

**Toyota Motor Corp., et al.
v.
Emerging Automotive LLC**

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

Patent Trial and Appeal Board

All Grounds Fail for at Least Three Independent Reasons

Neither Rector nor Rector/Kleve discloses or renders obvious independent claim limitations 1[b], 1[c], 17[b], or 17[c]

- The Petition **failed to provide any suggestion or motivation to modify the teachings of Rector in the combination proposed**
 - Rector's smart-vehicle-executed method teaches local control of a driver's settings on a vehicle, where **every step of the method is carried out by the "smart vehicle" itself**
 - Whereas Rector's network-based system embodiment teaches remotely controlling a driver's settings
 - A POSITA would not have been motivated to combine the embodiments, given nonsensical redundancies, and indeed Rector's smart vehicle-executed method discourages any transfer of settings
- Regardless, Petitioner's unjustified combination of disparate teachings **still fails to disclose the independent claims' step of "transferring is configured to instruct" required of 1[c] and 17[c]**
- Petitioner's Rector/Kleve combination **fails to disclose the independent claims' limitation that a server processes user information to *verify the user for accessing the profile***
 - **Improper Combination**, premised on a non-existent problem in Rector
 - Even if combination were proper, **proposed modification still fails to disclose 1[b] and 17[b]**

'244 Patent

The '244 Patent Discloses a Novel Method For Seamlessly and Securely Transferring a User's Personalized Vehicle Settings From a Cloud Server to Any Vehicle, Regardless of Make or Model

'244 Patent

The independent claims require a **server verifying a user for access to a profile**; further, the **server executes a transfer of profile settings, where this transfer is itself “configured to instruct”** the vehicle’s electronics on how to apply the custom settings of the user’s profile

- This functionality enables true interoperability and scalability for personalized settings across different vehicle platforms, a problem not solved by the prior art.
 - Prior art like Rector and Kleve **never teach this functionality**
 - Instead, Rector’s **smart-vehicle-executed method** teaches localized, “smart vehicle”-executed steps of looking up and determining settings, **rendering any transfer unnecessary.**
 - Rector’s network-based embodiment has no transfer “configured to instruct,” but instead relies on the **smart vehicle itself to “limit[] functions of the smart vehicle based on the permitted settings.”**
 - Not even the Petition’s unexplained combination of Rector’s embodiments teaches any server transferring settings, where that **transfer is configured to instruct software/hardware on how to apply customized settings.**
 - No prior art combination teaches a server verifying a user **for access to a profile.**

'244 Patent

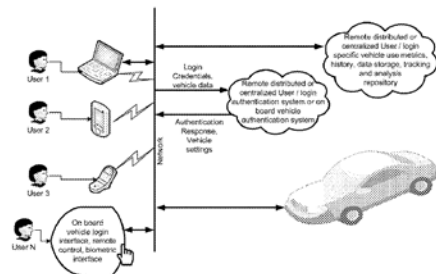
(12) **United States Patent**
Penilla et al.

(10) Patent No.: US 11,396,244 B2
(45) Date of Patent: *Jul. 26, 2022



METHODS FOR TRANSFERRING USER PROFILES BETWEEN VEHICLES USING CLOUD SERVICES

- (21) Appl. No.: 16/788,253
(22) Filed: Feb. 11, 2020
- (65) **Prior Publication Data**
US 2020/0186590 A1 Jun. 11, 2020
- Related U.S. Application Data**
(63) Continuation of application No. 16/285,706, filed on Feb. 26, 2019, now Pat. No. 10,652,312, which is a (Continued)
- (51) **Int. Cl.**
B60L 53/66 (2019.01)
B60L 53/68 (2019.01)
(Continued)
- (52) **U.S. Cl.**
CPC *B60L 53/665* (2019.02); *B60L 53/68* (2019.02); *B60W 40/08* (2013.01); *G06F 17/00* (2013.01);
(Continued)
- 20 Claims, 22 Drawing Sheets



Methods and systems for communicating with a server of a cloud services system used to interface with vehicles are provided. One method includes receiving, by the server, a request from electronics of a vehicle to access a profile for a user account. The request identifies user information for a user to use the vehicle. The method includes processing, by the server, at least part of the user information to verify the user against data associated with the user account. The profile has a plurality of settings of the user for the vehicle, and at least part of the plurality of settings for the profile being stored on storage accessible to the cloud services system. The method includes transferring, by the server, upon verification of the user information, one or more settings of the plurality of settings to the vehicle. The transferring is configured to instruct software associated with said electronics of the vehicle to apply said one or more settings to the vehicle for customizing said vehicle to use said one or more settings, and the vehicle uses wireless communication with the cloud services system to receive said one or more settings for the profile. And, the profile is transferrable from vehicle to vehicle used by the user, so user settings go with the user. The profile, in one example, is activated automatically in a vehicle upon pairing a device with the vehicle.

EX1001 ('244 Patent), Abstract

'244 Patent

If the user wishes to use his or her custom configuration in another vehicle, the user can login to the custom configuration or user account from another vehicle. If the other vehicle does not have all the system components needed to define the custom configuration, the custom configuration can be supplemented with other similar components automatically. In other embodiments, the custom configuration can be transferred from one vehicle to another, or when the user buys a new vehicle. In another embodiment, the custom configuration can be adjusted based on the driver. The custom configuration can also be preset remotely from the Internet, using the cloud services. The custom configuration can also be configured to provide limited use of certain systems or the vehicle, such as when a guest is driving the vehicle. In other embodiments, restrictions can be placed on the vehicle speed, location of driving, and automatic notifications for the user or the master user of the vehicle. The master user of the vehicle can have a master account with administrator credentials.

EX1001 ('244 Patent), 11:11-29

The cloud services 120 are also accessible via a computer that has access to the Internet, a smart device (e.g., smart phone, tablet, etc.), etc. Thus, data can be acquired from various sources and data can be consumed by various sources. The data that is acquired, shared or accessed can be launched on the user's device and then transferred to share in real-time with the display and/or electronics of the vehicle. Thus, a unified access display can be customized to the user, regardless of the vehicle that the user chooses to drive. This is in contrast to current models that customize settings for one vehicle owner or owners.

In one embodiment, the user's settings are seamlessly transferred to the vehicle the user chooses to drive. This is especially useful for cases where a user drives many cars,

EX1001 ('244 Patent), 22:50-63

'244 Patent

In operation **368**, a user interface is provided to the user's mobile device that will provide a notification to the user indicating that the person/user has arrived at the vehicle. In operation **370**, the users profile is transferred to the vehicle. The transfer of the profile will allow the settings of the user to automatically be set in the vehicle. The settings can include, for example, temperature, radio settings, seat settings, meter settings, air settings, etc.

In operation **372**, the settings that are made by the user when in the vehicle or adjustment settings can be sent back to the user profile. Thus, when the user offering the vehicle and making changes to his or her profile, those changes can also be communicated back to the profile database in cloud services **120**. This provides for a continuous feedback loop over time, to allow the users profile settings to be managed and maintained current to the users best liked preferences. The operation then proceeds to B in FIG. **9B**.

EX1001 ('244 Patent), 19:51-67

The cloud services **120** are also accessible via a computer that has access to the Internet, a smart device (e.g., smart phone, tablet, etc.), etc. Thus, data can be acquired from various sources and data can be consumed by various sources. The data that is acquired, shared or accessed can be launched on the user's device and then transferred to share in real-time with the display and/or electronics of the vehicle. Thus, a unified access display can be customized to the user, regardless of the vehicle that the user chooses to drive. This is in contrast to current models that customize settings for one vehicle owner or owners.

In one embodiment, the user's settings are seamlessly transferred to the vehicle the user chooses to drive. This is especially useful for cases where a user drives many cars,

EX1001 ('244 Patent), 22:50-63

'244 Patent

(12) **United States Patent**
Penilla et al.

