of “available vehicles” proximate to the user for a user-identified area (step 362). Yet nothing in the specification suggests those available vehicles are chosen based on compatibility with the user’s profile. Rather, the specification suggests availability depends on “the user’s location, using GPS or the like.” ’268 Patent at 18:19–20. After the user requests a specific vehicle (step 364), the system transfers the user’s profile to that vehicle (step 370). And after the user finishes using the vehicle, the system adds the vehicle back into the list of “available vehicles” (step 376). If “availability” were tied to the user profile, Figure 9 would have shown it.

That “available” should not be limited as Defendants propose is also evident from consideration of the claim’s structure and how it relates to the specification. As noted *supra*, the amendment to this limitation effectively added a step of first “identifying a plurality of vehicles as available,” which is then followed (despite being recited first) by the existing step of “identifying, from the plurality of available vehicles, a vehicle for applying the user profile.” That doesn’t suggest the “plurality of vehicles” must be chosen based on whether they can apply the user’s profile. Rather, it suggests first determining which vehicles are available for sharing, and *then* choosing a vehicle from those available vehicles, to which the user’s profile will be applied. This aligns with the method disclosed in Figure 9.

To be fair, Toyota’s position depends more on the prosecution history than the specification, but that prosecution history is also unavailing. Specifically, Toyota’s argument relates to the amendment that added the last clause—“the selected vehicle being one of a plurality of vehicles

identified as available by the server.” Describing the amendment, the applicants explained “clarifications were made to claims 1 and 10, such as the determination of vehicle settings that are determined compatible or are identified in the user preferences of the user profile.” ’268 Patent Prosecution History, Dkt. No. 134-5 at 204. None of the applicant’s remarks, however, specifically addresses the meaning of “availability.”

Importantly, the applicants extensively amended the claims to make these “clarifications.” In other words, it wasn’t just the addition of new language to the disputed phrase. For example, the applicants added “by the server” throughout Claim 10, and also added “wherein the applicable settings are programmed on the selected vehicle after receipt by the selected vehicle over a wireless connection.” ’268 Patent Prosecution History, Dkt. No. 134-5 at 197. The amendments also included limiting Claim 10’s “determining” step to determining “settings that are preferred to be set as identified from the user profile and compatible with settings that are settable in the selected vehicle.” *Id.* It would be improper to hold these amendments collectively operate to limit “available” to “available for applying the user’s profile.”

The Court agrees, however, that the “availability” is “to the user,” as Toyota’s construction suggests. Plaintiff objects to that language, but its briefing about the basis for that objection is sparse. *See* Dkt. No. 132 at 26; Dkt. No. 138 at 9. At the hearing, however, Plaintiff objected to the notion that “available” means “available to the user” because “there are many examples in the specification that do not comport with that understanding. Hr’g Tr., Dkt. No. 166 at 77:4–6. For support, it pointed to column 6’s disclosure of a user who buys a new car and then applies his settings to that car. *Id.* at 77:7–13. But that disclosure is not covered by Claim 10, which is clearly

directed to a shared-vehicle embodiment.<sup>5</sup>

For the foregoing reasons, the Court construes this limitation as “identifying a selected vehicle for applying the user profile, the selected vehicle having a plurality of settable settings, the selected vehicle being one of a plurality of vehicles identified as available to the user by the server.”

**M. Term 13:**

**“determining, by the server, applicable settings for the selected vehicle, the applicable settings being settings that are preferred to be set as identified from the user profile and are compatible with settings that are settable in the selected vehicle” (’268 Patent, Claim 10)**

**“the user profile having user settings for the vehicle, wherein certain of the user settings are determined to be compatible for use with the vehicle” (’268 Patent, Claim 20)**

| Plaintiff’s Construction  | Toyota’s Construction   |
|---|---|
| The parties agree these limitations require a <b>“compatibility check”</b> where the server / cloud based system determines whether settings are compatible with the vehicle. Otherwise, no construction necessary. | the server / cloud based system determines applicable settings by performing a <b>compatibility check</b> to determine which settings that are preferred to be set as identified from the user profile are able to be set in the selected vehicle |

The parties agree these claims require a “compatibility check.” Toyota says the check must also “determine which settings that are preferred to be set as identified from the user profile are able to be set in the selected vehicle.” Dkt. No. 134 at 28. Although this language is already in Claim 10, it is not in Claim 20. Toyota, however, fails to cite any evidence that says Claim 20 should also include this requirement. *See id.* at 28–29. Nor does Toyota set forth any basis for

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<sup>5</sup> Although Claims 1 and 20 were also extensively amended during prosecution, only Claim 10 was amended to include the “vehicles identified as available by the server” language that tracks the embodiment shown in Figure 9.

disclaimer. Accordingly, the Court will give these terms “plain and ordinary meaning” constructions.

