

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOYOTA MOTOR CORP.,
Petitioner,

v.

EMERGING AUTOMOTIVE LLC,
Patent Owner.

Case No. IPR2024-00814
U.S. Patent No. 11,396,244

PETITIONER'S REPLY TO PATENT OWNER'S RESPONSE

TABLE OF CONTENTS

	Page
I. INTRODUCTION	1
II. CLAIM CONSTRUCTION	3
A. The Plain Language of the Claims Does Not Support Excluding “Causation” from the Claim Scope	3
B. Patent Owner’s Case Law Does Not Support Excluding “Causation” from the Claim Scope	5
C. The Specification Does Not Support Excluding “Causation” From the Scope of the Claims	5
D. Patent Owner’s New Construction Cannot be Squared with Its Earlier Positions	8
III. THE CLAIMS ARE OBVIOUS.....	9
A. <i>Rector</i> ’s Disclosures Are Not Mutually Exclusive	11
B. <i>Rector</i> Discloses the Recited “transferring is configured to instruct” Step of the Independent Claims.....	18
C. <i>Rector</i> in Combination With <i>Kleve</i> Renders Obvious the “verifying” Step of Claims 1[b] and 17[b].....	21
IV. CONCLUSION.....	25

I. INTRODUCTION

The Board was right to institute *inter partes* review of the challenged claims. Patent Owner's arguments against the instituted grounds fail for multiple reasons.

Patent Owner first attempts to characterize the Petition as combining “disparate teachings from *Rector*'s distinct embodiments.” POR, 17. Patent Owner seeks to distinguish a supposed first embodiment involving a “Smart Car” from a supposed second embodiment involving a server. But what Patent Owner identifies as the “Smart Car” embodiment explicitly teaches a server in the very same paragraph that Patent Owner cites and excerpts. *Rector*, [0043]. Nowhere does *Rector* state that Patent Owner's “first embodiment” is incompatible with or mutually exclusive from Patent Owner's “second embodiment.” To the contrary, *Rector*'s invention includes systems involving both a smart vehicle and a server, and addresses how they interact. Nothing in *Rector* requires its teachings to be viewed separately in the way Patent Owner suggests.

Under the guise of claim construction, Patent Owner next seeks to distinguish *Rector* by arguing that it fails to disclose the recited “transferring is configured to instruct” step of the independent claims. Patent Owner argues for the first time that the Board should construe “configured to” to mean “designed, adapted or programmed to accomplish the specified objective.” But this is not how Patent Owner seeks to distinguish *Rector*.

Instead, Patent Owner seeks to distinguish *Rector* by arguing that “causation” does not teach the claimed “transferring.” Patent Owner is wrong. The claims are not so limited. Neither Patent Owner’s construction nor anything else precludes *Rector*’s causation from teaching the claimed “transferring.” As explained in the petition, *Rector* teaches that a transmission from the server causes the hardware/software of the vehicle to “implement” “settings for the driver.” Petition, 31 (citing *Rector*, [0031]-[0034], [0038], [0043], [0057], [0059]). That constitutes the claimed “transferring” even under Patent Owner’s new construction. Nothing more is required.

Finally, Patent Owner misinterprets the Petition’s combination of *Rector* and *Kleve*, arguing (1) that adding *Kleve*’s server-side authentication to *Rector*’s client-side authentication is somehow less secure, providing no evidentiary support and contradicting *Kleve*’s express teachings, and (2) that *Kleve* does not teach the elements for which the Petition relies on *Rector*. But Patent Owner’s arguments are unsupported and irrelevant.

Patent Owner’s arguments cannot overcome the plain, express teachings of the prior art disclosing all the claimed features and motivations to combine them as claimed, while establishing a reasonable expectation of success in doing so. The Board should cancel all challenged claims.

II. CLAIM CONSTRUCTION

Patent Owner contends, for the first time, that the claim language “the transferring is configured to instruct . . .” should be construed to mean “‘the transferring’ is designed, adapted or programmed to instruct . . .” POR, 41. Regardless of whether Patent Owner’s new construction has merit, it is not a basis for distinguishing the prior art because *Rector* and *Kleve* render obvious the instituted claims even under Patent Owner’s new, narrow interpretation.

