

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

FORD MOTOR COMPANY
Petitioner,

v.

AUTOCONNECT HOLDINGS, LLC
Patent Owner.

U.S. Patent No. 9,082,239 to Ricci

Case No.: IPR2026-00171

**PETITION FOR *INTER PARTES* REVIEW
UNDER 35 U.S.C. § 311 *ET SEQ.* AND 37 C.F.R. § 42.100 *ET SEQ.*
(U.S. PATENT NO. 9,082,239)**

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List of Exhibits

Exhibit No.	Description
1001	U.S. Patent No. 9,082,239 (“the ’239 Patent”)
1002	U.S. Patent No. 9,082,239 Certified File History (“the ’239 Patent File History”)
1003	Expert Declaration of Todor Cooklev
1004	Todor Cooklev Curriculum Vitae
1005	<i>AutoConnect Holdings LLC v. Ford Motor Company</i> , Complaint, Case No. 1:24-cv-01327-JCG (D. Del.) Filed December 6, 2024 (“Complaint”)
1006	Plaintiff’s Opposition to Ford’s Motion to Dismiss, <i>AutoConnect Holdings LLC v. Ford Motor Company</i> , Case No. 1:24-cv-01327-CFC (D Del.) Filed February 28, 2025 (“Opposition”)
1007-1010	<i>Intentionally left blank.</i>
1011	U.S. Patent No. 7,388,466 B2 to Ghabra (“Ghabra”)
1012	<i>Intentionally left blank.</i>
1013	U.S. Patent Application Pub. No. 2011/0093153 A1 to Moinzadeh (“Moinzadeh”)
1014	<i>Intentionally left blank.</i>
1015	U.S. Patent No. 7,783,699 B2 to Rasin (“Rasin”)
1016-1026	<i>Intentionally left blank.</i>
1027	U.S. Patent Application Pub. No. US2011/0106375 A1 to Sundaram (“Sundaram”)
1028-1034	<i>Intentionally left blank.</i>
1035	U.S. Patent No. 9,285,944 B1 to Penilla (“Penilla”)
1036	U.S. Patent Application Pub. No. 2010/0253498 A1 to Rork (“Rork”)
1037	U.S. Patent Application Pub. No. 2012/0016678 A1 to Gruber (“Gruber”)
1038-1044	<i>Intentionally left blank.</i>
1045	U.S. Patent Application Pub. No. 2009/0285445 A1 to Vasa (“Vasa”)
1046	<i>Intentionally left blank.</i>
1047	U.S. Patent No. 9,285,944 B1 File History (“Penilla File History”)
1048-1049	<i>Intentionally left blank.</i>

Exhibit No.	Description
1050	Bosch Automotive Handbook, 6 th Ed., (Robert Bosch GmbH – October 2004) (“Bosch”)
1051	IEEE Dictionary, (IEEE 100 The Authoritative Dictionary of IEEE Standards Terms 2000 7 th Edition) (“IEEE Dictionary”)
1052	“Specification of The Bluetooth System” (June 30, 2010). Version 4.0 (Volumes 0-6) Available at https://www.bluetooth.com/specifications/specs/core-specification-4-0/ (Accessed June 27, 2025) (“Bluetooth Specification”)
1053	<i>Intentionally left blank.</i>
1054	McCartt et al., “Driver Cellphone and Texting Bans in the United States: Evidence of Effectiveness,” Engaged Driving Symposium Annals of Advances in Automotive Medicine, March 31, 2014 Available at https://pmc.ncbi.nlm.nih.gov/articles/PMC4001674/ (Accessed July 1, 2025) (“McCartt”)
1055	NHTSA Traffic Safety Facts Research Note “Distracted Driving 2010” published September 2012. Available at https://www.nrd.nhtsa.dot.gov/CATS/index.aspx (Accessed June 24, 2025) (“NHTSA”)
1056	Peterson, Andrew, “Do not disturb, Ford Fights Distracted Driving with Limited In-Motion Sync Access,” July 12, 2010. Available at https://www.motortrend.com/news/163-news100712-ford-sync-do-not-disturb (Accessed June 24, 2025) (“Motor Trend”)
1057	Allen, Leslie “Ford launches parental control technologies,” October 7, 2008. Available at https://www.autonews.com/article/20081007/ZZZ_SPECIAL/310079921/ford-launches-parental-control-technologies/ (Accessed June 24, 2025) (“Auto News”)
1058	Ghangurde, Mujund “Ford SNYC and Microsoft Windows Embedded Automotive Make Digital Lifestyle a Reality on the Road,” <i>SAE International</i> , Volume 3, Issue 2, October 19, 2010 SAE2010-01-02319 (Accessed April 25, 2025) (“Ghangurde”)

Exhibit No.	Description
1059	Austin, Michael “Ford introduces Next-Gen Connectivity Suite Called MyFord; Should be Awesome,” January 6, 2010. Available at https://www.caranddriver.com/news/a15128939/ford-introduces-next-gen-connectivity-suite-called-myford-should-be-awesome-car-news/ (Accessed June 25, 2025) (“Car and Driver”)
1060	<i>Intentionally left blank.</i>
1061	Ford SYNC Supplemental Guide, November 2007 (“Sync Guide 2007”)
1062	Ford SYNC Supplemental Guide, January 2010 (“Sync Guide 2010”)
1063	<i>Intentionally left blank.</i>
1064	MyFord Touch Ford User Guide Ford Motor Company, February 2012 (“MyFord Touch Guide”)
1065-1109	<i>Intentionally left blank.</i>
1110	Flextronics “Flex celebrates 10 years of maintaining Ford’s prestigious Q1 quality certification in Guadalajara, Mexico” (Posted April 2, 2024) Available at https://flex.com/resources/10-years-of-maintaining-fords-q1-quality-certification
1111	<i>Intentionally left blank.</i>
1112	Scheduling Order, <i>AutoConnect Holdings LLC v. Ford Motor Company</i> , Case No. 1:24-cv-01327-JCG (D. Del) (“Scheduling Order”)
1113-1114	<i>Intentionally left blank.</i>
1115	Defendant’s Motion to Dismiss, <i>AutoConnect Holdings LLC v. Ford Motor Company</i> , Case No. 1:24-cv-01327-CFC (D Del.) Filed February 14, 2025 (“Motion to Dismiss”)
1116	<i>Intentionally left blank.</i>
1117	Zetter, Mark “Ford and Flextronics automotive EMS, Venture Outsource” February 2010 (Available at https://ventureoutsource.com/contract-manufacturing/industry-pulse/ford-and-flextronics-automotive-ems , accessed November 18, 2025) (“Ford Flextronics EMS”)

Exhibit No.	Description
1118	Schröter, Anke “Ford partners with Flextronics, evertiq.com”, February 12, 2010, (Available at https://evertiq.com/news/16197? , accessed November 18, 2025) (“Ford Flextronics 2010”)
1119	“Which Ford vehicles are compatible with Apple CarPlay?” (Available at https://www.ford.com/support/how-tos/sync/getting-started-with-sync/which-vehicles-are-compatible-with-apple-carplay/ Accessed November 18, 2025) (“Ford AppleCarPlay”)

Mandatory Notices under 37 C.F.R. § 42.8

Real Party-In-Interest - 37 C.F.R. § 42.8(b)(1)

Petitioner certifies that Ford Motor Company (“Petitioner”) is the real party-in-interest. No unnamed entity is funding, controlling, or directing this Petition or could control or direct this Petition or Petitioner’s participation.

Related Matters - 37 C.F.R. § 42.8(b)(2)

Petitioner identifies the following related judicial matter: *AutoConnect Holdings, LLC v. Ford Motor Company*, 1:24-cv-01327-JCG (D. Del) (pending) filed December 6, 2024. U.S. Patent No. 9,082,239 is being asserted in this parallel proceeding, along with twelve other patents: U.S. 9,020,491; U.S. 9,020,697; U.S. 9,098,367; U.S. 9,116,786; U.S. 9,123,186; U.S. 9,140,560; U.S. 9,147,296; U.S. 9,147,297; U.S. 9,173,100; U.S. 9,290,153; U.S. 10,862,764; and U.S. 11,163,931.

Petitioner is also aware that U.S. Patent No. 9,082,239 is being asserted in *AutoConnect Holdings LLC v. General Motors LLC* 2-24-cv-00877 (EDTX) (pending) filed October 30, 2024.

Petitioner filed IPR2025-01342 challenging U.S. 9,020,697, IPR2025-01383 challenging U.S. 9,290,153, IPR2025-01524 challenging U.S. 9,123,186, IPR2026-00002 challenging U.S. 9,147,296, and IPR2026-00172, being filed concurrently is challenging U.S. 9,147,297.

Lead and Back-Up Counsel - 37 C.F.R. § 42.8(b)(3)

The Petitioner identifies the following lead and back-up counsel:

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Pursuant to 37 C.F.R. § 42.10(b), an appropriate Power of Attorney is filed concurrently herewith.

Service Information - 37 C.F.R. § 42.8(b)(4)

Service information for lead and back-up counsel is provided in the designation of lead and back-up counsel above. Petitioner Ford Motor Company hereby consent to service by email at the following email address: FPGP0148IPR@brookskushman.com.

Fees - 37 C.F.R. § 42.15(a)

The filing fees associated with this Petition are being charged to Deposit Account 06-1510. The Board is authorized to charge any additional fees or credit any refunds pertaining to this Petition to Deposit Account 061-510.

I. Introduction

The Petitioner Ford Motor Company (“Ford”) respectfully requests *inter partes* review of claims 1–35 (the “Challenged Claims”) of U.S. Patent No. 9,082,239 (“the ’239 Patent”; attached as Ex. 1001). The supporting Declaration of Dr. Todor Cooklev is attached as Ex. 1003.

The ’239 Patent is one of thirteen asserted patents related to vehicle infotainment systems and more specifically is directed to automatically performing an action assisting a vehicle occupant based on a maintained persona and vehicle-related information. (Ex. 1005; Ex. 1001, Abstract, Claims 1-35.) Prior to the earliest priority date of the ’239 Patent, however, vehicle systems were well-known to provide assistance to a user based on user information. (Exs. 1027, 1035, 1036, 1037, 1045.) The underlying technology for implementing such systems was similarly well-known. (Ex. 1003, ¶¶77-103; Exs. 1011, 1013, 1015, 1050-1052, 1054-1059, 1061-1062, 1064.) Grounds 1-7 below establish that prior art to the ’239 Patent described these concepts in detail—rendering the ’239 Patent obvious and unpatentable.

The litigation filed by Patent Owner (AutoConnect Holdings, LLC or “AutoConnect”) is in its early pleadings stage, and trial is scheduled for October 2027, long after the projected final decision here. (Ex. 1112, 29.) Additionally, Petitioner had settled expectations that the ’239 Patent would not be asserted

because, *inter alia*, the original patent owner supplies the accused product to Petitioner (*see* Exs. 1110, 1117, 1118, 1119), and the current Patent Owner made no use of the '239 Patent before contacting Petitioner in December 2023. (Ex. 1005, 9.)

II. Grounds for Standing Requirements under 37 C.F.R. § 42.104

A. Grounds for Standing - 37 C.F.R. § 42.104(a)

Pursuant to 37 C.F.R. § 42.104(a), Petitioner certifies that the '239 Patent is available for IPR and that Petitioner is not barred or estopped from requesting IPR.

B. Challenged Claims - 37 C.F.R. § 42.104(b)(1)

Petitioner requests *inter partes* review for claims 1–35 of the '239 Patent and requests that the Patent Trial and Appeal Board (“PTAB”) cancel those claims as unpatentable.

C. Prior Art Relied Upon

The '239 Patent was filed after March 16, 2013, thus, AIA applies. (Ex. 1001, Cover.) The following prior art references are all prior art to the earliest claimed priority date of the '239 Patent (April 15, 2013¹):

- Sundaram – U.S. 2011/0106375 A1, published on May 5, 2011 (Ex. 1027, Cover), prior art under 35 U.S.C. §§ 102(a)(1) and 102(a)(2).
- Penilla – U.S. 9,285,944 B1, filed March 5, 2013 (Ex. 1035, Cover),

¹ Petitioner does not concede the '297 Patent is entitled to this priority date.

prior art under 35 U.S.C. § 102(a)(2).

- Rork – U.S. 2010/0253498 A1, published October 7, 2010 (Ex. 1036, Cover), prior art under 35 U.S.C. §§ 102(a)(1) and 102(a)(2).
- Vasa – U.S. 2009/0285445 A1, published November 19, 2009 (Ex. 1045, Cover), prior art under 35 U.S.C. §§102(a)(1) and 102(a)(2).
- Gruber – U.S. 2012/0016678 A1, published January 19, 2012 (Ex. 1037, Cover), prior art under 35 U.S.C. §§ 102(a)(1) and 102(a)(2)).

D. Grounds of Challenge – 37 C.F.R. § 42.104(b)(2)

The grounds of unpatentability presented in this petition are as follows:

Ground	Basis	References	Claims Challenged
1	103	Sundaram	1–2, 5, 7–10, 12, 14–16, 19, 21–22, 30, 34–35
2	103	Sundaram + Penilla	13, 20, 23–28, 31–33
3	103	Sundaram + Rork	3, 17
4	103	Sundaram + Gruber	4, 18
5	103	Sundaram + Gruber + Penilla	6
6	103	Sundaram + Rork + Gruber	11

Ground	Basis	References	Claims Challenged
7	103	Sundaram + Vasa	29

There is a reasonable likelihood that at least one Challenged Claim is unpatentable as explained herein. Petitioner requests review of the Challenged Claims, and judgment finding them unpatentable.

III. Person Having Ordinary Skill in the Art (PHOSITA)

A person having ordinary skill in the art (PHOSITA) of the '239 Patent would have had, as of April 15, 2013, a Bachelor's degree in Electrical Engineering, Mechanical Engineering, or an equivalent degree with at least two years of experience in communication systems, vehicle sensor systems, electronic user interface systems, or related technologies. Additional industry experience could make up for less education and vice versa. (Ex. 1003, ¶¶41-46.) Petitioner's expert, Dr. Cooklev, qualifies as a PHOSITA for the '239 Patent. (*Id.*, ¶¶7-20, 41-46; Ex. 1004.)

IV. The Challenged '239 Patent

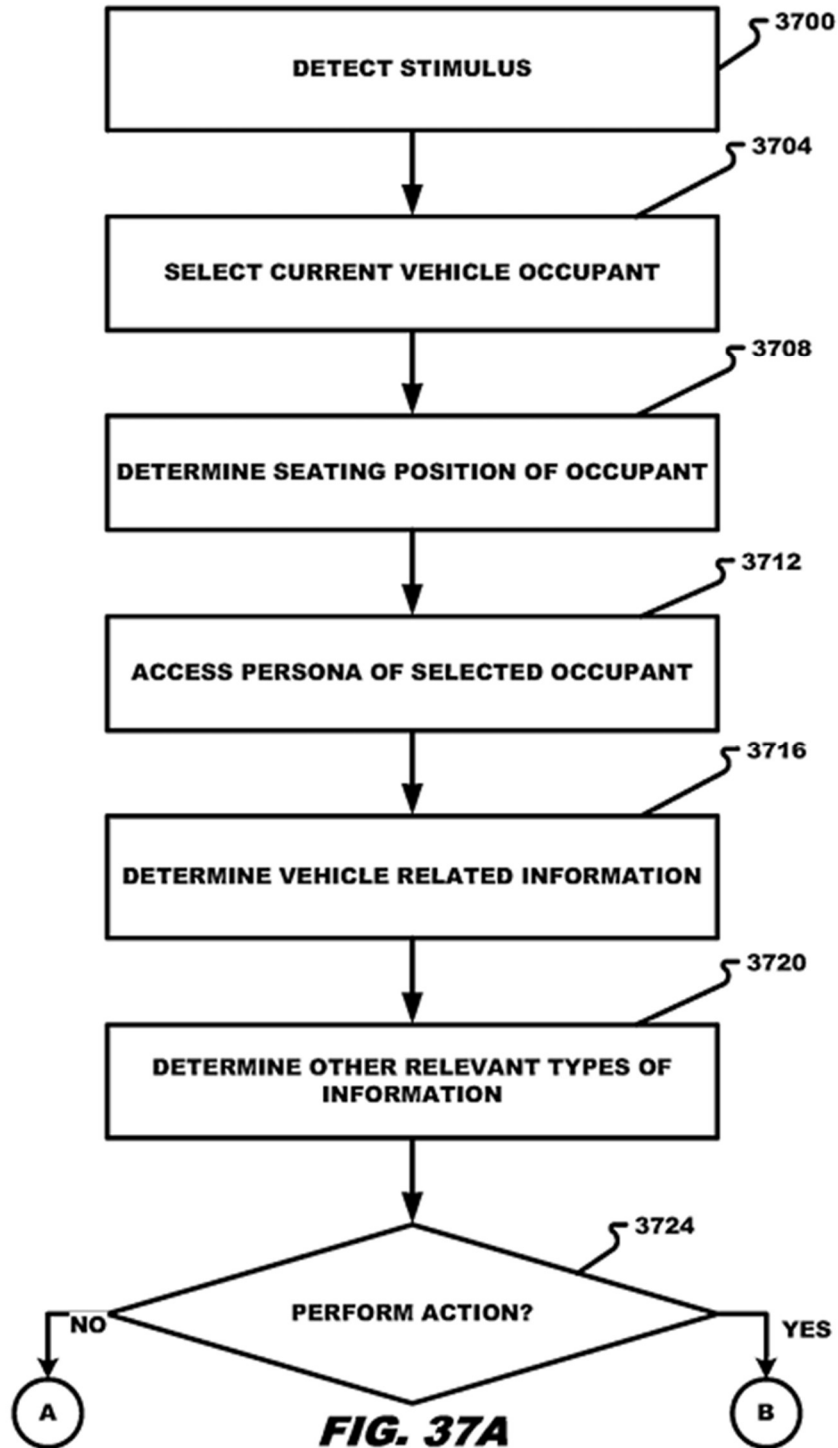
A. Priority Claim

The '239 Patent matured from U.S. Application 14/253,506 filed April 15, 2014, which claims priority to seven provisional patent applications, the earliest of

which is U.S. 61/811,981 filed April 15, 2013. (Ex. 1003, ¶¶47, 73; Ex. 1001, cover, 1:7-24.)

B. Overview of the '239 Patent

The '239 Patent is directed to “[m]ethods, systems, and a computer readable medium [that] are provided for maintaining a persona of a vehicle occupant and, based on the persona of the vehicle occupant and vehicle related information, performing an action assisting the vehicle occupant.” (Ex. 1001, Abstract.) The '239 Patent describes the “persona” as including “one or more of: bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content.” (Ex. 1001, 12:32-35.) The '239 Patent further describes vehicle related information as including “one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination.” (Ex. 1001, 12:36-39; Ex. 1003, ¶¶47-62.)



Ex. 1001, FIG. 37A

C. Prosecution History

The '239 Patent issued on March 6, 2015, to Flextronics AP, LLC, with thirty-five claims, including independent claims 1, 8, 15, 24, 26, and 28. (Ex. 1002, 845.) During prosecution, the Examiner rejected claims 1-2, 5, 8-9, 12, 15-16 as anticipated by U.S. 2008/0033635 to Obradovich and claims 1, 3-4, 7-8, 10-11, 14-15, 17-18, 21-23 as anticipated by U.S. 6,675,081 to Shuman. The Examiner found allowable subject matter in claims 6, 13, and 20. In response, Applicant presented new claims 24 and 26 that were directed to the allowable subject matter, and amended independent claims 1, 8, and 15 to further define the user persona and the assistance that is automatically provided to the user. (Ex. 1002, 587-604.) The Examiner issued a notice of allowance on May 1, 2015 without providing any reasons for allowance. (*Id.*, 834-836; Ex. 1003, ¶¶63-72.) A certificate of correction was issued on May 10, 2016 to fix errors in claim 7 and 14.² (Ex. 1002, 847-853.)

The references forming the basis of Grounds 1-7 were neither cited nor applied during examination of the '239 Patent. (*See*, Ex. 1001, 1-5; Ex. 1003, ¶72.)

V. Claim Construction — 37 C.F.R. § 42.104(B)(3)

² These corrections are noted in Appendix A using brackets (“[]”). Quotes from claims 7 and 14 in the body of the petition are shown in corrected form without brackets.

In an IPR proceeding, the claims are construed “in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” 37 C.F.R. §42.100(b); *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–13 (Fed. Cir. 2005) (en banc). Petitioner applies the plain and ordinary meaning of the Challenged Claims to the asserted prior art references in support of all grounds herein.

Petitioner proposes the following claim constructions for the purposes of this Petition only.

A. Claims 1-2, 4-9, 11-16, 18-22, 24-28, 30, 34-35: “*and/or*”

Petitioner interprets “*and/or*” as “or” in accordance with Patent Owner’s position for that term in the related litigation. (Ex. 1006, 5-6.) Petitioner challenged the above listed claims as indefinite in district court because the ’239 Patent defines “*and/or*” as both disjunctive and conjunctive, which is an impossibility. (Ex. 1001, 15:63-16:3; Ex. 1115, 15-16.) More specifically, Independent claims 1, 8, and 15 require:

wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history **and/or** browsed content;

wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, **and/or** intended path of travel, waypoint, and destination.

