

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TOYOTA MOTOR CORP.,
Petitioner,

v.

EMERGING AUTOMOTIVE LLC,
Patent Owner.

Case No. IPR2024-00786
U.S. Patent No. 9,171,268

**REPLY DECLARATION OF KEVIN C. ALMEROTH, PH.D.
IN SUPPORT OF PETITIONER'S REPLY TO PATENT OWNER'S
RESPONSE**

Table of Contents

I.	Introduction.....	3
II.	Qualifications and Background	4
III.	Materials Considered	4
IV.	Legal Standards	5
V.	Grounds involving Patenaude.....	5
	A. Ground 3A: Xiao in combination with Patenaude renders claim 12 obvious	5
	B. Ground 3B: Xiao in combination with Hayashi and Patenaude renders claim 12 obvious.....	11
VI.	Conclusion	12

I. INTRODUCTION

1. I, Kevin C. Almeroth, Ph.D., submit this declaration to state my opinions on the matter described below.

2. I have been retained by Petitioner Toyota Motor Corp. (“Petitioner”), as an independent expert in this proceeding before the United States Patent and Trademark Office. Although I am being compensated at my usual and customary rate, no part of my compensation depends on the outcome of this proceeding, and I have no other interest in this proceeding.

3. I previously submitted a declaration (Ex. 1009) in support of Petitioner’s Petition in this proceeding.

4. I understand that this proceeding involves U.S. Patent No. 9,171,268 (the “’268 patent”) (Ex. 1001), assigned to Patent Owner Emerging Automotive LLC (“Patent Owner”), and I have been asked to provide my opinions as to the patentability of the claims of the ’268 patent.

5. I have been asked to consider and provide opinions regarding certain issues raised by Patent Owner in its Patent Owner Response.

6. Based on the prior art discussed in my prior declaration, it remains my opinion that claims 10-20 of the ’268 patent are unpatentable for the reasons provided in my original declaration, and for the additional reasons provided below.

II. QUALIFICATIONS AND BACKGROUND

7. My prior declaration summarizes my qualifications and background.

III. MATERIALS CONSIDERED

8. In forming my opinions, I have reviewed the following documents:

Exhibit	Description
Ex. 1001	U.S. Patent No. 9,171,268 to Penilla et al.
Ex. 1002	Prosecution File History for U.S. Patent No. 9,171,268.
Ex. 1003	U.S. Provisional Application No. 61/745,729.
Ex. 1004	Originally-Filed Specification of U.S. Application No. 13/842,158.
Ex. 1005	U.S. Provisional Application No. 61/478,436.
Ex. 1006	Originally-Filed Specification of U.S. Application No. 13/452,882.
Ex. 1007	Comparison Result of Specification of U.S. Application No. 14/050,314 to U.S. Application No. 13/842,158, with Annotations Showing Added “Compatibility” Disclosure.
Ex. 1010	U.S. Patent Application Pub. No. 2012/0164989 A1 by Hong Xiao et al.
Ex. 1011	U.S. Patent Application Pub. No. 2006/0136106 A1 by Russell A. Patenaude et al.
Ex. 1012	U.S. Patent Application Pub. No. 2007/0255464 A1 by Amita Singh et al.
Ex. 1013	Japanese Patent Application Pub. No. 2012-076627 A by Kunikatsu HAYASHI et al.
Ex. 1015	Patent Owner’s Infringement Contentions of the ’268 Patent in E.D. Tex. Civil Action No. 2:23-cv-434

Ex. 1024	Deposition transcript of Dr. Sam Malek, April 11, 2025
Ex. 1025	The Authoritative Dictionary of IEEE Standards Terms, Seventh Edition, Published by Standards Information Network IEEE Press, 2000
Ex. 2001	Declaration of Professor Sam Malek, Ph.D. under 37 C.F.R. § 1.68 in support of Patent Owner's Preliminary Response
Ex. 2002	Curriculum Vitae of Dr. Malek
Ex. 2011	Declaration of Professor Sam Malek, Ph.D. under 37 C.F.R. § 1.68 in support of Patent Owner's Response
Paper 1	Petition
Paper 6	Patent Owner's Preliminary Response
Paper 7	Petitioner's Pre-Institution Reply
Paper 9	Patent Owner's Sur-Reply
Paper 11	Institution Decision
Paper 13	Patent Owner's Response

IV. LEGAL STANDARDS

9. My prior declaration summarizes my understanding of the legal principles that guide my analysis to determine if the claims are unpatentable in light of the prior art.