Worse, Patent Owner asserts that its construction is necessary to distinguish “transferring that is merely ‘capable of’” instructing vehicle electronics. *Id.* But Patent Owner’s application of its proposed construction further narrows the claims to exclude not just capability, but also causation. POR, 42. There is no reason to exclude causation from the scope of “designed, adapted or programmed to instruct.” Patent Owner’s additional narrowing of its already admittedly “narrow[]” construction should fail.

A. The Plain Language of the Claims Does Not Support Excluding “Causation” from the Claim Scope

Claim 1 of the ’244 patent is a method claim including a step of “transferring”:

transferring, by the server, upon verifying the user information, one or more settings of the plurality of settings to the vehicle, **the transferring is configured to instruct software and / or hardware associated with said**

electronics of the vehicle to apply said one or more
settings to the vehicle for customizing said vehicle to use
said one or more settings associated with the profile,

'244 Patent, claim 1 (emphasis added).

The disputed claim language, emphasized in red above, is prefaced by an action performed by “the server”—namely—transferring “settings to the vehicle.” The disputed language describes the purpose of this transferring, i.e., “to instruct software and / or hardware associated with said electronics of the vehicle to apply said one or more settings to the vehicle.” Claim 1. Accordingly, the “server” performs the actions of (1) “verifying the user information” and (2) transferring “settings to the vehicle,” while the “transferring” is configured to “instruct software and / or hardware associated with said electronics of the vehicle to apply said one or more settings.”

Patent Owner contends that “*Rector* fails to teach that the identified ‘transmitting’ is the ‘transferring is configured to instruct’” recited in the claims because “[n]either capability nor causation teaches the required ‘transferring is configured to instruct . . . ,’ as recited by the independent claims.” POR, 42. This is the first and only time that Patent Owner alleges that “causation” is beyond the scope of the disputed limitation, despite this argument being essential to Patent Owner’s supposed distinguishing of *Rector*. But as illustrated above, nowhere does the claim require or even suggest that “configured to instruct software and /or

hardware” means something narrower than “causes hardware and or software of the vehicle to apply said one or more settings.”

B. Patent Owner’s Case Law Does Not Support Excluding “Causation” from the Claim Scope

Patent Owner cites several cases distinguishing between “configuration” and “capability” claims. None of these cases support EA’s ultimate conclusion, i.e., that “causation” should be excluded from the scope of the claims, even under Patent Owner’s narrow construction

C. The Specification Does Not Support Excluding “Causation” From the Scope of the Claims

Because the plain language of the claims and cited cases do not support its proposed narrowing, Patent Owner attempts to impermissibly read language from the specification into the claims. *See Promptu Sys. Corp. v. Comcast Corp.*, 92 F.4th 1372, 1379 (Fed. Cir. 2024) (“Our case law has long recognized that particular features recited in the specification merely as aspects of embodiments, and not expressly or even implicitly identifying requirements of the invention, do not narrow a claim term that is otherwise broader in its ordinary meaning.”). For example, Patent Owner asserts that “[b]y the ‘transferring is configured to instruct,’ [] the claimed inventions enable the ‘seamless[] transfer’ of the user’s custom configuration of settings, regardless of the vehicle type.” POR, 15. But the claim language is not limited to a “seamless transfer” between vehicles of different

types. Rather, the claims read on all transfers to any vehicles. And regardless, the specification's recitation of a "seamless transfer" does not exclude or disclaim "causation" from the scope of the claims. Likewise, the claims do not recite the transfer of a "profile" or "automatically setting" the settings, and this disclosure, too, fails to amount to a clear disclaimer of claim scope. POR, 15 (citing '244 patent, 19:51-67)

Patent Owner also contends that "the server can utilize 'mapping engine 118'" such that "the server transferring operation allows for" the configuration to be transferred. POR, 15-16. But Patent Owner does not seek to construe the claims' recitation of "transferring, by the server." Whether the server "can utilize" a mapping engine to accomplish an earlier limitation has no bearing on whether "causation" is encompassed by the disputed limitation. Nothing in the '244 Patent precludes a prior art reference that discloses "causing hardware and or software of the vehicle to apply said one or more settings." *See* POR, 8, 15 (citing '244 patent at 11:9-18, 22:50-23:42, 23:24-34, 19:51-67, claims 1, 2, 17).

In fact, none of Patent Owner's citations imparts the requirement Patent Owner seeks to read into the plain language of the claims. Further, the specification explicitly characterizes Patent Owner's alleged support as exemplary or optional.