(Ex. 1115, 16.)

A PHOSITA would not have been able to “decipher which of the recited claim features is subject to the ‘one or more’ limitation, and whether the limitations connected by ‘and’ are subject to the ‘and/or’ limitation or not”. (Ex. 1116, 16.) Because indefiniteness is not an issue for the board, we adopt AutoConnect’s construction of “*and/or*” as or. However, as explained in Ground 1 for claims 1, 8, and 15, Sundaram teaches that the “*persona*” comprises both “*bioinformatics*” and “*browsed content*”; and that the “*vehicle related information*” comprises both “*vehicle ... location*” and a “*intended path of travel*.”

VI. Unpatentability Grounds

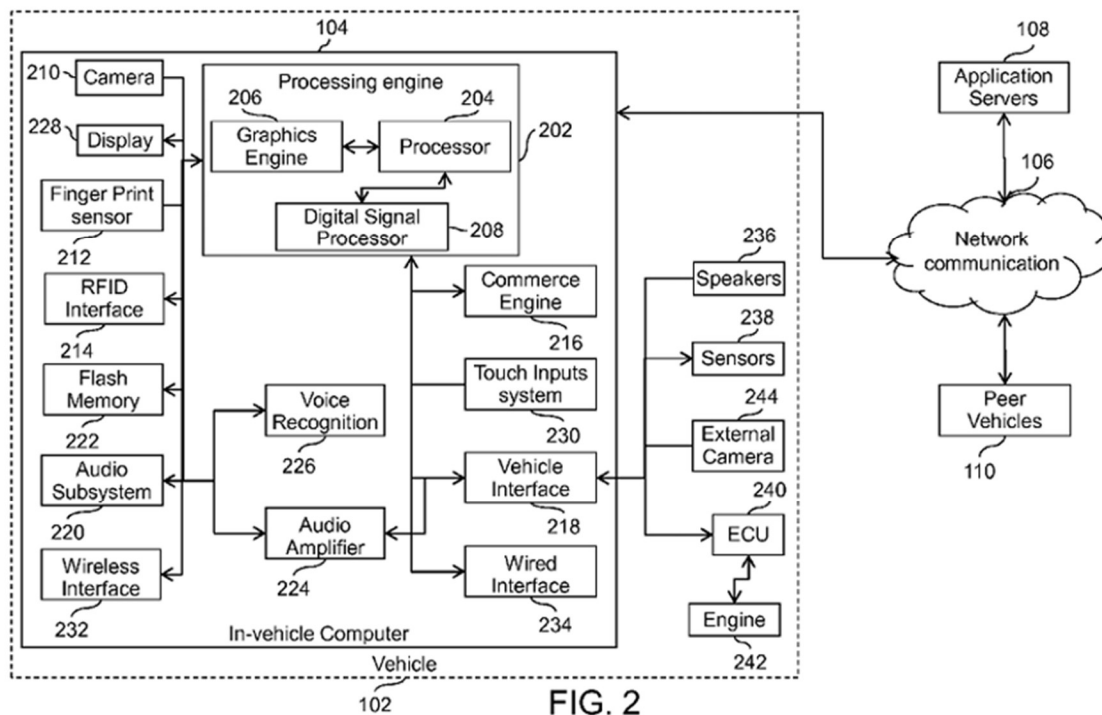
The references below render the claimed subject matter invalid under 35 U.S.C. §103 and the Petitioner therefore has a reasonable likelihood of prevailing as to each of the following grounds of unpatentability. 35 U.S.C. § 314(a); 37 C.F.R. § 42.104(b)(4).

A. Ground 1: Claims 1–2, 5, 7–10, 12, 14–16, 19, 21–22, 30, 34–35 are rendered obvious by Sundaram

1. Overview of Sundaram

Sundaram discloses that an “in-vehicle computer 104 may control vehicle

102's behavior to personalize the vehicle according to its user's needs and requirements.” (Ex. 1027, [0017].)



Ex. 1027, FIG. 2

Sundaram teaches that a user is identified using various sensors/devices in the vehicle and then the user's profile is automatically activated. (Ex. 1027, [0020]; Ex. 1003, ¶¶104-106).

2. Independent Claims 1, 8, 15³

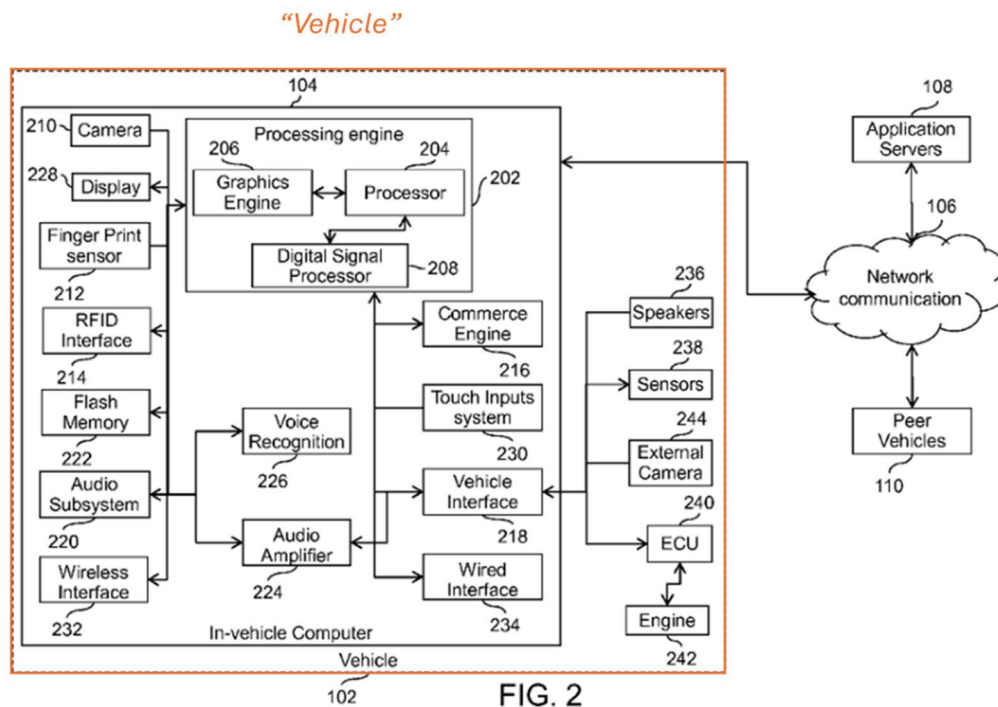
1[pre] A method, comprising:

Sundaram discloses “[m]ethods and systems for providing an integrated platform for entertainment, information, communication, control and computing applications in a vehicle.” (Ex. 1027, [0014]; Ex. 1003, ¶122.) Thus, Sundaram discloses a “*method*.” (Ex. 1003, ¶¶122-123.)

8[pre] A vehicle, comprising:

Sundaram discloses an in-vehicle integrated application platform that comprises an in-vehicle computer 104 and its connections with vehicle 102. (Ex. 1027, [0026]; Ex. 1003, ¶201.) Thus, Sundaram discloses a “*vehicle*.” (Ex. 1003, ¶¶201-202.)

³ Appendix A lists all challenged claims and Appendix B compares claims treated together. Where there is substantive overlap in claim elements, Petitioner has grouped analysis for efficiency and to avoid duplicity.



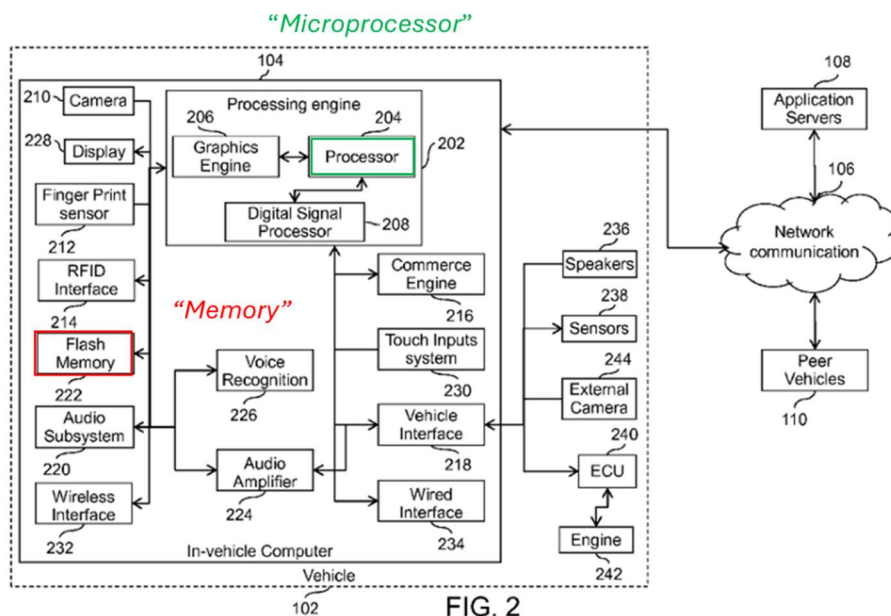
Ex. 1027, Fig. 2⁴

15[pre] A tangible and non-transient computer readable medium comprising microprocessor executable instructions that, when executed, perform functions comprising:

Sundaram discloses a microprocessor (referred to as a "processor" or "processing machine") that executes software stored in memory. “[A] processing machine include[s] a computer, a programmed microprocessor, an integrated circuit, and other devices or arrangements of devices that are capable of implementing the steps of the methods according to various embodiments.” (Ex. 1027, [0013].) For example, Sundaram discloses that the in-vehicle computer 104 includes a processing

⁴ All annotations added by Petitioner unless otherwise noted.

engine with a processor 204 that “is coupled with various memory and storage devices for storing software stack including all programs, applications, software etc. which in-vehicle computer 104 may run.” (Ex. 1027, [0028].)



Ex. 1027, Fig. 2

Sundaram further discloses a computer readable medium (“[a] *tangible and non-transient computer readable medium*”) containing computer code (“*microprocessor executable instructions*”) and a processor operable to execute the computer code to do (“*perform*”) various actions (“*functions*”). (Ex. 1027, [0236]-[0249].) Thus, Sundaram discloses limitation 15[pre]. (Ex. 1003, ¶¶231-234.)

[1a] maintaining, by a microprocessor executable profile identification module,

[8a] a microprocessor executable profile identification module operable to maintain

[15a] maintaining

... a persona of a selected vehicle occupant,

Sundaram discloses that the in-vehicle computer 104 identifies the user “through visual recognition using a camera, voice recognition, finger print identification etc. and [the] user's profile is automatically enabled in vehicle 102.” (Ex. 1027, [0020].) Sundaram discloses a user of a vehicle 102 (“*selected vehicle occupant*”) being a passenger or driver of a vehicle 102. (Ex. 1027, [0017].)

A PHOSITA would have understood that Sundaram’s disclosure of enabling a user profile that includes the identity or identifying characteristics of a user, such as fingerprints or images, would be a part of the “*persona*⁵” of the selected vehicle occupant. (Ex. 1003, ¶129.)

Sundaram discloses that the “in-vehicle computer 104 builds user's usage profile based on previous usage data stored with in-vehicle computer” which teaches storing and “*maintaining*” the user profile. (Ex. 1027, [0020].) Thus, Sundaram also discloses “*maintaining a persona*” as required by this limitation. (Ex. 1003, ¶¶124-134.)

⁵ The '239 Patent describes a “*persona*” as including user profile data. (Ex. 1001, 81:64-82:1; 81:50-53; Ex. 1003, ¶¶125, 127.)

Sundaram describes the in-vehicle computer 104 as including “a processor operable to execute the computer code to,” for example, “receive first information about a first user in the vehicle,” and “determine a first identity of the first user based on the received first information.” (Ex. 1027, [0081]-[0089]). Sundaram’s in-vehicle computer can take the form of a “programmed microprocessor” or a processing machine that “executes a set of instructions⁶” (Ex. 1027, [0013],[0017], [0027]-[0028]; Ex. 1003, ¶¶135-137.) Therefore, Sundaram discloses the claimed “*microprocessor executable profile identification module*,” as computer code or a set of instructions. (Ex. 1003, ¶137.)

In view of the analysis above, Sundaram renders limitations [1a], [8a], and [15a] obvious. (Ex. 1003, ¶¶124-139, 204, 235.)

[1b]/[8b]/[15b] wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content

Sundaram discloses that “the processor is operable to receive biometric information about the first user...in which the biometric information includes one

⁶ The ’239 Patent describes the “*profile identification module*” as software. (Ex. 1001, 49:43-49; Ex. 1003, ¶136.)

of: (a) a fingerprint reading; (b) a picture; (c) a retinal scan; (d) a voice recording; (e) a weight; (f) a height, (g) an eye color, and (h) a hair color.” (Ex. 1027, [0098]; Ex. 1003, ¶140.) Sundaram explains that “the user is identified by in-vehicle computer 104 through visual recognition using a camera, voice recognition, finger print identification etc. and user's profile is automatically enabled in vehicle 102.” (Ex. 1027, [0020].) Thus, a PHOSITA would have understood that Sundaram teaches the claimed *persona*, i.e., information regarding personal characteristics of the user such as weight, height, and fingerprints. (Ex. 1003, ¶¶140-143.)

Therefore, Sundaram renders limitations [1b], [8b], and [15b] obvious. (Ex. 1003, ¶¶140-144, 205, 236.)

Although Petitioner interprets the term “*and/or*” as or, Sundaram also discloses that the “*persona*” comprises “*browsed content*” in addition to “*bioinformatics*,” in the event the Board construes “*and/or*” as and.

Sundaram discloses transferring music files from a desktop computer to the vehicle: the in-vehicle computer 104 “will synchronize the music files of the desktop with in-vehicle computer 104's memory, therefore enabling the user to listen to his/her favorite music while driving.” (Ex. 1027, [0039].) (Ex. 1027, [0039].) A PHOSITA would have understood that music files teach “*browsed content*” as they are disclosed as the “favorite” music of a user and not a random selection. (Ex. 1027, [0039]; Ex. 1003, ¶¶143-144.)

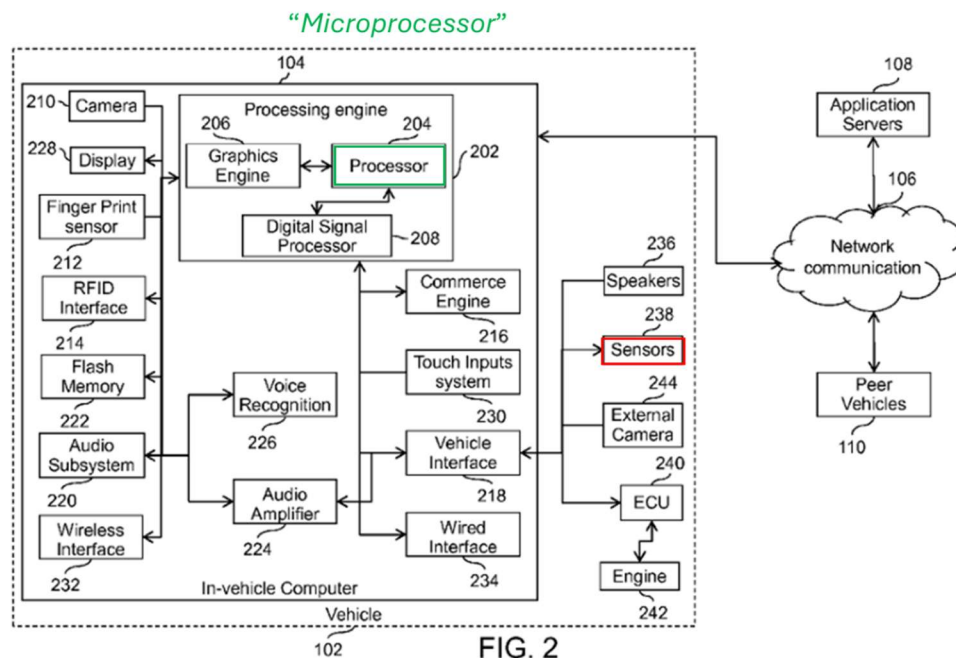
[1c] determining, by a microprocessor executable vehicle control system, vehicle-related information,

[8c] a microprocessor executable vehicle control system operable to: determine vehicle-related information,

[15c] determining vehicle-related information,

... wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination

Sundaram discloses that the vehicle 102 includes sensors 238, including “without limitation fuel level sensor, door open close sensor, knock sensor, flat tire sensor, etc.” (Ex. 1027, [0041].) As illustrated in Figure 2, the “[s]ensors 238 are connected to processing engine 202 via vehicle interface 218.” (*Id.*)



Ex. 1027, Fig. 2

Sundaram discloses that the “[i]n-vehicle computer 104 ... records all the inputs related to vehicle 102 and user's driving patterns ... includ[ing] ... driving characteristics of the user such as speed and the likes.” (Ex. 1027, [0022].) A PHOSITA would have understood that Sundaram’s sensors 238 include sensors for monitoring vehicle speed. (Ex. 1003, ¶145.)

Sundaram thus discloses that the vehicle through the code (“*vehicle control system*”) executed by a processor (“*microprocessor*”) “*determinin[es]*” the operational state of a vehicle including vehicle speed⁷. Sundaram describes “[a] system comprising a vehicle and a remote server, in which the vehicle is operable to: determine a first operational state of the vehicle ... [t]he system of embodiment H in which the first operational state includes one of: (a) an engine speed; [and] (b) a driving speed[.]” (Ex. 1027, [0154]-[0163]; Ex. 1003, ¶148.)

Additionally, Sundaram discloses “*vehicle-related information*” in the form of “*vehicle ... location.*” Sundaram teaches that the “vehicle is further operable to: determine an environmental state ... in which the environmental state includes one of: (a) a weather condition; (b) a road condition; (c) a presence of potholes (d) a

⁷ The ’239 Patent explains that a vehicle state includes information on whether the vehicle is moving such as “vehicle speed, acceleration, [and] deacceleration.” (Ex. 1001, 39:12-18; Ex. 1003, ¶¶145-146.)

traffic condition; (e) a location, (f) an altitude; (g) a road incline; and (h) a road curvature.” (Ex. 1027, [0154]-[0167].) A PHOSITA would have understood that Sundaram further teaches “*vehicle-related information*” in the form of the claimed “*vehicle ... location.*” (Ex. 1003, ¶¶148-149.)

Therefore, Sundaram renders limitations [1c], [8c], and [15c] obvious. (Ex. 1003, ¶¶145-150, 206, 237.)

Sundaram teaches traffic condition/speed are environmental states. (Ex. 1027, [0167].) The system of Sundaram further teaches that the system modifies its operational state like vehicle speed depending on the environmental state. (*Id.*) A PHOSITA would have understood that for the Sundaram system to determine traffic condition/speed it would require information about an intended path of travel. (Ex. 1003, ¶150.) Due to the environmental state being used as a basis to modify the operational state a PHOSITA would have understood the traffic conditions and thus path of the travel of the vehicle is being sensed. (*Id.*)

Although Petitioner interprets the term “and/or” as or, Sundaram also discloses that the “vehicle related information” comprises an “intended path of travel” in addition to the “vehicle ... location,” in the event the Board construes “and/or” as and. For example, Sundaram discloses: “J.2 The vehicle of embodiment J in which the sensor is a camera sensor and the condition of the road includes a presence of obstacles on the road.” (Ex. 1027, [0188].)

[1d]/[8d]/[15d] based on the persona of the selected vehicle occupant and the vehicle-related information, determining, by the microprocessor executable vehicle control system, a type of assistance to provide the selected vehicle occupant, the type of assistance not being based on or in response to a preceding request of the selected vehicle occupant;

Sundaram teaches alerting the user that they are driving above their speed limit (“*a type of assistance*”), which is based on the usage profile (“*persona*”) and the vehicle speed (“*vehicle-related information*”), and not based on a preceding request of that user. Specifically, Sundaram discloses that the “[i]n-vehicle computer 104 enables the setting of different usage profiles for different users, exposing one user to a set of features of vehicle 102 and another other user with a different set of features.” (Ex. 1027, [0018]; Ex. 1003, ¶¶151-152.)

D1 can define settings of vehicle 102 such that vehicle 102 identifies the driver and allows different speed limits for different drivers. In this case, the speed limit for D2 will be set as 60 km/hr in in-vehicle computer 104 and for D1 there will be no speed limit.

(Ex. 1027, [0018].)

Sundaram further discloses that “if a user attempts to go outside the bounds of certain settings (e.g., if user D1 attempts to exceed a maximum speed limit that has been set for him), the vehicle may respond” by “alerting the user that he is

attempting to go (or is going) outside the bounds (e.g., with an alarm or a computer voice alert).” (*Id.*, [0019].)

Sundaram discloses that “in case the driver is sleepy-eyed, camera 210 provides the inputs about driver's driving status to processor 204 and processor 204 may provide an alert to the driver to ensure safety of both the driver and the vehicle.” (Ex. 1027, [0031].) Sundaram further discloses that the “[c]amera 210 enables live video capturing of the user, enabling in-vehicle computer 104 to recognize gestures and user's moods and provide entertainment such as music, movies, advertisements, games etc. based on the identified gestures and moods.” (*Id.*) A PHOSITA would have understood that Sundaram’s disclosure of recognizing a user’s gestures and moods and then providing an entertainment alert based on the identified gestures and moods demonstrates that the processor provides an alert tailored for a specific user based on their profile or “*persona*”. (Ex. 1003, ¶153.)