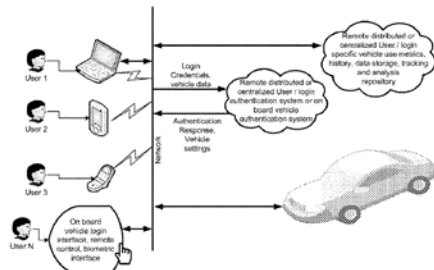
(10) Patent No.: US 11,396,244 B2
(45) Date of Patent: *Jul. 26, 2022



METHODS FOR TRANSFERRING USER PROFILES BETWEEN VEHICLES USING CLOUD SERVICES

- patent is extended or adjusted under 35 U.S.C. 154(b) by 51 days.
This patent is subject to a terminal disclaimer.
- (21) Appl. No.: 16/788,253
(22) Filed: Feb. 11, 2020
- (65) **Prior Publication Data**
US 2020/0186590 A1 Jun. 11, 2020
- Related U.S. Application Data**
(63) Continuation of application No. 16/285,706, filed on Feb. 26, 2019, now Pat. No. 10,652,312, which is a (Continued)
- (51) **Int. Cl.**
B60L 53/66 (2019.01)
B60L 53/68 (2019.01)
(Continued)
- (52) **U.S. Cl.**
CPC *B60L 53/665* (2019.02); *B60L 53/68* (2019.02); *B60W 40/08* (2013.01); *G06F 17/00* (2013.01);
(Continued)

20 Claims, 22 Drawing Sheets



'244, Claim 1[b]

processing, by the server, at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle, at least part of the plurality of settings for the profile being stored on storage accessible to the cloud services system; and

EX1001 ('244 Patent), 33:16-22

'244, Claim 17[b]

processing, by one of the servers, at least part of the user information to verify the access for the user, the profile having a plurality of settings of the user for the vehicle, at least part of the plurality of settings of the profile being stored on storage accessible to said one or more servers; and
transferring, by one of the servers, upon verification of the user information, one or more settings of the plurality

EX1001 ('244 Patent), 35:11-16

'244 Patent

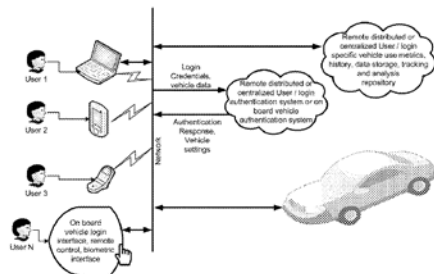
(12) United States Patent
Penilla et al.

(10) Patent No.: US 11,396,244 B2
(45) Date of Patent: *Jul. 26, 2022

METHODS FOR TRANSFERRING USER PROFILES BETWEEN VEHICLES USING CLOUD SERVICES

- (21) Appl. No.: 16/788,253
(22) Filed: Feb. 11, 2020
(65) Prior Publication Data
US 2020/0186590 A1 Jun. 11, 2020
(63) Related U.S. Application Data
Continuation of application No. 16/285,706, filed on Feb. 26, 2019, now Pat. No. 10,652,312, which is a (Continued)
(51) Int. Cl. (2019.01)
B60L 53/66 (2019.01)
B60L 53/68 (Continued)
(52) U.S. Cl. (2019.02); B60L 53/665 (2019.02); B60L 53/68 (2019.02); B60W 40/08 (2013.01); G06F 17/00 (2013.01); (Continued)

20 Claims, 22 Drawing Sheets



'244, Claim 1[c]

transferring, by the server, upon verifying the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and/or hardware associated with said electronics of the vehicle to apply said one or more settings to the vehicle for customizing said vehicle to use said one or more settings associated with the profile,

EX1001 ('244 Patent), 33:23-29

'244, Claim 17[c]

transferring, by one of the servers, upon verification of the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and hardware associated the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user, the request and the transferring being via wireless communication of said vehicle.

EX1001 ('244 Patent), 35:17-24

Transformative Innovation of the '244 Patent

Unified, Server-Executed Instruction Enables Customization Across Vehicle Types:

- The '244 patent describes a cohesive system where the server's act of transferring settings is a specifically configured instruction designed for customization across various vehicle types.

The Petition Fails to Explain or Support Its Combination of Embodiments From Rector, Relied Upon for All Grounds

All Grounds Fail Because the Petition Relies on an Unjustified Combination for Alleged Disclosure of the Independent Claims' Recited Operation of "transferring, by the server ... the plurality of settings to the vehicle" (claims 1[c] and 17[c])

Rector's Method Never Teaches Any Server-Executed Transfer of Settings

Rector's "smart-vehicle" executed method fails to disclose elements 1[c] & 17[c]

- Each of the challenged claims recites "transferring, **by the server** ... the plurality of settings to the vehicle"

'244, Claim 1[c]

transferring, by the server, upon verifying the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and/or hardware associated with said electronics of the vehicle to apply said one or more settings to the vehicle for customizing said vehicle to use said one or more settings associated with the profile,

EX1001 ('244 Patent), 33:23-29

'244, Claim 17[c]

transferring, by one of the servers, upon verification of the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and hardware associated the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user, the request and the transferring being via wireless communication of said vehicle.

EX1001 ('244 Patent), 35:17-24

Rector's Method Never Teaches Any Server-Executed Transfer of Settings

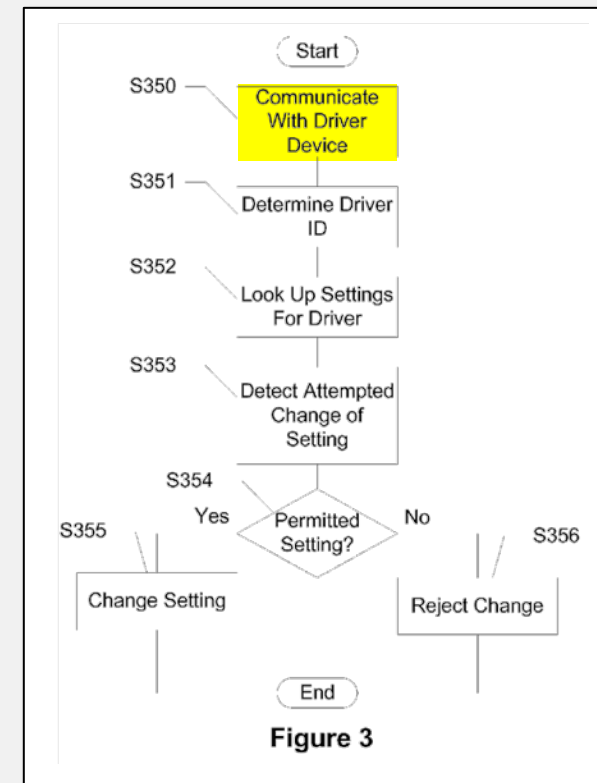
Improper Reliance on Unexplained Combination of Rector's Embodiments

Rector's "smart vehicle"-executed method of locally controlling a driver's settings

- Requires the "smart vehicle" to execute each step depicted in Figure 3
- At Step **S350**, "the smart vehicle communicating with a driver's device"

[0043] FIG. 3 shows a method of controlling a driver's settings on a smart vehicle, according to an exemplary embodiment of the present invention. In this embodiment, the method begins with the smart vehicle communicating with a driver's device S350. This device may be a wireless communications device, such as a cellular telephone, a contactless smart card, etc. The communication may occur as the driver enters the smart vehicle, as the driver starts the smart vehicle, etc. The smart vehicle communicates with the wireless communication device using short range wireless communication to request a unique identifier for the driver's wireless communication device. This short range wireless communication