- N. **Term 14:** “communicating to the cloud processing system by the vehicle, changes to user settings, the cloud processing system processing the changes and other changes to the user settings to learn behavior associated with the changes to the user settings; and receiving by the vehicle, from time to time, automatic changes to the user settings of the vehicle, wherein a repeat pattern of the changes is qualified as learned behavior before the automatic changes are sent to the vehicle for programming on the vehicle, wherein the user profile is configured to be updated to account for the automatic changes made to the user settings of the vehicle” (’268 Patent, Claim 20)

| Plaintiff’s Construction  | Toyota’s Construction |
|---------------------------|-----------------------|
| No construction necessary | Indefinite            |

These two limitations are more understandable when reproduced as shown in the patent:

communicating to the cloud processing system by the vehicle, changes to user settings, the cloud processing system processing the changes and other changes to the user settings to learn behavior associated with the changes to the user settings; and

receiving by the vehicle, from time to time, automatic changes to the user settings of the vehicle, wherein a repeat pattern of the changes is qualified as learned behavior before the automatic changes are sent to the vehicle for programming on the vehicle, wherein the user profile is configured to be updated to account for the automatic changes made to the user settings of the vehicle . . . .

’268 Patent at 34:52–64 (highlighting by Toyota).

Toyota makes two challenges. First, it says “[t]he red-highlighted instance of ‘the changes’ ambiguously could refer to either or both of ‘changes to user settings’ [in yellow] and ‘other changes to the user settings’ [in green].” Dkt. No. 134 at 30. Second, “[t]he pink-highlighted instance of ‘the changes’ ambiguously could refer to any combination of ‘changes to user settings,’

[in yellow], ‘other changes to the user settings’ [in green], and/or ‘automatic changes to the user settings.’” *Id.*

The Court disagrees. As to the first challenge, “the changes” (in red) refers more broadly to both the then-communicated changes and the “other” changes from which the behavior is learned. The method involves, for example, “detecting pattern similarities in changes made to the profiles, of different users, based on respective learned user input.” ’268 Patent at 4:12–14. The learned setting is based on the difference in user input over time or from different similar users. Thus, these excerpts show the learned behavior is output from processing both sets of recited changes, as it would be impossible to have the recited “learned behavior” with only the then-communicated changes.

The same holds true for the second challenge. Determining a “repeated pattern of changes” requires comparing the changes then communicated to the server to something else. “The changes” cannot be “the automatic changes” because the behavior is qualified as “learned” before sending the automatic changes.

At the hearing, Toyota presented three “plausible interpretations” for the term that varied based on who was making the changes. Specifically, Toyota said the learned behavior could be associated with changes made by one user, other users, or both. *See* Hr’g Tr., Dkt. No. 166 at 85:18–86:8. The claim, however, is agnostic as to who is making the changes. It only matters that “user settings” are changed. Accordingly, the Court rejects that those are plausible interpretations that lead to different claim scope and construes this term as:

communicating to the cloud processing system by the vehicle, changes to user settings, the cloud processing system processing the changes and other changes to the user settings to learn behavior associated with **the communicated and other changes** to the

user settings; and  
 receiving by the vehicle, from time to time, automatic changes to the user settings of the vehicle, wherein a repeat pattern of **the communicated and other changes** is qualified as learned behavior before the automatic changes are sent to the vehicle for programming on the vehicle, wherein the user profile is configured to be updated to account for the automatic changes made to the user settings of the vehicle . . . .

**V. CONCLUSION**

| Term | Disputed Term   | The Court’s Construction  |
|------|---|---|
| 1    | “electronic key”/ “eKey”/ “e-key”<br>(’026 patent, Claims 1, 2, 6, 13, 15; ’659 Patent, Claims 1, 3, 4, 12, 13, 20; ’188 Patent, Claims 1, 11, 16, 17; ’268 Patent, Claims 10, 18)  | “electronic data that enables one or more functions of the vehicle” |
| 2    | “the unique access code is associated with privileges for use of the vehicle, the privileges are defined for the unique access code”<br>(’026 Patent, Claim 1)<br>“the e-key being assigned with the condition of use for the vehicle” / “the e-key being associated with the condition of use of the vehicle”<br>(’188 Patent, Claims 1, 16) | Plain and ordinary meaning  |
| 3    | “privileges for use of the vehicle”<br>(’026 Patent, Claim 1)<br>“privilege settings for use of the vehicle”<br>(’659 Patent, Claim 18)<br>“condition of use of the vehicle”<br>(’188 Patent, Claims 1, 16)   | Plain and ordinary meaning  |

