

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

EMERGING AUTOMOTIVE LLC,

Plaintiff,

v.

TOYOTA MOTOR NORTH AMERICA
INC., TOYOTA MOTOR SALES, U.S.A.,
INC. and TOYOTA MOTOR
CORPORATION

Defendants.

Civil Action No.: 2:23-CV-00434-JRG

JURY TRIAL DEMANDED

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Emerging Automotive LLC (“Plaintiff” or “Emerging Auto”), through its attorneys, for its First Amended Complaint against Toyota Motor North America, Inc. (“TMNA”), Toyota Motor Sales, U.S.A., Inc. (“TMS”) and Toyota Motor Corporation (“TMC”) (collectively, “Defendant” or “Toyota”), demands a trial by jury and alleges as follows:

INTRODUCTION

1. This First Amended Complaint arises from Toyota’s unlawful infringement of the following United States Patents owned by Emerging Auto: United States Patent Nos. 10,407,026 (the “’026 patent”), 11,738,659 (the “’659 patent”), 9,365,188 (the “’188 patent”), 9,171,268 (the “’268 patent”) and 11,396,244 (the “’244 patent”) (collectively the “Asserted Patents”). Each of the Asserted Patents was invented by Albert and Angel Penilla (the “Penilla brothers”) and issued to their company, Emerging Automotive LLC, a family-owned automotive innovation company.

THE PARTIES

2. Emerging Auto is a California limited liability company with its principal place of business located at 5619 Scotts Valley Dr., Suite 280, Scotts Valley, CA 95066. Emerging Auto is the sole owner by assignment of all right, title and interest in the Asserted Patents, including the right to recover for past, present and future infringement and damages.

3. On information and belief, TMNA is a corporation organized and existing under the laws of California with its principal place of business in this District at 6565 Headquarters Dr., Plano, Texas 75024. TMNA may be served through its registered agent CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201. TMNA is currently registered to do business in the State of Texas. On information and belief, TMNA is responsible for importing, making, marketing, distributing, offering for sale and/or selling Toyota-branded and Lexus-branded automobiles throughout the United States, including in this District.

4. On information and belief, TMS is a corporation organized and existing under the laws of California with its principal place of business in this District at 6565 Headquarters Dr., Plano, Texas 75024. TMS may be served through its registered agent CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201. TMS is currently registered to do business in the State of Texas. On information and belief, TMS is responsible for importing, making, marketing, distributing, offering for sale and/or selling Toyota-branded and Lexus-branded automobiles throughout the United States, including in this District.

5. On information and belief, TMC is a Japanese Corporation headquartered at 1 Toyota-Cho, Toyota City, Aichi Prefecture 471-8571, Japan. On information and belief, TMC is responsible for importing, making, marketing, distributing, offering for sale and/or selling Toyota-branded and Lexus-branded automobiles throughout the United States, including in this District.

JURISDICTION AND VENUE

6. This action arises under the patent laws of the United States, Title 35 of the United States Code. Subject matter jurisdiction is proper in this Court pursuant to 28 U.S.C. §§ 1331 and 1338(a).

7. This Court has personal jurisdiction over TMNA, TMS and TMC in this action because each has committed and continues to commit acts within this District giving rise to this action and have established minimum contacts with this forum such that the exercise of jurisdiction over each would not offend traditional notions of fair play and substantial justice. TMNA, TMS and TMC, directly and through subsidiaries or intermediaries, has committed and continues to commit acts of infringement in this District, by among other things, making, using, importing, offering to sell and selling Toyota-branded and Lexus-branded automobiles that infringe the Asserted Patents. TMNA, TMS and TMC have not contested personal jurisdiction in this Court in prior actions.

8. Venue is proper in this District pursuant to at least 28 U.S.C. §1391 and §1400(b). Upon information and belief, TMNA, TMS and TMC have a regular and established place of business in this District, including at 6565 Headquarters Dr., Plano, Texas 75024. Toyota has 4000 employees in Plano, Texas.¹ Toyota has not contested that this Court is a proper venue in prior actions. *See Foras Technologies Ltd. V. Toyota Motor North America, Inc. et. al.*, No. 2:23-cv-150, Dkt. 28 at ¶¶ 10-11, (E.D. Tex. July 10, 2023); *Fundamental Innovation Sys. Int’l LLC v. Toyota Motor Corp., et. al.*, No. 2:21-cv-281-JRG, Dkt. No. 51 at ¶ 23 (E.D. Tex. Nov. 15, 2021).

¹ <https://pressroom.toyota.com/celebrating-five-years-of-one-toyota-in-texas/>

FIRST COUNT

(INFRINGEMENT OF U.S. PATENT NO. 10,407,026)

9. Emerging Auto incorporates by reference the foregoing paragraphs as if fully set forth herein.

10. Emerging Auto owns by assignment, all rights, title and interest, including the right to recover damages for past, present and future infringement, in U.S. Patent No. 10,407,026 titled “Vehicles And Cloud Systems For Assigning Temporary E-Keys To Access Use Of A Vehicle.” The ’026 patent was duly and legally issued by the United States Patent and Trademark Office on September 10, 2019. A true and correct copy of the ’026 Patent is attached as Exhibit A.

11. On information and belief, Toyota has directly infringed and continues to directly infringe one or more claims of the ’026 patent, including at least claim 1 of the ’026 patent, in the state of Texas, in this judicial district, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products that embody one or more of the inventions claimed in the ’026 patent, including but not limited to the Accused Instrumentalities, including Toyota and Lexus vehicles that enable use via an electronic key. By way of example, the Accused Instrumentalities include Toyota’s Toyota and Lexus-branded vehicles that include Remote Connect and/or Digital Key, as well as all reasonably similar products, in violation of 35 U.S.C. § 271(a).

12. The ’026 Toyota Accused Instrumentalities satisfy all claim limitations of one or more claims of the ’026 patent. A claim chart comparing exemplary independent claim 1 of the ’026 patent to representative Accused Instrumentalities is attached as Exhibit B.

13. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, Toyota has injured Emerging Auto and is liable for infringement of the '026 patent pursuant to 35 U.S.C. § 271(a).

14. In addition, and/or in the alternative to its direct infringement, Toyota has also infringed and continues to infringe the claims of the '026 patent by, among other things, actively inducing others to use the Accused Instrumentalities. Toyota's users, customers, consumers, agents, distributors, installers, and other third parties who use, sell, and/or offer to sell the Accused Instrumentalities in accordance with Toyota's instructions infringe the claims of the '026 patent, in violation of 35 U.S.C. § 271(a). Toyota intentionally instructs its customers to infringe through support information such as websites, videos, demonstrations, support information and other published information. For example, Toyota's website instructs and encourages its customers to use, manage and control the infringing components and functionalities of the Accused Instrumentalities. See, e.g., at https://support.toyota.com/s/article/How-do-I-setup-my-Digital-Key-Toyota?language=en_US; https://support.toyota.com/s/article/How-do-I-get-a-Digital-Key-Toyota?language=en_US; <https://www.toyota.com/connected-services/remote-connect>. Toyota also publishes videos to assist and encourage users to use and operate the infringing components and functionalities of the Accused Instrumentalities. See, e.g., https://www.youtube.com/watch?v=QU0V8Q-wvkc&ab_channel=ToyotaUSA; https://www.youtube.com/watch?v=uV2Ll0aIUU8&ab_channel=ToyotaUSA; <https://www.youtube.com/watch?v=1mmN1wTTUdQ>; https://www.youtube.com/watch?v=mAf9uWFKLvo&ab_channel=ToyotaUSA; https://www.youtube.com/watch?v=qThp80RGjto&ab_channel=THEAFRICANCARGUY. Thus, Toyota actively instructs and directs its customers to infringe and actively encourages infringement

by its customers. Toyota is thereby liable for infringement of the '026 patent under 35 U.S.C. § 271(b).

15. At a minimum, Toyota has had knowledge of the '026 patent since at least the filing and/or service date of the Complaint in this action. Despite this knowledge, Toyota has continued to engage in activities to encourage and assist its customers in the use of the Accused Instrumentalities. Thus, on information and belief, Toyota (1) had actual knowledge of the patent; (2) knowingly induced its customers to infringe the patent; and (3) had specific intent to induce the patent infringement.

16. Additionally, and/or alternatively, Toyota is liable as a contributory infringer of the '026 patent under 35 U.S.C. § 271(c) by having offered to sell, sold and imported and continuing to offer to sell, selling, and importing into the United States the Accused Instrumentalities and reasonably similar products, to be especially made or adapted for use in infringement of the '026 patent. The portions of the Toyota Accused Instrumentalities that enable use via electronic keys are a material component for use in practicing the '026 patent and are especially made and are not staple articles of commerce suitable for non-infringing use.

