

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOYOTA MOTOR CORP.,
Petitioner,

v.

EMERGING AUTOMOTIVE LLC,
Patent Owner

Case IPR2024-00814
U.S. Patent 11,396,244

**DECLARATION OF DR. SAM MALEK IN SUPPORT OF PATENT
OWNER'S RESPONSE**

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I, Dr. Sam Malek, declare under penalty of perjury as follows:

I. INTRODUCTION AND BACKGROUND

1. I have been retained as an expert witness on behalf of Emerging Automotive LLC (“Emerging Auto”) to provide information and assistance regarding U.S. Patent No. 11,396,244 (“the ’244 patent”). Specifically, I have been asked to consider the Petition for Inter Partes Review numbered IPR2024-00814 (“the Petition”) regarding the ’244 patent, and specifically the Declaration of Dr. Almeroth (EX1005) that accompanies the Petition.

2. In this declaration I provide my independent analysis of the ’244 patent in light of the materials cited below and discussed herein and my knowledge and experience in this field during the relevant time frame. I have been asked to consider what one of ordinary skill in the art at the time of the invention of the ’244 patent (a “POSITA,” *see* Section V below) would have understood from the specification, including scientific and technical knowledge related to the patent. I have also been asked to consider whether certain references anticipate or would have rendered obvious the inventions described in the claims of the ’244 patent.

3. My findings, as explained below, are based on my study, experience, and background in the fields discussed below, informed by my education and my extensive experience in the field of cloud-based processing systems. I have also relied on my review and analysis of the references identified by Dr. Almeroth,

information provided to me, and information that I have independently reviewed. I have personal knowledge of the facts and opinions set forth in this declaration, and, if called upon to do so, I would testify competently thereto.

4. I am being compensated for my independent analysis as an expert with respect to this *inter partes* review proceeding. My compensation is not contingent in any way on the content of my analysis, the opinions that I offer, or the outcome of this proceeding. I have no financial interest in Petitioner (Toyota) or Patent Owner (Emerging Auto), and I have no financial interest in the '244 patent.

II. QUALIFICATIONS

5. My qualifications for forming the opinions given in this declaration are summarized here and are addressed more fully in my curriculum vitae, which is submitted as EX2002. That exhibit also includes a list of my publications.

6. I have approximately 25 years of experience in the general area of computer and software technology in a variety of roles, including as a software engineer, software architect, and programmer at a variety of companies, as well as a researcher and professor at several universities.

7. I am currently a Full Professor of Software Engineering with tenure in the Informatics Department within the School of Information and Computer Sciences at the University of California, Irvine. I am also the Director of the Software Engineering and Analysis Laboratory ("SEAL"). My general research

interests are in the field of software engineering, and to date my focus has spanned the areas of software analysis and testing, mobile computing, architecture and design, and software dependability and security. The underlying theme of my research has been to devise techniques and tools that aid with the construction, analysis, and maintenance of largescale software systems.

8. I received my Ph.D. and M.S. degrees in Computer Science from the University of Southern California and my B.S. degree in Information and Computer Science from the University of California, Irvine. I have received numerous awards for my research contributions, including the Test of Time Award from the Association for Computing Machinery Special Interest Group on Software Engineering (2020), National Science Foundation CAREER award (2013), GMU Emerging Researcher/Scholar/Creator award (2013), and the GMU Computer Science Department Outstanding Faculty Research Award (2011).

9. I have authored over 130 peer-reviewed research publications. These publications have been highly cited (more than 11,000 times according to scholar.google.com). Many of my publications have dealt with the topics that are related to this proceeding, including distributed software systems, cloud computing, client-server architecture, and software settings and configuration. I provide a few examples here.

10. My Ph.D. dissertation resulted in novel algorithms for optimizing the deployment architecture of a distributed software system. The deployment architecture of a distributed software system is the allocation of its software components to its hardware devices. There are many deployments of a software system possible, but some may be superior to others with respect to certain quality of service objectives (e.g., latency, availability, security). One application of my dissertation work was in the context of cloud computing, because in most cloud-based software systems there are many geographically distributed nodes (servers) available for the deployment of software components.

11. I have also worked on techniques to leverage cloud computing for software testing. For instance, in an article titled “A Whitebox Approach for Automated Security Testing of Android Applications on the Cloud,” I showed how the resources in the cloud can be effectively harnessed to facilitate security testing at scale.

12. In another article titled “GLIDE: A Grid-based Lightweight Infrastructure for Data-intensive Environments,” I described the results of my work with colleagues from NASA in the development of a new distributed software system for sharing large amounts of data generated by NASA. This capability was the first of its kind in the realm of Grid Computing, which is a precursor to Cloud Computing.

13. I have also investigated how the user preferences with respect to certain settings can interact when users share a common physical space. For example, in an article titled “Towards Multi-Design of Situated Service-Oriented Systems,” I described an automated solution for resolving conflicts between user-preferred settings in shared physical spaces.

14. I have received numerous research grants from a variety of organizations, including the National Science Foundation (NSF), Federal Bureau of Investigation (FBI), Air Force Office of Scientific Research, Department of Homeland Security (DHS), National Security Agency (NSA), Defense Advanced Research Projects Agency (DARPA), Office of the Director of National Intelligence, and Army Research Office among others. Software systems and results produced in my research lab have been adopted for use by various organizations in both private (e.g., Boeing, Bosch) and public (e.g., NASA, DHS, FBI) organizations. Many of the above-mentioned projects and software systems involved analysis and design of client-server software systems deployed on the cloud. For instance, in a project called “RASS: Resilient Autonomic Software Systems” funded by Air Force Office of Scientific Research, I led a team of researchers to develop a new method of automatically adapting Air Force’s software systems to fluctuations in communication networks, thereby making them resilient to network interruptions.

15. I also have several years of experience as a software engineer, software architect, and programmer at a variety of companies, namely the Boeing Company, PricewaterhouseCoopers Consulting (later acquired by International Business Machines (“IBM”) Corporation), FieldCentrix, and Neural Computing Systems Lab. During my tenure in the industry, I gained professional experience in the design, development, and management of largescale software engineering efforts. Among the software systems that I designed and developed were commercial ecommerce and enterprise software systems. Many of the software systems developed in the context of my professional experience were built according to the general client-server architectural style and deployed on the cloud or cloud-like environments. In most of these systems, the server held the state of the distributed application, allowing for that state, such as the preferred user settings, to be transferred to client at runtime.