A PHOSITA would have understood Sundaram’s tired (“sleepy-eyed”) entertainment alert based on a user’s identified gestures and moods (Ex. 1027, [0019], [0031]) compares a current appearance to the appearance of a user/driver stored in their user profile to determine if they look sleepy-eyed and to provide a corresponding entertainment alert tailored to that user. (Ex. 1003, ¶153.)

A PHOSITA would have understood that the sensors that monitor vehicle speed can also be used to monitor if the vehicle is moving at all as a vehicle

registering zero mph will not be moving. The sensed movement then indicates that the vehicle is being driven, which triggers the driver status updates such as a check if the driver is sleepy eyed. (Ex. 1003, ¶153.) Thus, a PHOSITA would have understood Sundaram teaches alerting (“*a type of assistance*”) the user that they are driving while sleepy eyed based on their appearance stored in their user profile (“*persona*”) and the vehicle being driven (“*vehicle-related information*”) and not based on a preceding request of that user. (Ex. 1027, [0031]; Ex. 1003, ¶152.)

Accordingly, a PHOSITA would have understood that Sundaram’s disclosure of alerting when: (1) certain speed limits for the identified as the driver (based on the persona) and (2) the driver is sleepy-eyed when driving, teaches the claimed “*assistance to provide the selected vehicle occupant, the type of assistance not being based on or in response to a preceding request of the selected vehicle occupant.*” (Ex. 1003, ¶¶153-154.) These responses are not based on a user request; indeed, the responses are automatic responses based on whether certain profile information and sensor information trigger an alert. (*Id.*, ¶155.)

Therefore, Sundaram renders limitations [1d], [8d], and [15d] obvious. (Ex. 1003, ¶¶151-161, 207, 238.)

[1e]/[8e]/[15e] performing, by the microprocessor executable vehicle control system, an action assisting the selected vehicle occupant, the action being one or more of providing a suggestion or

recommendation to the selected vehicle occupant, providing a reminder to the selected vehicle occupant, scheduling an activity involving the selected vehicle occupant, purchasing an item on line for the selected vehicle occupant, adding an entry into the selected vehicle occupant's electronic calendar, providing a notification to the selected vehicle occupant regarding an incoming message, call or action of a person, and/or sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time of the vehicle.

A PHOSITA would have understood the “*type of assistance*” required in claim limitations [1d]/[8d]/[15d] includes the “*action assisting the selected vehicle occupant*” required in claim limitations [1e]/[8e]/[15e] as discussed below. (Ex. 1003, ¶162.)

Sundaram discloses that the processor 204 (“*microprocessor*”), which is included in the in-vehicle computer 104, executes software code (“*vehicle control system*”) that is operable to cause an alert (“*action*”) to be generated. Specifically, Sundaram discloses a vehicle with a control system that includes “computer readable medium containing computer code,” “a processor operable to execute the computer code,” which can “provide instructions to the control system to cause an alert to be generated.” (Ex. 1027, [0065]-[0072]; Ex. 1003, ¶163.)

Sundaram discloses that “in-vehicle computer 104 may control vehicle 102's behavior to personalize the vehicle according to its user's needs and requirements.”

(Ex. 1027, [0017], [0019].) As explained for claim limitations [1d]/[8d]/[15d], Sundaram further discloses that the in-vehicle computer notifies the user when a speed limit is exceeded, e.g., “if user D1 attempts to exceed a maximum speed limit that has been set for him” the in-vehicle computer “alert[s] the user that he is attempting to go (or is going) outside the bounds (e.g., with an alarm or a computer voice alert).” (*Id.*, [0019] Ex. 1003, ¶164.)

A PHOSITA would have understood that Sundaram’s disclosure of an in-vehicle computer alerting the user, describes an “*action*” that is “*performed*” (generated) by a “*microprocessor*” executing code within the in-vehicle computer and the vehicle 102. (Ex. 1003, ¶¶165-168.) Further, a PHOSITA would have understood that alerting the user “*provid[es] a reminder to the selected vehicle occupant*” because the user is being reminded that they are approaching, or have surpassed the speed limit that has been set for them. The alert serves as a reminder because it is not simply telling the user their speed but giving additional information about the speed in relation to their personalized settings, e.g., the driver’s set speed limit. (*Id.*, ¶169.)

Similarly, the alert in response to camera data indicative of a sleepy-eyed driver also serves as a reminder to the driver of their current alertness and a reminder to take a break. (Ex. 1027, [0031]; Ex. 1003, ¶170.) A PHOSITA would have understood that the “sleepy” alert taught by Sundaram would come in the same form

as the speed limit alert, such as an audible or visual alert, for both notifying the user of an excessive speed and warning the user about signs of fatigue. (Ex. 1003, ¶167.) Therefore, Sundaram renders limitations [1e], [8e], and [15e] obvious. (Ex. 1003, ¶¶162-171, 208, 239.)

**3. Dependent Claims 2, 5, 7, 9, 12, 14, 16, 19, 21-22,
30, 34, 35**

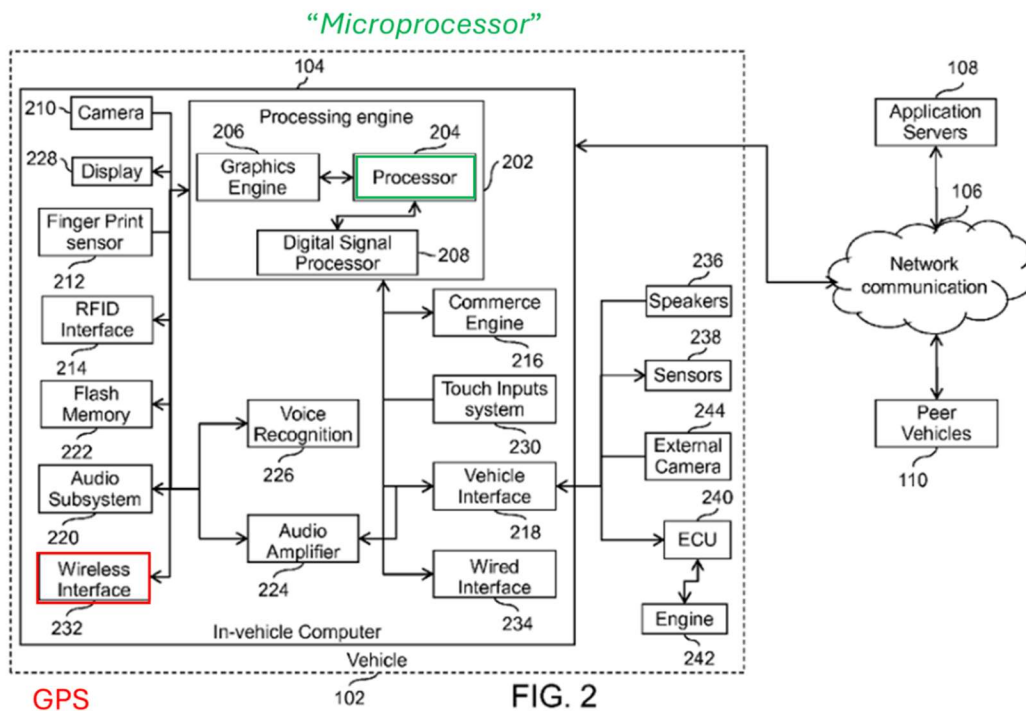
[2] The method of claim 1,

[9] The vehicle of claim 8,

[16] The computer readable medium of claim 15,

... wherein the vehicle-related information comprises at least one of a current and/or future vehicle location and path of vehicle travel and wherein the action is providing a notification of an instant message, email, voice mail from, and/or missed phone call from, current activity of and/or location of a friend.

Sundaram discloses that the in-vehicle computer 104 receives data from GPS and other sensors to determine vehicle position: “[w]ireless interface 232 includes without limitation GPS,” which “uses satellite to triangulate the location of vehicle 102.” (Ex. 1027, [0039].) “Here the location triangulation is not limited to GPS, and inputs from other location systems may also be used to approximate the location of vehicle 102.” (*Id.*)



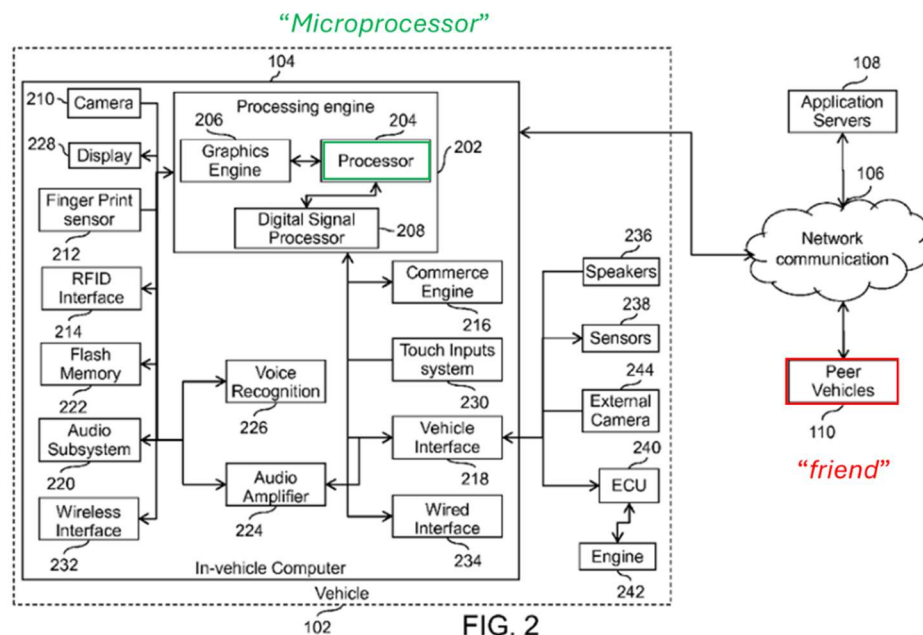
Ex. 1027, Fig. 2

Sundaram thus discloses determining “*vehicle-related information*” including the location of a vehicle (“*current ... vehicle location*”) and traffic condition/speed (“*path of vehicle travel*”) of a vehicle. (Ex. 1027, [0192]-[0197]; Ex. 1003, ¶175.)

Sundaram teaches traffic condition/speed are environmental states. (Ex. 1027, [0167].) The system of Sundaram further teaches that the system modifies its operational state like vehicle speed depending on the environmental state. (*Id.*) A PHOSITA would have understood that for the Sundaram system to determine traffic condition/speed it would require information about a path of travel. (Ex. 1003, ¶176.) Due to the environmental state being used as a basis to modify the operational state a PHOSITA would have understood the traffic conditions and thus path of the travel

of the vehicle is being sensed. (*Id.*)

Sundaram discloses that the “in-vehicle computer 104 enables communication and transfer of information to and from peer vehicles 110 such as car position, speed, traffic alerts etc.” (Ex. 1027, [0025].) Sundaram further discloses sharing information “with other vehicles within a social network or social circle.” (Ex. 1027, [0190].) A PHOSITA would have understood that the driver of a peer vehicle 110 within a social network of the driver is a “*friend*” of the driver. (Ex. 1003, ¶177.)



Ex. 1027, Fig. 2

Accordingly, a PHOSITA would have recognized that Sundaram’s combination of peer-to-peer communication and group-based transmission teaches “*wherein the action is providing a notification [alert] of ..., current activity [driving condition] of and/or location of a friend [another vehicle who is a member of the*

same social network].” (Ex. 1003, ¶178.) Further, a PHOSITA would have understood that a user’s profile would be used as the basis for the social network. (Id.)

Therefore, Sundaram renders claims [2], [9], and [16] obvious. (Ex. 1003, ¶¶174-179, 210, 242.)

[5] The method of claim 1, further comprising: determining, by the vehicle control system,

[12] The vehicle of claim 8, wherein the vehicle control system is further operable to determine

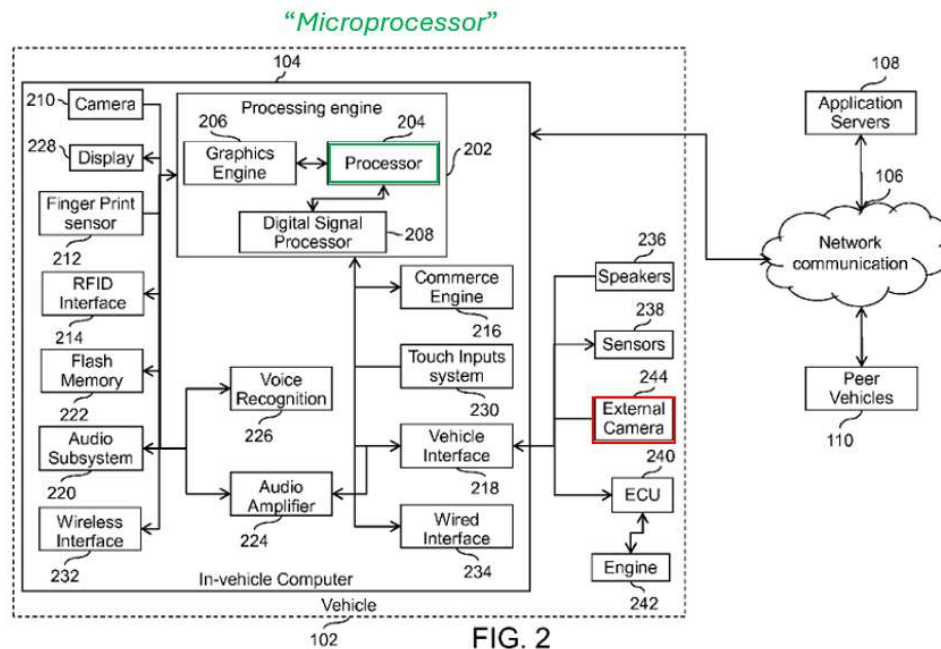
[19] The computer readable medium of claim 15, further comprising the function of determining

... relevant information other than the persona of the selected vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a persona of a selected person not currently in the vehicle, a message from a friend or family member of the selected vehicle occupant, a current activity of the friend and/or family member, a current location of the friend or family member near the vehicle and/or the vehicle's path of travel, and a road condition along a path of travel of the vehicle.

Sundaram discloses, that an “[e]xternal camera 244 is placed in the periphery of vehicle 102 or in locations external to vehicle 102, and is used for providing

driving assistance, threat detection on the road and other related services to the user.”

(Ex. 1027, [0043].)



Ex. 1027, Fig. 2

Sundaram further discloses that the “[i]n-vehicle computer 104 has ... access to various computing and control devices in vehicle 102” including “speedometer, fuel meter, air-conditioning regulator, engine control units, gyrometer and the like.” (Ex. 1027, [0017].) The “in-vehicle computer 104, by taking inputs from vehicle 102's gyrometer, may adjust vehicle 102's behavior to enhance comfort of the user and warn the user about the road conditions.” (Ex. 1027, [0017].) Sundaram further discloses determining that “the condition of the road includes a presence of potholes” based on “motion sensor” data; and determining that “the condition of the road

includes a presence of obstacles” based on “camera sensor” data. (Ex. 1027, Claims 43-44; [0188].)

Sundaram thus discloses “*determin[ing] relevant information other than the persona of the selected vehicle occupant and the vehicle-related information ... comprising one or more of ... a road condition along a path of travel of the vehicle [e.g., determining the presence of potholes and obstacles on the road based on motion sensor data and camera sensor data]*” and renders claims [5], [12], and [19] obvious (Ex. 1003, ¶¶181-183, 218, 246.)

[7a] The method of claim 1,

[14a] The vehicle of claim 8,

[21a] The computer readable medium of claim 15,

... wherein [the] maintaining [of] the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source,

Sundaram discloses, with reference to Figure 2 below, a “[f]inger print sensor 212 [that] provides user authentication input to processor 204” and “[i]nputs provided by camera 210 to processor 204 include without limitation, driver identification[.]” (Ex. 1027, [0031]-[0032].)

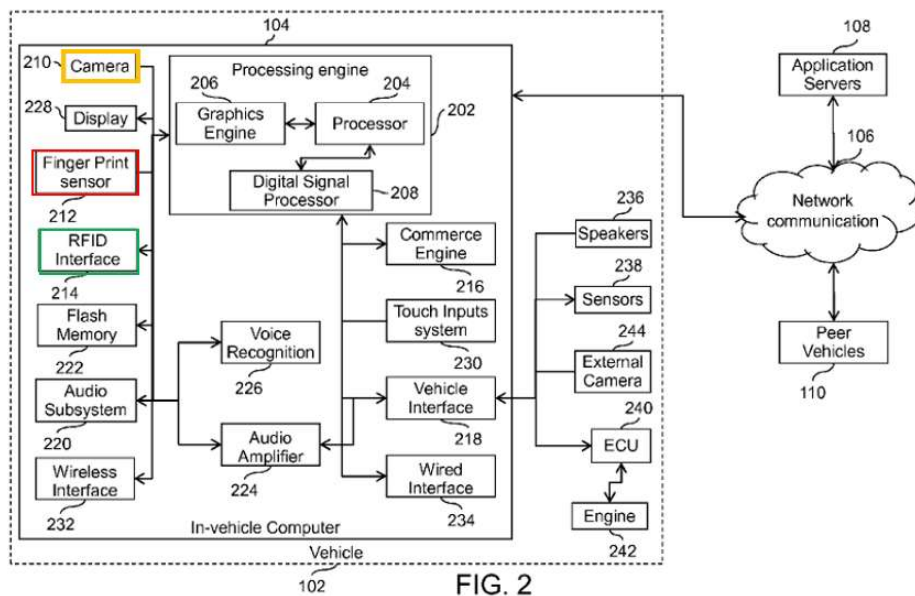


FIG. 2

Ex. 1027, Fig. 2

Sundaram discloses that the in-vehicle computer 104 identifies the user “through visual recognition using a camera, voice recognition, finger print identification etc. and [the] user's profile is automatically enabled in vehicle 102.” (Ex. 1027, [0020].) Sundaram thus discloses a fingerprint scan as a method to collect information, and then enabling the user’s profile (“*persona*”) based on the information. (Ex. 1003, ¶187.)

Therefore, Sundaram renders limitations [7a], [14a], and [21a] obvious. (Ex. 1003, ¶¶186-188, 221, 249.)

[7b]/[14b]/[21b] wherein the microprocessor executable vehicle control system, based on information received from a sensor identifies and/or distinguishes the selected vehicle occupant's

clothing, held object and/or object in the possession of the selected vehicle occupant, and

Sundaram discloses that the “in-vehicle computer 104 provides alerts and messages to the user” “based on inputs from RFID interface 214[.]” (Ex. 1027, [0033].) “For example in case the user has left his/her mobile phone in vehicle 102, in-vehicle computer 104 detects and identifies user's mobile phone via RFID interface 214 and alerts the user through audio signals or messaging him through any of the available communication network.” (*Id.*)

Sundaram thus discloses using computer code (“*vehicle control system*”) executed by a processor identify objects like a mobile phone (“*held objects*”) via RFID sensor (“*a sensor*”). (Ex. 1027, [0027], [0033], [0068]-[0072]; Ex. 1003, ¶190.)

Therefore, Sundaram renders limitations [7b], [14b], and [21b] obvious. (Ex. 1003, ¶¶190-191, 222, 250.)

[7c]/[14c]/[21c] wherein the action is based on the identified and/or distinguished clothing, held object and/or object in the possession of the selected vehicle occupant.

Sundaram discloses an alert (“*action*”) caused (“*based on*”) by a user leaving their mobile phone (“*held object*”) in the car. (Ex. 1027, [0068]-[0072]; Ex. 1003, ¶194.) The alert (“*action*”) is general and can have various triggers. (*Id.*, ¶¶167, 195.) In this example the alert’s trigger is based on leaving a mobile phone in the car. (*Id.*,

¶194.)

Therefore, Sundaram renders limitations [7c], [14c], and [21c] obvious. (Ex. 1003, ¶¶194-196, 223, 251.)

[14d] wherein a type of information collected depends on a seating position of the selected vehicle occupant.

Sundaram discloses collecting information from a fingerprint sensor mounted on the steering wheel to determine the user, which a PHOSITA would recognize is a driver specific collection of information due to the steering wheel being associated with the driver seating position. (Ex. 1027, [0032]; Ex. 1003, ¶¶224-225.)

Therefore, Sundaram renders limitation [14d] obvious. (Ex. 1003, ¶¶224-226.)

[10] The vehicle of claim 8, wherein the action performed depends on a seating position of the selected vehicle occupant.

As explained for claim limitation 8[e], Sundaram discloses various driver specific assistance provided by the disclosed system, such as an alert when exceeding a speed limit (Ex. 1027, [0019]) and an alert if a driver appears tired, i.e., is “sleepy-eyed.” (*Id.*, [0031].)