EX1006 (Rector), ¶43



EX1006 (Rector), Fig. 3

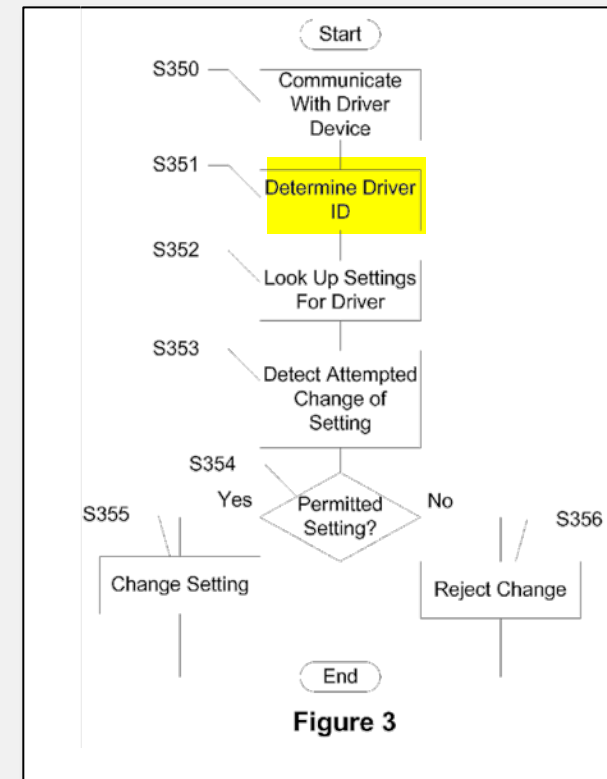
Improper Reliance on Unexplained Combination of Rector's Embodiments

Rector's "smart vehicle"-executed method of locally controlling a driver's settings

- Requires the "smart vehicle" to execute each step depicted in Figure 3
- At **Step S351**, "the smart vehicle determines the identity of the driver" in one of two ways, each of which is executed by the smart vehicle

characters. The unique identifier is associated with a user of the smart vehicle. With the unique identifier, the smart vehicle determines the identity of the driver S351. A client logic and processor on the smart vehicle compares the unique identifier with a set of unique identifiers stored on a memory of the smart vehicle. Alternatively, the unique identifier may be compared with a set of unique identifiers on a server on a network. With the identity of the driver determined, the smart

EX1006 (Rector), ¶43



EX1006 (Rector), Fig. 3

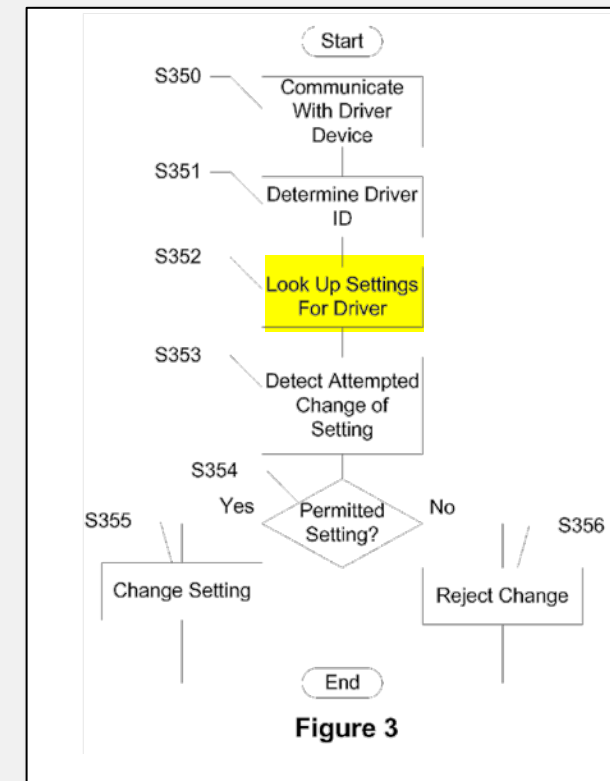
Improper Reliance on Unexplained Combination of Rector's Embodiments

Rector's "smart vehicle"-executed method of locally controlling a driver's settings

- Requires the "smart vehicle" to execute each step depicted in Figure 3
- At **Step S352**, "the smart vehicle looks up settings for the driver"

network. With the identity of the driver determined, the smart vehicle looks up settings for the driver S352. These settings may include driver created settings, controlling authority settings, etc. The settings are determined by comparing the driver's identity with a database of identities with corresponding settings. This database may be on the network, on the driver's device, on the smart vehicle's memory, etc. With the settings determined for the driver, the smart vehicle detects an

EX1006 (Rector), ¶43



EX1006 (Rector), Fig. 3

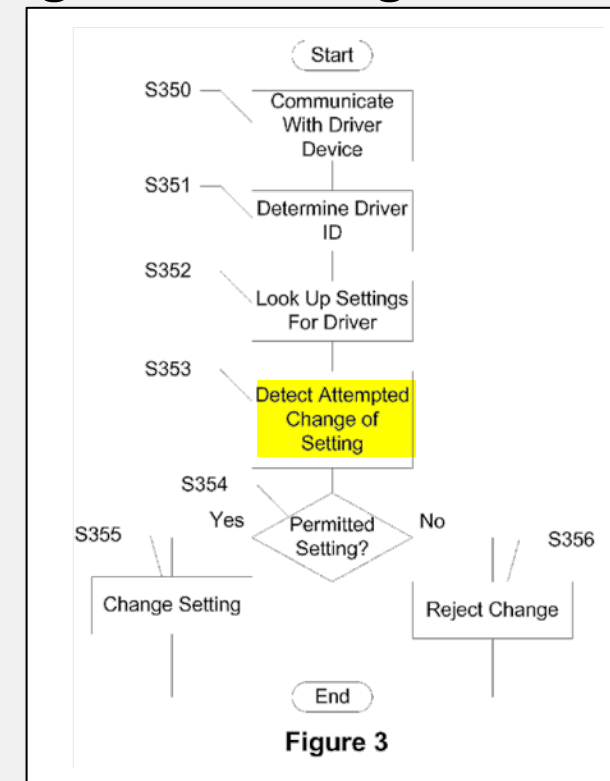
Improper Reliance on Unexplained Combination of Rector's Embodiments

Rector's "smart vehicle"-executed method of locally controlling a driver's settings

- Requires the "smart vehicle" to execute each step depicted in Figure 3
- At **Step S353**, "the smart vehicle detects an attempted change of a setting"

driver's device, on the smart vehicle's memory, etc. With the settings determined for the driver, the smart vehicle detects an attempted change of a setting S353. This may be the driver speeding up, the radio volume changing, the radio station changing, the driver's wireless communication device receiv-

EX1006 (Rector), ¶43



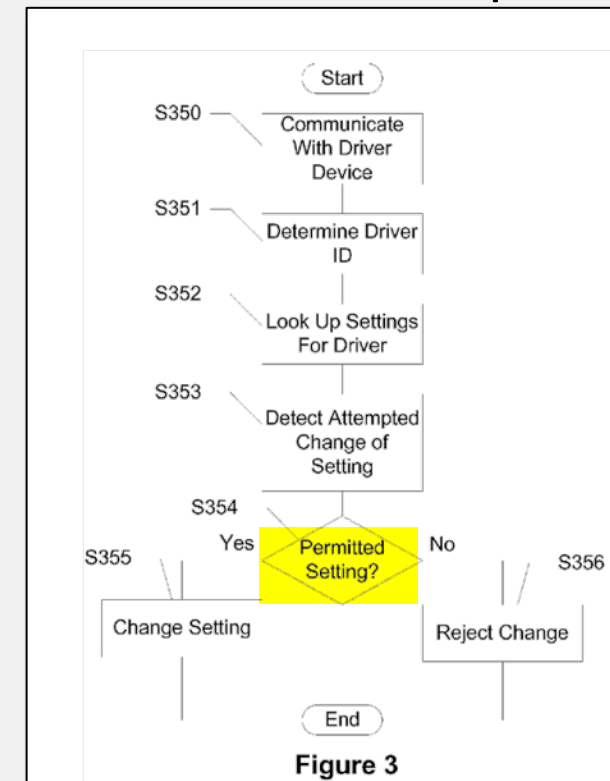
EX1006 (Rector), Fig. 3

Improper Reliance on Unexplained Combination of Rector's Embodiments

Rector's "smart vehicle"-executed method of locally controlling a driver's settings