16. I have taught software engineering and computer science courses on a regular basis at the B.S., M.S., and Ph.D. levels at the universities where I have been employed. I cover concepts related to cloud computing, distributed software, client-server architectural style, and user preferences and settings in many of the courses that I teach at the university. Notably, I have regularly taught distributed software engineering courses at UC Irvine and previously at George Mason University (GMU). In these courses, I cover concepts such as the client-server architectural

style, cloud computing principles, and server-side storage of user-defined preferences.

17. I have been a frequent speaker at scientific conferences, symposia, workshops, and gatherings of software engineering academics and professionals. I have served as chair, committee member, and reviewer for numerous software engineering journals, magazines, and conferences. I have served on the editorial board of the ACM Transactions on Software Engineering and Methodology, IEEE Transactions on Software Engineering, the ACM Transactions on Autonomous and Adaptive Systems, the Springer Journal of Automated Software Engineering, and the Springer Journal of Computing. I am a member of the Association for Computing Machinery (ACM), ACM Special Interest Group on Software Engineering (SIGSOFT), and the Institute of Electrical and Electronics Engineers (IEEE). I have testified at trial and deposition as an expert witness in numerous cases in the past five years.

18. Because of my background, training, and experience, I am qualified as an expert in the technical areas relevant to the '244 patent and I am a POSITA.

III. MATERIALS CONSIDERED

19. In preparing this declaration and forming my opinions, I have considered: the claims, specification, and prosecution history of the '244 patent; the Petition and declaration by Dr. Almeroth (including all materials cited in each); and

all materials cited and discussed in this declaration. In addition, I have considered the relevant legal standards, as they have been explained to me by counsel and as I understand them. I have also considered the knowledge and understanding of a person of ordinary skill at the time of the invention of the '244 Patent, of which I am familiar. As part of my analysis for this matter, I have also considered my own knowledge and experience, including my work and experience with cloud-based processing systems.

IV. LEGAL PRINCIPLES

20. In forming my opinions here, I have applied the following understanding of certain legal concepts related to anticipation, obviousness, combinations of references, and knowledge of one of ordinary skill in the art. Counsel for Patent Owner has informed me of legal principles that apply in this proceeding.

21. It is my understanding that assessing the validity / patentability of a U.S. patent claim based on a prior art analysis requires two essential steps. First, one must analyze the terms of the patent claims to understand what meaning one of ordinary skill in the art would give the terms. Second, one may then assess validity by comparing a patent claim to the “prior art.” I understand that the teaching of the prior art is viewed through the eyes of a person of ordinary skill in the art at the time

the invention was made. My opinion as to what constitutes a relevant person of ordinary skill in the art is set forth below.

22. I have been informed that in order for a patent claim to be invalid as anticipated by a prior art reference under 35 U.S.C. § 102, each and every element of that patent claim must be found disclosed in that reference, explicitly or inherently, to a person of ordinary skill in the art. Inherent disclosure requires that the claimed element be the only possible option given the other disclosures of the reference, and that it would be so recognized by persons of ordinary skill in the art. I also understand that the missing descriptive material cannot merely be probably or possibly present. If any single element of a claim is not disclosed in the reference, the entire claim is not anticipated. I understand that a prior art reference merely capable of being modified so as to operate in the same manner as the patented device or system does not anticipate. I further understand that obviousness is not inherent anticipation, and that it is insufficient that a missing limitation is so similar to a limitation actually disclosed in the reference that one of ordinary skill in the art would see the substitution as obvious. I also understand that, if it is necessary to reach beyond the boundaries of a single reference to provide missing disclosure of the claimed invention, the proper ground for asserting invalidity is not anticipation, but obviousness.

23. I understand that a claim is invalid as obvious under 35 U.S.C. § 103 if the differences between the claimed subject matter and the prior art are such that the subject matter as a whole would have been obvious at the time of the invention to a person having ordinary skill in the art.

24. I understand that a person of ordinary skill in the art provides a reference point from which the prior art and the claimed invention should be viewed. This reference point prevents one from using his or her own insight or hindsight in deciding whether a claim is obvious.

25. I have been informed that the following factors are used to determine whether or not the claimed subject matter would have been obvious: (i) the scope and content of the prior art; (ii) the differences between the prior art and the claimed invention; (iii) the level of ordinary skill in the field of the invention; and (iv) any relevant objective considerations of non-obviousness, such as commercial success, long-felt but unresolved needs, failure of others, etc.

26. I also understand that in considering the scope and content of the prior art, references must be reasonably related (i.e., analogous) to the claimed invention of that patent. I understand that the test for determining whether a prior art reference constitutes analogous art to the claimed invention is (1) whether the reference is from the same field of endeavor, regardless of the problem addressed and, (2) if the

reference is not within the field of the inventor's endeavor, whether the reference is still reasonably pertinent to the particular problem the inventor is trying to solve.

27. I understand that a party asserting obviousness based on a combination of prior art references must demonstrate that one of ordinary skill in the art would have been motivated to combine the teachings of those references to achieve the claimed invention and that the skilled artisan would have had a reasonable expectation of success in doing so. It is my understanding that it is not enough to show that one skilled in the art could combine elements of multiple references, but instead there must be some reason that would have prompted a person of ordinary skill in the art to combine the elements in the way the claimed invention does. I understand that there must be some reasoned explanation as to why one of ordinary skill in the art would combine the references. The reason cannot come from hindsight.

28. I understand that in considering whether a claimed invention is obvious, one may but is not required to find obviousness if at the time of the claimed invention there was a reason that would have prompted a person having ordinary skill in the field of the invention to combine the known elements in a way the claimed invention does, taking into account such factors as: (1) whether the claimed invention was merely the predictable result of using prior art elements according to their known function(s); (2) whether the claimed invention provides an obvious solution to a

known problem in the relevant field; (3) whether the prior art teaches or suggests the desirability of combining elements claimed in the invention; (4) whether the prior art teaches away from combining elements in the claimed invention; (5) whether it would have been obvious to try the combinations of elements, such as when there is a design need or market pressure to solve a problem and there are a finite number of identified, predictable solutions; and (6) whether the change resulted more from design incentives or other market forces. To find it rendered the invention obvious, the prior art must provide a reasonable expectation of success. Obvious to try is not sufficient in unpredictable technologies.

29. I understand that each claim must be evaluated separately for obviousness, and that it is improper to use hindsight. I understand that the disclosures in a patent or a prior art reference are viewed from the perspective of a person of ordinary skill in the art at the time of the invention. The obviousness analysis by a person of ordinary skill in the art must consider only what was known at the time of the invention.

30. It is my further understanding that obviousness cannot be based on a hindsight combination of components selected from prior art references. I also understand that an invention would not have been obvious simply because all of the elements of the invention may have been known separately in the prior art.