Patent Owner's Citation ¹	Patent Owner's Quotation	Actual Language of '244 Specification
11:9-28	-	“the custom from the user configuration <i>can</i> be transferred to other vehicles” ² “the user <i>can</i> login to the custom configuration” “the custom configuration <i>can</i> be transferred from one vehicle to another”
22:50-63	“the user's settings are seamlessly transferred. . .”	“ <i>In one embodiment</i> , the user's settings are seamlessly transferred. . .”
23:24-34	“only some settings are directly transferrable”	“ <i>In some cases</i> , only some settings are directly transferrable.”
19:57-67	-	“the settings . . . <i>can</i> be sent back to the user profile.”
19:51-67	“[t]he transfer of the profile will allow the settings of the user to automatically be set in the vehicle”	“FIG. 9A shows <i>one example process</i> In operation 370, the users profile is transferred to the vehicle. The transfer of the profile will allow the settings of the user to automatically be set in the vehicle.”
23:34-42	-	“ <i>In some cases</i> , only some settings are directly transferrable.”
17:3-7 ³	“that communicates with the automakers database . . .”	“The mapping engine 118, <i>in this example</i> includes a map or that communicates with the automakers database . . .”

¹ See POR, 15-17.

² All emphasis added.

³ Patent Owner's citation is incorrect. The correct citation for Patent Owner's excerpt is Ex. 1001, 18:13-17.

7:31-50	“the custom configuration [to] be transferred either entirely or partially to the new vehicle”	“ <i>In other embodiments</i> , when a user buys a new car, the custom configuration <i>can</i> be transferred either entirely or partially to the new vehicle.”
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Patent Owner identifies no clear disclaimer of claim scope. The first-named inventor, a patent attorney himself, carefully drafted the specification to avoid any disclaimer and read as broadly as possible. Patent Owner’s selective quoting cannot overcome the broad language of the claims. The specification plainly does not support the Patent Owner’s proposed narrowing.

D. Patent Owner’s New Construction Cannot be Squared with Its Earlier Positions

The instituted claims of the ’244 patent were asserted against Toyota at the time of filing the petition. *See Emerging Automotive LLC v. Kia Corporation et al.*, Case No. 2:23-cv-00437-JRG (E.D.Tex. Sept. 22, 2023). Following the USPTO’s denial of Patent Owner’s two requests for Certificate of Correction, Patent Owner withdrew the ’244 patent from the co-pending litigation.

Prior to withdrawing the ’244 Patent from litigation, however, Patent Owner served infringement contentions on Toyota. Patent Owner’s infringement contentions demonstrate a remarkably broad interpretation of the disputed limitation. There, Patent Owner alleged that the “transferring is configured to instruct” limitation is met because “Toyota transfers cloud-stored User Profile data from Toyota’s server to the [vehicle], using the vehicle’s factory installed

telematics system [] to communicate with Toyota’s server and apply one or more settings to the vehicle for customizing the vehicle. . . .” Ex. 1012 at 56. Notably absent from Patent Owner’s mapping is any showing of a “design[], adapt[ation] or program[ing] to accomplish” the “instructing” in the accused system, nor is there a showing of any particular “instruction” or “causation” beyond what is disclosed by the prior art in this IPR.

Patent Owner also exchanged proposed terms and claim elements for construction with Toyota. For the five patents at issue in the co-pending litigation, including the 244 patent, Patent Owner offered only the following statement:

Emerging Auto does not identify any terms that should be construed.

Ex. 1032 (9/12/24 email from Jerry Tice).

Yet now, Patent Owner argues for a specific construction of limitation 1[d] of the ’244 patent (“the transferring is configured to instruct...”) that it never sought in the district court. Patent Owner cannot treat the claims as a “nose of wax” to be “twisted and turned in any direction” to suit its needs. *White v. Dunbar*, 119 U.S. 47, 51 (1886). Patent Owner’s attempt to have its claims interpreted broadly at the district court and narrowly at the PTAB should be rejected.

III. THE CLAIMS ARE OBVIOUS

First, Patent Owner argues that the petition “rewrite[s]” the *Rector* reference because *Rector* “neither teaches nor suggests the server-executed steps of

‘processing . . . to verify the user for accessing the profile’ (claim 1[b]/17[b]) or ‘the transferring is configured to instruct’ (claims 1[c]/17[c]).” POR, 17. Patent Owner alleges that there is not sufficient rationale to combine *Rector*’s “different embodiments,” and therefore the “transferring” steps of limitations 1[b] and 17[b] are not met. POR, 17. But Patent Owner’s only basis for contending that *Rector*’s teachings are somehow “distinct” is an interpretation of *Rector*’s “alternative[]” functionality so extreme as to “teach[] away” from that very functionality. POR, 28.