17. Emerging Auto complied with 35 U.S.C. § 287 because Emerging Auto does not make, offer for sale or sell products that practice the '026 patent during the relevant time period.

18. As a result of Toyota's direct and indirect infringement of the '026 patent, Emerging Auto is entitled to monetary damages (past, present and future) in an amount adequate to compensate for Toyota's infringement, but in no event less than a reasonable royalty for the use made of the invention by Toyota, together with interest and costs as fixed by the Court.

19. On information and belief, despite having knowledge of the '026 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '026 patent, Toyota

has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. Toyota's infringing activities relative to the '026 patent have been, and continue to be, willful, wanton, malicious, deliberate, consciously wrongful, and an egregious case of misconduct beyond typical infringement such that Emerging Auto is entitled to enhanced damages under 35 U.S.C. § 284 up to three times the amount found or assessed.

20. Toyota's acts of direct and indirect infringement have caused and continue to cause damage to Emerging Auto. Emerging Auto is entitled to damages in accordance with 35 U.S.C. §§ 271, 281, and 284 sustained as a result of Toyota's wrongful acts in an amount to be proven at trial.

SECOND COUNT

(INFRINGEMENT OF U.S. PATENT NO. 11,738,659)

21. Emerging Auto incorporates by reference the foregoing paragraphs as if fully set forth herein.

22. Emerging Auto owns by assignment, all rights, title and interest, including the right to recover damages for past, present and future infringement, in U.S. Patent No. 11,738,659 titled "Vehicles And Cloud Systems For Sharing E-Keys To Access And Use Vehicles." The '659 patent was duly and legally issued by the United States Patent and Trademark Office on August 29, 2023.

A true and correct copy of the '659 Patent is attached as Exhibit C.

23. On information and belief, Toyota has directly infringed and continues to directly infringe one or more claims of the '659 patent, including at least claim 1 of the '659 patent, in the state of Texas, in this judicial district, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products that embody one or more of the inventions claimed in the '659 patent, including but not limited to the Accused

Instrumentalities, including Toyota and Lexus vehicles that enable use via an electronic key. By way of example, the Accused Instrumentalities include Toyota's Toyota and Lexus-branded vehicles that include Remote Connect and/or Digital Key, as well as all reasonably similar products, in violation of 35 U.S.C. § 271(a).

24. The Accused Instrumentalities satisfy all claim limitations of one or more claims of the '659 patent. A claim chart comparing exemplary independent claim 1 of the '659 patent to representative Accused Instrumentalities is attached as Exhibit D.

25. By making, using, offering for sale, selling and/or importing into the United States the Accused Instrumentalities, Toyota has injured Emerging Auto and is liable for infringement of the '659 patent pursuant to 35 U.S.C. § 271(a).

26. In addition, and/or in the alternative to its direct infringement, Toyota has also infringed and continues to infringe the claims of the '659 patent by, among other things, actively inducing others to use the Accused Instrumentalities. Toyota's users, customers, consumers, agents, distributors, installers, and other third parties who use, sell, and/or offer to sell the Accused Instrumentalities in accordance with Toyota's instructions infringe the claims of the '659 patent, in violation of 35 U.S.C. § 271(a). Toyota intentionally instructs its customers to infringe through support information such as websites, videos, demonstrations, support information and other published information. For example, Toyota's website instructs and encourages its customers to use, manage and control the infringing components and functionalities of the Accused Instrumentalities. See, e.g., at https://support.toyota.com/s/article/How-do-I-setup-my-Digital-Key-Toyota?language=en_US; https://support.toyota.com/s/article/How-do-I-get-a-Digital-Key-Toyota?language=en_US; <https://www.toyota.com/connected-services/remote-connect>. Toyota also publishes videos to assist and encourage users to use and operate the infringing components and

functionalities of the Accused Instrumentalities. See, e.g.,

https://www.youtube.com/watch?v=QU0V8Q-wvkc&ab_channel=ToyotaUSA;

https://www.youtube.com/watch?v=uV2Ll0aIUU8&ab_channel=ToyotaUSA;

<https://www.youtube.com/watch?v=1mmN1wTTUdQ>;

https://www.youtube.com/watch?v=mAf9uWFKLvo&ab_channel=ToyotaUSA;

https://www.youtube.com/watch?v=qThp80RGjto&ab_channel=THEAFRICANCARGUY. Thus,

Toyota actively instructs and directs its customers to infringe and actively encourages infringement by its customers. Toyota is thereby liable for infringement of the '659 patent under 35 U.S.C. § 271(b).

27. At a minimum, Toyota has had knowledge of the '659 patent since at least the filing and/or service date of the Complaint in this action. Despite this knowledge, Toyota has continued to engage in activities to encourage and assist its customers in the use of the Accused Instrumentalities. Thus, on information and belief, Toyota (1) had actual knowledge of the patent; (2) knowingly induced its customers to infringe the patent; and (3) had specific intent to induce the patent infringement.

28. Additionally, and/or alternatively, Toyota is liable as a contributory infringer of the '659 patent under 35 U.S.C. § 271(c) by having offered to sell, sold and imported and continuing to offer to sell, selling, and importing into the United States the Accused Instrumentalities and reasonably similar products, to be especially made or adapted for use in infringement of the '659 patent. The portions of the Toyota Accused Instrumentalities that enable use via electronic keys are a material component for use in practicing the '659 patent and are especially made and are not staple articles of commerce suitable for non-infringing use.

29. Emerging Auto complied with 35 U.S.C. § 287 because Emerging Auto does not make, offer for sale or sell products that practice the '659 patent during the relevant time period.

30. As a result of Toyota's direct and indirect infringement of the '659 patent, Emerging Auto is entitled to monetary damages (past, present and future) in an amount adequate to compensate for Toyota's infringement, but in no event less than a reasonable royalty for the use made of the invention by Toyota, together with interest and costs as fixed by the Court.

31. On information and belief, despite having knowledge of the '659 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '659 patent, Toyota has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. Toyota's infringing activities relative to the '659 patent have been, and continue to be, willful, wanton, malicious, deliberate, consciously wrongful, and an egregious case of misconduct beyond typical infringement such that Emerging Auto is entitled to enhanced damages under 35 U.S.C. § 284 up to three times the amount found or assessed.

32. Toyota's acts of direct and indirect infringement have caused and continue to cause damage to Emerging Auto. Emerging Auto is entitled to damages in accordance with 35 U.S.C. §§ 271, 281, and 284 sustained as a results of Toyota's wrongful acts in an amount to be proven at trial.

THIRD COUNT

(INFRINGEMENT OF U.S. PATENT NO. 9,365,188)

33. Emerging Auto incorporates by reference the foregoing paragraphs as if fully set forth herein.

34. Emerging Auto owns by assignment, all rights, title and interest, including the right to recover damages for past, present and future infringement, in U.S. Patent No. 9,365,188 titled

“Methods and Systems For Using Cloud Services To Assign E-Keys To Access Vehicles.” The ’188 patent was duly and legally issued by the United States Patent and Trademark Office on June 14, 2016. A true and correct copy of the ’188 Patent is attached as Exhibit E.

35. On information and belief, Toyota has directly infringed and continues to directly infringe one or more claims of the ’188 patent, including at least claim 1 of the ’188 patent, in the state of Texas, in this judicial district, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products that embody one or more of the inventions claimed in the ’188 patent, including but not limited to the Accused Server Instrumentalities, including servers that enable use of Toyota and Lexus-branded vehicles via electronic keys. By way of example, the Accused Server Instrumentalities include servers that implement, support, and/or direct the Remote Connect and/or Digital Key functionality of Toyota and Lexus-branded vehicles, as well as all reasonably similar products, in violation of 35 U.S.C. § 271(a).

36. The Accused Server Instrumentalities satisfy all claim limitations of one or more claims of the ’188 patent. A claim chart comparing exemplary independent claim 1 of the ’188 patent to representative Accused Server Instrumentalities is attached as Exhibit F.

37. By making, using, offering for sale, selling and/or importing into the United States the Accused Server Instrumentalities, Toyota has injured Emerging Auto and is liable for infringement of the ’188 patent pursuant to 35 U.S.C. § 271(a).