- Requires the "smart vehicle" to execute each step depicted in Figure 3
- At Steps **S354**, **S355**, **S356**, "the smart vehicle determines whether the attempted change of the setting is permitted" or "the setting is rejected"

ing an incoming call or text, etc. The smart vehicle determines whether the attempted change of the setting is permitted S354. This is accomplished by the client logic of the smart vehicle comparing the detected attempted change with the database of permitted or prohibited settings for the driver. If the change in setting is permitted, the change is allowed S355. For instance, the radio volume increases, the radio station changes, the call is received, the smart vehicle accelerates, etc. If the attempted setting is not permitted, the setting is rejected S356. For instance, the radio volume cannot be raised



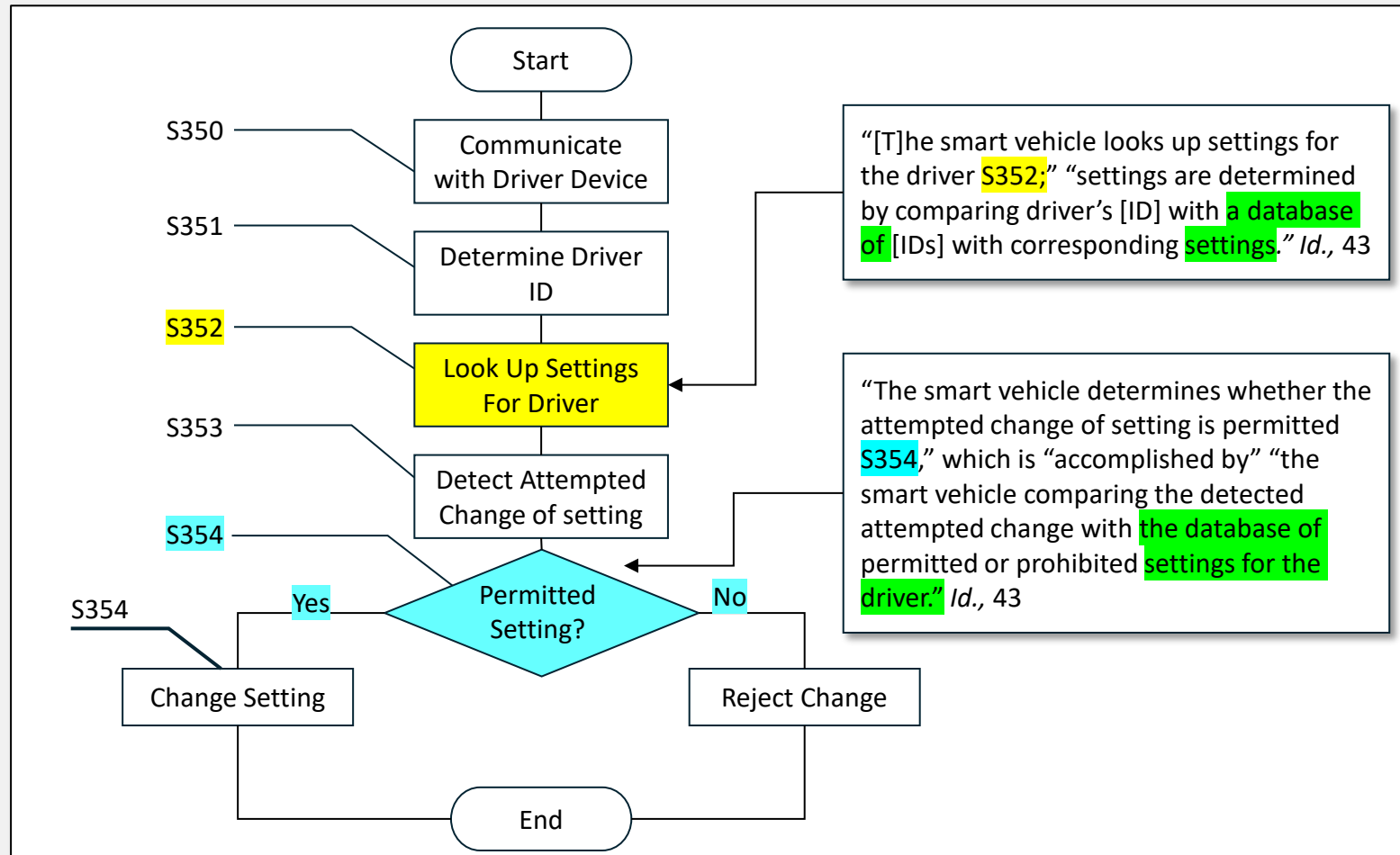
EX1006 (Rector), ¶43

EX1006 (Rector), Fig. 3

Rector's Smart Vehicle-Executed Method Discourages ANY Transfer of Settings Whatsoever

Rector Fails to Teach or Suggest *Any* Transfer of Settings

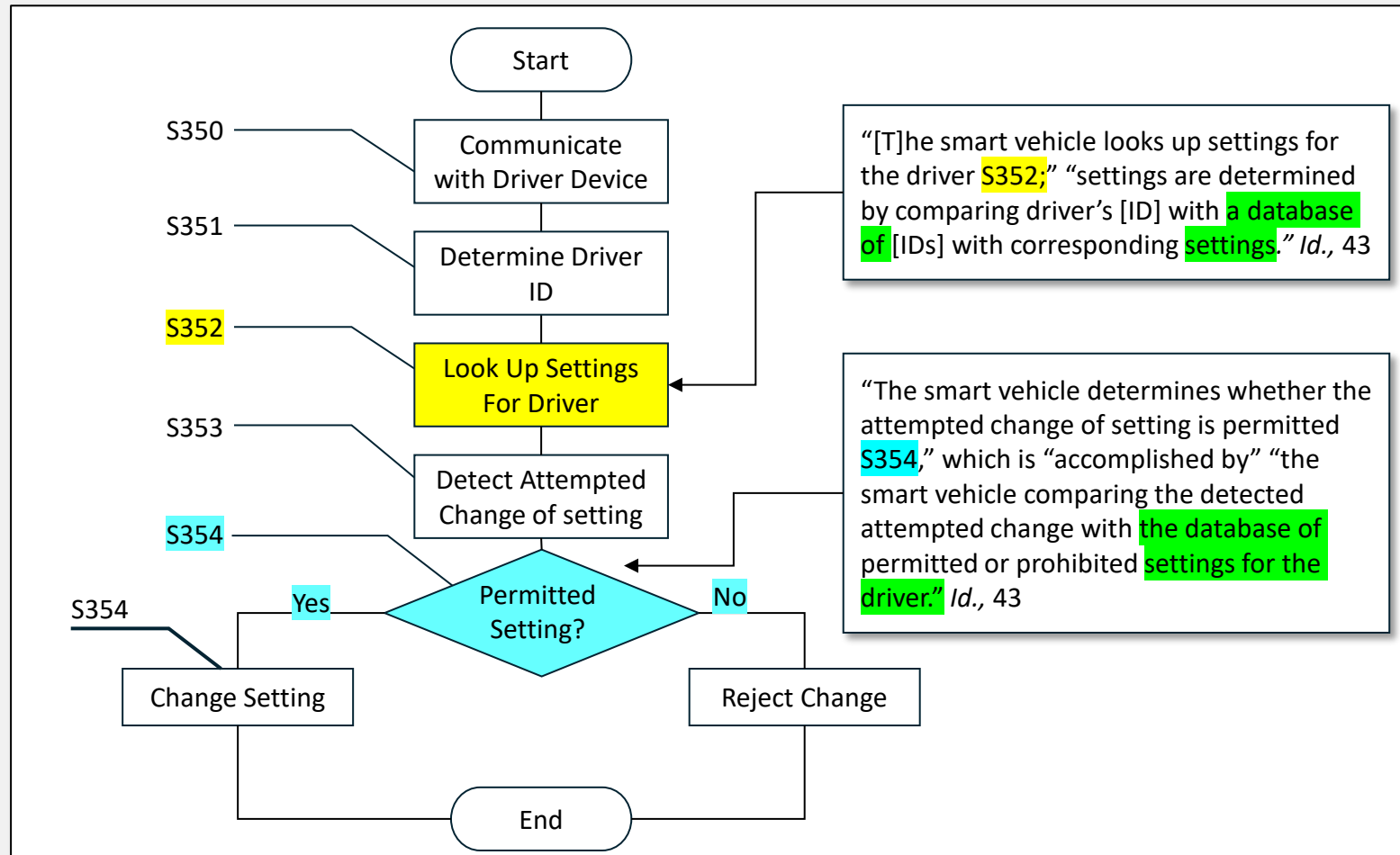
Rector explicitly discourages any transfer of settings – instead, the smart vehicle consults and re-consults the same **database of settings** for S352 and S354