31. I understand that a combination of references would not have been obvious if the alleged modification(s) to be made to the reference(s) would have been inconsistent with the reference's stated goals or would have rendered the combination inoperable for its intended purpose. I further understand that for something to have been obvious, the party asserting obviousness must explain why a POSITA would have selected components for combination in the manner claimed.

32. I have been informed that a prior art reference must be considered in its entirety, i.e. as a whole, including portions that would lead away from the claimed invention.

33. I understand that with respect to claim construction, the proper construction is considered in the context of, and must be consistent with, the specification and that the claim language should be read in light of the specification and file history as it would be interpreted by one of ordinary skill in the art. I further understand that any claim interpretation that renders a claim term or phrase superfluous is disfavored.

V. PERSON OF ORDINARY SKILL IN THE ART ("POSITA")

34. Counsel for Patent Owner has informed me that a person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art at the time of the invention. In my opinion, the relevant field of art for the '244 patent is that of cloud-based processing systems.

35. For the purpose of this Declaration, and based on my opinions herein, the time of invention for the '244 patent is April 2011. However, I understand that Dr. Almeroth opines that the time of the invention is March 2013. Any invention date from the early 2010s to the mid-2010s would not alter my opinion regarding a person of ordinary skill in the art. Thus my opinion regarding a POSITA applies to either a date of invention in April 2011 or a date of invention in March 2013.

36. I have been informed by counsel for Patent Owner that the person of ordinary skill is generally familiar with the type of problems encountered in the field and the prior art solutions to those problems and possesses an ordinary level of creativity.

37. I understand that Petitioner's expert, Dr. Almeroth, opined that a person of ordinary skill in the art "have had at least a four-year undergraduate degree in electrical engineering, computer science, or a closely related field, with at least two to four years of experience in the field of cloud services for settings customization. Additional education (such as a Master's degree in electrical engineering, computer science, or equivalent) could substitute for professional experience and vice versa." EX1005, Almeroth Decl., ¶ 89.

38. For purposes of this declaration, I apply Dr. Almeroth's definition. However, I note that the opinions I set forth below are applicable under any reasonable definition of a POSITA.

VI. BACKGROUND

A. Overview of the '244 Patent

39. The '244 patent, titled “Methods for Transferring User Profiles Between Vehicles Using Cloud Services,” was filed on February 11, 2020 and issued on July 26, 2022. *See* '244 Patent, cover page. The '244 Patent claims priority to multiple earlier applications, the earliest of which was filed on April 22, 2011. *Id.*, 1:7-33.

40. The '244 patent “relates to systems and methods for managing user profiles for vehicles and exchange of information with cloud-based processing systems.” '244 Patent, 1:37-39. As the '244 patent recognizes, the Internet services provide access to cloud services. The cloud services provide access to user accounts and access to settings, configurations, applications and other customization defined by the user. Customization can include a master user of a vehicle having a master user account with administrator credentials, placing restrictions on a selected vehicle according to different users. *Id.* 6:19-46; 10:15-24; 13:37-14:39. For example, as described in the '244 Patent, a master user may configure sub-user roles and settings of the profile for selected vehicles, so that when a particular sub-user logs into a selected vehicle, that sub-user has predefined privileges for the selected vehicle, e.g., enabled or restricted settings or functions of the vehicle. *Id.*; *see id.*, 3:40-44. The patent relates to managing user profiles for vehicles, including transferring user

profiles between vehicles, wherein cloud-based processing systems exchange information with software and/or hardware associated with vehicle electronics to synchronize user profile settings across different vehicles, while verifying user profile access and applying user profile settings according to logins defined by administrator-set roles and privileges/restrictions. *See also id.*, Figs. 2-5.

B. Prosecution History of the '244 Patent

41. I also analyzed the prosecution history of the '244 patent in forming my opinions. Of particular relevance here, I disagree with Dr. Almeroth's opinions that a POSITA would ignore limitations of the claims. In my opinion, claim 1 expressly requires "processing, by the server, at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle" *Id.*, 33:9-32 (Claim 1). Similarly, independent claim 17 requires "processing, by one of the servers, at least part of the user information to verify the access for the user, the profile having a plurality of settings of the user for the vehicle" *Id.*, 34:66-35:21-24 (Claim 17). In my opinion, Dr. Almeroth ignores these limitations by stating that the "comparing" functions of *Rector*, which are performed by a "smart vehicle," not a server, can allegedly satisfy the server verification limitation of claim 1. EX1005, ¶ 118-20. In my opinion, a POSITA would not ignore the limitations as Dr. Almeroth proposes, especially in light of the examples provided in the patent specification and

prosecution history which demonstrate the meaning and importance of these limitations, e.g., enabling a user account administrator to toggle settings according to logins or roles to be enforced depending on when a specific condition or event is detected.

42. During prosecution, the Examiner rejected then pending claims 1-20 in view of the *Zellner* reference. The Applicant then made amendments to the claims to clarify their meaning and overcome the rejection. Specifically, the Applicant amended independent claims 1 and 17, and stated that the amendments were adding language to each of “the independent claims to clarify the process for verifying the user for accessing a profile that has settings stored in storage of a cloud services system.” EX1002, 206; *id.* at 198, 202, 204-05.

43. For example, the Applicant amended claim 1 as follows:
processing, by the server, at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle and at least one of said plurality of settings being restricted for use on the vehicle, wherein at least part of the plurality of settings for the profile being stored on storage accessible to the cloud services system; and
Id., 198.

44. The Applicant argued that the amendments made to each of the independent claims clarified “the process for verifying the user for accessing a

profile that has settings stored in storage of a cloud services system” and “further clarified, it is not recited that at least one of said settings are restricted for use on the vehicle.” *Id.*, 206. Applicant cited to Figures 4 and 5 of the specification as examples of how some settings may be restricted depending on the login credentials of the user. *Id.* For example, the specification had illustrated “one sample of many potential configuration settings for a given vehicle,” wherein a “CHILD” user, or “User 2,” has a login that contains a set of settings that may or may not be configurable by User 2 since User 2 is not an administrator, and by contrast to an administrator login, the person logging in as User 2 has limited access to the user profile, that is, User 2 can only edit a subset of settings in the user profile. EX1001, 16:44-49, Fig. 4. For instance,

fuel use settings allow an admin[istrator] to choose what type of fuel the user login CHILD is allowed to use while logged into the vehicle. Similarly, location based settings allows an administrator to draw out a map of the area the user login CHILD is allowed to travel within while logged into the vehicle.

Id., 16:54-60.