Patent Owner next argues that *Rector* “fails to disclose the recited ‘transferring is configured to instruct’ step of the independent claims” even if its “different embodiments” argument is wrong. POR, 41. Here, Patent Owner relies on its new, erroneous claim construction argument in an attempt to show that *Rector* does not teach “the transferring is configured to instruct.” But even under Patent Owner’s flawed construction, *Rector* plainly teaches this limitation.

Finally, Patent Owner argues that “neither *Rector*, nor *Rector* in combination with *Kleve*, teaches or suggests the server processing information to verify the user. . . .” POR, 47. Here, Patent Owner reiterates same argument it made before institution. *Compare* POPR, 39-49 *with* POR, 47-57. And the Board should again reject the argument.

A. *Rector's* Disclosures Are Not Mutually Exclusive

Rector's invention, like the '244 patent, includes a system involving both a “smart vehicle” and a “server,” and describes how the two components interact. *Rector* never suggests that its teachings are mutually exclusive. The fact that *Rector* discusses its invention with reference to a method, system, or other class of claim does not somehow cabin its teachings into separate, mutually exclusive embodiments. Nor does the inclusion of multiple figures in *Rector's* disclosure. Notably, Patent Owner does not identify any specific portion of the grounds of invalidity relying on *Rector* where the petition supposedly attempts to modify *Rector* to account for purported deficiencies. This is because the Petition does not attempt to modify the teachings of *Rector* to combine different embodiments.

Patent Owner corrals the teachings of *Rector* into two supposedly “distinct embodiments.”⁴ First, Patent Owner defines a “method of controlling a driver’s settings on a smart vehicle,” i.e., *Rector* Fig. 3 and [0043], as a first embodiment. Second, Patent Owner tries to distinguish a “system of controlling a driver’s

⁴ Patent purports to find a third “embodiment” in *Rector's* [0057] and figure 9.

POR, 32. Patent Owner provides no discussion of, or rationale for, the “distinct[ness]” of this “embodiment.” It is not distinct. *Rector* expressly links it to the other *Rector* embodiments. *Rector* [0057],

settings,” i.e., *Rector* Fig. 1, [0031], and claim 1, as a second embodiment. POR, 21. Patent Owner’s sole citation, a comparison of *Rector*’s paragraph 9 and claim 1 with paragraph 43 and figure 3, nowhere describes these “embodiments” as being separate or distinct. Nonetheless, Patent Owner argues that the “method of controlling a driver’s settings on a smart vehicle” requires a smart vehicle to execute every step and thus is distinct from the sever-controlled “system of controlling a driver’s settings.” POR, 22. In other words, Patent Owner’s basis for alleging the *Rector*’s disclosures are “distinct embodiments” is that some disclosures discuss a smart vehicle while others discuss a server. In fact, *Rector*’s invention includes systems involving both a smart vehicle and a server, and how they interact.

At the outset, Patent Owner requests the Board to give *Rector*’s claim 1 (i.e., Patent Owner’s first embodiment) an interpretation that excludes, or is distinct from, *Rector*’s paragraph 43 and Figure 3 (i.e., Patent Owner’s second embodiment). But the Federal Circuit advises against “interpret[ing] claim terms in a way that excludes embodiments disclosed in the specification.” *Oatey Co. v. IPS Corp.*, 514 F.3d 1271, 1276 (Fed. Cir. 2008). Excluding *Rector*’s “method of controlling a driver’s settings” (Patent Owner’s first embodiment) from its “system of controlling driver’s settings” (Claim 1 and Patent Owner’s second embodiment)

would only be correct if the “embodiments” are “clearly disclaimed in the specification.” *Id.* Patent Owner identifies no such disclaimer. Nor is there one.

Further, Patent Owner failed to recognize that *Rector*’s “method of controlling a driver’s settings on a smart vehicle” and “system of controlling a driver’s settings” are both recited in *Rector*’s as-issued claim set. *Compare* Ex. 1031, claim 1 *with* Ex. 1031, claim 8. Yet the examiner never issued a restriction requirement, at least suggesting that the examiner did not find the “embodiments” of claims 1 and 8 to be mutually exclusive and distinct, as Patent Owner so asserts. *See* MPEP 806.05(j) (requiring restriction where “the inventions as claimed . . . are mutually exclusive” and “are [] not capable of use together”); *see also* MPEP 802.01.