EX1006, Fig. 3

Rector's Method Fails to Teach *Any* Transfer of Settings

Rector's method is fundamentally incompatible with any alleged server "transmission of settings," instead, the smart vehicle must look up settings in the database



EX1006, Fig. 3

Improper Reliance on Unexplained Combination of Rector's Embodiments

Rector separately describes a network-based embodiment – a system for remotely controlling a driver's settings

- No suggestion to combine embodiments, in fact server performs functions duplicative of Rector's smart-vehicle-executed method, wherein the **smart vehicle determines settings**
- System separately requires network **server to determine settings**

[0009] In one exemplary embodiment, the present invention is a system for controlling a driver's settings, the system including a network; a smart vehicle in communication with the network; a wireless communication device in communication with the smart vehicle; a settings server on the network, the settings server including a user account for a user of the wireless communication device, the user account including permitted settings for the user; a client logic on the smart vehicle to retrieve a unique identifier from the wireless communication device and transmit the unique identifier to the settings server; and a server logic on the settings server to associate the unique identifier with the user account, determine the permitted settings for the user, and transmit the permitted settings to the client logic, wherein the client logic limits functions of the smart vehicle based upon the permitted settings.

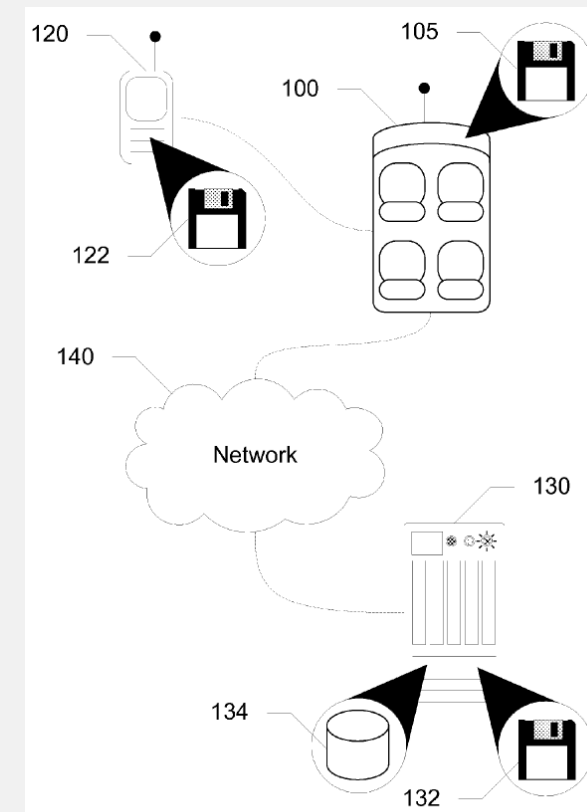


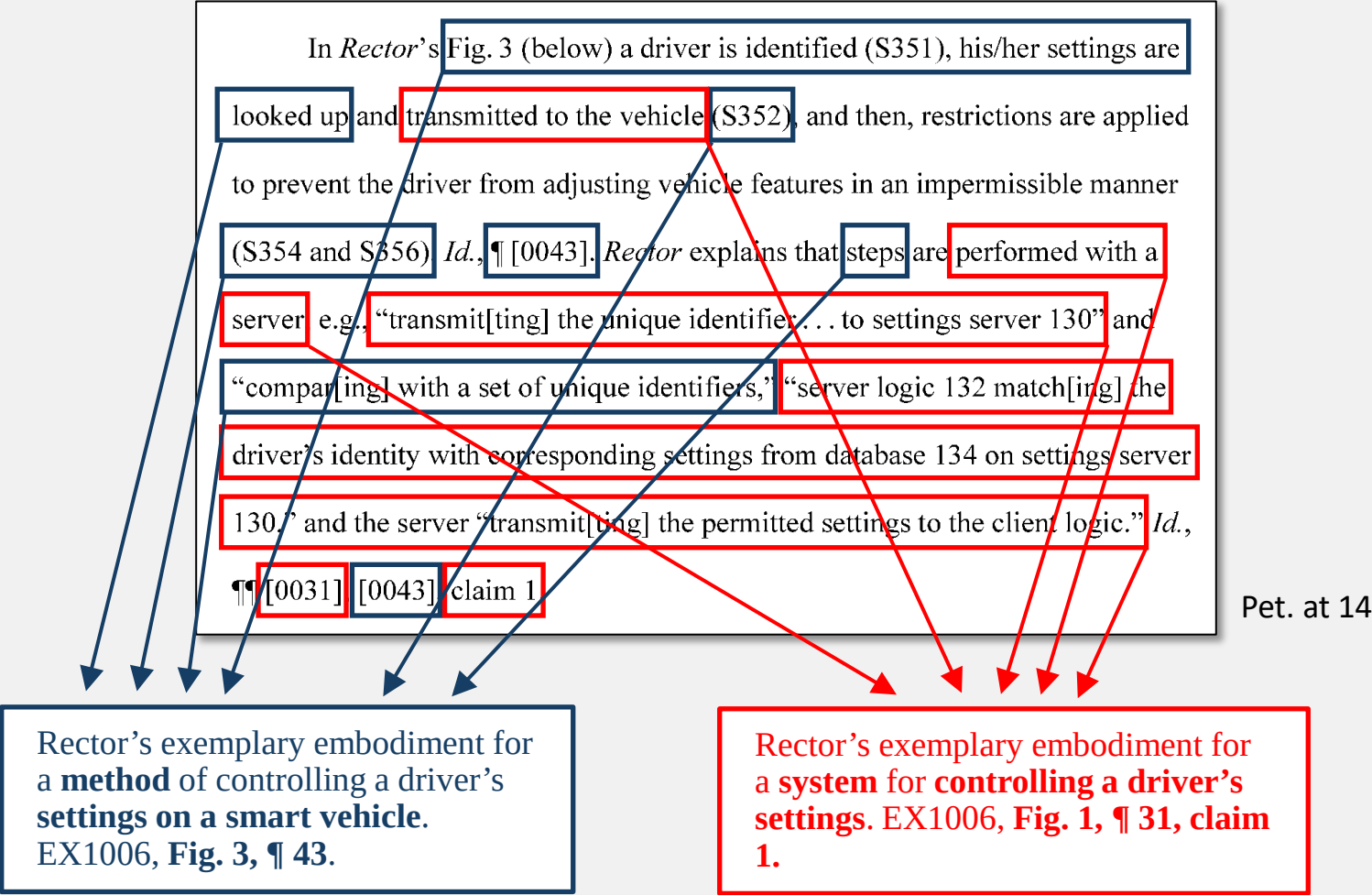
Figure 1

EX1006 (Rector), Fig. 1

EX1006 (Rector), ¶19

Petitioner's Reconstruction of Rector's Disclosure is Guided Only by Improper Hindsight

Petitioner treats two distinct embodiments of Rector as one without ever advising the Board of the combination, let alone justifying that combination:



Applicable Law Highlights Petition's Failures



Toyota's Petition mirrors that in *Abiomed*, where the Petition **failed to prove features of two embodiments were properly combined**, finding evidence “as to what pump 420 *could* include or *would* accommodate, however, is not the same as what [the reference] teaches.”