A PHOSITA would have understood that both alerts are based on the seating position of the user because the alerts are intended to notify the driver of unsafe driving conditions like unsafe speed or tired driving. One alert in Sundaram is based

on a limit set for a specified user. (Ex. 1027, [0019].) A PHOSITA would have understood the speed limit for a given user being active in a vehicle is important to the user that is operating the vehicle, i.e. in the driver seat position. Additionally, the drowsiness sensed is directly dependent on the seating position of the occupant as a PHOSITA would have understood that the sensor to monitor the driver's drowsiness would be directed toward the driver's seat to ensure the driver is not tired and putting the vehicle at risk. (Ex. 1027, [0031]; Ex. 1003, ¶212.)

Therefore, Sundaram renders limitation [10] obvious. (Ex. 1003, ¶¶211-213.)

[22a] The computer readable medium of claim 21, wherein the maintaining of the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source and

As discussed above in limitations [7a]/[14a]/[21a], Sundaram discloses that the in-vehicle computer 104 identifies the user “through visual recognition using ... finger print identification etc. and [the] user's profile is automatically enabled in vehicle 102.” (Ex. 1027, [0020].) Sundaram thus discloses a fingerprint scan as a method to collect information, and then enabling the user's profile (“*persona*”) based on the information. (Ex. 1003, ¶186.) Sundaram thus discloses a fingerprint scan as part of the user's profile (“*persona*”). Sundaram discloses the fingerprint reading

done by a fingerprint sensor 212 (“one or more vehicle sensors”). (Ex. 1027, [0032]; Ex. 1003, ¶187.)

Therefore, Sundaram renders limitation [22a] obvious. (Ex. 1003, ¶¶186-188, 254.)

[22b] wherein a type of information collected depends on one or more of an identity of the selected vehicle occupant, an age of the selected vehicle occupant, a seating position of the selected vehicle occupant, and an association of the selected vehicle occupant with the vehicle.

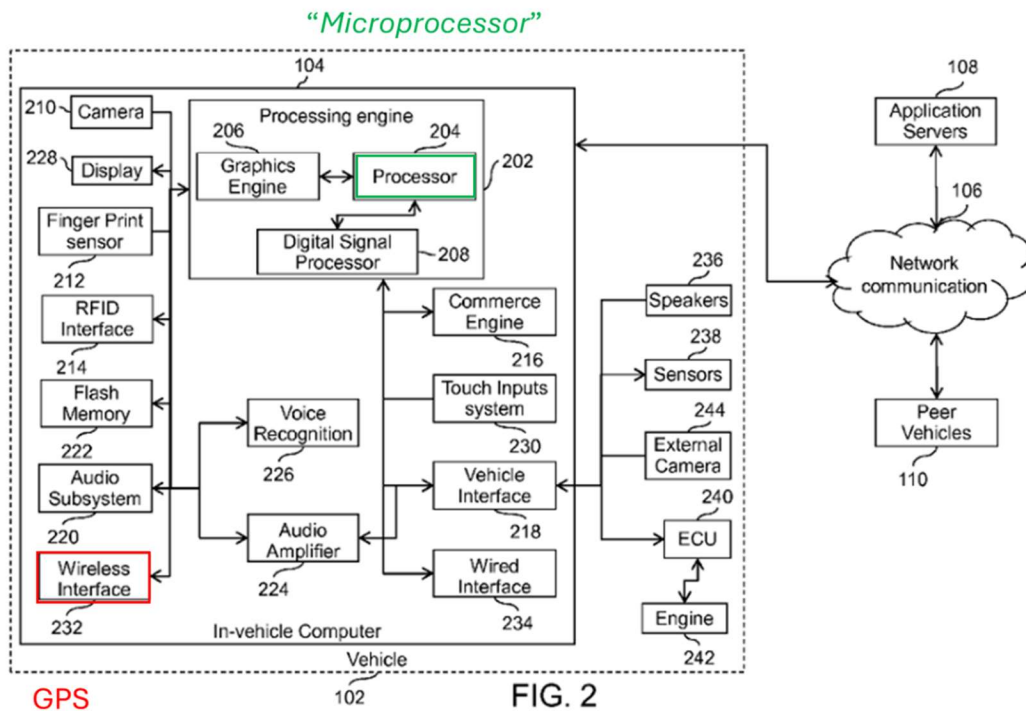
As discussed above in limitation [14d], Sundaram discloses collecting information from a fingerprint sensor mounted on the steering wheel to determine the user, which a PHOSITA would recognize is a driver specific collection of information due to the steering wheel being associated with the driver seating position. (Ex. 1027, [0032]; Ex. 1003, ¶¶ 224-225.)

Therefore, Sundaram renders limitation [22b] obvious. (Ex. 1003, ¶¶224-226, 255.)

[30] The method of claim 1, wherein the vehicle control system uses a vehicle location-based trigger to activate and/or deactivate a feature and/or setting at a waypoint or destination.

Sundaram discloses that the in-vehicle computer 104 includes a wireless interface 232 that receives data from “GPS” and other “location systems” “to

triangulate the location of vehicle 102.” (Ex. 1027, [0039].)



Ex. 1027, Fig. 2

Sundaram further discloses that the “in-vehicle computer 104 uses location source as one of the inputs to identify the road and area in which vehicle 102 is and then use this information to fetch the speed limit of that particular road dynamically” and provide “over speeding” alerts to the user. (Ex. 1027, [0017].)

Sundaram thus discloses that the in-vehicle computer 104 processor 204 executes code (“*vehicle control system*”), using the vehicle’s location (“*vehicle location-based trigger*”) to identify the road and area in which the vehicle is operating, and dynamically retrieves a corresponding speed limit for road or area and activate alerts for the user when the vehicle exceeds the speed limit (“*activate*

and/or deactivate a feature and/or setting”) at the identified location (“at a waypoint or destination”). (Ex. 1027, [0017]; Ex. 1003, ¶¶256-257.)

Therefore, Sundaram renders claim 30 obvious. (Ex. 1003, ¶¶256-259.)

[34] The method of claim 1, wherein the type of information collected by the microprocessor executable profile identification module for the selected vehicle occupant's persona depends on a seating position and/or age of the selected vehicle occupant.

As discussed above for claim limitation [14d], Sundaram discloses collecting information from a fingerprint sensor mounted on the steering wheel to identify the user, which a PHOSITA would have recognized is a driver specific collection of information due to the steering wheel being associated with the driver seating position. (Ex. 1027, [0032]; Ex. 1003, ¶¶ 224-226, 263.)

Therefore, Sundaram renders claim 34 obvious. (Ex. 1003, ¶263.)

[35] The method of claim 1, further comprising: determining, by the vehicle control system, relevant information other than the persona of the selected vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a location, hours of operation, and/or descriptive information about a point and/or location of interest near the vehicle and/or the vehicle's path of travel, a location, hours of operation, and/or descriptive information about a vehicle service facility near the vehicle and/or the vehicle's path of travel, and a location, hours of operation, and/or descriptive information about a hotel and/or motel near the

vehicle and/or the vehicle's path of travel.

As explained for claim 5, Sundaram discloses that the vehicle 102 includes sensors 238, including “without limitation fuel level sensor, door open close sensor, knock sensor, flat tire sensor, etc.” (Ex. 1027, [0041], Fig. 2.) Sundaram further discloses that the in-vehicle computer 104 determines that “the condition of the road includes a presence of potholes” based on “motion sensor” data; and determining that “the condition of the road includes a presence of obstacles” based on “camera sensor” data. (Ex. 1027, Claims 43-44; [0188].)

A PHOSITA would have understood the road to be a “*location of interest near the vehicle*” as it is a specified location and the condition of the road as “*descriptive information[.]*” (Ex. 1003, ¶268.)

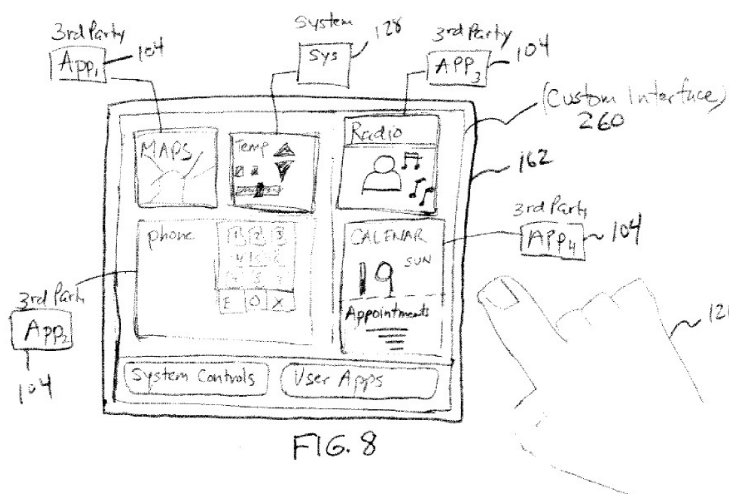
Therefore, Sundaram renders claim 35 obvious (Ex. 1003, ¶¶181-183, 266-269.)

B. Ground 2: Claims 13, 20, 23-28, and 31-33 are rendered obvious by the combination of Sundaram and Penilla

1. Overview of Penilla

Penilla discloses synchronizing devices such as the user’s phone, tablet, or smartwatch with an in-vehicle computer. For example, Penilla describes that “[i]n one embodiment, data from the local devices can be synchronized locally to the display of the vehicle in selected regions.” (Ex. 1035, 18:50-55.) Penilla further

teaches that content from applications running on the user's devices can be displayed on the vehicle display. (*Id.*, 15:23-39; Ex. 1003, ¶¶107-110).



Ex. 1047⁸, Fig. 8; see also Ex. 1035, Fig. 8

2. Rationale to Combine

A PHOSITA would have been motivated to combine the features of Penilla with the system described in Sundaram. (Ex. 1003, ¶¶271-289.) First, it would have been obvious to a PHOSITA to combine the system for uploading and saving profile data described in Sundaram with the known technique of performing such data transactions while the vehicle ignition is off as described in Penilla. Indeed, performing such file transfers with the ignition off would have the additional benefit

⁸ Petitioner cites to Penilla's original informal drawings as filed and references the later filed formal drawings that are included in Ex. 1035. (Ex. 1047, 90-110, 125-152; Ex. 1003, ¶109, FN 15.)

of limiting use of fuel saving costs and limiting pollution from exhaust. Further, by transferring files while the vehicle is off, there would be no need for the vehicle user to later switch the vehicle off after transfer is complete. This would provide an added convenience to the user. (*Id.*, ¶271-273.)

Secondly, a PHOSITA would have found it obvious to combine the system in Sundaram with the known technique of transferring information (profiles and settings) to different branded vehicles (including rental vehicles) described in Penilla. Indeed, a PHOSITA would have recognized the advantage of the ability to transfer as it would allow the user to maintain one profile that would be used regardless of the vehicle the user is driving. This would have been helpful in households with multiple vehicles where members of the household may use multiple vehicles and have a need to be able to switch from vehicle-to-vehicle while maintaining the same profile (including any adjustments made thereto) across all vehicles. (Ex. 1003, ¶274-281.)

A PHOSITA would have understood that Sundaram and Penilla describe complementary technologies in the same field of customization of vehicle interfaces to enable vehicle behavior and settings modifications via standardized platforms and are combinable. (Ex. 1027, [0002]; Ex. 1035, 1:26-29.) For example, Sundaram discloses that “[n]umerous modifications, changes, variations, substitutions and equivalents will be apparent to those skilled in the art without departing from the

spirit and scope of the described and contemplated embodiments.” (Ex. 1027, [0255].) Further, both Sundaram and Penilla address the problem of personalizing vehicle systems for given user. (Ex. 1027, [0020]; Ex. 1035, 20:1-6.) The combination would have been a software modification within the ability of a PHOSITA and a PHOSITA would have had a reasonable expectation of success in the combination. (Ex. 1003, ¶282.)

The *KSR* factors also support that a PHOSITA would have found it obvious to combine the teachings of Sundaram with the teachings of Penilla. First, combining Penilla with Sundaram would have yielded predictable results. Penilla adds synchronization while the vehicle is off, calendar downloads with notifications, smartwatch integration, and persona portability across manufacturers. Synchronization while the vehicle is off conserves fuel and removes the need for user oversight; calendar downloads enhance personalization and timely alerts; smartwatch integration expands device compatibility for easier access; and profile transfer improves convenience and safety by maintaining settings like speed limits across vehicles. (Ex. 1003, ¶¶283-287.)

Second, market forces would have driven the combination of Sundaram and Penilla. Synchronization while the vehicle is off reduces fuel costs and supervision time, creating strong design and economic incentives. Further, support of interoperability between different vehicle manufacturers and between vehicles and

smartwatches expands user options and encourages broader adoption by leveraging existing devices. Moreover, applying the system to rental vehicles would offer the clear commercial benefits of streamlining identity verification and improving renter convenience. These variations respond to market demand and predictably enhance efficiency, compatibility, and user experience. (Ex. 1003, ¶288.)

3. Dependent Claims 13 and 20

[13] The vehicle of claim 8,

[20] The computer readable medium of claim 15,

... wherein the vehicle obtains the persona from one or more of a different vehicle driven by the selected vehicle occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.

Sundaram discloses that “in case the user's vehicle 102 is nearby his/her house which has user's desktop, in-vehicle computer 104 on detecting the desktop through Wi-Fi technology will synchronize the music files of the desktop with in-vehicle computer 104's memory, therefore enabling the user to listen to his/her favorite music while driving.” (Ex. 1027, [0039].) Thus, Sundaram discloses synchronizing a “home computer” (user’s desktop) with the in-vehicle computer 104's memory to obtain the user’s music preferences (his or her favorite music). (Ex. 1003, ¶¶293-294.)

Sundaram further discloses receiving preferences from an external device. (Ex. 1027, [0094].) A PHOSITA would have understood that the desktop at the user's house to be an example of an external device as Sundaram teaches the desktop to be located in the user's house which is external to the vehicle. (Ex. 1027, [0039].) A PHOSITA would have understood the system receiving a set of preferences to be the same "*synchronization*" as with the above example with music files. Further, the preferences received can be a setting such as the speed limit for a given user. (*Id.*, [0019], [0094].) Thus, a PHOSITA would have understood Sundaram's disclosure of the vehicle receiving preferences like settings from an external device to teach the claimed "*vehicle obtains the persona from one or more of a ... a home computer[.]*" (Ex. 1003, ¶¶295-296.) A PHOSITA would have understood that Sundaram's disclosure of obtaining the user's preferred music files (preferences in music) from the user's desktop and user preferences including vehicle settings from an external device (desktop computer) would have represented an example of obtaining the user's persona.⁹ Thus, a PHOSITA would have understood that Sundaram discloses obtaining the user's persona from a home computer. (Ex. 1003, ¶297.)

A PHOSITA would have understood that Sundaram alone suggests

⁹ "[P]ersona" includes information such as "likes or interests, dislikes, preferences, and the like." (Ex. 1001, 81:48-53.)

synchronization (i.e., transfer of files) when the vehicle's ignition is off. Sundaram discloses Wi-Fi communication between the in-vehicle computer and the user's desktop when the vehicle is nearby the user's home, from which a PHOSITA would have understood that the car is parked as using home Wi-Fi requires the car to be stationery and users do not typically leave cars running when home. (Ex. 1003, ¶298.)

Additionally, Penilla teaches turning a vehicle ignition off during the communication of data like the music files described in Sundaram. Specifically, Penilla discloses that “[t]he communication can be made by vehicle electronics while the vehicle is on or when the vehicle is off, so long as communication and processing circuitry of vehicle electronics has a power source.” (Ex. 1035, 9:19-22; Ex. 1003, ¶299.)

Therefore, Sundaram in combination with Penilla renders claims 13 and 20 obvious (Ex. 1003, ¶¶292-300, 305-306.)

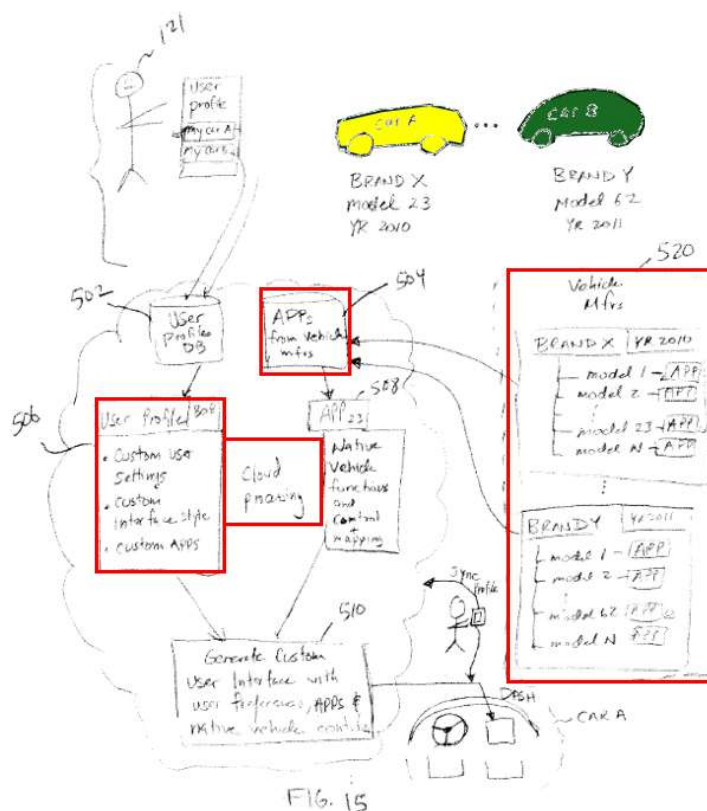
[23a] The computer readable medium of claim 21, wherein the persona is defined in a format that can be processed by vehicles of different manufacturers,

Sundaram discloses a need for a unified, standardized application platform in vehicles to enable development and integration of diverse entertainment and computational applications, overcoming manufacturer-specific limitations and

incompatibility across car systems, for example “the existing platforms are very rigid and are restricted to what is provided by the manufacturer, thus preventing customization of a vehicle based on requirements and needs of a user.” (Ex. 1027, [0003], [0008]-[0009]; Ex. 1003, ¶309.) Sundaram teaches the user’s profile (*persona*) being maintained online and enabling access in different vehicles. Sundaram discloses that “[t]he user's profile may also be maintained online thus enabling the user to access his/her usage profile in different vehicles 102.” (Ex. 1027, [0020].) A PHOSITA would have understood that different vehicles would include vehicles from different manufacturers as a purpose of standardizing the application platform is to allow for the user to move from vehicle-to-vehicle, which would include vehicles of different manufacturers even within a household. (Ex. 1003, ¶310.)

Penilla discloses that “[t]he user profile ... can be managed by the cloud processing 120” with “a user profile database 502 ... that allows the user to synchronize settings for various profiles, such as for ‘my car A’, and ‘my car B’, or the like.” “[T]he custom configuration can be transferred from vehicle to vehicle and for a period of time.” (Ex. 1035, 22:17-24.) As shown illustrated in Figure 15 below, Penilla discloses a database managed by cloud processing 120 that can be accessed by a portable device and synchronized between different branded vehicles e.g., “Brand X Model 23” (annotated in yellow) and “Brand Y Model 62” (annotated in

green) (i.e., “different manufacturers”). (Ex. 1003, ¶¶311-312.)



Ex. 1047, FIG. 15; See also Ex. 1035, Fig. 15

Penilla further discloses that “the manufacturer of the vehicle and the second vehicle is either the same or different.” (Ex. 1035, 2:35-50; Ex. 1003, ¶312.) A PHOSITA would have understood the second vehicle being able to receive and configure itself based on the custom configuration along with the disclosure of a vehicle of different manufacturers/brands operating in the same cloud processing ecosystem as illustrated in FIG. 15 demonstrates “*wherein the persona is defined in a format that can be processed by vehicles of different manufacturers[.]*”

Therefore, Sundaram in combination with Penilla renders limitation [23a]

obvious (Ex. 1003, ¶¶308-314.)

[23b] wherein the persona is provided, by the selected vehicle occupant, to a rental car company, and wherein the vehicle is rented by the selected vehicle occupant from the rental car company.

Penilla discloses that “the custom configuration can be transferred from vehicle to vehicle and for a period of time” such as “a trip, a day, a week, a rental period, a lease period, etc.” (Ex. 1035, 22:22-26; Ex. 1003, ¶317.)

A PHOSITA would have understood that synchronizing custom configurations of a user profile (“*persona*”) with a vehicle for a rental period teaches “*wherein the persona is provided, by the selected vehicle occupant, to a rental car company, and wherein the vehicle is rented by the selected vehicle occupant from the rental car company.*” (Ex. 1003, ¶318.)

Therefore, Sundaram in combination with Penilla renders claim limitation [23b] obvious (Ex. 1003, ¶¶317-319.)

4. Independent Claims 24, 26, and 28

Independent claims 24, 26, and 28 are substantially similar to independent claims 1, 8, and 15 analyzed in Ground 1, and include the additional synchronization limitations of claims 13 and 20.

24[pre] A method, comprising:

26[pre] A vehicle, comprising: a microprocessor executable profile identification module operable to

28[pre] A tangible and non-transient computer readable medium comprising microprocessor executable instructions that, when executed, perform functions comprising:

[24a]/[26a]/[28a] maintain[ing, by a microprocessor executable profile identification module,] a persona of a vehicle occupant; and

Claim limitations 24[pre-a], 26[pre-a], and 28[pre-a] are substantively identical to claim limitations 1[pre-a], 8[pre-a], and 15[pre-a], respectively. Therefore, for the same reasons Sundaram renders claim limitations 1[pre-a], 8[pre-a], and 15[pre-a] obvious, Sundaram also renders claim limitations 24[pre-a], 26[pre-a], and 28[pre-a] obvious. (Ex. 1003, ¶¶122-139, 201-204, 231-235, 323-339, 385-386, 388, 398-399, 402-412.)