The examiner’s determination is correct. There is no reason to pigeon-hole *Rector*’s teachings as Patent Owner argues. On the contrary, *Rector* is clear that its Fig. 1, Fig. 3, paragraph [0043], paragraph [0031], and claim 1 disclosures can be applied to one another. *See Rector*, [0029] (“For the following description, it can be assumed that most correspondingly labeled structures across the figures (e.g., 132 and 232, etc.) possess the same characteristics and are subject to the same structure and function.”), [0051] (“The concept of backup identification can also be applied to the passengers in the smart vehicle.”), [0060] (“The foregoing disclosure of the exemplary embodiments of the present invention has been presented for

purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise forms disclosed.”). There is no basis for treating the disclosures as mutually exclusive, as Patent Owner asserts.

Regarding *Rector*’s Fig. 3, Patent Owner argues that each of steps S350-S356 must be performed “on the smart vehicle.” POR, 22-27. Yet, Patent Owner admits that *Rector*’s “method of controlling a driver’s settings on a smart vehicle” explicitly teaches comparing unique identifiers and determining a driver ID via “a server on a network” as an “alternative” option. POR, 24 (citing *Rector*, [0043]).

Rector states:

FIG. 3 shows a **method of controlling a driver's settings on a smart vehicle**, according to an exemplary embodiment of the present invention.

...

A client logic and processor on the smart vehicle compares the unique identifier with a set of unique identifiers stored on a memory of the smart vehicle. **Alternatively, the unique identifier may be compared with a set of unique identifiers on a server on a network.** With the identity of the driver determined, the smart vehicle looks up settings for the driver S352. These settings may include driver created settings, controlling authority settings, etc. **The settings are determined by comparing the driver's identity with a database of identities with corresponding settings. This database**

may be on the network, on the driver's device, on the
Smart vehicle's memory, etc.

...

Rector, [0043] (emphasis added).

Patent Owner then concludes that “[determining driver ID and looking up settings for driver] can be accomplished without the server at all, confirming that it is the vehicle, and not any server, that does the comparing.” POR, 24. But *Rector*’s disclosure of optionally performing these steps on a server is far from confirming that the steps are performed only by the vehicle, and not the server. *See Upsher-Smith Labs. v. Pamlab, LLC*, 412 F.3d 1319, 1323 (Fed. Cir. 2005) (reference disclosing optional inclusion of a particular component teaches compositions that both do and do not contain that component). Patent Owner goes on to state that “[m]issing from this embodiment is any teaching of any server transmission or server transfer of settings from the database.” POR, 28. But *Rector* discloses a “settings server” that “determine[s] the permitted settings for the user” and “transmit[s] the permitted settings to the [vehicle].” *Rector*, Claim 1; *see also* Petition, 27-28; Ex. 1005, ¶ 127. This “settings server” is the “server” discussed in paragraph 43 above. Ex. 1030, ¶ 14. There is no reason to exclude the “settings server,” and the functions that *Rector* teaches the “settings server” performs, from an “embodiment” discussing this very server. And even if *Rector* alone did not

teach “transferring, by the server, upon verifying the user information, one or more settings of the plurality of settings to the vehicle,” the obvious combination of *Rector* and *Kleve* does. Petition, 27-30; *see also* Ex. 1005, ¶ 127-33.

Further, Patent Owner fails to recognize that the Board already determined that, in *Rector*, “[t]he unique identifier may be compared with a set of unique identifiers on a server on a network.” Institution Decision, 14 (quoting *Rector*, [0043]). The Board further determined that *Rector*’s “[s]erver logic 132 at settings server 103 matches the driver’s identify with corresponding settings from database 134 on sever 130” (*id.*, 29), and that “Petitioner has provided sufficient explanation,” undisputed by Patent Owner, that the prior art discloses the claimed “transmitting” step (*id.*, 33-35). There is no reason for the Board to diverge from these findings.