45. The Applicant also cited Figure 5 as one of the “many ways of doing the restriction.” EX1002, 206. Figure 5 illustrates an example in which additional vehicle settings that are configurable by the user with the login ‘CHILD’ and those that are only configurable by User one being the Administrator. FIG. 5 also describes

a subset of settings a user login CHILD in this case is allowed to change. For example, the user login CHILD is allowed to select his or her radio stations, streaming services, and Internet access settings for a unified experience in any vehicle they log into using this log in. Similarly, the user login CHILD can access driving modes and set the vehicle mode to sport for instance. EX1001. 16:61-17:7, Fig. 5.

46. As the Applicant explained, “the restriction can be set for the vehicle by an administrator, e.g., which could be the owner of the vehicle or entity that has control of the vehicle, e.g., the manufacturer, the leasing entity, the sharing entity, a parent, an owner, etc.” and “[i]n this manner, other settings that are not restricted can be transferred to the vehicle (and vehicle to vehicle) and set once the user information is verified.” EX1002, 206-07. The Applicant also added independent claim 21, and like independent claims 1 and 17, claim 21 requires that one of the servers processes user information for accessing the profile of settings, with at least one of the settings being restricted for use on the vehicle. *Id.*, 204-05; *see also id.*, 207.

47. The Applicant relied on this recited server functionality—verifying the user information of the user for accessing a profile that has setting stored in storage of a cloud services system, wherein at least one of the settings are restricted for use on the vehicle—to traverse the Examiner’s *Zellner* anticipation rejection.

48. The Applicant argued that the *Zellner* reference teaches determining the identity of a user in order to grant access to a vehicle, where *Zellner* “is concerned with detecting a device of a user when the user approaches a vehicle to enable the device to transfer a signal used to identify the user.” *Id.*, 206. “In *Zellner*, all of the settings are preferences of the user, and the user setting or not setting preferences is not the same as enforcing a restriction upon a setting preference that the user may have wanted set.” *Id.*, 206. By contrast, “[a]s now claimed, depending on the login credentials of the user, e.g., user information, the verification will work to apply at least one restriction to at least one of the settings.” *Id.*

49. Following the Applicant’s amendments to the independent claims, including the server’s verifying the user for accessing a profile with settings, including at least one of those settings being restricted for use on the vehicle, the Examiner allowed all pending claims, provided the Applicant filed a terminal disclaimer. *Id.*, 213. The Examiner stated that “all of the prior art of record fails to teach or suggest the limitation of claim, a method executed by a server of a cloud services system ... comprising: ... processing, by the server, at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle and at least one of said plurality of settings being restricted for use on the vehicle ... [.]” *Id.*

50. The claims of the '244 patent therefore require the server to process at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle, as the Applicant explained. EX1002, 206.

51. It is my opinion that a POSITA, especially after reviewing the prosecution history, would understand that each of the independent claims has limitations that require a server process at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle.

VII. SUMMARY OF CERTAIN REFERENCES

52. Below I provide a summary of certain references that are relevant to this declaration and my opinions expressed herein.

A. Rector (EX1006)

53. U.S. Publication 2011/0137520 to *Rector* et al. (EX1006, “Rector”) is titled “Devices, Systems and Methods for Controlling Permitted Settings on a Vehicle.” EX1006, cover page. Rather than being directed to systems and methods for managing user profiles for vehicles and exchange of information with cloud-based processing systems, *Rector* is directed to “devices, systems, and methods for identifying a driver within a vehicle using short range wireless communications in order to alter permitted settings of the vehicle.” EX1006, ¶ 23. *Rector* teaches a

“smart vehicle” “determines the identity of the driver.” *Id.*, ¶¶ 30, 40, 43. For example, the smart vehicle includes client logic, and can communicate with “a wireless communication device,” via an antenna and a transceiver, “to determine[] the identity of the driver.” *Id.*, ¶ 30. While *Rector* instructs that the settings server includes settings for the driver, and “server logic 132 matches the driver’s identity with corresponding settings from database 134 on settings server 130” (*id.*, ¶ 31), *Rector* instructs that it is the smart vehicle, and “client logic on the smart vehicle,” that performs “[t]he determination of a driver’s identification and the subsequent initiation of the corresponding settings for the driver[.]” *Id.*, ¶ 40.

54. I reviewed *Rector* and it does not disclose a server processing “at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle.” EX1001, claim 1[b]. In fact, *Rector* does not disclose or suggest any server processing user information to verify the user or any server verifying a user for accessing the user profile having settings for the vehicle.

55. I have reviewed *Rector*, including *Rector*’s “method of controlling a driver’s settings on a smart vehicle, according to an exemplary embodiment[.]” EX1006, ¶ 43, Fig. 3. The embodiment of *Rector* illustrated in Figure 3 and described in paragraph 43 does not disclose or suggest “transferring, by the server ... the plurality of settings to the vehicle ... the transferring is configured to instruct

...” as required by all challenged claims. EX1001, claims 1[c], 17[c]; EX1006, ¶ 43. In fact, *Rector* does not disclose or suggest any “transferring, by the server ... 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” (claim 1[c]) / “software and hardware associated [with] the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user ...” (claim 17[c]).

56. In *Rector*’s method embodiment, the smart vehicle determines the driver’s identity. EX1006, ¶ 43. *Rector* teaches that smart vehicle determines the identity of the driver, either by “compar[ing] the unique identifier with a set of unique identifiers stored on a memory of the smart vehicle,” or “[a]lternatively, the unique identifier may be compared with a set of unique identifiers on a server on a network.” *Id.* *Rector* teaches that the smart vehicle performs this comparison operation to “determine the identity of the driver S351.” *Id.*

57. *Rector*’s method further instructs that “the smart vehicle looks up settings for the driver S352.” *Id.* The method neither teaches nor suggests any server transfer or transmission of settings. *Id.*

58. In this method, the smart vehicle determines settings “by comparing the driver’s identity with a database of identities with corresponding settings.” *Id.* *Rector*

teaches that the smart vehicle looks up settings in a database, and “[t]his database may be on the network, on the driver’s device, on the smart vehicle’s memory, etc.”

Id.