38. In addition, and/or in the alternative to its direct infringement, Toyota has also infringed and continues to infringe the claims of the ’188 patent by, among other things, actively inducing others to use the Accused Server Instrumentalities. Toyota’s users, customers, consumers, agents, distributors, installers, and other third parties who use, sell, and/or offer to sell the Accused

Server Instrumentalities in accordance with Toyota's instructions infringe the claims of the '188 patent, in violation of 35 U.S.C. § 271(a). Toyota intentionally instructs its customers to infringe through support information such as websites, videos, demonstrations, support information and other published information. For example, Toyota's website instructs and encourages its customers to use, manage and control the infringing components and functionalities of the Accused Server Instrumentalities. *See, e.g.*, at https://support.toyota.com/s/article/How-do-I-setup-my-Digital-Key-Toyota?language=en_US; https://support.toyota.com/s/article/How-do-I-get-a-Digital-Key-Toyota?language=en_US; <https://www.toyota.com/connected-services/remote-connect>. Toyota also publishes videos to assist and encourage users to use and operate the infringing components and functionalities of the Accused Server Instrumentalities. *See, e.g.*, https://www.youtube.com/watch?v=QU0V8Q-wvkc&ab_channel=ToyotaUSA; https://www.youtube.com/watch?v=uV2LI0aIUU8&ab_channel=ToyotaUSA; <https://www.youtube.com/watch?v=1mmN1wTTUdQ>; https://www.youtube.com/watch?v=mAf9uWFKLvo&ab_channel=ToyotaUSA; https://www.youtube.com/watch?v=qThp80RGjto&ab_channel=THEAFRICANCARGUY. Thus, Toyota actively instructs and directs its customers to infringe and actively encourages infringement by its customers. Toyota is thereby liable for infringement of the '188 patent under 35 U.S.C. § 271(b).

39. Toyota has had knowledge of the '188 patent at least as early as April 4, 2018, when it identified the '188 patent to the United States Patent and Trademark Office in a filing in connection with its patent application number 15/945,360. Toyota has also had knowledge of the '188 patent since at least the filing and/or service date of the Complaint in this action. Despite this knowledge, Toyota has continued to engage in activities to encourage and assist its customers in the use of the

Accused Server Instrumentalities. Thus, on information and belief, Toyota (1) had actual knowledge of the patent; (2) knowingly induced its customers to infringe the patent; and (3) had specific intent to induce the patent infringement.

40. Additionally, and/or alternatively, Toyota is liable as a contributory infringer of the '188 patent under 35 U.S.C. § 271(c) by having offered to sell, sold and imported and continuing to offer to sell, selling, and importing into the United States the Accused Instrumentalities and reasonably similar products, to be especially made or adapted for use in infringement of the '188 patent. The portions of the infringing servers that enable use of Toyota and Lexus vehicles via electronic keys are a material component for use in practicing the '188 patent and are especially made and are not staple articles of commerce suitable for non-infringing use.

41. Emerging Auto complied with 35 U.S.C. § 287 because Emerging Auto does not make, offer for sale or sell products that practice the '188 patent during the relevant time period.

42. As a result of Toyota's direct and indirect infringement of the '188 patent, Emerging Auto is entitled to monetary damages (past, present and future) in an amount adequate to compensate for Toyota's infringement, but in no event less than a reasonable royalty for the use made of the invention by Toyota, together with interest and costs as fixed by the Court.

43. On information and belief, despite having knowledge of the '188 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '188 patent, Toyota has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. Toyota's infringing activities relative to the '188 patent have been, and continue to be, willful, wanton, malicious, deliberate, consciously wrongful, and an egregious case of misconduct beyond typical infringement such that Emerging Auto is entitled to enhanced damages under 35 U.S.C. § 284 up to three times the amount found or assessed.

44. Toyota's acts of direct and indirect infringement have caused and continue to cause damage to Emerging Auto. Emerging Auto is entitled to damages in accordance with 35 U.S.C. §§ 271, 281, and 284 sustained as a results of Toyota's wrongful acts in an amount to be proven at trial.

FOURTH COUNT

(INFRINGEMENT OF U.S. PATENT NO. 9,171,268)

45. Emerging Auto incorporates by reference the foregoing paragraphs as if fully set forth herein.

46. Emerging Auto owns by assignment, all rights, title and interest, including the right to recover damages for past, present and future infringement, in U.S. Patent No. 9,171,268 titled "Methods and Systems For Setting And Transferring User Profiles To Vehicles And Temporary Sharing of User Profiles To Shared-Use Vehicles." The '268 patent was duly and legally issued by the United States Patent and Trademark Office on October 27, 2015. A true and correct copy of the '268 Patent is attached as Exhibit G.

47. The '268 patent solves technical problems and is directed to novel technological improvements in methods and systems for locating, providing access to, and securely communicating data with a shared vehicle using wireless networks which departed from prior approaches. The inventions disclosed and claimed in the '268 patent enable the transfer of user profiles to various vehicles having differing features and functionality, allowing varying user preferences to be automatically configured, depending on the compatibility of the vehicle. This shift in technology from basic vehicle settings to user-specific vehicle settings determined and applied based on the technical capabilities of specific vehicles has revolutionized the automotive industry. As explained in more detail below, the embodiments set forth in the '268 patent allow each user to apply his or her

relevant and compatible settings to any vehicle based on personal login information. When a user logs in to a vehicle, the vehicle may determine either locally/onboard the vehicle or via communications remotely with a distributed access management system the validity of the login and password presented to the system. If the user's login is recognized, the system will apply the user specific settings and user privileges to the vehicle.

48. The '268 patent is part of a family of patents that teach and claim inventions for improving the efficiency, security, consistency and overall user experience of personal, rental and shared-use vehicle systems.

49. The '268 patent discloses the Penilla brothers' inventive systems and methods allowing for, e.g., securely, dynamically and automatically transferring user profile settings to vehicles and the employment of a cloud processing system to manage, update, learn from, improve upon and automatically implement a personalized vehicle-user experience in specific vehicles having various technical functionalities. Ex. G, 1:56-5:12. The inventions of the '268 patent offer a specific, personalized user experience, defined by preferences the user sets in a user profile, while simultaneously achieving the scalability of applying those personalized settings to various shared vehicles and shared vehicle services—supporting a wide range of user preferences and vehicle types by, e.g., providing for a compatibility check between settings in the user profile and available settings on the vehicle before transferring the profile settings for programming on the vehicle. *Id.*; *see also id.*, 33:1-26, 34:43-35:21. As stated in the title, the '268 patent involves transferring user profile settings and making those settings available to a user from vehicle to vehicle. As part of this process, the systems and methods perform a compatibility check to ensure that a selected vehicle has particular settings available. *Id.*, 1:66-2:5, 10:42-55, 31:65-32:3, 33:11-15, 34:42-51. Indeed, this

“compatibility check” was featured prominently in prosecution and used as a basis to overcome art. Ex. Y, at 202-203, 213.

50. As explained in the '268 patent itself, the inventions allow for a shift in current technology, allowing a user's preference regarding vehicle settings to be securely stored remotely and dynamically applied to specific vehicles having specific technology features:

The purpose of abstracting vehicle operators from the vehicle itself is a shift from the current state of the art in which settings are vehicle specific—each vehicle typically only having the ability to store 1-3 sets of settings, to where vehicle settings are user specific and 1-n logins can be managed through an access management system. The embodiments defined herein allow each user to apply his or her settings to any vehicle based on their login information in which they provide their login and password. When a user logs into a vehicle, the vehicle will determine locally on board and/or communicate remotely with a central or distributed access management system to determine the validity of the login presented to the system. If the user's login is recognized, the system will apply settings and use privileges to the vehicle prescribed by the login.

Ex. G, at 12:31-45.

51. The innovations of the '268 patent have broad application to various shared vehicle services, supporting a wide range of users and vehicles, and are particularly beneficial for improving ‘mobility as a service’ industries, such as car-sharing, ride-hailing and other on-demand transportation solutions. Ex. Y at 202-203, 213. In fact, the innovations disclosed by the '268 patent have provided a foundation that persists in many of the shared vehicle and vehicle personalization technologies of today. Companies like Uber Technologies, Waymo, IBM, Google, Cisco, LG Electronics, Apple, Ford, Nissan, Honda, Audi, Daimler, and even Toyota have all cited to the '268 Patent in their own patent applications. Ex. M, at 24-26 (Google Patents Search, U.S. Patent No. 9,171,268, identifying assignees of patents and patent application publications which cited to the '268 patent). Indeed, Defendants have recognized the novelty and importance of the functionality disclosed and claimed in the '268 patent.

52. For example, years after the priority date of the '268 patent, Toyota InfoTechnology Center U.S.A., Inc., formerly a wholly-owned subsidiary of Defendant Toyota Motor Company, filed a family of patent applications titled, "User Profile Synchronization for a Vehicle." Ex. T.² The disclosure and claims of the patents in this family are remarkably similar to that of the '268 patent. *Id.* Likewise, well after the priority date for the '268 patent, Defendant Toyota Motor Corporation filed a patent application titled "User Profile-Based Automatic Parameter Tuning System for Connected Vehicles," which issued as U.S. Patent No. 10,202,127, further demonstrating that technological advancement of the '268 patent. Ex. O.