Abiomed, Inc. v. Maquet Cardiovascular, LLC, at 11 (P.T.A.B. Oct. 23, 2017)

Applicable Law Highlights Petition's Failures



The Petition failed to justify its combination of disparate features from Rector, for even where a combination includes features from a single reference, “there must be a showing of a suggestion or motivation to modify the teachings of that reference.”

Pers. Web Techs., LLC v. Apple, Inc., 848 F.3d 987, 991 (Fed. Cir. 2017)

Applicable Law Highlights Petition's Failures



Petition failed to show a suggestion or motivation to modify the distinct embodiments of Rector.

- “identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention.”
- “there must be a showing of a suggestion or motivation to modify the teachings of that reference.”

In re Kotzab, 217 F.3d at 1365 , 1370 (Fed. Cir. 2017)

The Petition Failed to Sustain its Obviousness Burden



Petition fails to sustain its burden under §103.

“Petition ha[d] not explained how or why a person having ordinary skill in the art would modify the Multigigabit Router to use the [features] of the Netstar GigaRouter.”

“[a]lthough both routers are described in a single reference, Petitioner must still articulate a rationale for combining the features of the two devices.”

Cisco Systems, Inc. v. Bockstar Technologies LLC, IPR2014-01192 (P.T.A.B. Feb. 2, 2015)

Even with Petition's Unjustified Combination, the Prior Art Still Fails to Teach Limitations 1[b], 1[c], 17[b], and 17[c] of the Independent Claims

Even if Petitioner's Unjustified Combination Were Somehow Proper, All Grounds Still Fail Because the Petition's Art Fails to Satisfy the "Configured to Instruct" Limitations Required of All Claims (1[c] and 17[c])

Unjustified Combination Still Fails to Teach Limitations 1[c] and 17[c]

Regardless of Petitioner's unjustified combination of Rector's disparate teachings, Rector still fails to teach limitations 1[c] and 17[c]

- The '244 patent's claims recite a server's transfer operation designed to specifically instruct the vehicle's hardware/software on how to apply the settings for customizing the vehicle for the user.
- The claims' "transferring, by the server ... configured to instruct ..." allows for seamless transfer to a variety of vehicle types.

'244, Claim 1[c]

transferring, by the server, upon verifying the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and/or hardware associated with said electronics of the vehicle to apply said one or more settings to the vehicle for customizing said vehicle to use said one or more settings associated with the profile,

EX1001 ('244 Patent), 33:23-29

'244, Claim 17[c]

transferring, by one of the servers, upon verification of the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and hardware associated the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user, the request and the transferring being via wireless communication of said vehicle.

EX1001 ('244 Patent), 35:17-24

Petition's Art Fails to Satisfy the “Configured to Instruct” Limitations

“the transferring is configured to instruct ...” claims 1[c] and 17[c]

- “configured to” does not mean merely “capable of”
- Precedent shows that the plain and ordinary meaning of “configured to” = **“designed, adapted or programmed to accomplish the specified objective”**

'244, Claim 1[c]

transferring, by the server, upon verifying the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and/or hardware associated with said electronics of the vehicle to apply said one or more settings to the vehicle for customizing said vehicle to use said one or more settings associated with the profile,

EX1001 ('244 Patent), 33:23-29

'244, Claim 17[c]

transferring, by one of the servers, upon verification of the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and hardware associated the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user, the request and the transferring being via wireless communication of said vehicle.

EX1001 ('244 Patent), 35:17-24

Precedent Shows “Configured to” is Narrower than “Capable of”

Federal Circuit Precedent shows “configured to” is most naturally understood to mean *designed to or configured to accomplish the specified objective*, not mere capability



describing “configured to” as ***narrower than the “broader sense” of “capable of” or “suitable for”***

Aspex Eyewear, Inc. v. Marchon Eyewear, Inc., 672 F.3d 1335, 1349 (Fed. Cir. 2012)



construing “memory ... configured to” as “memory that ***must perform the recited function***”

Typhoon Touch Techs., Inc. v. Dell, Inc., 659 F.3d 1376, 1380 (Fed. Cir. 2011)

Precedent Shows “Configured to” is “Made or Designed for”

Precedent requires the plain and ordinary meaning of “configured to,” which is “made or designed for” as opposed to merely “capable of” or “suitable for”



interpreting thumb switch as being “configured to,” i.e. ***“made or designed for”*** activation by a human thumb,” ***as opposed to merely “capable of” or “suitable for”***

In re Man Mach. Interface Techs. LLC, 822 F.3d 1282, 1285 (Fed. Cir. 2016)



“our cases ***distinguish between*** claims with ***language that recites capability, and those that recite configuration***”

ParkerVision, Inc. v. Qualcomm Inc., 903 F.3d 1354, 1361 (Fed. Cir. 2018)

Specification Supports the Plain and Ordinary Meaning

With the server's transferring operation, specifically "configured to instruct" the vehicle electronics software/hardware of the vehicle, the claimed inventions enable the "seamless transfer" of the user's custom configuration of settings, regardless of vehicle type

If the user wishes to use his or her custom configuration in another vehicle, the user can login to the custom configuration or user account from another vehicle. If the other vehicle does not have all the system components needed to define the custom configuration, the custom configuration can be supplemented with other similar components automatically. In other embodiments, the custom configuration can be transferred from one vehicle to another, or when the user buys a new vehicle. In another embodiment, the custom configuration can be adjusted based on the driver. The custom configuration can also be preset remotely from the Internet, using the cloud services. The custom configuration can also be configured to provide limited use of certain systems or the vehicle, such as when a guest is driving the vehicle. In other embodiments, restrictions can be placed on the vehicle speed, location of driving, and automatic notifications for the user or the master user of the vehicle. The master user of the vehicle can have a master account with administrator credentials.

EX1001 ('244 Patent), 11:11-29

The cloud services 120 are also accessible via a computer that has access to the Internet, a smart device (e.g., smart phone, tablet, etc.), etc. Thus, data can be acquired from various sources and data can be consumed by various sources. The data that is acquired, shared or accessed can be launched on the user's device and then transferred to share in real-time with the display and/or electronics of the vehicle. Thus, a unified access display can be customized to the user, regardless of the vehicle that the user chooses to drive. This is in contrast to current models that customize settings for one vehicle owner or owners.

In one embodiment, the user's settings are seamlessly transferred to the vehicle the user chooses to drive. This is especially useful for cases where a user drives many cars,

EX1001 ('244 Patent), 22:50-63

Specification Supports the Plain and Ordinary Meaning

To automatically transfer user profile, allowing customized configuration in any vehicle, the server's transferring operation is specifically configured to instruct software/hardware of vehicle to customize the vehicle to use those profile settings

In operation 368, a user interface is provided to the user's mobile device that will provide a notification to the user indicating that the person/user has arrived at the vehicle. In operation 370, the users profile is transferred to the vehicle. The transfer of the profile will allow the settings of the user to automatically be set in the vehicle. The settings can include, for example, temperature, radio settings, seat settings, meter settings, air settings, etc.