59. “With the settings determined for the driver,” *Rector* teaches that “the smart vehicle detects an attempted change of a setting S353.” *Id.* For example, this attempted change “may be the driver speeding up, the radio volume changing, the radio station changing, the driver’s wireless communication device receiving an incoming call or text, etc.” *Id.* “The smart vehicle determines whether the attempted change of the setting is permitted S354.” *Id.* *Rector* teaches that “[t]his is accomplished by the client logic of the smart vehicle comparing the detected attempted change with the database of permitted or prohibited settings for the driver.” *Id.* *Rector* teaches that the smart vehicle utilizes this database for the operations described at steps S352 and S354. *Id.*

60. *Rector* instructs that “[i]f the change in setting is permitted, the change is allowed S355[,]” however, “[i]f the attempted setting is not permitted, the setting is rejected S356.” *Id.* For example, “if the change in setting is permitted,” “the radio volume increases, the radio station changes, the call is received, the smart vehicle accelerates, etc.[]” however, “if the attempted setting is not permitted, the setting is rejected S356.” *Id.* *Rector* does not teach that any of these steps or operations of the “method of controlling a driver’s settings on a vehicle” is performed by a server. *Id.*

B. Kleve (EX1007)

61. U.S. Publication 2014/0129053 to *Kleve* et al. (EX1007, “Kleve”) is titled “Credential Check and Authorization Solution for Personal Vehicle Rental.” EX1007, cover page. *Kleve* is directed to a “vehicle rental micro-business,” integrated with a vehicle computer system (VCS), allowing for authorization of a vehicle rental between an owner and a temporary user. *Id.*, ¶¶ 7, 36. *Kleve* teaches that “[t]he vehicle rental micro-business 200 may include a website, a smart phone application or other nomadic device that an Owner and Temporary User may use to manage their assets and/or user profile.” *Id.*, ¶ 36. *Kleve* explains that this “user profile” can be accessed using a website or a nomadic device communicating with the site, and the owner may use the user profile to “input[] information into the website or nomadic device including, but not limited to the make, model and year of the vehicle available for rent.” *Id.*, ¶ 37. *Kleve* teaches that the “Temporary User may also fill out a user profile using the website or nomadic device to include, but not limited to photos of credit card, photo of forms of ID, facial recognition, voice print recognition, matrix barcode (ex. Two-dimensional code), code word or phrase for speech recognition, temporary mobile web login IDs and password, or other types of unique Temporary User identification to validate and pay for the rental service at step 204.” *Id.* The Petition and Dr. Almeroth contend that the “user profile” described by *Kleve* is the “user account” recited by the challenged claims. *E.g.*, Pet.

24-25; EX1005, ¶¶ 120-125. The “profile associated with the user account,” as recited in claims 1 and 17, is a “profile having a plurality of settings of the user for the vehicle ...” EX1001, claims 1, 17. The *Kleve* disclosures identified by the Petition and Dr. Almeroth (Pet. 25 (citing EX1007, ¶ 37), EX1005, ¶ 121 (citing EX1007, ¶ 37)) do not discuss, disclose or otherwise suggest the “profile” recited in claims 1 and 17, at least because *Kleve*’s “user profile” description offers no mention of the user profile having any settings of the user for the vehicle. EX1007, ¶ 37.

62. I reviewed *Kleve* and it does not disclose a server processing user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle, as required by claims 1 and 17. EX1001, claims 1, 17. The *Kleve* disclosures identified by the Petition and Dr. Almeroth relate to various options to provide remote credential verification at a vehicle, as a means to “facilitate the virtual key with additional security.” EX1007, ¶ 49; Pet. 24-25 (citing, e.g., EX1007, ¶ 49). The virtual key, *Kleve* instructs, “may permit entry of the vehicle[,] grant a keyless drive-away of a vehicle, and/or both.” EX1007, ¶ 48. *Kleve* teaches three options for remote credential verification to authorize this vehicle access granted by the virtual key: (1) by the VCS, (2) using a server, or (3) allowing the Owner to verify the Temporary User’s request. *Id.*, ¶ 49. The use of a server, as taught by *Kleve*, relates to remote credential verification for the virtual key, a virtual key that grants access

to the vehicle and/or keyless drive-away. *Id.*, ¶¶ 48-49. *Kleve*'s disclosures do not disclose or suggest any server verification of a user for accessing the profile with settings of the user for the vehicle.

VIII. DETAILED ANALYSIS OF PETITION GROUNDS

63. As I describe in detail below, it is my opinion that Dr. Almeroth and the Petition fail to demonstrate that any claim of the '244 patent is invalid.

A. *Rector*, alone or in combination, fails to render obvious the challenged claims.

64. In my opinion, Dr. Almeroth and Petitioner fail to show that *Rector*, alone or in combination, would have rendered obvious any claim of the '244 patent.

1. *Rector*'s method does not teach or suggest any server transfer of settings or server transmission of settings.

65. Independent claims 1 and 17 require "transferring, by the server, upon verifying the user information, one or more settings ... to the vehicle, the transferring is configured to instruct ..." EX1001, claims 1[c] and 17[c]. In my opinion, *Rector* does not teach or suggest these claim limitations. As such, it is my opinion that Dr. Almeroth and Petitioner fail to demonstrate that any claim would have been obvious under Grounds 1-5 based on *Rector*'s alleged disclosure of elements 1[c] and 17[c].

66. Petitioner and Dr. Almeroth rely on *Rector*'s method of controlling a driver's settings on a smart vehicle (EX1006, ¶ 43, Fig. 3) for alleged obviousness of the independent claims. *See, e.g.*, Pet. 23, 27-28, 30-31, 44-46. As described

above, *Rector's* method teaches that the smart vehicle executes the operation for determining the driver's identity, the smart vehicle looks up and determines the driver's settings, the smart vehicle detects an attempted change of setting, and the smart vehicle determines whether the attempted change of the setting is permitted or prohibited. *Id.*, ¶ 43. If the change is permitted, the change is allowed, whereas if the change is not permitted, the setting is rejected. *Id.* *Rector* teaches that a smart vehicle, not a server, executes the above-referenced steps of the method. *Id.* Indeed, *Rector's* method teaches away from any suggestion that a server transfers settings to the vehicle, since for example, *Rector's* method instead teaches that the smart vehicle is to access the settings stored in the database at step S352 and again at step S354. *Id.*

67. Neither the Petition nor Dr. Almeroth offers an explanation or motivation for a POSITA to have modified *Rector's* method of controlling a driver's settings on a smart vehicle in the manner proposed by their obviousness arguments. Pet. 23, 27-28, 30-31; EX1005, ¶¶ 100, 127-128, 134-136. Additionally, the Petition does not explain why a POSITA would have been motivated to combine the individual embodiments of *Rector*: (1) *Rector's* system for controlling a driver's settings (described, for example, at EX1006, paragraph 9 and claim 1), which teaches that a server determines permitted settings, with (2) *Rector's* method of controlling a driver's settings on a smart vehicle (described at EX1006, paragraph

43, Figure 3), which directs that a smart vehicle determines the driver's permitted settings. In my opinion, *Rector* itself does not offer any motivation to a POSITA to combine the two embodiments in the manner proposed by the Petition.