|   |   |   |
|---|---|---|
| 4 | <p>“communications circuitry of the vehicle . . . programmable to communicate with the server of the cloud system and communicate with a mobile device”<br/>                 (’026 Patent, Claim 1)</p> <p>“the vehicle having wireless communication systems for communicating with the server or other servers and for communicating with devices local to the vehicle”<br/>                 (’188 Patent, Claim 1)</p>           | Plain and ordinary meaning  |
| 5 | <p>“transmitting, by the server, the e-key to the recipient using the identifying information so that a device of the recipient is implemented to use the e-key”<br/>                 (’188 Patent, Claim 1)</p>  | Plain and ordinary meaning  |
| 6 | <p>“a server” / “the server” / “said server”<br/>                 (’026 Patent, Claims 1, 2, 6, 13, 15; ’659 patent, Claims 1, 3, 4, 12, 13, 20; ’188 Patent, Claims 1, 11, 16, 17; ’268 Patent, Claims 10, 18)</p>   | Plain and ordinary meaning  |
| 7 | <p>“if the request is authentic, and the mobile device is provided with data to enable an electronic key to use the vehicle and the electronics of the vehicle instructs the subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle for use of the vehicle via the electronic key consistent with the privileges of the unique access code”<br/>                 (’026 Patent, Claim 1)</p> | <p>“if the request is authentic, the mobile device is provided with data to enable an electronic key to use the vehicle and the electronics of the vehicle instructs the subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle for use of the vehicle via the electronic key consistent with the privileges of the unique access code”</p> |

|    |  |  |
|----|--|--|
| 8  | <p>“the electronics of the vehicle instructs the subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle”<br/>                 ('026 Patent, Claim 1)</p>   | <p>“the electronics of the vehicle instructs the respective subsystem of the vehicle to enable unlocking of the vehicle and enable starting of the vehicle”</p>  |
| 9  | <p>“the vehicle sends data to the server during the use of the electronic key on the vehicle, the data including at least use metrics of the vehicle, the use metrics being stored by the server as history of use for the electronic key” ('026 Patent, Claim 13)</p> <p>“use of the vehicle using the eKey is tracked to identify and log actions taken using the vehicle while the eKey is used”<br/>                 ('659 Patent, Claim 1)</p> <p>“use data regarding use of the vehicle for when the vehicle is used via the e-key”<br/>                 ('188 Patent, Claims 1, 16)</p> | <p>Plain and ordinary meaning</p>  |
| 10 | <p>“settings that should or may be made to the vehicle when using the e-key”<br/>                 ('188 Patent, Claim 17)</p>  | <p>Plain and ordinary meaning</p>  |
| 11 | <p>“wherein the vehicle is configured to receive or securely store information from the server to perform authentication or verification that the coded data received from the mobile device should activate the eKey”<br/>                 ('659 Patent, Claim 3)</p>   | <p>“wherein the vehicle is configured to receive or securely store information from the server to perform (1) authentication or (2) verification that the coded data received from the mobile device should activate the eKey”</p> |

|    |   |  |
|----|---|--|
| 12 | <p>“identifying a selected vehicle for applying the user profile, the selected vehicle having a plurality of settable settings, the selected vehicle being one of a plurality of vehicles identified as available by the server”<br/>(’268 Patent, Claim 10)</p>  | <p>“identifying a selected vehicle for applying the user profile, the selected vehicle having a plurality of settable settings, the selected vehicle being one of a plurality of vehicles identified as available to the user by the server”</p> |
| 13 | <p>“determining, by the server, applicable settings for the selected vehicle, the applicable settings being settings that are preferred to be set as identified from the user profile and are compatible with settings that are settable in the selected vehicle”<br/>(’268 Patent, Claim 10)</p> <p>“the user profile having user settings for the vehicle, wherein certain of the user settings are determined to be compatible for use with the vehicle”<br/>(’268 patent, claim 20)</p> | <p>Plain and ordinary meaning</p>  |

|    |  |   |
|----|--|---|
| 14 | <p>“communicating to the cloud processing system by the vehicle, changes to user settings, the cloud processing system processing the changes and other changes to the user settings to learn behavior associated with the changes to the user settings; and</p> <p>receiving by the vehicle, from time to time, automatic changes to the user settings of the vehicle, wherein a repeat pattern of the changes is qualified as learned behavior before the automatic changes are sent to the vehicle for programming on the vehicle, wherein the user profile is configured to be updated to account for the automatic changes made to the user settings of the vehicle”</p> <p>(’268 Patent, Claim 20)</p> | <p>“communicating to the cloud processing system by the vehicle, changes to user settings, the cloud processing system processing the changes and other changes to the user settings to learn behavior associated with the communicated and other changes to the user settings; and</p> <p>receiving by the vehicle, from time to time, automatic changes to the user settings of the vehicle, wherein a repeat pattern of the communicated and other changes is qualified as learned behavior before the automatic changes are sent to the vehicle for programming on the vehicle, wherein the user profile is configured to be updated to account for the automatic changes made to the user settings of the vehicle . . . .”</p> |
|----|--|---|

The Court **ORDERS** each party not to refer, directly or indirectly, to its own or any other party’s claim-construction positions in the presence of the jury. Likewise, the Court **ORDERS** the parties to refrain from mentioning any part of this opinion, other than the actual positions adopted by the Court, in the presence of the jury. Neither party may take a position before the jury that contradicts the Court’s reasoning in this opinion. Any reference to claim construction proceedings is limited to informing the jury of the positions adopted by the Court.

**SIGNED this 13th day of May, 2025.**

  
 ROY S. PAYNE  
 UNITED STATES MAGISTRATE JUDGE