V. GROUNDS INVOLVING PATENAUDE

A. Ground 3A: Xiao in combination with Patenaude renders claim 12 obvious

10. As I explained in my prior declaration, Xiao in view of Patenaude

renders claim 12 obvious.

11. I understand that Dr. Malek's opinion is that Patenaude does not disclose or suggest element 12[c], which recites "sending the learned settings to the user profile for use or transfer to the selected vehicle." Ex. 2011 at ¶¶121-122. Dr. Malek appears to agree that Patenaude does disclose the retrieval of data, but he then suggests that "retrieval" does not teach that the data was sent.

12. Dr. Malek acknowledges that Patenaude states "[d]uring stage S610, processor 122 in the telematics unit 120 retrieves the user-specific entertainment selection profile stored in the in-vehicle memory 128..." Ex. 2011 at ¶122 (citing Ex. 1011 at ¶[0073]). Dr. Malek also acknowledges that Patenaude states "[d]uring stage S612, the telematics unit 120 powers up at least one entertainment unit 135, 136, or 137 based on the retrieved user-specific entertainment selection profile." Ex. 2011 at ¶122 (citing Ex. 1011 at ¶[0074]). However, Dr. Malek then alleges that these disclosures concerning "retrieval" are not "sending" because "there is a significant difference between data being pushed (i.e., sending) versus data being pulled (i.e., retrieving). Ex. 2011 at ¶122. Dr. Malek does not explain what this "significant difference" is, nor, in my opinion, is it a relevant distinction as it relates to the claim element.

13. Dr. Malek asserts that "a POSITA in this field would conclude" that there is a significant difference between pushing and pulling data. *Id.* However, Dr.

Malek provides no support for this assertion, or even, if true, how it would make a difference to the claim requirements. Indeed, this is a distinction without a difference in the context of the obviousness of claim 12 of the '268 patent in view of the cited prior art.

14. In my opinion, there is no relevant difference as it relates to the transfer of data and whether the process is described from the perspective of the receiver in terms of retrieving (or requesting), as in the case of Patenaude, or from the perspective of the sender in terms of delivering. A person of ordinary skill in the art ("POSITA") would understand both relate to the sending and receiving of data. The retrieval of data requires that the data be sent in any realistic scenario. Dr. Malek's attempt to suggest that retrieval not only would not teach sending, but would also not suggest sending and would not even be obvious is wrong. For example, even assuming he is right that there is a difference between "push" versus "pull" in this context, pulling data still requires the data to be sent. Ultimately, Dr. Malek points to no scenario, realistic or otherwise, where data is retrieved (or pulled) but not sent. As such, Dr. Malek's alleged distinction is irrelevant to the requirement of the claims. And it does not change my opinion that Patenaude discloses "sending the learned settings to the user profile for use or transfer to the selected vehicle," as recited in claim 12, and as I laid out in my original declaration. Ex. 1009 at ¶¶211-215.

15. A component “retrieving” something (e.g., data) from another component means that the thing (data) being retrieved moves from one component to another. In other words, the thing (data) is sent from one component to the other. This can be done in various ways, for example, by copying files/data, as one of skill in the art would understand. But in any event, the retrieval would necessarily involve transmitting the thing (data) to the component that is doing the retrieving.

16. For example, *The Authoritative Dictionary of IEEE Standards Terms*, a publication of the Institute of Electrical and Electronics Engineers (IEEE), defines “retrieve” as “To move data out of a storage device or data medium.” Ex. 1025 at 4. One of ordinary skill in the art would understand that if data “moves” from component A to component B, data is transmitted from component A to component B. In other words, the data is “sent” from component A to component B.