2. *Rector* does not teach or suggest the server “transferring is configured to instruct ...,” as required by the independent claims.

68. Independent claims 1[c] and 17[c] recite that “transferring, by the server, ... one or more settings ... to the vehicle, the transferring is configured”: “to instruct software and/or hardware associated with said electronics of said vehicle to apply one or more settings to the vehicle for customizing said vehicle to use said one or more settings associated with the profile” (claim 1[c]) / “to instruct software and hardware associated [with] the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user” (claim 17[c]). EX1001, 33:23-29, 35:17-24.

69. While Dr. Almeroth's declaration opines that “*Rector* discloses its server ‘transmit[s] the permitted settings to the client logic [of the smart vehicle]’” and “[t]hese transmitted settings cause the client logic to implement them,” (EX1005, ¶ 134 (citing EX1006, claim 1, ¶ 9)), *Rector* does not use the word “cause” in paragraph 9 or claim 1, nor do these disclosures suggest that the system's server transmitting settings “cause the client logic to implement them.” *Id.*; EX1006, ¶ 9, claim 1. *Rector* teaches that it is the smart vehicle, using its client logic, that

determines what functions to limit on the vehicle according to the permitted settings, and in fact, *Rector* teaches an embodiment in which that the “the settings server may not be necessary to the system.” *See, e.g., Id.; id.* at ¶ 38.

70. Dr. Almeroth opines that “*Rector* is **capable of** satisfying, and does satisfy, this element of claim 1,” however even if the recited components were capable of achieving the specific objectives identified in the transferring limitations of claims 1[c] and 17[c], a capability does not teach a server-transferring operation that is “configured to instruct ...” according to the claim limitations. EX1005, ¶¶ 127-137; EX1001, claims 1, 17.

71. I have reviewed the disclosures cited by Dr. Almeroth which he cites to as “numerous examples of the ways that software or hardware of the smart vehicle is instructed to apply the settings for customizing the vehicle.” EX1005, ¶ 136 (citing EX1006, ¶¶ 31-34, 38, 43, 57, 59). These cited disclosures from *Rector* do not teach or suggest “numerous examples of the ways that software or hardware of the smart vehicle is instructed to apply the settings for customizing the vehicle,” nor do any of these cited disclosures teach or suggest the limitations of claims 1[c] and 17[c], wherein the recited “transferring, by the server, ... one or more settings to the vehicle” further requires that “the transferring is configured”: “to instruct software and/or hardware associated with said electronics of said vehicle to apply one or more settings to the vehicle for customizing said vehicle to use said one or more settings

associated with the profile” (claim 1[c]) / “to instruct software and hardware associated [with] the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user” (claim 17[c]). EX1001, 33:23-29, 35:17-24.” EX1001, claims 1[c], 17[c].

3. *Rector* does not disclose or suggest the claimed server verifying a user for accessing a profile function of independent claims 1 and 17.

72. Independent claims 1 and 17 require “processing, by the server [by one of the servers], user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle.” EX1001, claims 1, 17. In my opinion, *Rector* does not teach or suggest these claim limitations. As such, it is my opinion that Dr. Almeroth and Petitioner fail to demonstrate that any claim would have been obvious under Grounds 1-5 based on *Rector*’s alleged disclosure of elements 1[b] and 17[b].

a. *Rector* does not teach or suggest a server processing user information to verify the user for accessing the profile, as claimed

73. *Rector* does not mention or suggest a server performing any user verification operation and does not mention or suggest the claimed server verification for the user accessing the user profile. The Petition identifies *Rector*’s “comparing the unique identifier with a set of unique identifiers on a server on a network,” but the server in *Rector* does not verify a user or otherwise process user

information to verify a user. *Rector* actually discloses that it is a “smart vehicle,” not any server, that performs this “comparing” function. Pet. 23; EX1006, ¶ 43.

74. *Rector* instructs that its “smart vehicle determines the identity of the driver” wherein “a client logic and processor on the smart vehicle compares the unique identifier with a set of unique identifiers on a server on a network.” EX1006, ¶ 43. And then, “[w]ith the identity of the driver determined,” *Rector* explains, “the smart vehicle looks up settings for the driver.” *Id.* *Rector* teaches that the “comparing” operation to determine the identity of the driver can be performed by two operations: by comparing information from the wireless communication device of the user to the information stored on the vehicle, or by taking a unique identifier from the wireless communication device and comparing it to the unique identifier from the settings server. *Id.* ¶ 43; *see also id.*, ¶ 30 (“[c]lient logic 105 on smart vehicle 100, via an antenna and transceiver, receives the unique identifier ... and determines the identity of the driver.”). Neither of these “comparing” operations described by *Rector* discloses or suggests the recited server processing user information to verify a user for accessing a profile.

75. *Rector* does not suggest the server’s involvement in determining a driver’s identification, and in fact *Rector* makes clear that “***the determination of a driver’s identification*** and the subsequent initiation of the corresponding settings for

the driver *are performed by smart vehicle 200.*” EX1006, ¶ 40. It is “with the unique identifier” that “*the smart vehicle determines the identity of the driver S351*”:

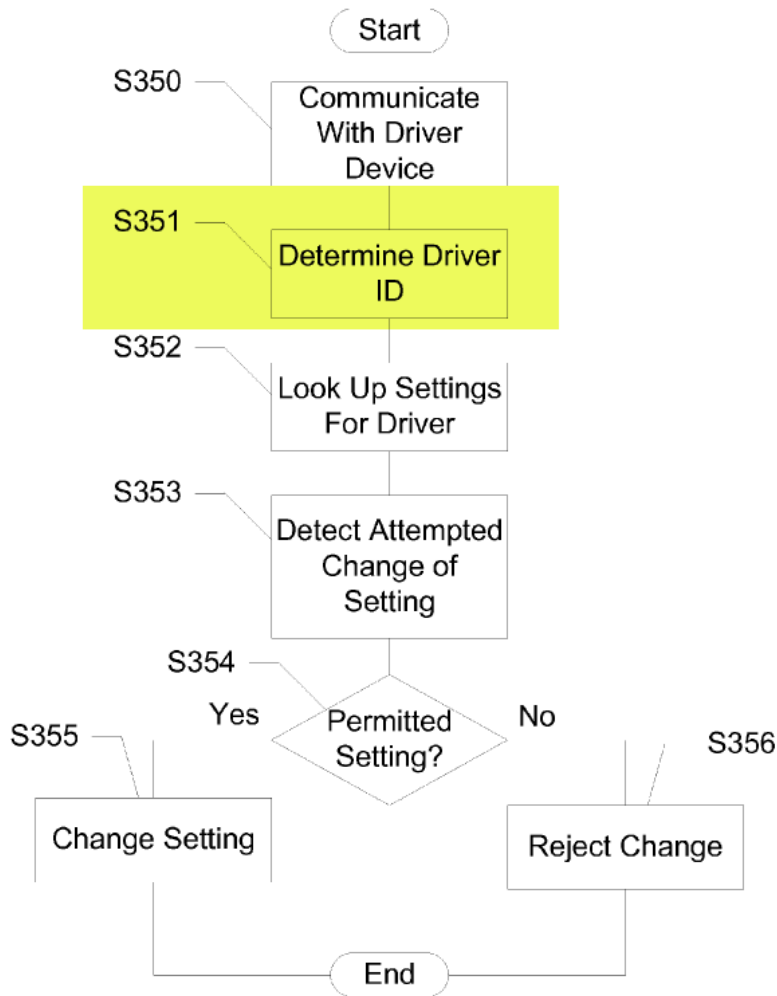


Figure 3

EX1006, Fig. 3 (highlighted).

- b. The Petition offers no evidence that *Rector’s* “associate” function discloses or suggests a**

**server verifying the user for accessing the
profile, as claimed**

76. It is my opinion that *Rector*'s "associat[ing] the unique identifier with the user account" does not disclose or suggest the required server verification function limitation of claim 1[b] and claim 17[b]. Pet. 23; EX1006, ¶ 9. The Petition identifies no disclosure suggesting that "associat[ing] the unique identifier with the user account" performs or otherwise processes user information to verify the user and fails to explain how this "associating" function allegedly discloses a server performing the required verification of user information for accessing the user profile. Pet. 21-24, 44-45 ("see supra, IV.A.3."), 76 ("see supra, VI.A.10 (discussing nearly identical element 17[b])"); *see id.*, 23 (citing EX1006, ¶¶ 9, 43, 31, Figure 3). Instead, *Rector* uses the term "verifying a driver's identity" to describe the various ways in which **the smart vehicle** of the settings control system can "verify that the correct party is determined to be the driver." *E.g.*, EX1006, ¶¶ 30, 40, 43, 47-48. The Petition does not identify any disclosure or rationale to indicate that *Rector*'s use of the term "associate" suggests or teaches the required server verification operation recited by the challenged claims. *Id.*; EX1006, ¶¶ 47-48.

77. The disclosures of *Rector* identify one component of the "settings control system"—the "smart vehicle"—"to verify that the correct party is determined to be the driver." *See, e.g.*, EX1006, ¶¶ 9, 30, 40, 43, 47-48. The Petition

does not identify any disclosures from *Rector* showing or suggesting that a server performs this verification function. Therefore, it is my opinion that the Petition does not show that *Rector* teaches or suggests, “processing, by the server, at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle” / “processing, by one of the servers, at least part of the user information to verify the access for the user, the profile having a plurality of settings of the user for the vehicle.”

4. Petitioner has not shown a motivation to modify *Rector*’s method of controlling driver settings to include server-side verification, as in *Kleve*.

78. The Petition and Dr. Almeroth contend that “[i]t would have been obvious to modify *Rector*’s methods of controlling driver settings to include server-side verification, as in *Kleve*, **for additional security.**” Ex 1005, ¶ 122. I disagree. It is common knowledge in computer science that distributed software systems are less secure than local software systems. Indeed, computer security was not a major concern until the advent of the Internet and the increased popularity of distributed software systems, such as client-server software systems. A system in which authentication (verification) is performed locally on the client is typically more secure than a system in which the authentication is performed remotely on the server. That is because server-side authentication relies on computer networks to transmit

messages for verifying credentials. Computer networks are the major source of security attacks. Systems relying on computer networks for authentication must deal with a myriad of security attacks, including spoofing and replay attacks.

79. The Petition and Dr. Almeroth have relied on a misunderstanding of *Kleve*'s disclosures in their motivation to combine. *Kleve* discloses that its "system may be further extended to facilitate the virtual key with **additional security** by requiring **remote credential verification at the vehicle**." EX1007, ¶ 49. *Kleve* discloses that "the remote credential verification **at the vehicle** may be done with additional hardware assembled on the exterior of the vehicle or in the vehicle cabin." *Id.* According to *Kleve*, "the remote credential verification may be done by **the VCS**, using a server, or allowing the Owner to verify the Temporary User's request." *Id.* VCS is the vehicle-computing system in *Kleve* that is local to the vehicle. A POSITA would understand that in *Kleve* credential authorization can be performed by: (1) VCS, (2) server, or (3) owner. *Id.* While *Kleve* discloses the verification can be performed by any of these entities, it states the client-side verification at the vehicle using VCS provides additional security. A POSITA would not have been motivated to modify *Rector*'s method of controlling driver settings to include server-side verification. *Rector* already uses the more secure client-side verification.

5. Petitioner has not shown that *Rector* in combination with *Kleve* renders obvious "processing, by the server, ... user information to

verify the user for accessing the profile associated with the user account ...” as recited in independent claims 1 and 17.

80. It is further my opinion that *Rector* in combination with *Kleve* fails to teach or render obvious “processing, by the server [by one of the servers], ... user information to verify the user for accessing the profile [the access for the user] associated with the user account, the profile having a plurality of settings of the user for the vehicle ...,” as in independent claims 1 and 17.

81. The Petition and Dr. Almeroth both state “[t]o the extent element 1[b] is interpreted to require the *server* to ‘verify the user for accessing the profile associated with the user account,’ it would have been obvious to modify *Rector* such that verification is performed by the server, as in *Kleve*.” Pet. 24 (citing EX1007, ¶ 49); EX1005, ¶ 120 (same). But the server in *Kleve* only verifies credentials for accessing a vehicle (e.g., enter/drive away); the server in *Kleve* is not verifying the user for accessing a profile having settings, which is required by all challenged claims. EX1007, ¶¶ 48-49. The Petition and Dr. Almeroth identify disclosures of *Kleve* which describe “facilitat[ing] the virtual key with additional security by requiring remote credential verification at the vehicle.” *Id.* *Kleve* explains that this security feature is available to a vehicle owner before a user is granted temporary access to enter and/or drive away a vehicle. *Id.* That is, even after a “virtual key” is issued to a user, the user also undergoes remote credential verification at the vehicle

itself before the user is allowed to enter and/or drive the vehicle. *Id.* *Kleve* teaches verifying this security feature for vehicle access:

[t]he virtual key may allow a Temporary User temporary granted access to the Owner's vehicle. ***The granted access allowed by the virtual key may permit entry of the vehicle; grant a keyless drive-away of a vehicle, and/or both.*** The Temporary User may enter a virtual key outside or inside the vehicle, while credential authorization may be processed by the VCS, a server and/or by the vehicle Owner. ***The system may be further extended to facilitate the virtual key with additional security by requiring remote credential verification at the vehicle.*** ... For example, but not limited to, the Temporary User entering a credential verification password at the vehicle's touchscreen visual display while having the VCS, server, or owner compare and verify authorization.