53. The innovations of the '268 patent not only provide users with a more personalized, comfortable and secure experience, they also allow the owner of a vehicle (or a fleet of vehicles) more control and security in the management of their car and how the vehicle can be used by other drivers. Ex. G, Abstract, 1:56-5:12, 6:13-29; 10:7-24, 42-55. For example, the inventions of the '268 patent allow for an enhanced user experience, ensuring consistent comfort, convenience and security for the user across different vehicles—rented, shared or owned. *Id.* The inventions also support increased security and privacy, for instance, by allowing temporary profile management that ensures user data is protected by deactivating profiles after use. *Id.*, 20:6-13, 33:61-34:3.

54. Additionally, the systems of the '268 patent allow the owner of a vehicle to specify what settings will be available to another driver, like a child, a valet, a guest driver, a dealership "test-drive" customer, or a rental car customer, and because the invention includes a compatibility check

² In July 2018, Defendants announced they were absorbing the research and development functions of Toyota InfoTechnology Center and Toyota InfoTechnology Center U.S.A. into their in-house Connected Company. <https://pressroom.toyota.com/toyota-motor-corporation-toyota-motor-north-america-to-absorb-toyota-infotechnology-center/>.

between settings in the user profile and available settings on the vehicle, the system sends the owner automatic alerts when there is a violation of those settings. Ex. G, 1:66-2:5, 10:15-24; 13:37-14:39.

55. The prosecution history provides relevant details on the claims' requirement that a server perform a compatibility check before transferring user profiles to selected vehicles. During prosecution, the pending claims 1-20 were initially rejected as anticipated by the Hendrix reference (U.S. Publication No. 2012/0330494), and ultimately, Applicant made clarifying amendments to independent claims 1, 10, and 20, including adding language on "the check for compatibility of settings" to each of these claims. Ex. Y, 128, 192-201, 203. An Examiner Interview was conducted, in which the Examiner and Applicant discussed "the clarifying language that defines the exchanges between the server and the vehicle and the transfer of user profiles to a vehicle, such that settings that are compatible with a vehicle can be transferred for programming on the vehicle." *Id.*, 202. In this interview, the Examiner and Applicant reached an "[a]greement [] that the cited art to Hendrix does not teach these features, considered as a whole with the claims as amended." *Id.*

56. Applicant then made those "agreed-upon" clarifying amendments to independent claims 1, 10, and 20, as well as amendments to claims 2-5, 7-9, 11-15, and 18. Ex. Y, 192-201. For example, Applicant amended claim 10 to specifically include the terms "by the server" and "are compatible with settings that" in element 10[c]:

determining, by the server, applicable settings for the selected vehicle, the applicable settings being settings that are preferred to be set as identified from the user profile and are compatible with settings that are settable in the selected vehicle;

Ex. Y, 196.

57. Applicant argued that amendments to each of the independent claims 1, 10 and 20 clarified "the way in which the user profile is used to enable transfer of certain vehicle settings to the vehicle." Ex. Y, 203. For example, Applicant made clarifications to independent claims 1 and 10, "such as the determination of vehicle settings that are determined compatible" (claim 10[c])

amendments); Applicant further clarified the vehicle settings that “are identified in the user preferences of the user profile” (claim 10[b] amendments). *Id.*, 196, 203; *see also id.*, 203 (“claim 10 was also amended to clarify the determining, by the server, of applicable settings for the selected vehicle...”). Likewise, independent “[c]laim 20[a] was also amended to recite that certain of the user settings are determined to be compatible for use with the vehicle.” *Id.*, 203; *see also id.*, 200. Applicant also made numerous amendments to claim 20 “for clarity,” including amendments to the preamble, elements 20[b]-20[c] and 20[e]. *Id.*, 203; *see also id.*, 200. Applicant cited to paragraph 018 in support of additional claim 20 amendments. *Id.*, 203; *see also id.*, 39, ¶ [0018].

58. Importantly, “as examples of the check for compatibility of settings,” Applicant specifically cited to paragraphs “007, 0075” of the specification. *Id.* For example, the specification had described that a compatibility check can detect a violation of a setting or an incompatible setting, allowing for an automatic notification to be sent to the profile administrator:

In one example, the profile is associated with a plurality of vehicle types and the method includes detecting a violation of a setting or an incompatible setting in the profile that is user defined via the user account. The method can then automatically send a notification to a predefined administrator of the profile.

Ex. Y, 37, ¶ [0007]

59. As another example, the specification described a transfer of profile settings, in which a user’s vehicle screen displays only those third-party applications that are compatible with the vehicle selected, or is allowed to display to the user all applications, regardless of compatibility:

The screen displays can have various configurations, placements ... and the user can provide controls for some or all of the interfaces and controls in certain locations. The selection can be enabled for third-party applications. ... The third-party applications can be pre-identified by the site and displayed to the user if they are compatible with the particular vehicle selected. In another embodiment, the third-party applications can all be shown to the user whether or not they are compatible with the vehicle. ...

Ex. Y, 55-56, ¶ [0075].

60. Applicant then relied upon this claimed functionality to overcome the rejection, arguing that “Hendrix does not teach to perform any compatibility between settings in the user profile

against settings available on the specific vehicle” and therefore, “does not teach the transfer of user profiles to vehicles.” Ex. Y, 203. With these amendments made to independent claims 1, 10 and 20, including the server’s check for compatibility of settings in the allowed claims, all pending claims were allowed. *Id.* The Examiner recognized that neither Hendrix nor “any art of record” discloses or suggests “...transferring the user profile, and configured the vehicle to automatically set on the vehicle one or more of the available **vehicle settings that are determined compatible** with settings identified in one or more of the user preferences of the user profile[.]” *Id.* (emphasis added).

61. Accordingly, each of the independent claims recites, and has written description for the server performing a compatibility check between settings in the user profile against settings available on the specific vehicle. *Id.*, *see id.*, 203 (“See ¶¶ 007, 0075, as examples of the check for compatibility of settings...”); *and see id.*, 190-201 (amendments to claims 1-5, 7-15, 18, 20). The compatibility check performed by the server is an improvement in the technical field of cloud computing.

62. During the prosecution of their own patents, Defendants have overcome rejections under 35 U.S.C. § 101, by relying on features and functionalities of the claim that are included in the claims of the ’268 Patent, demonstrating the eligibility of the ’268 Patent.

63. For example, Defendant Toyota Motor North America (“TMNA”) filed an application which led to the issuance of U.S. Patent No. 11,788,852 (the “’852 patent”), titled “Sharing of Transport User Profile,” on October 17, 2023. Ex. P. Generally speaking, TMNA’s ’852 patent “relates to profiles of users and occupants of transports, and more particularly, to sharing of transport user profiles.” *Id.* at Technical Field. Issued claim 1 of the ’852 patent is reproduced below:

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What is claimed is:

1. A method, comprising:

executing a profile-sharing blockchain transaction via a blockchain ledger stored on and replicated among a plurality of transports which are peers of the blockchain ledger; 5

receiving, by a transport from among the plurality of transports, a request for a service based on an input to a processing device of the transport by a transport occupant of the transport; 10

accessing, via the processing device of the transport, a mobile device of the transport occupant to identify the transport occupant and matching an identity of the transport occupant to an occupant profile stored on the blockchain ledger; 15

determining, by the transport, that the occupant profile of the transport occupant stored on the blockchain ledger does not contain a subscription to the requested service therein;

identifying, by the transport, conditions for sharing a different profile from an additional transport with the profile of the transport occupant from the profile-sharing blockchain transaction committed to the blockchain ledger; 20

determining, via a blockchain smart contract running on the blockchain ledger, that the different profile is authorized for use by the profile of the transport occupant based on the conditions identified from the profile-sharing blockchain transaction committed to the blockchain ledger; 30

executing a blockchain consensus process among the plurality of transports to verify that peer-to-peer sharing of the subscription service from the additional transport to the transport is based on the at least one shared profile read from the blockchain ledger; and 35

in response to the verification, outputting content for the service via the processing device of the transport.

64. During the prosecution of App No. 16/699,038 which issued as the '852 patent, in an office action dated March 10, 2022, the Patent Office rejected the pending claims pursuant to 35 U.S.C. § 101 “because the claimed invention is directed to an abstract idea without significantly more” and the claims recite “the abstract concept of identifying a profile shared with a transport occupant based on a profile of the transport occupant” which “falls into the mental processes grouping of abstract ideas as they include a human mentally determining the profile of the transport occupant and identifying a profile shared with the transport occupant based on their profile.” In addition, the Examiner found that the claims also “recite a step of providing a service to the transport occupant based on the profile shared with the transport occupant” which “falls into the organization of human activity grouping of abstract ideas as it includes a human being providing the service.” The Examiner further found that while the claims recite additional elements, “they fail to integrate the abstract idea into a practical application.” Ex. Q.