Patent Owner next suggests that *Rector* teaches away from *Rector*’s own recitation of “alternatively” utilizing a server to accomplish the steps of Figure 3, questioning “why *Rector*’s method would require that the smart vehicle re-consult the database settings at step S354” in an attempt to show “incompatibil[ity].” POR, 28-29. But there is plainly no “incompatibility” or exclusivity between consulting a server once, twice, or any other number of times. That is, receiving a transmission from a server on a first and second occasion is not inconsistent with receiving a

transmission from a server on a first occasion. Patent Owner’s “teaching away” argument is nonsensical.

Finally, Patent Owner attempts to fault Petitioner for not showing that “the features of [*Rector*’s] various embodiments are interchangeable or that one skilled in the art would have combined those features in the manner proposed by Petitioner” (POR, 30) and that “a POSITA would have had a reasonable expectation of success in combining the embodiments” (POR, 38). But there is no reason for any such showing because the Petition does not propose any combination of “incompatible . . . embodiments.” The Petition maps precisely what *Rector* teaches: determining the identity of the driver, “[a]lternatively, . . . on a server on a network” (*Rector*, [0043]), “match[ing] the driver’s identify with corresponding settings from database 134 on sever 130” (Institution Decision, 29), and “transmit[ing] the permitted settings to the [vehicle]” (*Rector*, claim 1).

In light of Patent Owner’s failure to identify any supposed distinction between its first and second embodiments, it would be improper to compartmentalize *Rector*’s disclosures. *See Upsher-Smith Labs.*, 412 F.3d at 1323; *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004) (“The prior art’s mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed....”); M.P.E.P. §

2123(I) (citing *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804 (Fed. Cir. 1989)

(“a reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill in the art.”).

B. *Rector* Discloses the Recited “transferring is configured to instruct” Step of the Independent Claims

Patent Owner argues that the independent claims require that the prior art must be “designed, adapted, or programmed to accomplish the specified objective of the limitation ‘to instruct software. . . .’” POR, 41. Regardless of whether Patent Owner’s construction has merit, it does not distinguish *Rector*.

According to Patent Owner, “[n]one of Dr. Almeroth’s identified disclosures of *Rector* describe any instruction to apply settings for customizing the vehicle.” POR, 45. Dr. Almeroth’s testimony and the Petition’s *Rector* citations, however, both demonstrate that *Rector* discloses the “transferring” limitation even under Patent Owner’s new construction. *Rector*’s “transmitting” is “designed, adapted, or programmed to accomplish the specified objective of the limitation ‘to instruct software. . . .’” to apply the settings for customizing a vehicle. *See* Petition, 31 (citing *Rector* [0031–34, 38, 43, 57, 59]).

For instance, *Rector* describes a “server logic” existing on the “settings server” for “transmit[ting] the permitted settings to the [vehicle].” *Rector*, claim 1. The vehicle then “limits functions of the smart vehicle based upon the permitted settings.” *Id.* Specifically, “[w]ith the settings determined for the driver, the smart

vehicle detects an attempted change of a setting.” *Rector*, [0043]. “The smart vehicle determines whether the attempted change of the setting is permitted,” and if it is, “the change is allowed.” *Id.* Further, based on the identification of the driver’s identity, *Rector*’s vehicle may implement “controlling authority settings” received from the settings server, such as a maximum speed using a speed governor. *Rector*, [0031-0032].

Even under Patent Owner’s proposed construction, *Rector*’s “causation” disclosure, i.e., *Rector*’s transmitting of settings causing the vehicle to implement the settings, plainly teaches that “‘the transferring’ is designed, adapted or programmed to instruct . . .” Ex. 1005, ¶¶ 134-137. It is nonsensical to suggest otherwise. *Rector*’s settings being implemented on receipt of the transmission is not a coincidence—it is by design.

Patent Owner dedicates four sentences to disputing whether *Rector* discloses “causation” at all. Specifically, because “*Rector* does not use the term ‘cause,’” *Rector* supposedly does not disclose the “transmitted settings caus[ing] the client logic to implement them.” POR, 42-43 (quoting Ex. 1005, ¶ 134). Dr. Malek shares this language but provides no further analysis. *See* Ex. 2003, ¶ 69. But there is no need for *Rector* to recite the term “cause” when it plainly discloses “transmit[ing] the permitted settings to the client logic, wherein the client logic limits functions of the smart vehicle *based upon the permitted settings*.” *Rector*,

[0009] (emphasis added). It is the transmitting of the permitted settings that precipitates the “limit[ing],” i.e. setting, step. *Rector* does not disclose that the client logic on the vehicle can ignore the permitted settings received from the server; nor would a POSITA expect this to be a possibility. Ex. 1030, ¶ 16. As identified above, *Rector* discloses transmitting “settings determined for the driver” to the vehicle, which then applies and enforces the settings such that the smart vehicle may enact “limits” and “determine whether [an] attempted change of the setting is permitted.” *Rector*, [0032], [0043]. Nothing more is required by the claim limitation.