[24b]/[26b]/[28b] [a microprocessor executable vehicle control system operable,] based on the persona of the vehicle occupant and vehicle-related information, [] perform[ing, by a microprocessor executable vehicle control system,] an action assisting the vehicle occupant,

As explained for claim limitations [1d-1e]/[8d]-[8e]/[15d]-[15e] in Ground 1, Sundaram discloses that one driver may set speed limits for other drivers, e.g., “if a user attempts to go outside the bounds of certain settings (e.g., if user D1 attempts to exceed a maximum speed limit that has been set for him), the vehicle may respond” by “alerting the user that he is attempting to go (or is going) outside the bounds (e.g., with an alarm or a computer voice alert).” (Ex. 1027, [0019].)

Sundaram also discloses that that the processor 204 provides an alert, based on a user's entertainment preferences, in response to detecting that the driver is tired: "in case the driver is sleepy-eyed, camera 210 provides the inputs about driver's driving status to processor 204 and processor 204 may provide an alert to the driver to ensure safety of both the driver and the vehicle." (*Id.*, [0031].) The "[c]amera 210 enables live video capturing of the user, enabling in-vehicle computer 104 to recognize gestures and user's moods and provide entertainment such as music, movies, advertisements, games etc. based on the identified gestures and moods." (*Id.*)

Sundaram thus teaches alerting the user that they are driving above a designated speed limit, or tired, ("action") that is based on the usage profile ("persona"), appearance, and the vehicle speed ("vehicle-related information").

Therefore, Sundaram in combination with Penilla renders limitations [24b], [26b], and [28b] obvious (Ex. 1003, ¶¶151-171, 207-208, 238-239, 343-350, 389, 415-418.)

[24c]/[26c]/[28e] wherein the vehicle obtains the persona from one or more of a different vehicle driven by the occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.

As explained for claims 13 and 20, Sundaram discloses the user's vehicle synchronizing with a desktop computer over Wi-Fi while the vehicle is nearby the user's house. (Ex. 1027, [0039]; Ex. 1003, ¶¶298, 304.)

Additionally, Penilla discloses turning a vehicle ignition off during the communication of data like the music files described in Sundaram: "The communication can be made by vehicle electronics while the vehicle is on or when the vehicle is off, so long as communication and processing circuitry of vehicle electronics has a power source." (Ex. 1035, 9:19-22; Ex. 1003, ¶299.)

Therefore, Sundaram in combination with Penilla renders limitations [24c], [26c], [28e] obvious (Ex. 1003, ¶¶353-356, 390, 437-443.)

[28c] wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content, wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination, and

Claim limitation [28c] is substantively identical to claim limitations [1b]-[1c], [8b]-[8c]. and [15b]-[15c]. Therefore, for the same reasons Sundaram renders claim limitations [1b]-[1c], [8b]-[8c]. and [15b]-[15c] obvious, Sundaram also renders claim limitation [28c] obvious. (Ex. 1003, ¶¶140-150, 205-206, 236-237, 421-429.)

[28d] wherein the action is one or more of making an appointment, making a reservation, purchasing an item on line, adding a waypoint or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the occupant, notifying the occupant, and sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time and

As explained for claim limitations [1d]-[1e] Sundaram discloses alerting (“*action*”) the user of an excess speed condition: “if a user attempts to go outside the bounds of certain settings (e.g., if user D1 attempts to exceed a maximum speed limit that has been set for him), the vehicle may respond” by “alerting the user that he is attempting to go (or is going) outside the bounds (e.g., with an alarm or a computer voice alert).” (Ex. 1027, [0019]; Ex. 1003, ¶430.) Sundaram further discloses “in case the driver is sleepy-eyed, camera 210 provides the inputs about driver's driving status to processor 204 and processor 204 may provide an alert to the driver to ensure safety of both the driver and the vehicle.” (Ex. 1027, [0031].)

A PHOSITA would have understood Sundaram’s disclosure of alerting the user teaches “*warning the occupant*” and “*notifying the occupant*” because the user being told they are approaching their limit or have surpassed their limit is a reminder of the limit or that they are sleepy-eyed. (Ex. 1003, ¶432.)

Therefore, Sundaram in combination with Penilla renders limitation [28d] obvious. (Ex. 1003, ¶¶151-171, 430-434.)

5. Dependent Claims 25 and 27

[25a] The method of claim 24,

[27a] The vehicle of claim 26

... wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content,

[25b]/[27b] wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination, and

Claim limitations [25a]-[25b] and [27a]-[27b] are substantively identical to claim limitations [1b]-[1c], respectively. Therefore, for the same reasons Sundaram renders claim limitations [1b]-[1c] obvious, Sundaram also renders claim limitations [25a]-[25b] and [27a]-[27b] obvious. (Ex. 1003, ¶¶140-150, 359-374, 393-394.)

... [25c]/[27c] wherein the action is one or more of making an appointment, making a reservation, purchasing an item on line, adding a waypoint or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the occupant, notifying the occupant, and sending a

message to a person at a waypoint or destination of the vehicle regarding an arrival time.

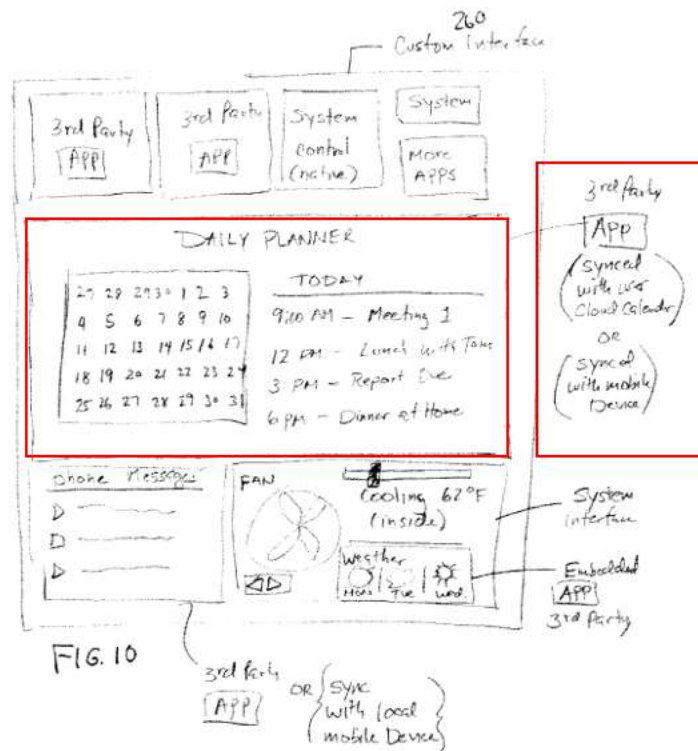
Claim limitations [25c] and [27c] are substantively identical to claim limitation [28d]. Therefore, for the same reasons Sundaram renders claim limitation [28d], Sundaram also renders claim limitations [25c] and [27c] obvious. (Ex. 1003, ¶¶376-380, 395, 430-434.)

6. Dependent Claims 31-33

[31] The method of claim 1, wherein the vehicle control system synchronizes with an electronic calendar of the selected vehicle occupant to provide scheduled activity alarms and calendar updates.

Sundaram discloses that the “in-vehicle computer 104 communicates with other wired and wireless enabled devices such as mobile phone, laptop etc. and synchronizes data with these devices.” (Ex. 1027, [0039].)

Penilla discloses “an application provided by third-party, such as an online calendar, can be synchronized with the user's calendar managed by a 3rd party or stored by a 3rd party on a website. (Ex. 1035, 18:4-12.)



Ex. 1047, FIG 10; See also Ex. 1035, Fig. 10

A PHOSITA would have understood that Sundaram discloses data synchronization between various computing devices, such as a mobile phone and an in-vehicle computer, via a processor. (Ex. 1027, [0054]-[0065].) This synchronization is compatible with the data synchronization between a vehicle and a portable device as disclosed in Penilla. Sundaram's disclosure includes applications that would be synchronized, and Penilla demonstrates a calendar is one such program. Given Sundaram's disclosure of various alerts, it would have been obvious to a PHOSITA that alerts for calendar functionality, as disclosed in Penilla, would be included. (Ex. 1003, ¶450.)

Therefore, Sundaram in combination with Penilla renders claim 31 obvious (Ex. 1003, ¶¶446-451.)

[32] The method of claim 1, wherein the vehicle control system synchronizes data with a wearable of the selected vehicle occupant and at least one of (i) enables the selected vehicle occupant to interact with the wearable via an on board vehicle display and (ii) uses the data received from the wearable as part of the persona of the selected vehicle occupant.

Sundaram discloses that the “in-vehicle computer 104 communicates with other wired and wireless enabled devices such as mobile phone, laptop etc. and synchronizes data with these devices.” (Ex. 1027, [0039].) Thus, Sundaram discloses synchronizing information (“data”) between the in-vehicle computer 104 and various wired and wireless enabled devices including a mobile phone, as well as remote controlling (“interact”) the mobile phones with the in-vehicle computer 104. (Ex. 1003, ¶456.)

Further, Sundaram discloses the in-vehicle computer 104 through the display executing computer instructions (“vehicle control system”) with a processor as the means for user interaction with applications downloaded from devices such a mobile phone. (Ex. 1027, [0054]-[0065].) Similarly, Penilla discloses that “applications such as phone messages, notes and the like, can be synchronized with an Internet

application or with a local device. The local device might be the user's mobile phone, the user's computer wristwatch[.]” (Ex. 1035, 18:48-52.)

Penilla also discloses displaying the functions of the portable device 210 on the display device 162. Penilla teaches:

[I]f the user wishes to use his own telephone calling interface and contacts that are stored on the portable device 210, that information can be populated and mirrored to the display device 162, while still using other system components or other applications of the vehicle in the background or in a separate screen that is not currently active.

(Ex. 1035, 15:31-36.)

A PHOSITA would have understood that the smart watch described in Penilla functions like the other portable devices described in Penilla and Sundaram, as they all generally interconnect and run compatible software. Hence, a PHOSITA would have understood that the smart watch described in Penilla would have been used to synchronize with the in-vehicle computer described in Sundaram, much like the other disclosed wireless enabled devices are able to synchronize. When synchronized, the smart watch of Penilla would have been able to provide updates like the other devices described in Penilla, including settings information which would be included in the occupant’s “*persona*.” (Ex. 1003, ¶460.)

Therefore, Sundaram in combination with Penilla renders claim 32 obvious (Ex. 1003, ¶¶455-461.)

[33a] The method of claim 1, wherein the vehicle control system provides a display to the selected vehicle occupant,

Sundaram discloses a “set of computer instructions that, when executed” cause a “processor to: instruct a display screen in the vehicle to display an icon representing the first application program[.]” (Ex. 1027, [0054]-[0056].) Accordingly, Sundaram discloses a “*vehicle control system [that] provides a display to the selected vehicle occupant [e.g., by displaying an icon on the display screen].*”

Therefore, Sundaram renders claim limitations [33a] obvious. (Ex. 1003, ¶¶466-469.)

[33b] the display comprising a plurality of selectable applications, an indicator of vehicle-related information, one or more messages for the selected vehicle occupant, a navigation input field for receiving a location-enabled object as a waypoint or destination for a route of travel, contact addresses of persons associated with the selected vehicle occupant, and electronic calendar information for the selected vehicle occupant.

Sundaram discloses “the operating systems is like a desktop, displaying indications of applications, and allowing the user to click on them or download more.” (Ex. 1027, [0055]; Ex. 1003, ¶473.) Thus, Sundaram discloses “*the display comprising a plurality of selectable applications[.]*” (Ex. 1003, ¶473.) Sundaram further discloses a display screen displaying a driving route (“*vehicle-related information/path of travel*”) making the display an “*indicator of vehicle-related*

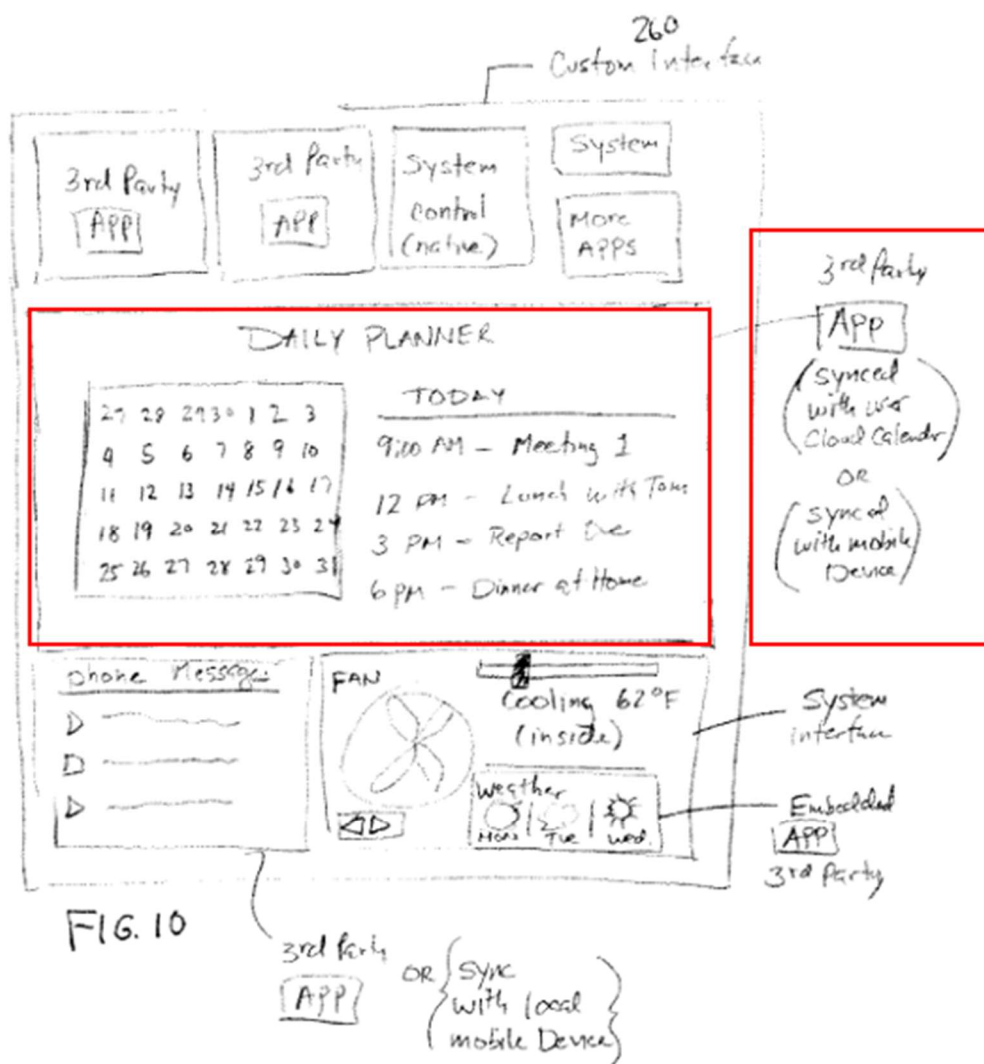
information.” (Ex. 1027, [0236]; Ex. 1003, ¶¶474-475.)

Sundaram discloses that display 228 serves as the primary visual interface for all graphical and visual data generated by the in-vehicle computer 104, including outputs from applications, alerts, and communications such as fax and instant messages. (Ex. 1027, [0038]-[0039].) A PHOSITA would have understood that any function or component requiring graphical expression to operate effectively would necessarily be rendered through this display. (Ex. 1003, ¶477.)

Further, Sundaram renders “*a navigation input field for receiving a location-enabled object as a waypoint or destination for a route of travel*” obvious as the display screen allows for directions to a determined destination to be overlaid on top of map data (“*location-enabled object*”) on the display screen, “the processor is further operable to: determine a destination; determine directions to the destination; cause the map data to be projected on the display screen; and cause the directions to be displayed overlaid on top of the map data on the display screen.” (Ex. 1027, [0251]-[0255], *see also* [0056]-[0063]; Ex. 1003, ¶478-480.)

Penilla discloses a display that populates contacts from a portable device. (Ex. 1035, 15:28-36.) A PHOSITA would have understood the disclosure of Penilla as disclosure of “*contact addresses of persons associated with the selected vehicle occupant,*” as all forms of disclosed addresses allow for the user to make contact with another person. (Ex. 1003, ¶¶481-483.)

Sundaram discloses synchronizing data with user devices and downloading application programs from devices that frequently had calendar functionality such as personal digital assistants and cellular phones. (Ex. 1027, [0039], [0054].) Penilla discloses a calendar information being synchronized and displayed on the vehicle display. (Ex. 1035, 15:40-58; Ex. 1003, ¶¶484-485.)



Ex. 1047, FIG. 10; See also Ex. 1035, Fig. 10

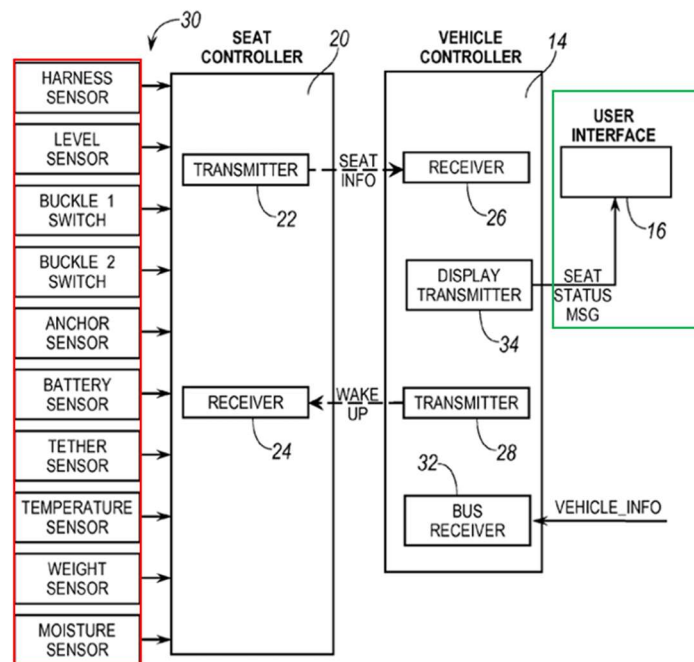
A PHOSITA would have understood that Sundaram's method of downloading and synchronizing application data, when combined with Penilla's calendar-specific application, discloses the claimed limitation. This is further evidenced by the system of Sundaram disclosing the vehicle synchronizing with user devices like laptops and mobile phones (Ex. 1027, [0039]), which a PHOSITA would have known frequently included calendar information. (Ex. 1003, ¶¶486-487.)

Therefore, Sundaram renders claim limitations [33b] obvious. (Ex. 1003, ¶¶473-488.)

C. Ground 3: Claims 3 and 17 are rendered obvious by the combination of Sundaram and Rork

1. Overview of Rork

Rork is directed to a system of seat sensors and methods for notifying a user of a seat status sensed by the sensors. Rork seeks to improve ease of use of child seats in vehicles by giving users notifications when, for example, child car seats are not properly installed. (Ex. 1036, [0005]; Ex. 1003, ¶¶114-115.)



Ex. 1036, FIG. 2

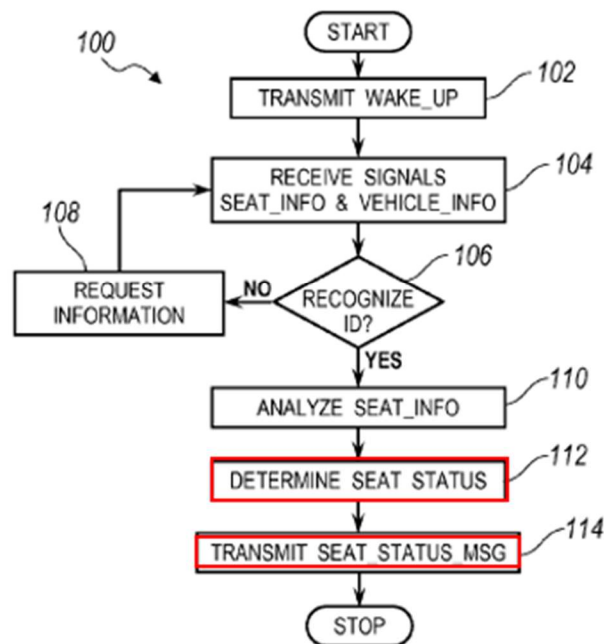


FIG. 6

Ex. 1036, FIG. 6.

2. Rationale to Combine

A PHOSITA would have found it obvious to combine Sundaram's in-vehicle platform with Rork's child seat monitoring system. Sundaram teaches internal sensors near the driver and passenger seats (Ex. 1027, [0121]-[0122]), which relay data to a processor for responsive actions based on user profiles (*Id.*, [0041]). Sundaram also discloses seat position modification commands. (*Id.*, [0050]). These features suggest to a PHOSITA the feasibility of incorporating child seat monitoring into Sundaram's system. (Ex. 1003, ¶496.)