65. In response to the March 2022 office action, TMNA submitted a proposed amendment to claim 1, among other claims. TMNA also participated in an Examiner interview of March 21, 2022. TMNA argued that it had traversed the rejection by amending the claims and requested that the rejection be withdrawn. The Examiner disagreed during the interview, stating that “the proposed amendment to claim 1 would not overcome the rejection under 35 U.S.C. 101.” Ex. Q.

66. On May 9, 2022, the Examiner issued another office action finding that the claims “as amended are still directed to an abstract idea finding that “While the applicant has amended the independent claims to define the provided service to be retrieved content that is provided to the transport, the amendment is not sufficient to overcome the rejection because it is considered data output which is insignificant extra-solution activity.” Ex. Q. The Examiner suggested making further amendments to the independent claims to either incorporate the contents of other pending claims “or

to specify that the provided service is something such as ‘a need for fuel/charge, a maintenance service, etc.’” *Id.*

67. On June 29, 2022, TMNA responded to the May 2022 office action. Ex. Q. Again, TMNA participated in an interview with the Examiner, arguing that the proposed amendments to claim 1 would overcome the 101 rejection “because the amended feature of ‘requesting, by the transport, the different transport for permission to use a subscription for the service included in the additional profile and retrieving permission to use the subscription from the different transport.’” During the interview, the Examiner said that the claim would likely still be rejected “as being directed to a mental process without significantly more because the feature of requesting and retrieving a permission could be considered necessary data gathering/data output which amounts to insignificant extra-solution activity.” *Id.*

68. In TMNA’s response, it pointed to the USPTO’s “2019 Revised Patent Subject Matter Eligibility Guidance” (the “Revised Guidance”) and made several arguments to overcome the 101 rejection. First, TMNA noted that for the features of claim 1, transports can exchange data/profiles using a blockchain ledger and a blockchain network that connects them together. “Thus profiles can be securely shared between transports” and “Furthermore, as noted in Claim 1, permission to use a service in another person’s profile is based on a profile-sharing blockchain transaction” making the claims subject matter eligible under Prong I of Step 2A of the Revised Guidance. Ex. Q. TMNA further stated that “a device such as a radio, navigation system, infotainment system etc. receives an input from a user for a subscription service which the user does not subscribe to. In this case, the transport can query the blockchain ledger for subscription services of other users (on other transports) that are shared with the user in the current transport. In particular, a blockchain ledger and a

blockchain network are used to share data and permissions between transports thus enabling transports to share services among themselves in an automated matter.”

69. TMNA further stated that “Applicant’s claims impose meaningful, practical, and succinct operations that provide an unconventional solution to a problem of lack of authorization for using the Internet/services,” “describe a concrete, practical solution to the problem” and “integrate an alleged abstract idea into a practical application that reduces the amount of applications needed for reminders of tasks detected from multiple different media channels and that does not monopolize a judicial exception and are thereby patent eligible because the practical application of Applicant’s claims allow for a real-world benefit through computing systems.” Ex. Q.

70. TMNA concluded its response to the office action by stating that “should the Office nonetheless maintain its position that the claims are directed to an abstract idea, Applicant respectfully submits that under the second step (2B) of Alice the ordered combination of elements in the independent claims are sufficient to ensure that the claim amounts to significantly more than the judicial exception.” Ex. Q.

71. On July 25, 2022, the Examiner issued an Advisory Action. Ex. Q. On August 9, 2022, TMNA submitted an Amendment Submitted With RCE, requesting additional amendments to claim 1 in an attempt to traverse the 101 claim rejections, again pointing to the Revised Guidance to argue patent eligibility. *Id.* TMNA submitted, among other arguments, that “the process includes media content being retrieved and output to a device within a transport,” that “none of the steps are abstract” and “the steps include novel functionality of using a blockchain transaction to share profiles among transports (including permission to use subscription services).” *Id.* TMNA concluded its remarks by reiterating the claims “impose meaningful, practical, and succinct operations that provide an unconventional solution to a problem of improved communication amongst transports,” that the

claims are “patent eligible because the practical application of Applicant’s claims allow for a real-world benefit through computing systems” and that under the second step (2B) of Alice the ordered combination of elements in the independent claims are sufficient to ensure the claim amounts to significantly more than the judicial exception.” Ex. Q.

72. On October 31, 2022, the Examiner issued a further office action in response to TMNA’s request for continued examination, agreeing that independent claims 1 and 15, as amended are now directed to patent-eligible subject matter, “because the recited step of ‘executing a profile-sharing blockchain transaction via a blockchain ledger shared with a plurality of transports’ could not be reasonably performed in the human mind.” Ex. Q. The Examiner, did however, maintain his 101 rejection with respect to independent claim 8 stating that the recited steps of claim 8 could be mentally performed by a human with the help of pen and paper. *Id.*

73. On January 13, 2023, TMNA further amended claim 8 to include the same/similar steps performed in claims 1 and 15 in order to traverse the 101 rejection. Ex. Q. On April 5, 2023, the Examiner issued a further office action indicating all 101 rejections had been overcome. *Id.*

74. Defendants’ marketing materials tout the “game-changing” benefits of the inventions claimed in the ’268 Patent. For example,

One of the coolest features involves the Toyota mobile app. It builds on an existing function allowing drivers to start the car from their phone. Now with user profiles, drivers can store preferred vehicle settings via the Toyota app. With the user profile paired to either a smartphone device or the vehicle’s smart key, the settings such as music and screen display preferences will automatically be recognized when a driver returns to the vehicle. No more having to readjust everything each time a different person gets behind the wheel, which saves time and, honestly, energy.

The user profiles are also transferrable, so drivers can bring their favorite settings to any Toyota vehicle with the new multimedia system.

Ex. R, <https://pressroom.toyota.com/toyotas-all-new-audio-multimedia-system-is-here-and-it-is-a-game-changer/>.

75. As another example, Defendants tout the importance of the user profile feature, whereby “having a more personalized experience that moves from vehicle to vehicle with the driver is essential.”

In the age of digital transformation in mobility, having a more personalized experience that moves from vehicle to vehicle with the driver is essential. Through the new multimedia system’s **User Profile** feature, the driver’s personalized settings and experience, from preferred media or radio station to climate settings in some models, will be retained and accessible when the driver next returns to the vehicle.

- **User Profiles**– To help improve the user’s overall driving experience, a user will receive the same personalized settings in new vehicles making it portable from vehicle to vehicle. The new profile system is stored on the cloud, meaning users can access and take their experiences on the go with them across vehicles featuring the new multimedia system. Once created, users can use a Bluetooth handheld device such as a smartphone or tablet, smart key, or manual login to access their profile.

Ex. S, <https://pressroom.toyota.com/toyota-motor-north-america-introduces-next-generation-multimedia-system-to-deliver-best-in-car-user-experience/>

76. On information and belief, Toyota has directly infringed and continues to directly infringe one or more claims of the ’268 patent, including at least claim 10 of the ’268 patent, in the state of Texas, in this judicial district, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products that embody one or more of the inventions claimed in the ’268 patent, including but not limited to the Accused Server Instrumentalities. By way of example, the Accused Server Instrumentalities include servers that are associated with receiving, maintaining, and/or storing User Profile information and/or communicating User Profile and/or setting information for Toyota and Lexus-branded vehicles to be

programmed remotely based on user profiles, as well as all reasonably similar products, in violation of 35 U.S.C. § 271(a).

77. Accused Server Instrumentalities satisfy all claim limitations of one or more claims of the '268 patent. A claim chart comparing exemplary independent claim 10 of the '268 patent to representative Accused Server Instrumentalities is attached as Exhibit H.

78. By making, using, offering for sale, selling and/or importing into the United States the Accused Server Instrumentalities, Toyota has injured Emerging Auto and is liable for infringement of the '268 patent pursuant to 35 U.S.C. § 271(a).