Id. The identified disclosures of *Kleve* cited by the Petition and Dr. Almeroth do not mention or suggest a server verification for accessing a user profile, and do not mention or suggest a server verifying a user for accessing a user profile having settings of a user for a vehicle. *Id.*

82. Neither the Petition nor Dr. Almeroth provides a description or disclosure from *Kleve* that could enable the innovations of the '244 patent that were cited by the Applicant to overcome Zellner during Examination of the patent. None of these *Kleve* disclosures teaches or suggests a server verifying a user's access to a

profile so that one user—e.g., a parent-owner of a vehicle—can login and update profile settings available to a second user (e.g., parent’s teenaged child) in real-time, allowing for real-time changes and automatic updates of the profile settings transferred to a vehicle while the teenaged driver is logged into that vehicle. It is my opinion, therefore, that *Kleve*’s disclosure about verifying to ***grant access to a vehicle*** does not teach or suggest the required server verification for accessing a profile with a plurality of settings.

83. The Petition also identifies *Kleve*’s “user profile” as the claims’ recited “profile having a plurality of settings of the user for the vehicle,” but the identified disclosures show that *Kleve*’s “user profile” does not have “settings of the user for the vehicle.” EX1007, ¶ 37. *Kleve* describes its “user profile” as a feature which allows the owner to, e.g., approve of, and receive payment for, a vehicle rental transaction. *Id.* For example, *Kleve* explains that a “user profile” is where the owner lists the make, model and year of the vehicle, the temporary user submits photographs of their credit cards and photographs of their IDs, and ultimately, it is the “user profile” that allows the owner to obtain payment from and validate a user to rent the vehicle. *Id.*

84. Because *Kleve*’s “user profile” has no disclosure or suggestion of any settings of the user for the vehicle (e.g., user preferences of the vehicle which may be configured to be automatically set in the vehicle), or any disclosure of transferring

settings from a profile to a vehicle depending on a user's permissions, the disclosures of *Kleve* cannot achieve the vehicle customization, variable restrictions/permissions of settings, or real-time updates enabled by the user profile transfer solutions of the '244 Patent. EX1001, 1:59-2:28, 11:30-46, 13:50-14:41, 15:25-17:7, Fig. 4, Fig. 5. Regardless, the Petition-identified disclosures of *Kleve* are limited to verification for *the vehicle access*, not the transaction approval platform *Kleve* refers to as a "user profile." EX1007, ¶¶ 48-49.

85. It is further my opinion that the Petition-identified "step 624" of *Kleve* fails to disclose or suggest the claims' recited server verifying the user for accessing the profile having settings of a user for the vehicle. Pet. 25 (citing EX1007, Fig. 6). *Kleve* does not mention or suggest any server involvement in "step 624." EX1007, ¶ 72, Fig. 6. Instead, *Kleve* teaches that once the temporary user uses a virtual key to enter/start the rented vehicle, the temporary user can use a "nomadic device" to pair with the vehicle computer system and *Kleve* instructs that it is this nomadic device that "may send personal settings to the vehicle." *Id.*, Fig. 6, ¶ 72.

86. Accordingly, it is my opinion that there is no teaching or suggestion in *Kleve* of the claimed "processing, by the server, ... user information to verify the user for accessing the profile associated with the user account the profile having a plurality of settings of the user for the vehicle." *Kleve*'s server verification grants access to a vehicle and fails to disclose a server performing a verification of a user

for accessing a profile such that only select settings may be accessible to that user login, depending on their permissions/restrictions. EX1007. Instead, *Kleve* discloses a limited verification—an additional security check before a user can access a vehicle. *Kleve*’s “user profile” does not mention or suggest settings of the user for the vehicle. Likewise irrelevant are the “personal settings” identified by Toyota’s Petition, which are sent solely from a nomadic device to a vehicle. Therefore, it is my opinion that the Petition’s Grounds 1-5, all of which cite to and rely only on *Rector* and/or *Kleve* for elements 1[b] / 17[b], each fail to show obviousness.

B. The Additional References Do Not Cure the Deficiencies of *Rector* or the *Rector/Kleve* Proposed Combination.

87. In my opinion, the additional references that Dr. Almeroth proposes to combine with *Rector* and *Kleve* do not cure any of the deficiencies I identified above. Dr. Almeroth proposes to add *Yassin* (Grounds 2, 3, and 5), *Patenaude* (Ground 3) and *Faenger* (Grounds 4 and 5), but none of these references discloses the required “transferring, by the server, ... one or more settings to the vehicle ... the transferring is configured to”: “instruct software and/or hardware associated with said electronics of said vehicle to apply one or more settings to the vehicle for customizing said vehicle to use said one or more settings associated with the profile” (claim 1[c]) / “to instruct software and hardware associated [with] the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user” (claim

17[c]). EX1001, 33:23-29, 35:17-24. Also, Dr. Almeroth offers no opinion to the contrary.

88. In my opinion, the additional references that Dr. Almeroth proposes to combine with *Rector* and *Kleve* also do not cure any of the deficiencies I identified above with respect to the required “processing, by the server, at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings” / “processing, by one of the servers, at least part of the user information to verify the access for the user, the profile having a plurality of settings of the user for the vehicle” recited by claims 1[b] and 17[b], and Dr. Almeroth offers no opinion to the contrary.

89. Instead, Dr. Almeroth proposes to add “Yassin,” “Patenaude,” and “Faenger” in an attempt to show that other limitations would have been obvious. “Yassin,” “Patenaude,” or “Faenger” (or any of the three together) do not cure the deficiencies that I discuss herein. It is therefore my opinion that every ground fails and the Petition has failed to show that any of the challenged claims is obvious.

IX. CONCLUSION

90. This declaration reflects my opinions as currently held. However, my analysis may continue such that I may consider additional information that may result in additional observations.

91. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code.

Executed this 14th day of February, 2025, at Irvine, California.



Dr. Sam Malek