Rork teaches a vehicle controller that receives child seat sensor data ("SEAT_INFO") and other system inputs like seat inclination. (Ex. 1036, [0024].) A PHOSITA would have recognized that integrating Rork's child seat sensing into Sundaram's system would provide easier seat adjustment using known techniques. (Ex. 1003, ¶497.)

A PHOSITA would have understood that Sundaram and Rork describe complementary technologies in the same field of vehicle systems involving component communication for alerts and are combinable. (Ex. 1027, [0014]; Ex. 1036, [0005].) Each provides user alerts to aid in the proper operation of the vehicle components. (Ex. 1027, [0031]; Ex. 1036, [0025]; Ex. 1003, ¶498-500.) Further, Sundaram discloses that its system can be modified for added functionality. (Ex. 1027, [0255].)

Combining Sundaram and Rork yields predictable benefits. It improves proper child seat installation and enhances convenience by enabling sensor-guided adjustment. A PHOSITA would be motivated to combine the systems, as Rork's child seat functionality complements Sundaram's integrated vehicle platform. (Ex. 1003, ¶¶496-502.) A PHOSITA would have also understood how to combine Sundaram and Rork. Both disclose processors interacting with sensors. (Ex. 1027, [0027]; Ex. 1036, [0024].) The similar sensor interfacing would have made it obvious to a PHOSITA to combine Sundaram with Rork with a reasonable expectation of success. (Ex. 1003, ¶¶505-507.)

Several *KSR* factors support the conclusion that a PHOSITA would have found it obvious to combine Sundaram with Rork. First, combining Sundaram's vehicle sensors with Rork's child seat sensors would have used known integration methods and predictably enhances ease of child seat installation. A PHOSITA would have recognized that integrating Rork's transmission methods into Sundaram's system requires no significant modifications and follows established sensor integration methods set in Sundaram. Second, adding Rork's sensors to Sundaram's or any other vehicle platform would predictably improve ease of installation. Sundaram's system is designed for sensor expansion, and Rork's child seat sensors represent a predictable improvement with a reasonable expectation of success. Third, prior art and market demand for aid in installing a child safety seat would have

motivated a PHOSITA to combine Sundaram and Rork for predictable efficiency benefits. (Ex. 1003, ¶¶508-513.)

3. Dependent Claims 3 and 17

[3a] The method of claim 1,

[17a] The computer readable medium of claim 15,

... wherein the action performed depends on a seating position of the selected vehicle occupant and

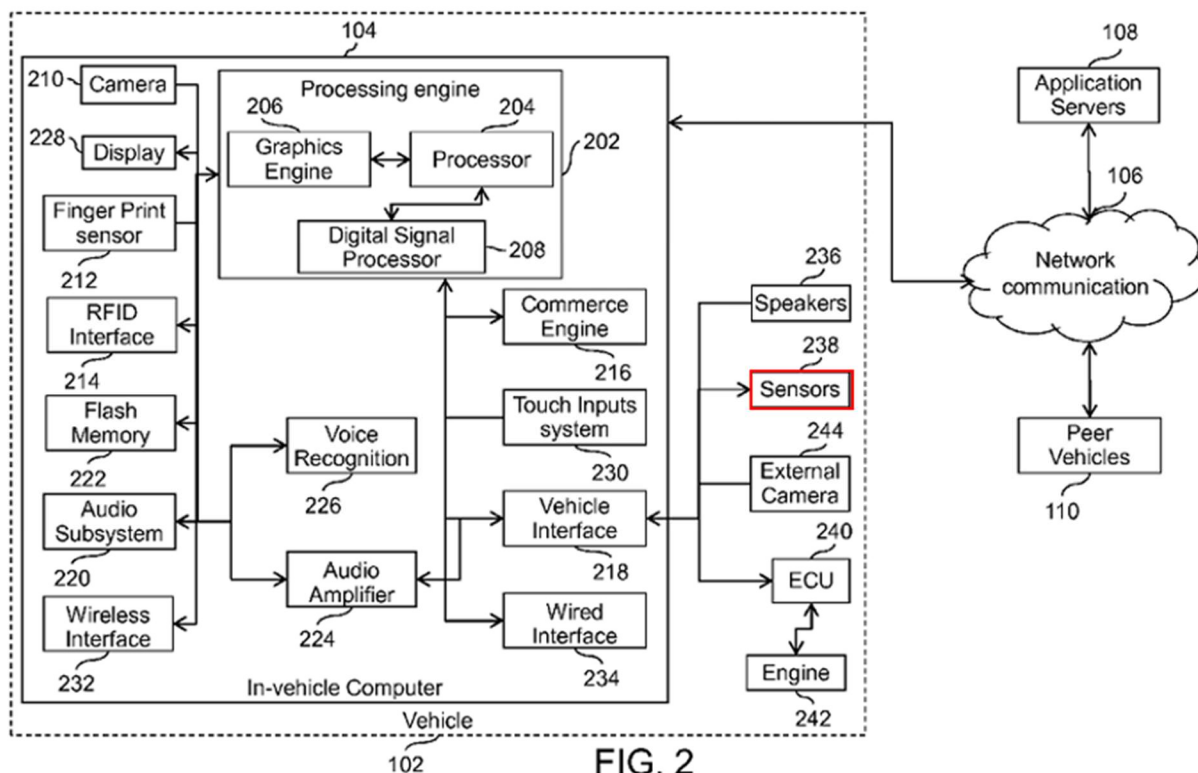
Sundaram discloses driver-specific assistance features, including alerts for exceeding speed limits (Ex. 1027, [0019]) and for drowsiness detection. (Ex. 1027, [0031].) A PHOSITA would have understood both alerts are tied to seating position, as they are intended to notify the driver of unsafe conditions. (Ex. 1003, ¶519.)

A PHOSITA would have recognized that these alerts are of particular importance to the driver, since the driver can correct the issue and the driver may be traveling without passengers. The over speed alert is activated based on driver identity, determined via a fingerprint sensor on the steering wheel (Ex. 1027, [0020]), and triggered when the identified driver exceeds a preset limit (*Id.*, [0019]). The drowsiness alert also depends on seating position, as the imaging system must be directed at the driver to assess attentiveness. (*Id.*, [0031].) Thus, a PHOSITA would have understood that Sundaram's alerts are directed to the user occupying the driver position. (Ex. 1003, ¶¶520-521.)

Therefore, Sundaram renders claim limitations [3a] and [17a] obvious. (Ex. 1003, ¶¶518-522, 533-534.)

[3b]/[17b] wherein the microprocessor executable vehicle control system senses a condition or activity of another vehicle occupant and notifies the selected vehicle occupant of the condition or activity.

Sundaram discloses various sensors for monitoring vehicle and component status. (Ex. 1027, [0041].)



Ex. 1027, FIG. 2

Rork discloses sensors for monitoring proper child seat operation and

providing corresponding status notifications. (Ex. 1036, [0032], [0016]; Ex. 1003, ¶¶525-526.) For example, “[t]he controller 14 analyzes the information received from the child seat system 18 and relays a corresponding message to the user interface 16, so that the status of the child seat may be conveyed to an operator of the vehicle 12.” (Ex. 1036, [0017].)

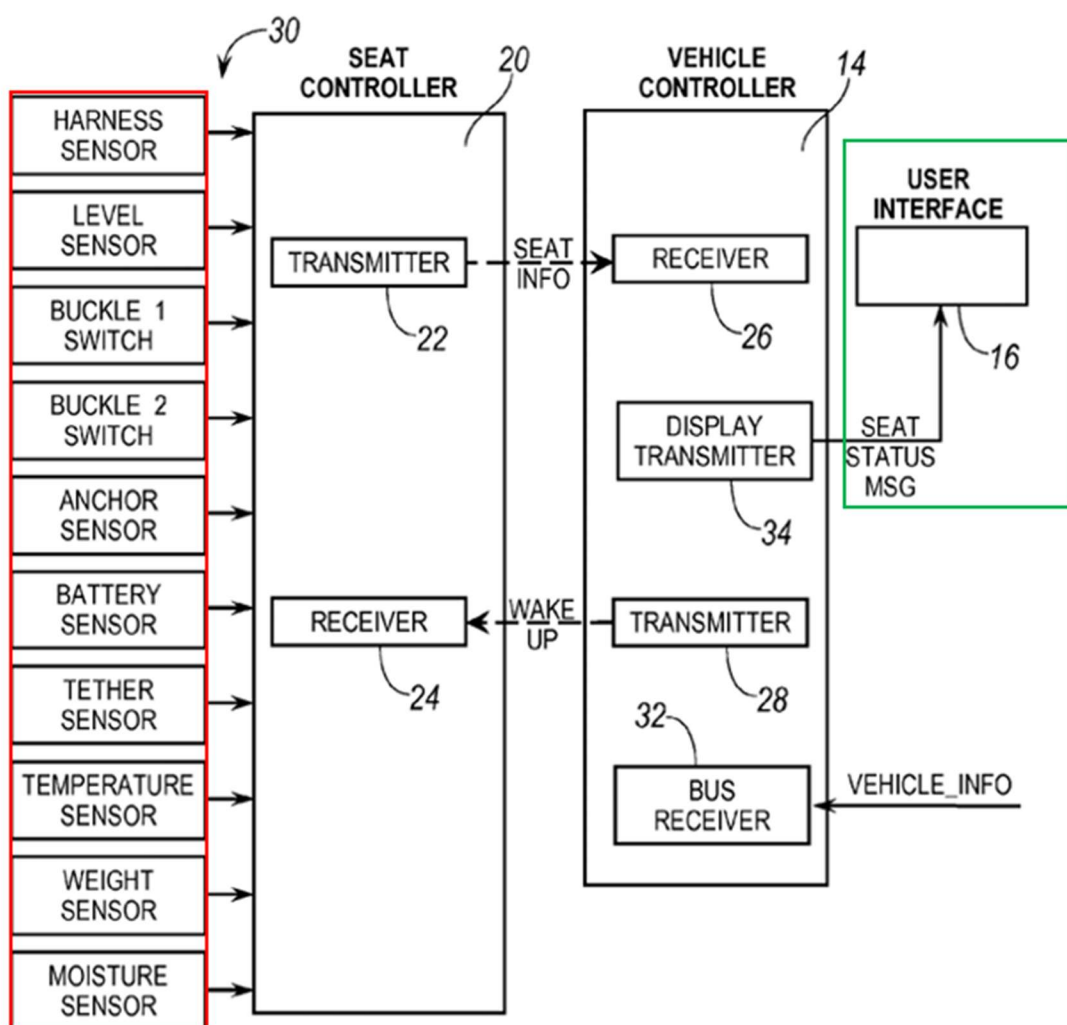


FIG. 2

Ex. 1036, FIG. 2.

A PHOSITA would have understood that the combination of Sundaram and Rork would allow for taking measurements (“*sensing*”) and conveying (“*notifying*”) to the user (“*selected vehicle occupant*”) the seating status (“*condition*”) of a non-driver, e.g., a child (“*another vehicle occupant[.]*”) (Ex. 1003, ¶527.)

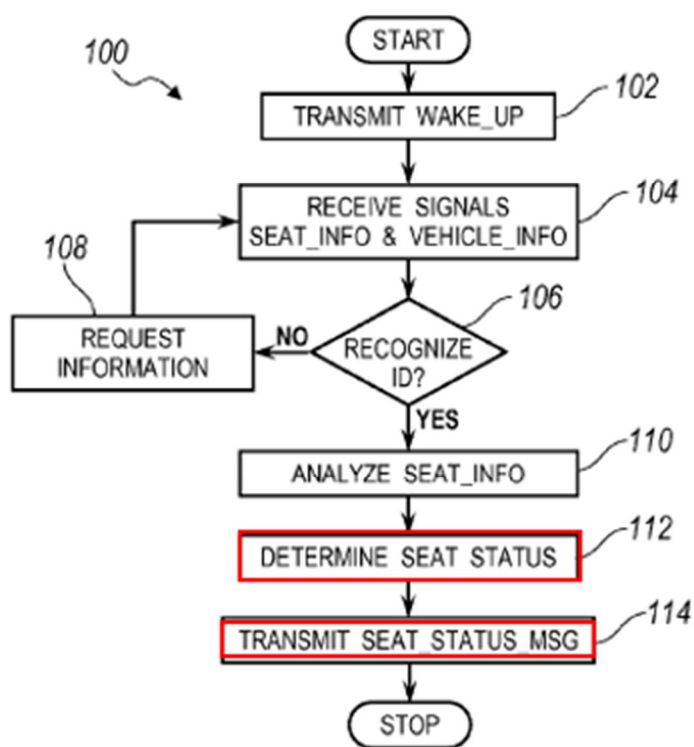


FIG. 6

Ex. 1036, FIG. 6.

Therefore, Sundaram renders limitations [3b] and [17b] obvious. (Ex. 1003, ¶¶525-528, 535.)

D. Ground 4: Claims 4 and 18 are rendered obvious by the combination of Sundaram and Gruber

1. Overview of Gruber

Gruber is directed to an intelligent automated assistant operable in a vehicle that delivers personalized text, audio/speech, and graphical outputs based on user preferences to enhance automated assistance. (Ex. 1037, [0148]-[0156].) Gruber further discloses that the assistant 1002 provides proactive assistance that is triggered by different events. (*Id.*, [0345]; Ex. 1003, ¶¶116-118.)

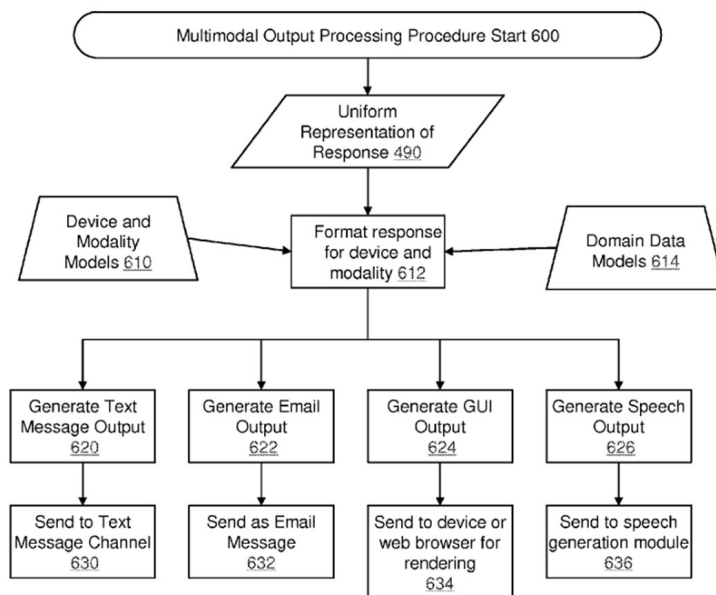


FIG. 42

Ex. 1037, FIG. 42

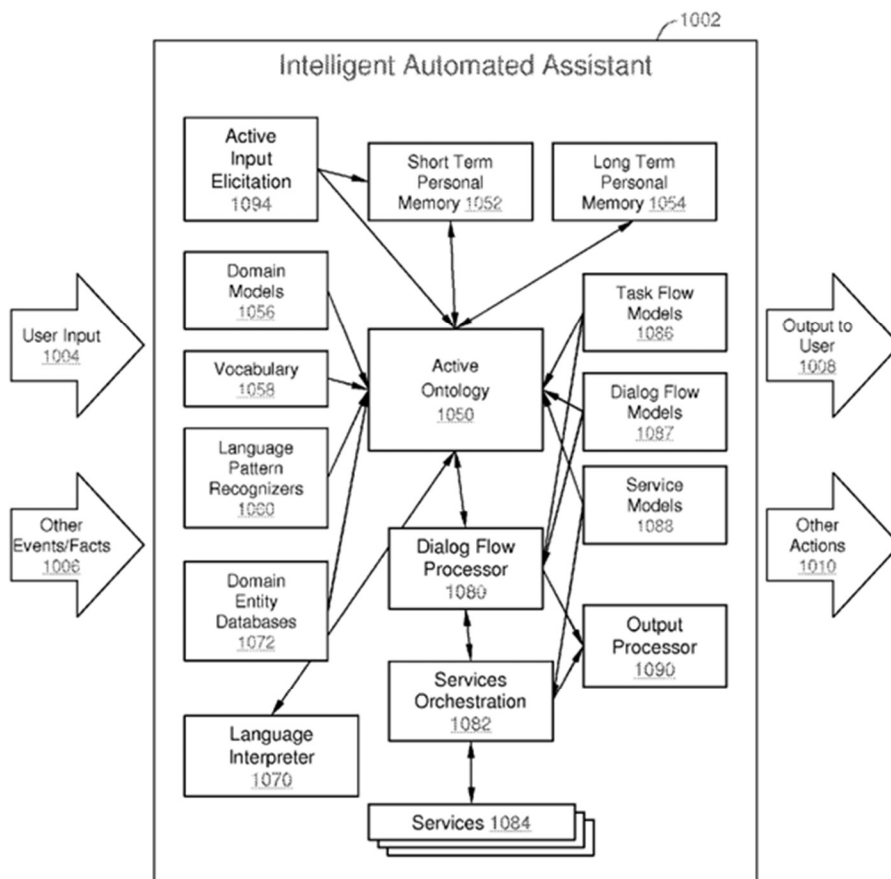


FIG. 1

Ex. 1027, FIG. 1

2. Rationale to Combine

A PHOSITA would have found it obvious to combine Sundaram's in-vehicle platform with Gruber's automated assistant. Sundaram discloses a system offering services and driving assistance (Ex. 1027, [0017], [0043]) and presents its in-vehicle computer as a platform for applications such as GPS navigation, location-based services, and driver identification (*Id.*, [0021]). Sundaram also enables control over

vehicle functions like radio, climate, speed, and navigation. (*Id.*, [0044].) Gruber discloses an automated assistant as an application (Ex. 1037, [0073]) operating within a vehicle (*Id.*, [0093]). (Ex. 1003, ¶¶536-538.)

A PHOSITA would have understood that Sundaram and Gruber describe complementary technologies in the same field of automated vehicle assistance that are combinable. (Ex. 1027, [0017]; Ex. 1037, [0148-0156], [0337]-[0339].) For example, Sundaram discloses that its system can be modified for added functionality. (Ex. 1027, [0255].) Sundaram and Gruber both seek to assist users by providing alerts. (Ex. 1027, [0017]; Ex. 1037, [0336].) A PHOSITA would have combined Sundaram and Gruber to achieve more effective alerts. (Ex. 1003, ¶¶541-542.)

A PHOSITA would have understood how to combine Sundaram and Gruber with a reasonable expectation of success as only software modifications are required to allow for the functions disclosed in Gruber to operate in the system of Sundaram. These software modifications (such as downloading an application) were well within the capabilities of a PHOSITA. Sundaram already discloses a platform that allows for audio output when alerting and specific settings for specific users. (*See* Ex. 1027, [0018]-[0019].) Gruber's system is disclosed to operate as an application on vehicles with dashboard interfaces and sensors. (*See* Ex. 1037, [0093].) The vehicle in Sundaram's system includes these features as well as a platform to run various

applications. (*See* Ex. 1027, [0014]: Ex. 1003, ¶542.) Several *KSR* factors support the conclusion that a PHOSITA would find it obvious to combine Sundaram with Gruber. First, Sundaram teaches in-vehicle alerts, including alarms and a “computer voice alert,” while Gruber teaches dynamically rendered speech outputs, and combining these features predictably yields more personalized alerts. Sundaram’s voice alert can be substituted with Gruber’s synthesized speech output under the same conditions, requiring only a simple software change. Gruber improves computing devices using known software techniques and operates across various device types as an application. Sundaram uses known techniques for downloading applications, and adding Gruber’s application would predictably improve personalization and effectiveness of the alerts. (Ex. 1003, ¶¶543-547.)

Furthermore, it would be obvious to try adding user-specific audio outputs to Sundaram’s alerts, and a PHOSITA would have found it obvious to incorporate Gruber’s customized speech outputs. Third, market demand drives customization and safety, and a PHOSITA would have expected tailored alerts to improve user response. Sundaram suggests customizable alerts and discloses a need for personalization, which is satisfied by Gruber’s user-based speech rendering. (Ex. 1003, ¶¶548-550.)

3. Dependent Claims 4 and 18

[4a] The method of claim 1,

[18a] The computer readable medium of claim 15,

... wherein the action is performed by an avatar, wherein the avatar is a graphical and/or voice representation of an object that can be the selected vehicle occupant or the selected vehicle occupant's alter ego or character or of a person selected by the selected vehicle occupant,
and

Sundaram discloses an “action” in the form of alerting the user via alarm or computer voice alert when the vehicle exceeds a certain designated speed. (Ex. 1027, [0019]; Ex. 1003, ¶557.) Gruber discloses an automated assistant 1002 capable of delivering speech outputs, including “[s]ynthesized speech,” “[s]ampled speech,” “[r]ecorded messages” as well as “[g]raphical” content. (Ex. 1037, [0152]-[0156]; Ex. 1003, ¶¶558-559.) With reference to Figure 9, Gruber discloses an intelligent automated assistant 1002 that “[r]ender[s] output data in different speech voices dynamically” and “[d]ynamically render[s] to specified modalities based on user preferences.” (Ex. 1037, [0590].)