In operation 372, the settings that are made by the user when in the vehicle or adjustment settings can be sent back to the user profile. Thus, when the user offering the vehicle and making changes to his or her profile, those changes can also be communicated back to the profile database in cloud services 120. This provides for a continuous feedback loop over time, to allow the users profile settings to be managed and maintained current to the users best liked preferences. The operation then proceeds to B in FIG. 9B.

EX1001 ('244 Patent), 19:51-67

The cloud services 120 are also accessible via a computer that has access to the Internet, a smart device (e.g., smart phone, tablet, etc.), etc. Thus, data can be acquired from various sources and data can be consumed by various sources. The data that is acquired, shared or accessed can be launched on the user's device and then transferred to share in real-time with the display and/or electronics of the vehicle. Thus, a unified access display can be customized to the user, regardless of the vehicle that the user chooses to drive. This is in contrast to current models that customize settings for one vehicle owner or owners.

In one embodiment, the user's settings are seamlessly transferred to the vehicle the user chooses to drive. This is especially useful for cases where a user drives many cars,

EX1001 ('244 Patent), 22:50-63

Rector Fails to Disclose or Render Obvious “transferring, by the server ... the transferring is configured to instruct,” as Recited by All Independent Claims (1[c] and 17[c])

**Rector Fails to Teach That Transmitted Settings Allegedly “cause”
The Smart Vehicle to Implement Settings, Let Alone Teach The Recited
“configured to instruct” Limitations.**

Rector Fails to Disclose the Recited “the transferring is configured to instruct”

- Petition relies on Rector alone for alleged “transferring ... the transferring is configured to instruct ...” (claim limitations 1[c] and 17[c])
- Rector’s transmission is not “configured to instruct” the vehicle on customization:
 - Rector itself—regardless of embodiment—relies on the “**smart vehicle**” itself to limit functions of the smart vehicle based on the permitted settings.
 - Rector’s smart vehicle looks up settings to determine permitted settings
 - Rector’s smart vehicle detects an attempted change of setting
 - Rector’s smart vehicle checks the driver’s permitted settings to determine whether the detected attempted change of setting is prohibited or permitted
 - Dr. Almeroth’s testimony as to what Rector’s components may be “capable of” or whether an operation might “cause” another operation to occur fails to teach the required “transferring configured to instruct”
 - Rector has no disclosure to support Dr. Almeroth’s conclusion that transmitted settings “cause” the smart vehicle’s client logic to implement settings

Even if Rector's system were "capable of" instructing the smart vehicle, mere capability does not teach the recited "configured to" limitations.

Rector Fails to Disclose the Recited “the transferring is configured to instruct”

Server’s transmission is not “configured to instruct” the vehicle on customization:

- Petition fails to show any transferring operation that is specifically designed to accomplish the claimed objectives:
 - To instruct software/hardware associated with the vehicle electronics to apply settings for customizing vehicle to use settings associated with the profile

'244, Claim 1[c]

transferring, by the server, upon verifying the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and/or hardware associated with said electronics of the vehicle to apply said one or more settings to the vehicle for customizing said vehicle to use said one or more settings associated with the profile,

EX1001 ('244 Patent), 33:23-29

'244, Claim 17[c]

transferring, by one of the servers, upon verification of the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and hardware associated the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user, the request and the transferring being via wireless communication of said vehicle.

EX1001 ('244 Patent), 35:17-24

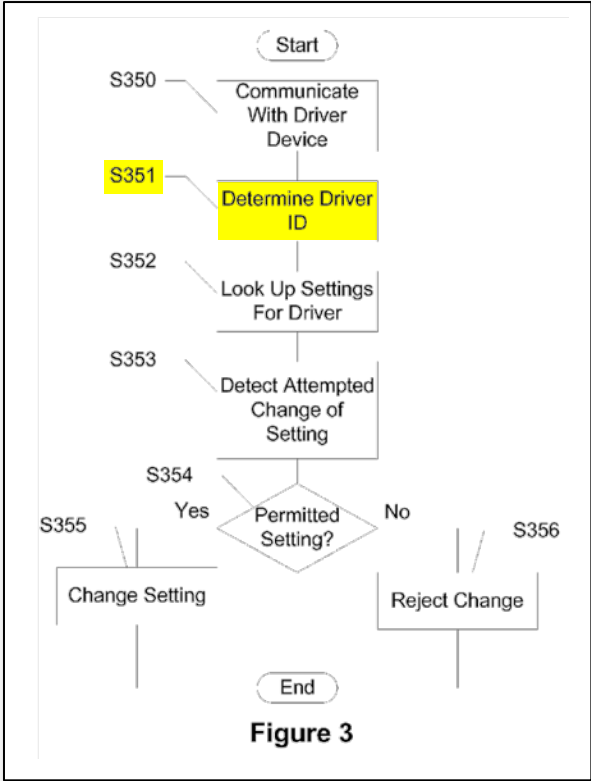
**All Grounds Fail Because Petition Fails to Show Rector in Combination with
Kleve Teaches
Server Processing User Information to Verify User for Profile Access (Claim
Limitations 1[b] and 17[b])**

Rector Fails to Teach or Suggest Any Server Processing User Information to Verify the User for Accessing the Profile

Petition’s relied-upon “comparing” function is performed by the smart vehicle

characters. The unique identifier is associated with a user of the smart vehicle. With the unique identifier, the smart vehicle determines the identity of the driver S351. A client logic and processor on the smart vehicle compares the unique identifier with a set of unique identifiers stored on a memory of the smart vehicle. Alternatively, the unique identifier may be compared with a set of unique identifiers on a server on a network. With the identity of the driver determined, the smart vehicle looks up settings for the driver S352. These settings may include driver created settings, controlling authority settings, etc. The settings are determined by comparing the driver’s identity with a database of identities with corresponding settings. This database may be on the network, on the driver’s device, on the smart vehicle’s memory, etc. With the

EX1006 (Rector), at ¶ 43



EX1006 (Rector), Fig. 3

Neither of Rector's "comparing" operations discloses or suggests any server processing information to verify a user for accessing a profile

Rector teaches that the smart vehicle performs the "comparing" operation in one of two ways: (1) comparing with identifiers stored on a memory or (2) comparing with identifiers stored on a server

1 of 2 ways

2 of 2 ways

characters. The unique identifier is associated with a user of the smart vehicle. With the unique identifier, the smart vehicle determines the identity of the driver S351. A client logic and processor on the smart vehicle compares the unique identifier with a set of unique identifiers stored on a memory of the smart vehicle. Alternatively, the unique identifier may be compared with a set of unique identifiers on a server on a network. With the identity of the driver determined, the smart vehicle looks up settings for the driver S352. These settings may include driver created settings, controlling authority settings, etc. The settings are determined by comparing the driver's identity with a database of identities with corresponding settings. This database may be on the network, on the driver's device, on the smart vehicle's memory, etc. With the

EX1006 (Rector), at ¶ 43

Neither of Rector's "comparing" operations discloses or suggests any server processing information to verify a user for accessing a profile