17. One of skill in the art, reading Patenaude, would understand its disclosures of “retrieval” to be consistent with this definition. For example, one would understand that when Patenaude states “[d]uring stage S610, processor 122 in the telematics unit 120 retrieves the user-specific entertainment selection profile stored in the in-vehicle memory 128 and the current time, day of week, week of the month and date from a clock and calendar internal to the telematics unit 120” (Ex. 1011 at ¶[0073]), it means that the user-specific entertainment selection profile is

sent from memory 128 to processor 122. One would also understand that the current time, day of week, week of the month and date would be sent from the “clock and calendar” to processor 122. Similarly, one would understand that when Patenaude states “[d]uring stage S612, the telematics unit 120 powers-up at least one entertainment unit 135, 136, or 137 based on the retrieved user-specific entertainment selection profile” (Ex. 1011 at ¶[0074]), it means that the user-specific entertainment selection profile had been sent from a source to a recipient (e.g., the telematics unit 120).

18. Additionally, one would understand that because Patenaude teaches the profile being retrieved from memory, it follows that the profile must have been previously sent to the memory. Patenaude explains, for example, the determined patterns are output to the processor 122 of the telematics unit 120, and the processor 122 “stores the user entertainment selection profile in the in-vehicle memory 128.” Ex.1011 at ¶[0058]. Patenaude also explains that the profile can be stored at a remote location, too. *Id.* (“In another embodiment, the user entertainment selection profile is stored at the call center 170.”). Data would have to be sent to a component before it could be retrieved from that component.

19. As one of skill in the art knows, there can be differences in implementation of a “retrieval” operation. For example, retrieval could be implemented using a “push” operation or a “pull” operation. However, such

differences in implementation would be apparent to a person of skill in the art as routine details, and those details would not affect my analysis concerning whether Patenaude's "retrieval" meets the claimed "sending." For example, differences between pushing and pulling mainly concern the initiation of the operation. More specifically, they concern *who* (or what component) initiates the operation and what the trigger may be. For example, a push operation involves data being sent to a component, which may be done without the component asking for it (e.g., a "push notification" delivered whenever there is an update). Whereas a pull operation may involve the component asking for data to be sent to it (e.g., "polling" for updates at the time of a request). In any event, however, the data is "sent" from a source to a recipient.

20. Patenaude makes no mention of "pushing" or "pulling" operations. And neither does the '268 patent. In my opinion, there is nothing particularly significant about Patenaude's choice of the word "retrieve."

21. Additionally, because "retrieval" necessarily involves "sending" a thing from a source to a recipient, I see no practical difference between the "retrieval" disclosed by Patenaude and the "sending" recited in claim 12. Indeed, claim 12 does not specify the source of the sending in any way that would alter my analysis. What matters is that there is "sending" of "the learned settings to the user profile for use or transfer to the selected vehicle," as recited by 12[c], which I

explained is taught or suggested by Patenaude. Ex. 1009 at ¶¶211-215.

22. I understand that Dr. Malek acknowledged that retrieval can involve transmission. When asked about the “retrieval” discussed in Patenaude in his deposition, Dr. Malek acknowledged it “depends how retrieval is implemented.” Ex. 1024 at 18:6-7. This supports my opinion that differences in implementation of a retrieval operation would be apparent to a person of skill in the art as routine details.

23. Even under Dr. Malek’s apparent interpretation, Xiao in view of Patenaude still renders obvious claim 12. As I explained above, Patenaude’s disclosures of retrieving the user-specific entertainment selection profile encompass the sending of that user-specific entertainment selection profile. This includes not only sending the user-specific entertainment to the processor in the telematics unit, but also sending the user-specific entertainment selection profile to the memory (which would have had to occur for the profile to be able to be retrieved from the memory).

B. Ground 3B: Xiao in combination with Hayashi and Patenaude renders claim 12 obvious

24. As discussed above, it would have been obvious to combine Xiao and Patenaude and reach the subject matter of claim 12. For at least the same reasons, it would also have been obvious to combine Xiao (as may have been modified by

Hayashi) and Patenaude and reach the subject matter of claim 12.

VI. CONCLUSION

25. I declare that all statements made herein of my knowledge are true, that all statements made on information and belief are believed to be true, and 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.

Dated: April 18, 2025

By: Kevin C Almeroth
Kevin C. Almeroth, Ph.D.