79. In addition, and/or in the alternative to its direct infringement, Toyota has also infringed and continues to infringe the claims of the '268 patent by, among other things, actively inducing others to use the Accused Server Instrumentalities. Toyota's users, customers, consumers, agents, distributors, installers, and other third parties who use, sell, and/or offer to sell the Accused Server Instrumentalities in accordance with Toyota's instructions infringe the claims of the '268 patent, in violation of 35 U.S.C. § 271(a). Toyota intentionally instructs its customers to infringe through support information such as websites, videos, demonstrations, support information and other published information. For example, Toyota's website instructs and encourages its customers to use, manage and control the infringing components and functionalities of the Accused Server Instrumentalities. See, e.g., at https://support.toyota.com/s/article/Toyota-App-User-Profile-10735?language=en_US#:~:text=a%20User%20Profile%3F-.A%20User%20Profile%20is%20created%20when%20you%20register%20an%20account,to%20customize%20their%20driving%20experience;https://toyotaaudioandconnectedservicessupport.com/toyota/feature/Toyota%20User%20Profile%20/52ba95c0-3376-11ec-bd3d-9d7b70ae271f?model=bZ4X&year=2023;

<https://lexusconnectedtechnologysupport.com/lexus/feature/User%20Profile/6ba8b100-0929-11ed-a686-85aa58672a6c?model=UX%20250H&year=2024>; https://support.toyota.com/s/article/How-can-I-add-my-User-Profile-to-a-vehicle-Toyota?language=en_US#:~:text=enter%20the%20vehicle.-,The%20Toyota%20app%20must%20be%20open%20and%20signed%20in%2C%20and,desired%20profile%20for%20the%20driver. Toyota also publishes videos to assist and encourage users to use

and operate the infringing components and functionalities of the Accused Server Instrumentalities. See, e.g., https://www.youtube.com/watch?v=IBS6mlpArFQ&ab_channel=ToyotaUSA; https://www.youtube.com/watch?v=OWLkSJKb8Bc&ab_channel=ToyotaUSA. Thus, Toyota actively instructs and directs its customers to infringe and actively encourages infringement by its customers. Toyota is thereby liable for infringement of the '268 patent under 35 U.S.C. § 271(b).

80. Toyota has had knowledge of the '268 patent at least as early as December 8, 2020, when it identified the '268 patent to the United States Patent and Trademark Office in a filing in connection with its patent application number 15/632,854. Toyota has also had knowledge of the '268 patent since at least the filing and/or service date of the Complaint in this action. Despite this knowledge, Toyota has continued to engage in activities to encourage and assist its customers in the use of the Accused Server Instrumentalities. Thus, on information and belief, Toyota (1) had actual knowledge of the patent; (2) knowingly induced its customers to infringe the patent; and (3) had specific intent to induce the patent infringement.

81. Additionally, and/or alternatively, Toyota is liable as a contributory infringer of the '268 patent under 35 U.S.C. § 271(c) by having offered to sell, sold and imported and continuing to offer to sell, selling, and importing into the United States the Accused Server Instrumentalities and reasonably similar products, to be especially made or adapted for use in infringement of the '268

patent. The portions of the infringing servers that enable Toyota and Lexus vehicles to be programmed remotely based on user profiles are a material component for use in practicing the '268 patent and are especially made and are not staple articles of commerce suitable for non-infringing use.

82. Emerging Auto complied with 35 U.S.C. § 287 because Emerging Auto does not make, offer for sale or sell products that practice the '268 patent during the relevant time period.

83. As a result of Toyota's direct and indirect infringement of the '268 patent, Emerging Auto is entitled to monetary damages (past, present and future) in an amount adequate to compensate for Toyota's infringement, but in no event less than a reasonable royalty for the use made of the invention by Toyota, together with interest and costs as fixed by the Court.

84. On information and belief, despite having knowledge of the '268 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '268 patent, Toyota has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. Toyota's infringing activities relative to the '268 patent have been, and continue to be, willful, wanton, malicious, deliberate, consciously wrongful, and an egregious case of misconduct beyond typical infringement such that Emerging Auto is entitled to enhanced damages under 35 U.S.C. § 284 up to three times the amount found or assessed.

85. Toyota's acts of direct and indirect infringement have caused and continue to cause damage to Emerging Auto. Emerging Auto is entitled to damages in accordance with 35 U.S.C. §§ 271, 281, and 284 sustained as a results of Toyota's wrongful acts in an amount to be proven at trial.

FIFTH COUNT

(INFRINGEMENT OF U.S. PATENT NO. 11,396,244)

86. Emerging Auto incorporates by reference the foregoing paragraphs as if fully set forth herein.

87. Emerging Auto owns by assignment, all rights, title and interest, including the right to recover damages for past, present and future infringement, in U.S. Patent No. 11,396,244 titled “Methods For Transferring User Profiles Between Vehicles Using Cloud Services.” The ’244 patent was duly and legally issued by the United States Patent and Trademark Office on July 26, 2022. A true and correct copy of the ’244 patent is attached as Exhibit I.

88. On January 17, 2024, after Emerging Auto discovered a clerical mistake, it filed a certificate of correction which, among other changes, added the following claim limitation to claims 1 and 17: “and at least one of said plurality of settings being restricted for use on the vehicle, wherein” and added claims 21 and 22. Exhibit K.

89. The ’244 patent is part of a family of patents that teach and claim inventions for improving the efficiency, security, consistency and overall user experience of personal, rental and shared-use vehicle systems. The ’244 patent discloses inventive systems and methods allowing for, e.g., the automatic and seamless transfer of user profile settings between vehicles and the employment of a cloud processing system to manage, update, learn from, improve upon, and automatically implement a personalized vehicle-user experience in vehicles. Ex. I, Abstract, 1:59-6:11. In particular, the ’244 patent is a paradigm shift from the current state of the art in which settings are vehicle specific-each vehicle typically only having the ability to store one to three settings, to where vehicle settings are user specific and the logins to allow for these user-specific settings is managed through a remote access management system. The embodiments discussed in the ’244 patent allow

each user to apply his or her settings to any vehicle based on their individual login information in which they provide their login name and a password. When a user logs into a vehicle, the vehicle will determine locally on board and/or communicate remotely with a central or distributed access management system to determine the validity of the login presented to the system. If the user's login is recognized, the system will apply settings and user privileges to the vehicle prescribed by the login.

90. The inventions of the '244 patent offer a specific, personalized user experience, defined by the preferences the user sets in a user profile, while simultaneously achieving the scalability of applying those personalized settings to various shared vehicles and shared vehicle services—leveraging cloud services to store and manage user profile data which allows for secure and efficient synchronization of settings across a wide range of vehicle types by, e.g., server-side verification of the user's access to the user profile. Ex. I, 33:1-26, 34:43-35:21.

91. As stated in the title, the '244 patent involves the transferring of user profiles between vehicles using cloud services, making secure and efficient synchronization of user profile settings across different vehicles. As part of this process, the systems and methods include mechanisms for authenticating and verifying users that interact with the user profile data, ensuring that only authorized devices and verified users can access or modify the stored profiles. Ex. I, 31:65-32:3, 33:11-15, 34:42-51, 1:66-2:5, 10:42-55. Indeed, this 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. Ex. L, 213-214 (Reasons for allowance), 198-205 (Amendments), 206 (Applicant remarks in amendment).

92. The innovations of the '244 patent have broad application to various shared vehicle services, supporting a wide range of users and vehicles, and are particularly beneficial for improving ‘mobility as a service’ industries, such as car-sharing, ride-hailing and other on-demand

transportation solutions. Ex. I, 17:8-32. In fact, the innovations disclosed by the '244 patent have provided a foundation that persists in many of the shared vehicle and vehicle personalization technologies of today. Companies like Uber Technologies, Meta, Facebook, Apple, Ford, Google, Honda, Audi, Qualcomm, Nokia, Volvo, Jaguar, Paypal, IBM, Microsoft, and even Toyota have all cited to the '244 Patent in their own patent applications. Ex. M, (Google Patents Search, U.S. Patent No. 11,396,244, identifying assignees of patents and patent application publications which cited to the '244 patent).

93. The innovations of the '244 patent not only provide users with a more personalized, comfortable and secure experience, they also allow the owner of a vehicle (or a fleet of vehicles) more control and security in the management of their car and how the vehicle can be used by other drivers. Ex. I, Abstract, 1:56-5:12, 6:13-29; 10:7-24, 42-55. For example, the inventions of the '244 patent allow for an enhanced user experience, ensuring consistent comfort, convenience and security for the user across different vehicles—rented, shared or owned. *Id.* The inventions also support increased security and privacy, for instance, by allowing temporary profile management that ensures user data is protected by deactivating profiles after use. Ex. I, 20:6-13, 33:61-34:3.

94. Additionally, the systems of the '244 patent let the owner of a vehicle specify what settings will be available to another driver, like a teenaged-child, a valet, a guest driver, a dealership “test-drive” customer, or a rental car customer, and because the invention includes a server verification for accessing the profile data before transferring settings to a vehicle, the system ensures that only users with specific permissions, like an owner, a parent, or an administrator, can edit, restrict or permit settings for additional users, such as employee drivers or teenager family members. Ex. I, 1:66-2:5, 10:15-24; 13:37-14:39.