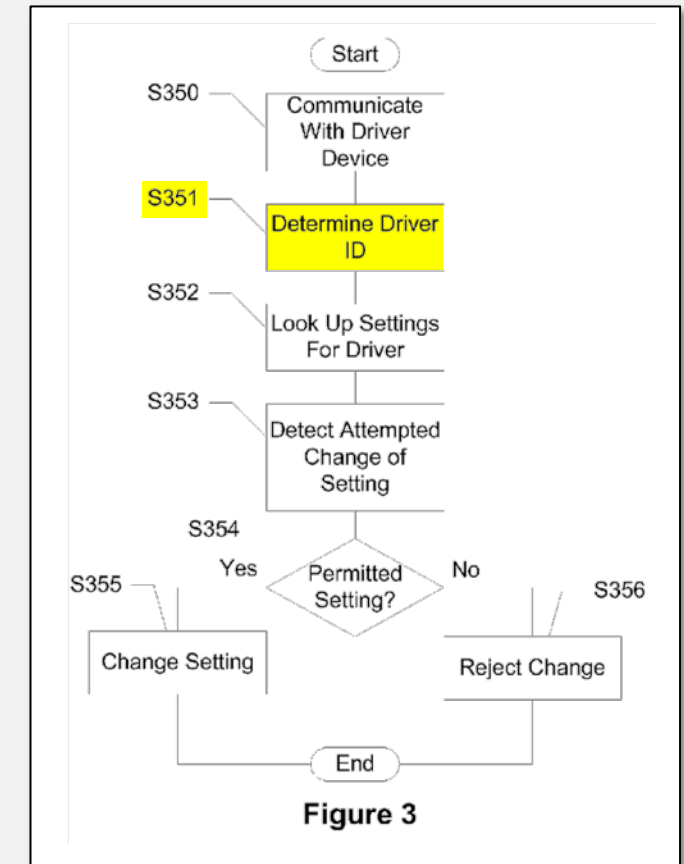
In Rector, the relied-upon "comparing" function cannot be the alleged server verifying a user for accessing a profile having settings, as the Petition incorrectly states.

[0040] The determination of a driver's identification and the subsequent initiation of the corresponding settings for the driver are performed by smart vehicle 200, in this exemplary embodiment, as follows. Transceiver 206, via antenna 208, detects the presence of wireless communication devices located within smart vehicle 200. At least the driver of smart vehicle 200 carries with them a wireless communication device such as a cellular telephone or a contactless smart card. The driver's wireless communication device is able to transmit a unique identifier corresponding to a user account for the driver. In the case of a cellular telephone, the unique identifier may be an MSISDN, IMSI, MAC address, etc. In the case of a contactless smart card, the unique identifier can be any alphanumeric, hexadecimal, or other unique string of charac-

EX1006 (Rector), at ¶ 40

characters. The unique identifier is associated with a user of the smart vehicle. With the unique identifier, the smart vehicle determines the identity of the driver S351. A client logic and processor on the smart vehicle compares the unique identifier with a set of unique identifiers stored on a memory of the smart vehicle. Alternatively, the unique identifier may be compared with a set of unique identifiers on a server on a network. With the identity of the driver determined, the smart vehicle looks up settings for the driver S352. These settings may include driver created settings, controlling authority settings, etc. The settings are determined by comparing the driver's identity with a database of identities with corresponding settings. This database may be on the network, on the driver's device, on the smart vehicle's memory, etc. With the

EX1006 (Rector), at ¶ 43



EX1006 (Rector), Fig. 3

**All Grounds Fail Because Petition Failed to Show a POSITA would have been motivated to modify Rector's more secure, local client-side verification with Kleve's less secure, remote server-side verification
(Claim Limitations 1[b] and 17[b])**

Motivation to Combine is Flawed

- The motivation to combine is flawed. A POSITA would not have been motivated to modify Rector's *more secure, local, client-side verification* with Kleve's *less secure, remote, server-side verification* under the guise of “additional security”.
- Authentication performed by local systems, i.e. client-side verification, is more secure than distributed systems
 - **Rector's client-side authentication is performed by a smart vehicle, in a local software system**
 - **Whereas Kleve's server-side verification is a distributed system, vulnerable to a variety of security attacks**
 - **A POSITA motivated to provide additional security to the client-side authentication of Rector would not have sought to modify Rector's more secure system to render it less secure with “server-side authentication, as in Kleve”**

Motivation to Combine is Flawed

- The motivation to combine is further flawed because Kleve teaches three options for verification at the vehicle, ***the MOST secure is the VCS***: “the VCS, server, or owner compare and verify authorization”
- A POSITA looking to provide “additional security,” as taught by Kleve, would not have selected the ***less-secure server-side option*** among Kleve’s three remote verification options:

[0049] The system may be further extended to facilitate the virtual key with additional security by requiring remote credential verification at the vehicle. The remote credential verification at the vehicle may be done with additional hardware assembled on the exterior of the vehicle or in the vehicle cabin. The remote credential verification may be done by the VCS, using a server, or allowing the Owner to verify the Temporary User’s request. For example, but not limited to, the Temporary User entering a credential verification password at the vehicle’s touchscreen visual display while having the VCS, server, or owner compare and verify authorization.

Petitioner's Motivation to Combine Fails the Legal Standard



Petitioner's burden not sustained. "A motivation to combine the teachings of references cannot be based on the alleged existence of a problem that does not exist in the specific asserted combination."



Aruba Networks, Inc., XR Commc'ns LLC, IPR2018-00701, Paper 10 at 10 (P.T.A.B. Aug. 27, 2018)

Federal Circuit reversed Board's obviousness determination where proposed modification was "unnecessary" to prior art system that ***"already" performs function of proposed additional feature*** and proposed ***modification "would do little more than add unwanted cost and complexity to the system"***

In re Schweickert, 676 F.App'x 988, 995-96 (Fed. Cir. 2017)

Unjustified Combination Still Fails to Teach Limitations 1[b] and 17[b]

Regardless of Petitioner's unjustified combination of Rector's disparate teachings, the prior art still fails to disclose the independent claims' limitation that a server processes user information to verify the user for accessing the profile

- The claims require the server to perform user **verification specifically for the purpose of accessing the user profile containing the profile settings**, not merely accessing the vehicle. Neither Rector nor Kleve teaches the claims' recited server-side verification.

'244, Claim 1[b]

processing, by the server, at least part of the user information to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle, at least part of the plurality of settings for the profile being stored on storage accessible to the cloud services system; and

EX1001 ('244 Patent), 33:16-22

'244, Claim 17[b]

processing, by one of the servers, at least part of the user information to verify the access for the user, the profile having a plurality of settings of the user for the vehicle, at least part of the plurality of settings of the profile being stored on storage accessible to said one or more servers; and
transferring, by one of the servers, upon verification of the user information, one or more settings of the plurality

EX1001 ('244 Patent), 35:11-16

The Petition relies on Kleve to supply a server-side verification step, but Kleve merely verifies access to a vehicle.

- Kleve's server only verifies credentials for accessing a vehicle (i.e., a virtual key to unlock and drive), not *for accessing a user profile having a plurality of settings* as the claims require.
- Relied-upon disclosures of Kleve *never mention or suggest verification for accessing a user profile*, nor the recited “processing, by the server ... user information *to verify the user for accessing the profile associated with the user account, the profile having a plurality of settings of the user for the vehicle*” (claim elements 1[b] and 17[b])
 - Kleve relies on a user's phone—pairing with the vehicle—to apply settings, e.g., “step 624” does not involve any server, but instead a phone that pairs with the vehicle directly

Reply Affirms Bases for Upholding All Claims

- Petitioner's Reply "offered neither excuse nor explanation for its failure to show a motivation to combine teachings from Rector's distinct embodiments".
- Reply affirms that the plain and ordinary meaning of "configured to instruct" is narrower than mere capability, and Petitioner's reliance on what Rector is "capable of" is insufficient to meet its burden.
- Petitioner's focus on "causation" is a "red herring", as Rector does not disclose such causation from a server transfer operation, nor does Petitioner's expert opine that it does.

'244, Claim 1[c]

transferring, by the server, upon verifying the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and/or hardware associated with said electronics of the vehicle to apply said one or more settings to the vehicle for customizing said vehicle to use said one or more settings associated with the profile,

EX1001 ('244 Patent), 33:23-29

'244, Claim 17[c]

transferring, by one of the servers, upon verification of the user information, one or more settings of the plurality of settings to the vehicle, the transferring is configured to instruct software and hardware associated the vehicle to enable said one or more settings for use on the vehicle to customize said vehicle for the user, the request and the transferring being via wireless communication of said vehicle.

EX1001 ('244 Patent), 35:17-24