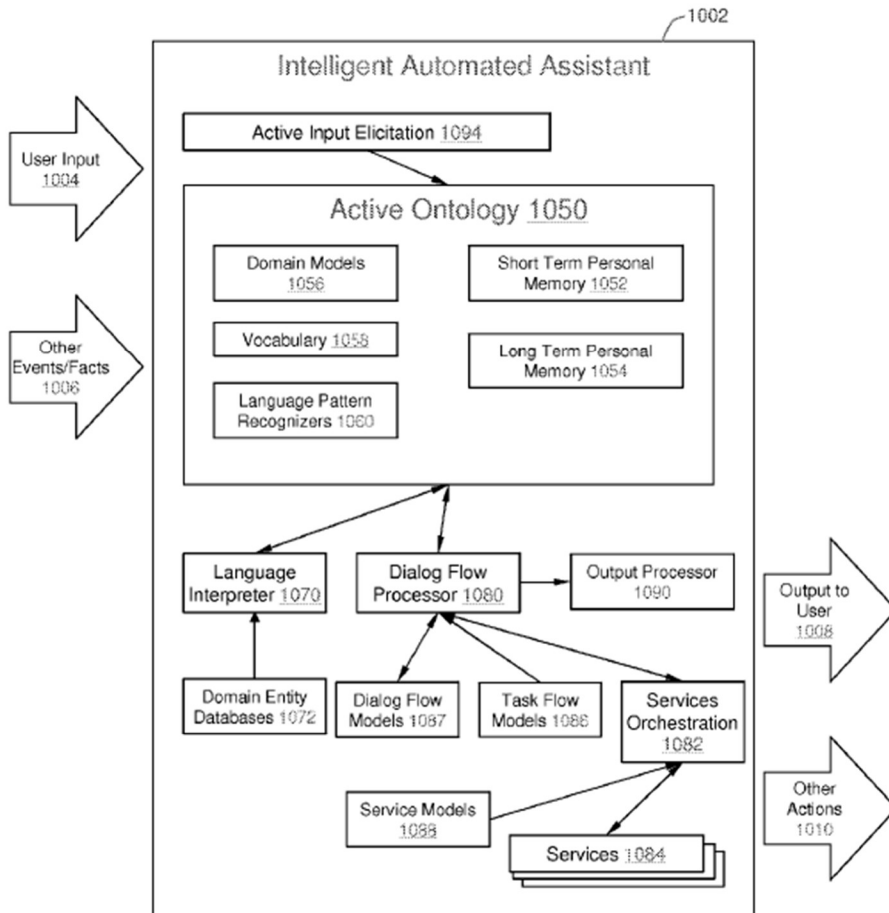


FIG. 9

Ex. 1037, Fig. 9

A PHOSITA would have understood that sampled speech and recorded messages are voice representations, which may include the voice of the user or a “*selected character*” corresponding to the claimed “*avatar*.” Incorporating personalized speech outputs enhances alert effectiveness by increasing user attentiveness. A PHOSITA would recognize that using sampled or recorded speech

tailored to the occupant ensures alerts, such as speed warnings, are more likely to be noticed and acted upon as compared to generic computer-generated speech. (Ex. 1003, ¶560.)

Therefore, Sundaram in combination with Gruber renders claim limitations [4a] and [18a] obvious. (Ex. 1003, ¶¶554-561, 573.)

[4b]/[18b] wherein different vehicle occupants have different avatars.

Gruber discloses a system that can “[r]ender output data for modalities that may include, for example, any combination of graphical user interfaces; text messages; email messages; sounds; animations; and/or speech output.” (Ex. 1037, [0587].) Gruber further discloses a system that can “[d]ynamically render to specified modalities based on user preferences.” (*Id.*, [0590]; Ex. 1003, ¶564.)

A PHOSITA would have understood that Gruber teaches rendering specific sounds and speech outputs (modalities) based on user preferences. This capability would include the ability to generate distinct outputs for different users according to their unique preferences. Given that an avatar may include voice characteristics unique to a vehicle occupant, a PHOSITA would have recognized that Gruber’s system enables creation of different avatars—via speech and sound modalities—for different occupants. (Ex. 1003, ¶565.)

Therefore, Sundaram in combination with Gruber renders claim limitations [4b] and [18b] obvious. (Ex. 1003, ¶¶564-566, 570, 573.)

E. Ground 5: Claim 6 is rendered obvious by the combination of Sundaram, Gruber, and Penilla

1. Rationale to Combine

The rationale to combine Sundaram, Gruber, and Penilla is the same as the rationale to combine Sundaram and Gruber in Ground 4 combined with the rationale to combine Sundaram and Penilla in Ground 2. (See ¶¶574-582, 585-593) For example, Sundaram and Penilla are complementary technologies, which a PHOSITA would have understood would be combined to form a system that enhances vehicle personalization and user assistance. Gruber complements that combination by further customizing vehicle behavior and assistance, and all three systems support application downloads for added functionality. (Ex. 1027, [0054]; Ex. 1035, 11:47-56; Ex. 1037, [0073], [0093]; Ex. 1003, ¶574.)

2. Dependent Claim 6

[6] The method of claim 4, wherein the vehicle obtains the persona from one or more of a different vehicle driven by the selected vehicle occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.

Claim 6 is substantively identical to claims 13 and 20. Therefore, for the same

reasons Sundaram combined with Penilla renders claims 13 and 20 obvious, Sundaram combined with Penilla and Gruber also render claim 6 obvious. (Ex. 1003, ¶¶292-300, 305-306, 597-604.)

F. Ground 6: Claim 11 is rendered obvious by the combination of Sundaram, Rork, and Gruber

1. Rationale to Combine

The rationale to combine Sundaram, Rork, and Gruber is the same as the rationale to combine Sundaram and Rork in Ground 3 combined with the rationale to combine Sundaram and Gruber in Ground 4. (See ¶¶607-625.) For example, the combination of Sundaram and Gruber, enables personalized vehicle alerts via software modifications. Rork complements this combination by enhancing the ease of car seat installation in a vehicle, with Sundaram disclosing computer voice alerts modifiable by Gruber's speech customization. (Ex. 1027, [0018]; Ex. 1037, [0585]-[0590]; Ex. 1003, ¶¶607-612.)

2. Dependent Claim 11

[11a] The vehicle of claim 8, wherein the action is performed by an avatar, wherein the avatar is a graphical and/or voice representation of an object that can be the selected vehicle occupant or the selected vehicle occupant's alter ego or character or of a person selected by the selected vehicle occupant,

As discussed above in claim limitations [4a] and [18a], Sundaram discloses

an “*action*” in the form of alert to the user via alarm or computer voice alert when the exceed a speed limit. (Ex. 1027, [0019].) Gruber discloses an automated assistant 1002 capable of delivering speech outputs, including synthesized speech, sampled speech, recorded messages as well as graphical outputs. (Ex. 1037, [0152]-[0155].)

Therefore, Sundaram in combination with Gruber and Rork renders the claim limitation [11a] obvious. (Ex. 1003, ¶¶554-561, 571-572, 629-636.)

[11b] wherein the microprocessor executable vehicle control system senses a condition or activity of another vehicle occupant and notifies the selected vehicle occupant of the condition or activity, and

As discussed above for claim limitations [3b] and [17b], the combination of Sundaram and Rork would allow for taking measurements (“*sensing*”) and conveying (“*notifying*”) to the user (“*selected vehicle occupant*”) of the seating status (“*condition*”) of the child (“*another vehicle occupant[.]*”)

Therefore, Sundaram in combination with Gruber and Rork renders the claim limitation [11b] obvious. (Ex. 1003, ¶¶525-528, 534-535, 640-642.)

[11c] wherein different vehicle occupants have different avatars.

A discussed for claim limitations [4b] and [18b], Gruber teaches rendering specific sounds and speech outputs (modalities) based on user preferences and a PHOSITA would recognize that Gruber’s system enables creation of different

avatars—via speech and sound modalities—for different occupants.

Therefore, Sundaram in combination with Gruber and Rork renders claim limitation [11c] obvious. (Ex. 1003, ¶¶564-566, 572-573, 645-648.)

G. Ground 7: Claim 29 is rendered obvious by the combination of Sundaram and Vasa

1. Overview of Vasa

Vasa discloses a device, which has wireless communication capability and a camera. The camera “captures images of traffic signs that are unfamiliar to a user. A controller in the device analyzes the captured image and generates information that allows the user to identify the traffic sign.” (Ex. 1045, Abstract). Vasa is directed to a sign translation system that “translates unfamiliar objects, such as road or traffic signs, for a user.” (*Id.*, [0028].) Vasa seeks to improve a user’s ability to drive in unfamiliar places. (*Id.*, [0003]; Ex. 1003, ¶¶111-113.)

2. Rationale to Combine

A PHOSITA would find it obvious to combine Sundaram’s in-vehicle platform with Vasa’s sign detection and translation. Both systems operate in the field of in vehicle assistance, enabling interaction between computing devices to enhance user experience and are combinable. (Ex. 1027, [0014]; Ex. 1045, [0004]; Ex. 1003, ¶¶651, 654, 657.) For example, Sundaram discloses that its system can be modified for added functionality. (Ex. 1027, [0255].)

Sundaram and Vasa both seek to provide driver assistance. Sundaram discloses an external camera for driving assistance (*Id.*, [0043]), which interacts with the in-vehicle computer. (*Id.*, [0027].) Vasa similarly uses a camera for driving assistance, specifically to translate unfamiliar signs, (Ex. 1045, [0008]), and includes common hardware elements compatible with Sundaram's system. (Ex. 1045, [0030]; Ex. 1003, ¶¶652-658.)

A PHOSITA would have known how to integrate Vasa's image recognition and translation software into Sundaram's in-vehicle platform with a reasonable expectation of success, as both systems rely on compatible hardware architectures involving sensors, processors, and displays, and the integration would require only routine software adaptation using Sundaram's existing application framework. (Ex. 1003, ¶¶662-663.)

Several *KSR* factors support the conclusion that a PHOSITA would have found it obvious to combine Sundaram with Vasa. (Ex. 1003, ¶¶664-669.) A PHOSITA would recognize that Sundaram's existing hardware supports Vasa's image recognition functionality, making their combination a predictable way to assist drivers with unfamiliar signs. (*Id.*, ¶665.) Adding Vasa's sign recognition software to Sundaram's image processing platform would be a straightforward enhancement yielding improved driver assistance. (*Id.*, ¶666.)

Vasa's system, designed for camera-equipped devices, would be implemented

via software on Sundaram's compatible hardware to enhance user interaction with surroundings. (*Id.*, ¶667.) It would have been obvious to a PHOSITA to try combining Sundaram and Vasa, as Vasa's functionality aligns with Sundaram's hardware and use context, making integration predictable. (*Id.*, ¶668.) Market demand for multilingual sign translation in vehicles, especially for international travelers, would motivate combining Sundaram's external camera system with Vasa's translation functionality. (*Id.*, ¶669-670.)

3. Claim 29

[29] The method of claim 1, wherein the vehicle control system translates signage located outside the vehicle and provides a translated signage message to the selected vehicle occupant.

Sundaram discloses an external camera used for driver assistance, with its processor analyzing captured video as part of the vehicle control system and identifies the cameras as sensors. (Ex. 1027, [0043].) Vasa discloses a system where a cellular phone translates road signs using a camera that captures images automatically (in green below) (Ex. 1045, [0042]-[0043]), and delivers translation information to the user via audio output (in red below) (Ex. 1045, [0046]; Ex. 1003, ¶¶673-676.)

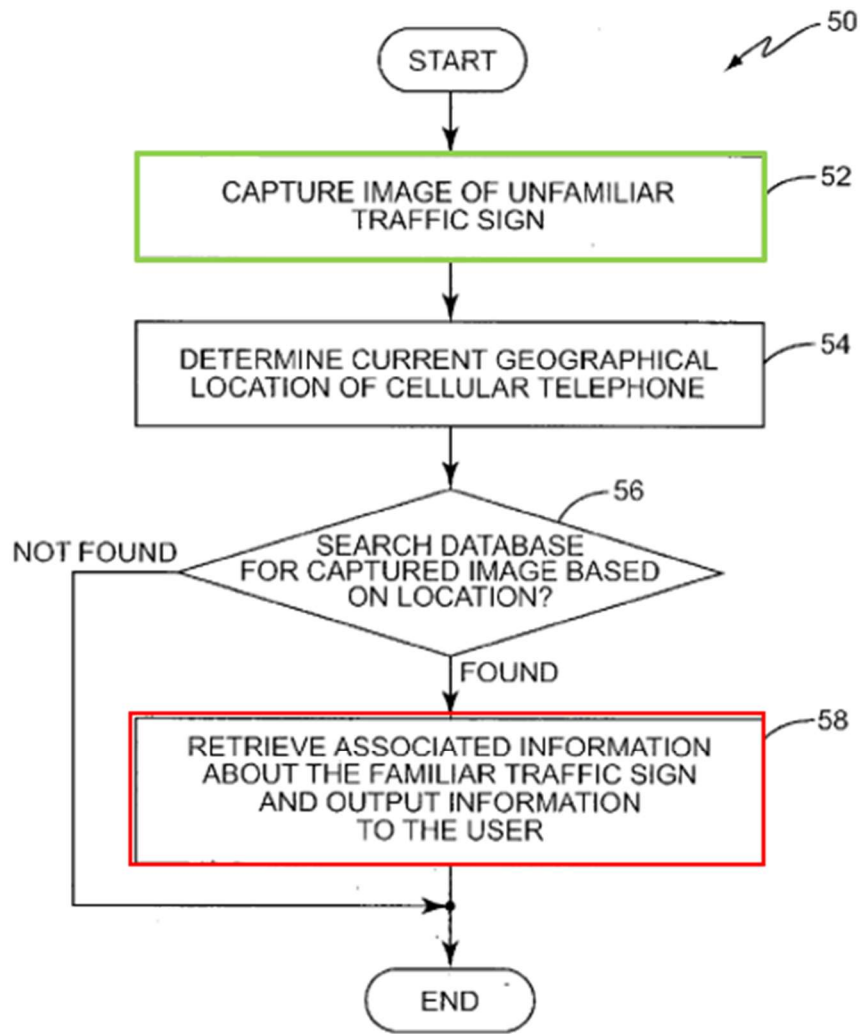


FIG. 5

Ex. 1045, FIG. 5

A PHOSITA would have understood that Sundaram's system already supports synchronization and data exchange between its in-vehicle computer and external devices, and that Vasa's camera-equipped wireless communication device—though described in the context of mobile phones—is compatible with Sundaram's

hardware as is. Sundaram includes components to perform Vasa's functions, and a simple software modification would enable integration. Sundaram also supports downloading phone applications like the application taught in Vasa, indicating that the Sundaram system would have been capable of running Vasa's image recognition and translation logic. (Ex. 1003, ¶677.)

Therefore, Sundaram in combination with Vasa renders the claim [29] obvious. (Ex. 1003, ¶¶672-679.)

VII. Objective Indicia of Nonobviousness

Petitioner is not aware of any evidence of alleged secondary considerations of non-obviousness having nexus to the challenged claims. (Ex. 1003, ¶681.)

VIII. Conclusion

For the foregoing reasons, the Board should grant institution.

Respectfully submitted,

Dated: December 5, 2025

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Certificate of Service

The undersigned hereby certifies that the foregoing **PETITION FOR *INTER PARTES* REVIEW UNDER 35 U.S.C. § 311 *ET SEQ.* AND 37 C.F.R. § 42.100 *ET SEQ.* (U.S. PATENT NO. 9,082,239)**, including all exhibits and supporting evidence, was served by overnight courier in its entirety on **December 5, 2025**, upon the following correspondence address as shown for the '239 Patent:

192827 - Avantech Law, LLP 80 S 8th St, Suite 900 Minneapolis, MN 55402 UNITED STATES

Respectfully submitted,

Dated: December 5, 2025

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Certificate of Compliance Pursuant to 37 C.F.R. § 42.24

This paper complies with the type-volume limitation of 37 C.F.R. § 42.24. The paper contains 13,771 words, excluding the parts of the paper exempted by §42.24(a).

This paper also complies with the typeface requirements of 37 C.F.R. § 42.6(a)(ii) and the type style requirements of § 42.6(a)(iii)&(iv).

Respectfully submitted,

Dated: December 5, 2025

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Appendix A

A. Listing of All Challenged Claims

1[pre]	A method comprising:
1[a]	maintaining, by a microprocessor executable profile identification module, a persona of a selected vehicle occupant,
[1b]	wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content;
[1c]	determining, by a microprocessor executable vehicle control system, vehicle-related information, wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination; and
[1d]	based on the persona of the selected vehicle occupant and the vehicle-related information, determining, by the microprocessor executable vehicle control system, a type of assistance to provide the selected vehicle occupant, the type of assistance not being based on or in response to a preceding request of the selected vehicle occupant;
[1e]	performing, by the microprocessor executable vehicle control system, an action assisting the selected vehicle occupant, the action being one or more of providing a suggestion or recommendation to the selected vehicle occupant, providing a reminder to the selected vehicle occupant, scheduling an activity involving the selected vehicle occupant, purchasing an item on line for the selected vehicle

	occupant, adding an entry into the selected vehicle occupant's electronic calendar, providing a notification to the selected vehicle occupant regarding an incoming message, call or action of a person, and/or sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time of the vehicle.
[2]	The method of claim 1, wherein the vehicle-related information comprises at least one of a current and/or future vehicle location and path of vehicle travel and wherein the action is providing a notification of an instant message, email, voice mail from, and/or missed phone call from, current activity of and/or location of a friend.
[3a]	The method of claim 1, wherein the action performed depends on a seating position of the selected vehicle occupant and
[3b]	wherein the microprocessor executable vehicle control system senses a condition or activity of another vehicle occupant and notifies the selected vehicle occupant of the condition or activity.
[4a]	The method of claim 1, wherein the action is performed by an avatar, wherein the avatar is a graphical and/or voice representation of an object that can be the selected vehicle occupant or the selected vehicle occupant's alter ego or character or of a person selected by the selected vehicle occupant, and
[4b]	wherein different vehicle occupants have different avatars.
[5]	The method of claim 1, further comprising: determining, by the vehicle control system, relevant information other than the persona of the selected vehicle occupant and the vehicle-related information,

	the relevant information comprising one or more of a persona of a selected person not currently in the vehicle, a message from a friend or family member of the selected vehicle occupant, a current activity of the friend and/or family member, a current location of the friend or family member near the vehicle and/or the vehicle's path of travel, and a road condition along a path of travel of the vehicle.
[6]	The method of claim 4, wherein the vehicle obtains the persona from one or more of a different vehicle driven by the selected vehicle occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.
[7a]	The method of claim 1, wherein the maintaining of the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source,
[7b]	wherein the microprocessor executable vehicle control system, based on information received from a sensor identifies and/or distinguishes the selected vehicle occupant's clothing, held object and/or object in the possession of the selected vehicle occupant, []and
[7c]	wherein the action is based on the identified and/or distinguished clothing, held object and/or object in the possession of the selected vehicle occupant.
8[pre]	A vehicle, comprising:
[8a]	a microprocessor executable profile identification module operable to maintain a persona of a selected vehicle occupant,

[8b]	wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content; and
[8c]	a microprocessor executable vehicle control system operable to: determine vehicle-related information, wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination;
[8d]	based on the persona of the selected vehicle occupant and the vehicle-related information, determine a type of assistance to provide the selected vehicle occupant, the type of assistance not being based on or in response to a preceding request of the selected vehicle occupant; and
[8e]	perform an action assisting the selected vehicle occupant, the action being one or more of providing a suggestion or recommendation to the selected vehicle occupant, providing a reminder to the selected vehicle occupant, scheduling an activity involving the selected vehicle occupant, purchasing an item on line for the selected vehicle occupant, adding an entry into the selected vehicle occupant's electronic calendar, providing a notification to the selected vehicle occupant regarding an incoming message, call or action of a person, and/or sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time of the vehicle.
[9]	The vehicle of claim 8, wherein the vehicle-related information comprises at least one of a current and/or future vehicle location and

	path of vehicle travel and wherein the action is providing a notification of an instant message, email, voice mail from, and/or missed phone call from, current activity of and/or location of a friend.
[10]	The vehicle of claim 8, wherein the action performed depends on a seating position of the selected vehicle occupant.
[11a]	The vehicle of claim 8, wherein the action is performed by an avatar, wherein the avatar is a graphical and/or voice representation of an object that can be the selected vehicle occupant or the selected vehicle occupant's alter ego or character or of a person selected by the selected vehicle occupant,
[11b]	wherein the microprocessor executable vehicle control system senses a condition or activity of another vehicle occupant and notifies the selected vehicle occupant of the condition or activity, and
[11c]	wherein different vehicle occupants have different avatars.
[12]	The vehicle of claim 8, wherein the vehicle control system is further operable to determine relevant information other than the persona of the selected vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a persona of a selected person not currently in the vehicle, a message from a friend or family member of the selected vehicle occupant, a current activity of the friend and/or family member, a current location of the friend or family member near the vehicle and/or the vehicle's path of travel, and a road condition along a path of travel of the vehicle.