Patent Owner’s additional arguments likewise fail.

Patent Owner parrots its earlier “distinct embodiment” argument, i.e., that the “smart vehicle itself,” and not *Rector*’s disclosed server, “determines what functions to limit on the vehicle.” POR, 43. Patent Owner is incorrect for the reasons discussed above and, at any rate, Patent Owner’s quarrel regarding which of *Rector*’s entities “determines what functions to limit on the vehicle” is irrelevant to whether *Rector*’s “transferring” causes the settings to be implemented. POR, 43.

Patent Owner next encourages the Board to compare the “inventions” of the ’244 patent with *Rector*. POR. 43. Patent Owner points the Board to an excerpt of the ’244 patent (23:34-42). But this excerpt does not define the claims. To the contrary, it uses exemplary language like “[in] some cases,” “[i]n other

embodiments,” “[i]n one embodiment.” ’244, 23:34-42. Any comparison between such exemplary language and *Rector* is irrelevant.

Finally, Patent Owner’s citation to case law illustrating that simple “capability” is not enough to disclose its proposed construction fails for the reasons discussed above. POR, 44-45. *Rector* teaches more than “capability”: *Rector* teaches causation. That is enough. Patent Owner identifies nothing that would require more than causation to render the claims unpatentable.

C. *Rector* in Combination With *Kleve* Renders Obvious the “verifying” Step of Claims 1[b] and 17[b]

Patent Owner states that “no alleged server in *Rector* performs this ‘comparing,’ verifies a user, or otherwise processes user information to verify a user.” POR, 47. As the Board correctly noted, the Petition does not rely on *Rector* alone to teach “processing . . . to verify the user for accessing the profile.” Institution Decision, 29. Thus, the Board can again dismiss this portion of Patent Owner’s argument.

Next, Patent Owner claims that “*Kleve* does not even stand for the proposition claimed by Toyota” and that Toyota relies on *Kleve*’s teaching “about ‘additional security’ via remote credential verification *as limited to* server-side verification.” POR, 52 (emphasis added). Neither is true. First, *Kleve* plainly describes facilitating “additional security” by requiring remote credential verification. *Kleve*, [0049]. This verification “may be done [] using a server.” *Id.*

Second, the Petition describes “applying *Kleve*’s server-side verification” to *Rector*’s invention and is not “limited” to only server-side verification. Petition, 22. As Dr. Almeroth’s first declaration confirms, “[t]he server-side verification could also be done as a check on local verification.” Ex. 1005, ¶ 122.

Patent Owner next alleges that “the petition has not shown that a POSITA would have been motivated to modify *Rector*’s more secure client-side verification with a less secure server-side verification.” POR, 51. Here, Patent Owner disputes the motivation for combining *Rector* and *Kleve* on the basis that “modifying a local, client-side verification system with a less-secure server-side system does not provide the additional security that the Petition claims.” *Id.* But Patent Owner’s argument is directly contrary to the express teachings of *Kleve*, as the Board already found.

Kleve teaches “further extend[ing]” a system “to facilitate virtual key with **additional security** by requiring remote credential verification at the vehicle.” *Kleve*, [0049] (emphasis added). The Board emphasized this language from *Kleve* in its institution decision, noting that Patent Owner’s expert, Dr. Malek, did not provide an underlying basis for his opinion that server-side verification is less secure, and expressly invited the parties to further develop the record. Institution Decision, 33. Patent Owner, however, **provided no additional testimony** from Dr.

Malek. *Compare* Ex. 2001 at ¶¶65–66 with Ex. 2003 at ¶¶78–79 (identical). Patent Owner’s failure to address this point is telling.