95. In developing the innovations described in the '244 patent, the Penilla brothers recognized drawbacks in the prior art. For example, vehicle settings were specific to vehicles and their respective technical capabilities and functionalities. The Penilla brothers orchestrated a fundamental shift in the art, detaching vehicle operators and their respective user profiles from specific vehicles, such that preferences for vehicle settings are user specific, allowing each user to securely apply settings to any vehicle of any capability using secure login and defined permissions/restrictions. Ex. I, 13:35-43. For instance, the innovative methods of access management for user profiles and user profile transfer between vehicles claimed in the '244 patent enable companies to create and manage different logins to company vehicles for their employee delivery drivers, car washers, and mechanics. Ex. I, 14:42-46. "That is, each login can be configured to provide or restrict access based on the user logged into the vehicle." *Id.*, 14:44-46.

96. Families, too, find important applications of the inventions of the '244 patent, which ensures that only select users of vehicles, like a co-owner parent, can create and make changes to user profile roles and restrict specific settings for the vehicle. For example, in Figure 2, shown below, user 1 is an administrator and can add more logins and/or roles to the system to allow a family member to have access to the family vehicles, but user 1 (e.g., parent) may only want user 2 (e.g., teenaged child driver) to have access to the vehicle for purposes of traveling between school and home. The '244 Patent invention restricts the teenager's ability to edit his or her login, role, or vehicle settings since they do not have administrator access. Ex. I, 16:18-36, Fig. 2.


 User 1

User 1 Logins	User 1 Roles	User 1 Vehicles
Administrator(edit) Add New	- Owner(edit) - Weekend driving(edit) - Commute driving(edit) Add New	- Ford SUV(edit) - Honda Hybrid(edit) Add New


 User 2

User 2 Logins	User 2 Roles	User 2 Vehicles
Child(edit)	- School commute(edit) - Errands(edit)	Honda Hybrid


 User 1

User 2 Logins	User 2 Roles	User 2 Vehicles
Child(edit) Add New	- School commute(edit) - Errands(edit) Add New	Honda Hybrid Add New

FIG. 2

97. The methods of the '244 patent allow an administrator parent and teenager child to have user profiles with specific settings for the same family car, and by having the server verifying user access to the profile of settings, not merely verifying accessing the vehicle, the parent can alter and restrict settings to be applied to the vehicle—in real time—even when other users are logged in, like the teenager user, but the teenager user does not have the same editing permission given his or her login role. Ex. I, 11:30-46, 13:50-14:41, 15:25-17:7, Figs. 2-4.

98. For example, with the inventions of the '244 patent, the parent administrator of the vehicle, who has a master account with administrator credentials, is able to set and remotely

administer login settings for their teenaged-driver child, and can even update restrictions of settings, for example, at night or upon receipt of a notification that the teenager's rate of speed has exceeded a specified threshold. Ex. I, 11:30-46, 13:50-14:41, 15:25-17:7, 23:7-14, Figs. 2-5.

99. In addition, the prosecution history provides relevant details on the claims' requirement that *a server* verify a user for *accessing a user profile* that has stored settings before transferring user profiles to a vehicle.

100. During prosecution, the pending independent claims 1 and 17 were initially rejected as anticipated by the Zellner reference (U.S. Publication No. 2007/0207789), and ultimately, Applicants made clarifying amendments to independent claims 1 and 17 and added independent claim 21, including 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.” Ex. L, 206; *id.* at 198, 202, 204-05. For example, Applicants amended claim 1 to specifically include the terms “for accessing the profile” and “and at least one of said plurality of settings being restricted for use on the vehicle, wherein” in element 1[b]:

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.

101. Applicant argued that amendments to each of the pending independent claims 1 and 17 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.” Ex. L, 206.

102. As examples of how some settings may be restricted depending on the login credentials of the user, Applicant specifically cited to Figures 4 and 5 of the specification. Ex. L. 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. Ex. I, 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.

103. Figure 4 shows which settings, based on User 2’s login credentials, are “user editable” versus those that are “admin or restricted”:


 User 2

User 2's login settings for login: CHILD	
Fuel use settings	• Electric battery • Plug in • Fuel • Hybrid
Driving characteristics	• Speed restrictions • Fuel use restrictions
Location based settings	• GPS aided travel restrictions • Map restrictions • Travel radius boundaries • Dynamically load maps • Dynamically load directions • Dynamically load fuel • Dynamically load charge • Dynamically load battery • Fuel purchase location restrictions
Time based use and restrictions	• Day driving • Night driving • Time specific driving
Automatic purchase settings	• Financial institution linking • Fuel purchase settings • Charge time purchase settings • Battery purchase settings • Car wash purchase settings

User editable

Admin or restricted

FIG. 4

104. Figure 5 was also cited by Applicant as one of the “many ways of doing the restriction,” wherein Figure 5 describes:

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.

Ex. I, 16:61-17:7, Fig. 5

105. Applicant explained that “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.” Ex. L, 206-07.

106. Likewise, independent claim 21 was also added and like independent claims 1 and 17, claim 21 recited 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. Applicant also made amendments to dependent claims 2-3, 6, and 11-12, and added dependent claim 22. Ex. L, 198-200, 205; *see also id.*, 200.

107. Applicant relied on this claimed server functionality—verifying the user for accessing a profile that has settings stored in storage of a cloud services system, wherein at least one of the settings are restricted for use on the vehicle—to overcome the Zellner anticipation rejection. Applicant argued that the Zellner reference teaches determining the identity of a user in order to grant access to a vehicle, that is, 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.” Ex. L, 206. And “[i]n *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.*

108. With these amendments made 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, all pending claims were allowed, subject to filing a terminal disclaimer. Ex. L, 213. The Examiner recognized 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.* (emphases added).

109. During the prosecution of their own patents, Defendants have argued that functionality implicated by the claims of the ’244 patent is novel and non-abstract to overcome rejections under 35 U.S.C. § 101, demonstrating the eligibility of the ’244 Patent.

110. Indeed, Toyota itself has recognized the novelty and importance of the functionality disclosed and claimed in the ’244 patent. Years after the priority date of the ’244 Patent, Toyota filed a patent application titled, “System and Methods for Selecting a User Profile Among Multiple Users Carrying Personal Devices.” Ex. N. The disclosure and claims of Toyota’s patent application publication are remarkably similar to that of the ’244 patent—so similar in fact that Toyota’s application has been rejected by the Patent Office as unpatentable under 35 U.S.C. § 103 over the ’244 Patent in view of Patent Application Publication No. 2017/0369071 to Gould et al. *Id.* at 7.

Toyota has since appealed that final rejection of its patent application, claiming that the cited combination fails to teach or suggest a proposed feature for accessing a profile log and loading a user profile based on the profile log. *Id.* at 11-12.

111. Moreover, long after the priority date of the '244 patent, Toyota filed a family of patent applications titled "User Profile Synchronization for a Vehicle. Ex. T. The disclosure and claims of the patents in this family recite identical and/or similar functionality disclosed in the '244 patent. *Id.* The '244 patent's inventive concept of transferring and synchronizing user profile settings between vehicles using cloud services was a significant and novel advancement in the art, as confirmed by, for example, Toyota's investment in the technology years after Emerging Auto's invention and its representations to the Patent Office during the prosecution of its patents.

112. During the prosecution of Application No. 17/092,993, on January 3, 2023, the Examiner issued an office action rejecting the claims under 35 U.S.C. § 101 because "the claimed invention is directed to an abstract idea accomplishable by mental processes without significantly more" and "the claims recite the abstract idea of choosing a user profile to load, which is analogous to mental work." Ex. U. The Examiner continued, "In addition, the remaining claim limitations either work to develop the abstract idea further (such as defining device IDs, claim 8) or to implement the idea onto generic computer components (such as a controller, claim 11 and mobile devices.) The recited abstract idea is not integrated into a practical application." *Id.*

113. TMNA and the Examiner conducted an interview of March 28, 2023. On April 5, 2023, TMNA submitted a response to the January 3, 2023 office action, submitting that "broadcasting a signal using a communication protocol and establishing communication channels between a vehicle and a plurality of mobile devices cannot be performed in the human mind" and "independent claims 1 and 11 are not directed to an abstract idea and/or are integrated into a practical application." Ex. V.

114. On May 12, 2023, the Examiner issued a further office withdrawing the section 101 rejection in light of TMNA's April 2023 claim amendments (Ex. W) that "sufficiently integrate the abstract idea into a practical application." Ex. X.