[13]	The vehicle of claim 8, wherein the vehicle obtains the persona from one or more of a different vehicle driven by the selected vehicle occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.
[14a]	The vehicle of claim 8, wherein maintaining the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source,
[14b]	wherein the microprocessor executable vehicle control system, based on information received from a sensor identifies and/or distinguishes the selected vehicle occupant's clothing, held object and/or object in the possession of the selected vehicle occupant, []and
[14c]	wherein the action is based on the identified and/or distinguished clothing, held object and/or object in the possession of the selected vehicle occupant, and
[14d]	wherein a type of information collected depends on a seating position of the selected vehicle occupant.
15[pre]	A tangible and non-transient computer readable medium comprising microprocessor executable instructions that, when executed, perform functions comprising
[15a]	maintaining a persona of a selected vehicle occupant,
[15b]	wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content;

[15c]	determining vehicle-related information, wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination; and
[15d]	based on the persona of the selected vehicle occupant and the vehicle-related information, determining a type of assistance to provide the selected vehicle occupant, the type of assistance not being based on or in response to a preceding request of the selected vehicle occupant; and
[15e]	performing an action assisting the selected vehicle occupant, the action being one or more of providing a suggestion or recommendation to the selected vehicle occupant, providing a reminder to the selected vehicle occupant, scheduling an activity involving the selected vehicle occupant, purchasing an item on line for the selected vehicle occupant, adding an entry into the selected vehicle occupant's electronic calendar, providing a notification to the selected vehicle occupant regarding an incoming message, call or action of a person, and/or sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time of the vehicle.
[16]	The computer readable medium of claim 15, wherein the vehicle-related information comprises at least one of a current and/or future vehicle location and path of vehicle travel and wherein the action is providing a notification of an instant message, email, voice mail from, and/or missed phone call from, current activity of and/or location of a friend.

[17a]	The computer readable medium of claim 15, wherein the action performed depends on a seating position of the selected vehicle occupant and
[17b]	wherein the microprocessor executable vehicle control system senses a condition or activity of another vehicle occupant and notifies the selected vehicle occupant of the condition or activity.
[18a]	The computer readable medium of claim 15, wherein the action is performed by an avatar, wherein the avatar is a graphical and/or voice representation of an object that can be the selected vehicle occupant or the selected vehicle occupant's alter ego or character or of a person selected by the selected vehicle occupant, and
[18b]	wherein different vehicle occupants have different avatars.
[19]	The computer readable medium of claim 15, further comprising the function of determining relevant information other than the persona of the selected vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a persona of a selected person not currently in the vehicle, a message from a friend or family member of the selected vehicle occupant, a current activity of the friend and/or family member, a current location of the friend or family member near the vehicle and/or the vehicle's path of travel, and a road condition along a path of travel of the vehicle.
[20]	The computer readable medium of claim 15, wherein the vehicle obtains the persona from one or more of a different vehicle driven by the selected vehicle occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home

	computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.
[21a]	The computer readable medium of claim 15, wherein the maintaining of the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source,
[21b]	wherein the microprocessor executable vehicle control system, based on information received from a sensor identifies and/or distinguishes the selected vehicle occupant's clothing, held object and/or object in the possession of the selected vehicle occupant, and
[21c]	wherein the action is based on the identified and/or distinguished clothing, held object and/or object in the possession of the selected vehicle occupant.
[22a]	The computer readable medium of claim 21, wherein the maintaining of the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source and
[22b]	wherein a type of information collected depends on one or more of an identity of the selected vehicle occupant, an age of the selected vehicle occupant, a seating position of the selected vehicle occupant, and an association of the selected vehicle occupant with the vehicle.
[23a]	The computer readable medium of claim 21, wherein the persona is defined in a format that can be processed by vehicles of different manufacturers,
[23b]	wherein the persona is provided, by the selected vehicle occupant, to a rental car company, and wherein the vehicle is rented by the

	selected vehicle occupant from the rental car company.
24[pre]	A method, comprising:
[24a]	maintaining, by a microprocessor executable profile identification module, a persona of a vehicle occupant; and
[24b]	based on the persona of the vehicle occupant and vehicle-related information, performing, by a microprocessor executable vehicle control system, an action assisting the vehicle occupant,
[24c]	wherein the vehicle obtains the persona from one or more of a different vehicle driven by the occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.
[25a]	The method of claim 24, wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content,
[25b]	wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination, and
[25c]	wherein the action is one or more of making an appointment, making a reservation, purchasing an item on line, adding a waypoint or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the

	occupant, notifying the occupant, and sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time.
26[pre]	A vehicle, comprising:
[26a]	a microprocessor executable profile identification module operable to maintain a persona of a vehicle occupant; and
[26b]	a microprocessor executable vehicle control system operable, based on the persona of the vehicle occupant and vehicle-related information, to perform an action assisting the vehicle occupant,
[26c]	wherein the vehicle obtains the persona from one or more of a different vehicle driven by the occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.
[27a]	The vehicle of claim 26, wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content,
[27b]	wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination, and
[27c]	wherein the action is one or more of making an appointment, making a reservation, purchasing an item on line, adding a waypoint or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the

	occupant, notifying the occupant, and sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time.
28[pre]	A tangible and non-transient computer readable medium comprising microprocessor executable instructions that, when executed, perform functions comprising:
[28a]	maintaining a persona of a vehicle occupant; and
[28b]	based on the persona of the vehicle occupant and vehicle-related information, perform an action assisting the vehicle occupant,
[28c]	wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content, wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination, and
[28d]	wherein the action is one or more of making an appointment, making a reservation, purchasing an item on line, adding a waypoint or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the occupant, notifying the occupant, and sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time and
[28e]	wherein the vehicle obtains the persona from one or more of a different vehicle driven by the occupant and a home computer and

	wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.
[29]	The method of claim 1, wherein the vehicle control system translates signage located outside the vehicle and provides a translated signage message to the selected vehicle occupant.
[30]	The method of claim 1, wherein the vehicle control system uses a vehicle location-based trigger to activate and/or deactivate a feature and/or setting at a waypoint or destination.
[31]	The method of claim 1, wherein the vehicle control system synchronizes with an electronic calendar of the selected vehicle occupant to provide scheduled activity alarms and calendar updates.
[32]	The method of claim 1, wherein the vehicle control system synchronizes data with a wearable of the selected vehicle occupant and at least one of (i) enables the selected vehicle occupant to interact with the wearable via an on board vehicle display and (ii) uses the data received from the wearable as part of the persona of the selected vehicle occupant.
[33a]	The method of claim 1, wherein the vehicle control system provides a display to the selected vehicle occupant,
[33b]	the display comprising a plurality of selectable applications, an indicator of vehicle-related information, one or more messages for the selected vehicle occupant, a navigation input field for receiving a location-enabled object as a waypoint or destination for a route of travel, contact addresses of persons associated with the selected vehicle occupant, and electronic calendar information for the

	selected vehicle occupant.
[34]	The method of claim 1, wherein the type of information collected by the microprocessor executable profile identification module for the selected vehicle occupant's persona depends on a seating position and/or age of the selected vehicle occupant.
[35]	The method of claim 1, further comprising: determining, by the vehicle control system, relevant information other than the persona of the selected vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a location, hours of operation, and/or descriptive information about a point and/or location of interest near the vehicle and/or the vehicle's path of travel, a location, hours of operation, and/or descriptive information about a vehicle service facility near the vehicle and/or the vehicle's path of travel, and a location, hours of operation, and/or descriptive information about a hotel and/or motel near the vehicle and/or the vehicle's path of travel.

Appendix B

A. Comparison of Independent Claims

Ind Claim 1	Ind Claim 8	Ind Claim 15
1[pre] A method, comprising:	8[pre] A vehicle, comprising:	15[pre] A tangible and non-transient computer readable medium comprising microprocessor executable instructions that, when executed, perform functions comprising:
[1a] maintaining, by a microprocessor executable profile identification module, a persona of a selected vehicle occupant,	[8a] a microprocessor executable profile identification module operable to maintain a persona of a selected vehicle occupant,	[15a] maintaining a persona of a selected vehicle occupant,
[1b] wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content;	[8b] wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content; and	[15b] wherein the persona comprises one or more of bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content;
[1c] determining, by a microprocessor executable vehicle control system, vehicle- related information,	[8c] a microprocessor executable vehicle control system operable to: determine vehicle- related information,	[15c] determining vehicle-related information,

wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination; and	wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination;	wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination;
[1d] based on the persona of the selected vehicle occupant and the vehicle-related information, determining, by the microprocessor executable vehicle control system, a type of assistance to provide the selected vehicle occupant, the type of assistance not being based on or in response to a preceding request of the selected vehicle occupant;	[8d] based on the persona of the selected vehicle occupant and the vehicle-related information, determine a type of assistance to provide the selected vehicle occupant, the type of assistance not being based on or in response to a preceding request of the selected vehicle occupant; and	[15d] based on the persona of the selected vehicle occupant and the vehicle-related information, determining a type of assistance to provide the selected vehicle occupant, the type of assistance not being based on or in response to a preceding request of the selected vehicle occupant; and
[1e] performing, by the microprocessor executable vehicle control system, an action assisting the selected vehicle occupant, the action being one or more of providing a suggestion or recommendation to the selected vehicle occupant,	[8e] perform an action assisting the selected vehicle occupant, the action being one or more of providing a suggestion or recommendation to the selected vehicle occupant,	[15e] performing an action assisting the vehicle occupant, the action being one or more of providing a suggestion or recommendation to the selected vehicle

providing a reminder to the selected vehicle occupant, scheduling an activity involving the selected vehicle occupant, purchasing an item on line for the selected vehicle occupant, adding an entry into the selected vehicle occupant's electronic calendar, providing a notification to the selected vehicle occupant regarding an incoming message, call or action of a person, and/or sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time of the vehicle.	providing a reminder to the selected vehicle occupant, scheduling an activity involving the selected vehicle occupant, purchasing an item on line for the selected vehicle occupant, adding an entry into the selected vehicle occupant's electronic calendar, providing a notification to the selected vehicle occupant regarding an incoming message, call or action of a person, and/or sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time of the vehicle.	occupant, providing a reminder to the selected vehicle occupant, scheduling an activity involving the selected vehicle occupant, purchasing an item on line for the selected vehicle occupant, adding an entry into the selected vehicle occupant's electronic calendar, providing a notification to the selected vehicle occupant regarding an incoming message, call or action of a person, and/or sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time of the vehicle.
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Ind. Claim 1 and 13	Ind Claim 24 and 25	Ind Claim 26 and 26	Ind Claim 28
1[pre] A method, comprising:	24[pre] A method, comprising:	26[pre] A vehicle, comprising:	28[pre] A tangible and non-transient computer readable medium comprising microprocessor executable instructions that, when executed, perform functions comprising:

[1a] maintaining, by a microprocessor executable profile identification module, a persona of a selected vehicle occupant,	[24a] maintaining, by a microprocessor executable profile identification module, a persona of a vehicle occupant; and	[26a] a microprocessor executable profile identification module operable to maintain a persona of a vehicle occupant; and	[28a] maintaining a persona of a vehicle occupant; and
[1d] based on the persona of the selected vehicle occupant and the vehicle-related information, determining, by the microprocessor executable vehicle control system, a type of assistance to provide the selected vehicle occupant, the type of assistance not being based on or in response to a preceding request of the selected vehicle occupant;	[24b] based on the persona of the vehicle occupant and vehicle-related information, performing, by a microprocessor executable vehicle control system, an action assisting the vehicle occupant,	[26b] a microprocessor executable vehicle control system operable, based on the persona of the vehicle occupant and vehicle-related information, to perform an action assisting the vehicle occupant,	[28b] based on the persona of the vehicle occupant and vehicle-related information, perform an action assisting the vehicle occupant,

[1e] performing, by the microprocessor executable vehicle control system, an action assisting the selected vehicle occupant, . . .			
[13] The vehicle of claim 8, wherein the vehicle obtains the persona from one or more of a different vehicle driven by the selected vehicle occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.	[24c] wherein the vehicle obtains the persona from one or more of a different vehicle driven by the occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.	[26c] wherein the vehicle obtains the persona from one or more of a different vehicle driven by the occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.	[28e] wherein the vehicle obtains the persona from one or more of a different vehicle driven by the occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.
[1b] wherein the persona comprises one or more of	[25a] The method of claim 24, wherein the persona comprises one or more of	[27a] The vehicle of claim 26, wherein the persona comprises one or more of	[28c] wherein the persona comprises one or more of

bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content;	bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content,	bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content,	bioinformatics, medical information, driving history, personal information, private information, travel information, and Internet browsing history and/or browsed content, ...
[1c] determining, by a microprocessor executable vehicle control system, vehicle-related information, wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination; and	[25b] wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination, and	[27b] wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination, and	[28c]... wherein vehicle related information comprises one or more of vehicle context, state, external surroundings, location, past, current, and/or intended path of travel, waypoint, and destination, and
	[25c] wherein the action is one or more of making an appointment, making a	[27c] wherein the action is one or more of making an appointment, making a	[28d] wherein the action is one or more of making an appointment, making a

	reservation, purchasing an item on line, adding a waypoint or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the occupant, notifying the occupant, and sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time.	reservation, purchasing an item on line, adding a waypoint or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the occupant, notifying the occupant, and sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time.	reservation, purchasing an item on line, adding a waypoint or destination to path of travel on a navigation system of the vehicle, adding an entry into the occupant's electronic calendar, changing a destination or path of travel on the navigation system, warning the occupant, notifying the occupant, and sending a message to a person at a waypoint or destination of the vehicle regarding an arrival time and
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B. Comparison of Dependent Claims

Depend from Ind. Claim 1	Depend from Ind. Claim 8	Depend from Ind. Claim 15
[2] The method of claim 1, wherein the vehicle-related information comprises at least one of a current and/or future	[9] The vehicle of claim 8, wherein the vehicle-related information comprises at least one of a current and/or future	[16] The computer readable medium of claim 15, wherein the vehicle-related information comprises at least one of a current and/or future

vehicle location and path of vehicle travel and wherein the action is providing a notification of an instant message, email, voice mail from, and/or missed phone call from, current activity of and/or location of a friend.	vehicle location and path of vehicle travel and wherein the action is providing a notification of an instant message, email, voice mail from, and/or missed phone call from, current activity of and/or location of a friend.	vehicle location and path of vehicle travel and wherein the action is providing a notification of an instant message, email, voice mail from, and/or missed phone call from, current activity of and/or location of a friend.
[3a] The method of claim 1, wherein the action performed depends on a seating position of the selected vehicle occupant and		[17a] The computer readable medium of claim 15, wherein the action performed depends on a seating position of the selected vehicle occupant and
[3b] wherein the microprocessor executable vehicle control system senses a condition or activity of another vehicle occupant and notifies the selected vehicle occupant of the condition or activity.	[11b] wherein the microprocessor executable vehicle control system senses a condition or activity of another vehicle occupant and notifies the selected vehicle occupant of the condition or activity, and	[17b] wherein the microprocessor executable vehicle control system senses a condition or activity of another vehicle occupant and notifies the selected vehicle occupant of the condition or activity.
[4a] The method of claim 1, wherein the action is performed by an avatar, wherein the avatar is a graphical and/or voice representation of an object that can be the selected vehicle occupant or the selected vehicle occupant's alter ego or character or of a person	[11a] The vehicle of claim 8, wherein the action is performed by an avatar, wherein the avatar is a graphical and/or voice representation of an object that can be the selected vehicle occupant or the selected vehicle occupant's alter ego or character or of a person	[18a] The computer readable medium of claim 15, wherein the action is performed by an avatar, wherein the avatar is a graphical and/or voice representation of an object that can be the selected vehicle occupant or the selected vehicle occupant's alter ego or character or of a person

selected by the selected vehicle occupant, and	selected by the selected vehicle occupant,	selected by the selected vehicle occupant, and
[4b] wherein different vehicle occupants have different avatars.	[11c] wherein different vehicle occupants have different avatars.	[18b] wherein different vehicle occupants have different avatars.
[5] The method of claim 1, further comprising: determining, by the vehicle control system, relevant information other than the persona of the selected vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a persona of a selected person not currently in the vehicle, a message from a friend or family member of the selected vehicle occupant, a current activity of the friend and/or family member, a current location of the friend or family member near the vehicle and/or the vehicle's path of travel, and a road condition along a path of travel of the vehicle.	[12] The vehicle of claim 8, wherein the vehicle control system is further operable to determine relevant information other than the persona of the selected vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a persona of a selected person not currently in the vehicle, a message from a friend or family member of the selected vehicle occupant, a current activity of the friend and/or family member, a current location of the friend or family member near the vehicle and/or the vehicle's path of travel, and a road condition along a path of travel of the vehicle.	[19] The computer readable medium of claim 15, further comprising the function of determining relevant information other than the persona of the selected vehicle occupant and the vehicle-related information, the relevant information comprising one or more of a persona of a selected person not currently in the vehicle, a message from a friend or family member of the selected vehicle occupant, a current activity of the friend and/or family member, a current location of the friend or family member near the vehicle and/or the vehicle's path of travel, and a road condition along a path of travel of the vehicle.
[6] The method of claim 4,	[13] The vehicle of claim 8,	[20] The computer readable medium of claim 15,

wherein the vehicle obtains the persona from one or more of a different vehicle driven by the selected vehicle occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.	wherein the vehicle obtains the persona from one or more of a different vehicle driven by the selected vehicle occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.	wherein the vehicle obtains the persona from one or more of a different vehicle driven by the selected vehicle occupant and a home computer and wherein the vehicle synchronizes with the different vehicle and/or home computer when the vehicle is parked in proximity thereto and an ignition of the vehicle is turned off.
[7a] The method of claim 1, wherein the maintaining of the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source,	[14a] The vehicle of claim 8, wherein maintaining the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source,	[21a] The computer readable medium of claim 15, wherein the maintaining of the persona comprises collecting information from one or more vehicle sensors and/or from a remote information source,
[7b] wherein the microprocessor executable vehicle control system, based on information received from a sensor identifies and/or distinguishes the selected vehicle occupant's clothing, held object and/or object in the possession of the selected vehicle occupant, and	[14b] wherein the microprocessor executable vehicle control system, based on information received from a sensor identifies and/or distinguishes the selected vehicle occupant's clothing, held object and/or object in the possession of the selected vehicle occupant, and	[21b] wherein the microprocessor executable vehicle control system, based on information received from a sensor identifies and/or distinguishes the selected vehicle occupant's clothing, held object and/or object in the possession of the selected vehicle occupant, and

[7c] wherein the action is based on the identified and/or distinguished clothing, held object and/or object in the possession of the selected vehicle occupant.	[14c] wherein the action is based on the identified and/or distinguished clothing, held object and/or object in the possession of the selected vehicle occupant,	[21c] wherein the action is based on the identified and/or distinguished clothing, held object and/or object in the possession of the selected vehicle occupant.
[29] The method of claim 1, wherein the vehicle control system translates signage located outside the vehicle and provides a translated signage message to the selected vehicle occupant.		
[30] The method of claim 1, wherein the vehicle control system uses a vehicle location-based trigger to activate and/or deactivate a feature and/or setting at a waypoint or destination.		
[31] The method of claim 1, wherein the vehicle control system synchronizes with an electronic calendar of the selected vehicle occupant to provide scheduled activity alarms and calendar updates.		
[32] The method of claim 1, wherein the vehicle control system synchronizes data with a wearable of the selected vehicle occupant and at least one of (i) enables		

the selected vehicle occupant to interact with the wearable via an on board vehicle display and (ii) uses the data received from the wearable as part of the persona of the selected vehicle occupant.		
[33a] The method of claim 1, wherein the vehicle control system provides a display to the selected vehicle occupant,		
[33b] the display comprising a plurality of selectable applications, an indicator of vehicle-related information, one or more messages for the selected vehicle occupant, a navigation input field for receiving a location-enabled object as a waypoint or destination for a route of travel, contact addresses of persons associated with the selected vehicle occupant, and electronic calendar information for the selected vehicle occupant.		
[34] The method of claim 1, wherein the type of information collected by the microprocessor executable profile	[14d] wherein a type of information collected depends on a seating position of the selected vehicle occupant.	[22b] wherein a type of information collected depends on one or more of an identity of the selected vehicle

identification module for the selected vehicle occupant's persona depends on a seating position and/or age of the selected vehicle occupant.		occupant, an age of the selected vehicle occupant, a seating position of the selected vehicle occupant, and an association of the selected vehicle occupant with the vehicle.
[35] The method of claim 1, further comprising: determining, by the vehicle control system, relevant information other than the persona of the selected vehicle occupant and the vehicle-related information the relevant information comprising one or more of a location, hours of operation, and/or descriptive information about a point and/or location of interest near the vehicle and/or the vehicle's path of travel, a location, hours of operation, and/or descriptive information about a vehicle service facility near the vehicle and/or the vehicle's path of travel, and a location, hours of operation, and/or descriptive information about a hotel and/or motel near the vehicle and/or the vehicle's path of travel.		

	[10] The vehicle of claim 8, wherein the action performed depends on a seating position of the selected vehicle occupant.	
		[23a] The computer readable medium of claim 21, wherein the persona is defined in a format that can be processed by vehicles of different manufacturers,
		[23b] wherein the persona is provided, by the selected vehicle occupant, to a rental car company, and wherein the vehicle is rented by the selected vehicle occupant from the rental car company.