The addition of server-side verification plainly is a “security feature,” as Patent Owner previously argued in its First Amended Complaint and as *Kleve* describes. *See* Ex. 1025 at ¶¶90-91 (asserting that the “**security feature** of the **server verifying** the user for ‘accessing the profile’ was featured in prosecution and used as a basis to overcome prior art.”) (emphasis added). As Dr. Almeroth further explains, “[u]tilizing both server-side and client-side verification, for example, in a multi-factor authentication scheme, would minimize or eliminate any security disadvantages associated with server-side verification alone. Just as having two locks on your door is more secure than one, a two-step, local and server-based authentication scheme would prevent a bad actor from obtaining access to the system should any one authentication method be compromised.” Ex. 1030, ¶ 21 (Almeroth).

Finally, Patent Owner attacks the Petition’s reliance on *Kleve* for teaching server-side verification, claiming that “[*Kleve*’s] alleged server only verifies credentials for accessing a vehicle, not verifying the user for accessing a user profile. . . .” POR, 54. As the Board previously noted, Patent Owner again misstates the proposed combination. Institution Decision, 31. The Petition does not rely on *Kleve* to teach any profile settings—this is disclosed by *Rector*. Petition,

28. The Petition illustrates that *Rector*'s "settings" are implemented only upon determining the identity of the driver (Petition, 28 (citing *Rector* [0010], [0043], [0057])), and this is not disputed by Patent Owner. In fact, Patent Owner recognizes that "*Rector* utilizes the term 'verifying the driver's identity' to describe various means by which the smart vehicle . . . 'can verify that the correct party is determined to be the driver.'" POR, 50 (citing *Rector*, [0047]-[0048]). The proposed combination is not to substitute *Rector*'s "settings" with some other "settings" disclosed in *Kleve*, but rather to perform *Kleve*'s server-side "verifying" in the invention disclosed by *Rector*. Petition, 30.

With this context, Patent Owner's arguments do not hold up. Patent Owner states that "*Kleve*'s teaching about verifying to grant access to a vehicle cannot be the required verifying for accessing a profile with a plurality of settings." But the Petition never contends that *Kleve*'s verifying is "for accessing a profile with a plurality of settings." Rather, as conceded by Patent Owner, *Kleve* discloses "verifying [a user identity] to grant access to a vehicle." It would have been obvious to combine *Kleve*'s server-side identity verification with *Rector*'s "method of controlling driver settings to transmit settings upon verifying" such that *Rector* performs *Kleve*'s server-side verification instead of (or in addition to) *Rector*'s supposedly client-side verification. *Rector* teaches "verifying the user for accessing the profile." Petition, 24-26 (citing *Rector*, [0047], [0049]); *Rector*, claim 1. *Kleve*

teaches “verifying the user” on a server. Petition, 24-26 (citing *Kleve*, [0037], [0049], [0069], [0072], Fig. 6). Implementing the server-side teaching from *Kleve* does not dissolve *Rector*’s “verifying the user for accessing the profile.”

Patent Owner never contends that a POSITA would be unable to make such a combination. Patent Owner never contends that the teachings of *Rector* and *Kleve* are incompatible. Patent Owner’s sole basis for disputing the combination’s disclosure of this limitation is that *Kleve* does not teach the elements for which the Petition relies on *Rector*. Patent Owner’s argument fails.

In any case, Patent Owner’s characterization of *Kleve* is wrong. *Kleve* explains that credential authorization may be processed by a server, upon which personalized “enhancements” are applied to the vehicle, including “radio presets, seat and mirror position, and ambient lighting preferences.” *Kleve*, [0048]-[0050], Fig. 3B. *Kleve* also shows that “Personal Settings” (which may be retrieved from the server (Fig. 6)) “May be Applied to the Vehicle . . .” after verification done in preparation of operating the vehicle. *Kleve*, [0048]-[0050], [0063]-[0072], Fig. 6. Thus, even if the Patent Owner correctly captured the proposed combination, its argument would fail, nonetheless.

IV. CONCLUSION

For these reasons, the Board should find the challenged claims unpatentable.

Respectfully submitted,

Dated: May 9, 2025

By: /Joshua L. Goldberg/
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Counsel for Petitioner

CERTIFICATE OF COMPLIANCE

Pursuant to 37 C.F.R. § 42.24(c)(1), the undersigned hereby certifies that the foregoing PETITIONER'S REPLY contains 5,577 words, excluding the parts exempted under 37 C.F.R. § 42.24(c), as measured by the word-processing system used to prepare this paper.

Dated: May 9, 2025

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CERTIFICATE OF SERVICE

The undersigned certifies that a copy of the foregoing **Petitioner's Reply** was served on May 9, 2025 via email directed to counsel of record for Patent Owner at the following.

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