115. Defendants' marketing materials also tout the "game-changing" benefits of the inventions claimed in the '244 patent. For example:

One of the coolest features involves the Toyota mobile app. It builds on an existing function allowing drivers to start the car from their phone. Now with user profiles, drivers can store preferred vehicle settings via the Toyota app. With the user profile paired to either a smartphone device or the vehicle's smart key, the settings such as music and screen display preferences will automatically be recognized when a driver returns to the vehicle. No more having to readjust everything each time a different person gets behind the wheel, which saves time and, honestly, energy.

The user profiles are also transferrable, so drivers can bring their favorite settings to any Toyota vehicle with the new multimedia system.

Ex. R, <https://pressroom.toyota.com/toyotas-all-new-audio-multimedia-system-is-here-and-it-is-a-game-changer/>.

116. As another example, Defendants tout the importance of the user profile feature, whereby "having a more personalized experience that moves from vehicle to vehicle with the driver is essential."

In the age of digital transformation in mobility, having a more personalized experience that moves from vehicle to vehicle with the driver is essential. Through the new multimedia system's **User Profile** feature, the driver's personalized settings and experience, from preferred media or radio station to climate settings in some models, will be retained and accessible when the driver next returns to the vehicle.

- **User Profiles**– To help improve the user’s overall driving experience, a user will receive the same personalized settings in new vehicles making it portable from vehicle to vehicle. The new profile system is stored on the cloud, meaning users can access and take their experiences on the go with them across vehicles featuring the new multimedia system. Once created, users can use a Bluetooth handheld device such as a smartphone or tablet, smart key, or manual login to access their profile.

Ex. S, <https://pressroom.toyota.com/toyota-motor-north-america-introduces-next-generation-multimedia-system-to-deliver-best-in-car-user-experience/>

117. On information and belief, Toyota has directly infringed and continues to directly infringe one or more claims of the '244 patent, including at least claim 1 of the '244 patent, in the state of Texas, in this judicial district, and elsewhere in the United States by, among other things, making, using, selling, offering for sale, and/or importing into the United States products that embody one or more of the inventions claimed in the '244 patent, including but not limited to the Accused Server Instrumentalities, including servers that are associated with receiving, maintaining, and/or storing User Profile information and/or communicating User Profile and/or setting information for Toyota and Lexus-branded vehicles to be programmed remotely based on user profiles, as well as all reasonably similar products, in violation of 35 U.S.C. § 271(a).

118. Accused Server Instrumentalities satisfy all claim limitations of one or more claims of the '244 patent. A claim chart comparing exemplary independent claim 1 of the '244 patent to representative Accused Server Instrumentalities is attached as Exhibit J.

119. By making, using, offering for sale, selling and/or importing into the United States the Accused Server Instrumentalities, Toyota has injured Emerging Auto and is liable for infringement of the '244 patent pursuant to 35 U.S.C. § 271(a).

120. In addition, and/or in the alternative to its direct infringement, Toyota has also infringed and continues to infringe the claims of the '244 patent by, among other things, actively

inducing others to use the Accused Server Instrumentalities. Toyota's users, customers, consumers, agents, distributors, installers, and other third parties who use, sell, and/or offer to sell the Accused Server Instrumentalities in accordance with Toyota's instructions infringe the claims of the '244 patent, in violation of 35 U.S.C. § 271(a). Toyota intentionally instructs its customers to infringe through support information such as websites, videos, demonstrations, support information and other published information. For example, Toyota's website instructs and encourages its customer to use, manage and control the infringing components and functionalities of the Accused Server Instrumentalities. See, e.g., at https://support.toyota.com/s/article/Toyota-App-User-Profile-10735?language=en_US#:~:text=a%20User%20Profile%3F-,A%20User%20Profile%20is%20created%20when%20you%20register%20an%20account,to%20customize%20their%20driving%20experience;https://toyotaaudioandconnectedservicessupport.com/toyota/feature/Toyota%20User%20Profile%20/52ba95c0-3376-11ec-bd3d-9d7b70ae271f?model=bZ4X&year=2023;https://lexusconnectedtechnologysupport.com/lexus/feature/User%20Profile/6ba8b100-0929-11ed-a686-85aa58672a6c?model=UX%20250H&year=2024;https://support.toyota.com/s/article/How-can-I-add-my-User-Profile-to-a-vehicle-Toyota?language=en_US#:~:text=enter%20the%20vehicle.-,The%20Toyota%20app%20must%20be%20open%20and%20signed%20in%2C%20and,desired%20profile%20for%20the%20driver. Toyota also publishes videos to assist and encourage users to use and operate the infringing components and functionalities of the Accused Server Instrumentalities. See, e.g., https://www.youtube.com/watch?v=lBS6mlpArFQ&ab_channel=ToyotaUSA; https://www.youtube.com/watch?v=OWLkSJKb8Bc&ab_channel=ToyotaUSA. Thus, Toyota

actively instructs and directs its customers to infringe and actively encourages infringement by its customers. Toyota is thereby liable for infringement of the '244 patent under 35 U.S.C. § 271(b).

121. Toyota has been aware of the '244 patent at least as early as January 3, 2023, when it was identified to Toyota by the United States Patent Office in connection with U.S. Patent Application No. 17/092,993. On April 3, 2023, Toyota discussed the contents of the '244 patent in a filing with the Patent Office in connection with that application. At a minimum, Toyota has had knowledge of the '244 patent since at least the filing and/or service date of the Complaint in this action. Despite this knowledge, Toyota has continued to engage in activities to encourage and assist its customers in the use of the Accused Server Instrumentalities. Thus, on information and belief, Toyota (1) had actual knowledge of the patent; (2) knowingly induced its customers to infringe the patent; and (3) had specific intent to induce the patent infringement.

122. Additionally, and/or alternatively, Toyota is liable as a contributory infringer of the '244 patent under 35 U.S.C. § 271(c) by having offered to sell, sold and imported and continuing to offer to sell, selling, and importing into the United States the Accused Server Instrumentalities and reasonably similar products, to be especially made or adapted for use in infringement of the '244 patent. The portions of the infringing servers that enable Toyota and Lexus-branded vehicles to be programmed remotely based on user profiles are a material component for use in practicing the '244 patent and are especially made and are not staple articles of commerce suitable for non-infringing use.

123. Emerging Auto complied with 35 U.S.C. § 287 because Emerging Auto does not make, offer for sale or sell products that practice the '244 patent during the relevant time period.

124. As a result of Toyota's direct and indirect infringement of the '244 patent, Emerging Auto is entitled to monetary damages (past, present and future) in an amount adequate to compensate

for Toyota's infringement, but in no event less than a reasonable royalty for the use made of the invention by Toyota, together with interest and costs as fixed by the Court.

125. On information and belief, despite having knowledge of the '244 patent and knowledge that it is directly and/or indirectly infringing one or more claims of the '244 patent, Toyota has nevertheless continued its infringing conduct and disregarded an objectively high likelihood of infringement. Toyota's infringing activities relative to the '244 patent have been, and continue to be, willful, wanton, malicious, deliberate, consciously wrongful, and an egregious case of misconduct beyond typical infringement such that Emerging Auto is entitled to enhanced damages under 35 U.S.C. § 284 up to three times the amount found or assessed.

126. Toyota's acts of direct and indirect infringement have caused and continue to cause damage to Emerging Auto. Emerging Auto is entitled to damages in accordance with 35 U.S.C. §§ 271, 281, and 284 sustained as a results of Toyota's wrongful acts in an amount to be proven at trial.

PRAYER FOR RELIEF

Emerging Auto respectfully requests that the Court find in favor of Emerging Auto and against Toyota, and the Court grant Emerging Auto the following relief:

- A. For judgment that Toyota is liable for infringement of one or more claims of the Asserted Patents, directly and/or indirectly, either literally and/or under the doctrine of equivalents;
- B. For judgment that Toyota has willfully infringed one or more claims of the Asserted Patents, directly and/or indirectly, either literally and/or under the doctrine of equivalents;
- C. For an accounting of all damages sustained by Emerging Auto as the result of Toyota's acts of infringement, including compensatory damages in an amount according to proof, and in no event less than a reasonable royalty;

D. For a mandatory future royalty payable on each and every future sale by Toyota of a product that is found to infringe one or more of the Asserted Patents and on all future products which are reasonably similar to those products found to infringe;

E. For a judgment and order requiring Toyota to pay Emerging Auto's damages, costs, expenses, and pre- and post-judgment interest for its infringement of the Asserted Patents as provided under 35 U.S.C. § 284;

F. For a judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Emerging Auto its reasonable attorneys' fees; and

G. For such other and further relief in law and in equity as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Emerging Auto hereby demands a trial by jury of this action.

Dated: September 5, 2024

Respectfully submitted,

/s/ Marc Belloli

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