

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

UNITED SERVICES AUTOMOBILE ASSOCIATION,
Petitioner,

v.

AUTO TELEMATICS LTD.,
Patent Owner.

Case IPR2023-00911
Patent No. 9,311,271 B2

**PATENT OWNER AUTO TELEMATICS LTD's PRELIMINARY
RESPONSE PURSUANT TO 37 C.F.R. §42.107**

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Patent Owner Auto Telematics Ltd. (“Patent Owner” or “Auto Telematics”) submits this Preliminary Response to the Petition filed by United Services Automobile Association (“Petitioner” or “USAA”) for *Inter Partes* Review (“IPR”) of claims 1, 3, 4, 6, and 7 (the “Challenged Claims”) of U.S. Patent No. 9,311,271 B2 (“the ’271 patent”). This response is being timely filed.

I. INTRODUCTION

A dispute in a UK court over the cause of a minor traffic accident led to the conception of the inventions claimed in the family of patents in which the ’271 patent is included. Initially, the inventors developed a mobile device application (known as the Witness App) that simply recorded video of a user’s vehicle journey in a rolling loop while also determining and recording other useful information such as time of day, speed, and GPS position converted into a trace of the vehicle’s journey on a map. Subsequently, a new application – Witness Pro – was developed allowing recordings of additional aspects of the vehicle’s journey recorded in a rolling loop and uploaded to a central server. Soon thereafter, a smartphone-based insurance telematics product was developed and offered to insurance companies in the UK as a cost-effective alternative to traditional vehicle insurance policies.

The ’271 patent describes methods and systems for logging driving information associated with a vehicle when driven. In one aspect, a mobile telecommunications device is provided that may be adapted for installation to a

vehicle and configured to log driving information associated with that vehicle. The mobile device is arranged to register the start of a driving period during which the mobile device is installed to the vehicle and the vehicle is being driven. Importantly, the mobile device is also arranged to process sensor data during the driving period to derive driving information associated with how the vehicle is driven. A selection of that driving information is then stored to the mobile device.

II. SUMMARY OF ARGUMENTS

Regarding Ground 1A: (i) the cited references fail to teach or suggest all elements of the claims, and Petitioner has misconstrued the differences between the claims of the '271 patent and the cited references; and (ii) Petitioner has provided insufficient rationale for why a POSITA would have been motivated to combine the references, basing combinations on impermissible hindsight. Regarding Ground 1B: (i) the additional reference does not cure the deficiencies of Ground 1A; and (ii) the ground for challenge is duplicative to Ground 1A. Nothing in Petitioner's Grounds 1C-1D, which assert additional references with the Ground 1A combination, cures the deficiencies of Ground 1A. Similar bases for arguments are provided for Ground 2 as provided for Ground 1A.

III. THE '271 PATENT

The '271 patent includes four independent claims (1, 4, 6, and 7). Claim 1 provides:

1. A mobile telecommunications device configured to log driving information associated with a vehicle, the mobile device comprising:

a sensor set comprising an image sensor, an audio sensor, an accelerometer, or a positioning module, or a combination thereof;

a user interface;

a processor; and

a memory;

the mobile device configured to:

determine, based on inputs received by the user interface and sensor data from the sensor set, a start of a driving period during which the mobile device is removably attached to the vehicle and the vehicle is in use;

process the sensor data from the sensor set during the driving period to derive driving information associated with how the vehicle is driven;

store a selection of the driving information to the memory, wherein the driving information is derived without data from vehicle sensors; and,

wherein the mobile communications device is controlled by a downloaded application to control the

mobile device to register the start of the driving period in response to an initialization input generated automatically in response to the sensor data having predetermined values, wherein the initialization input is generated in response to sensor data reflecting a detected speed above a predetermined threshold.

USAA-1001 at 31:29-56.

Dependent Claim 3 recites other elements of the invention of Claim 1, including controlling the mobile device to down-sample the sensor data for storage at the down-sampled rate. USAA-1001 at 31:62-67.¹

Claim 4 is similar to Claim 1, replacing the final “wherein” clause with:

wherein the mobile communications device is controlled by a downloaded application to control the mobile device to process the sensor data from the sensor set during a plurality of driving periods to derive driving information associated with how the vehicle is driven during the driving periods, the sensor data being processed during a first set of driving periods defining a benchmark against which

¹ As the cited prior art references do not render obvious or otherwise invalidate Claim 1, and any additional references relied on in its obviousness assertions as to dependent Claim 3 similarly fails, Patent Owner focuses its arguments on Claim 1.

sensor data is compared during subsequent sets of driving periods.

USAA-1001 at 32:1-29.²

Claims 6 and 7 are directed to a “data-logging system,” Claim 6 reciting:

6. A data-logging system for logging driving information received from a remote mobile telecommunications device, the data-logging system comprising a processor and memory, the data logging system comprising:

a database for storing a plurality of accounts, each account having a unique identifier and the database being arranged to store driving information associated with at least one of a vehicle and a driver; a communications interface arranged to communicate with the remote mobile telecommunications device, and receive therefrom:

² Nothing in independent Claim 4 modifies Patent Owner’s positions stated for Claim 1. Thus, Patent Owner’s arguments as to Claim 1 apply equally to Claim 4. Patent Owner addresses new elements introduced in Claim 4 and reserves the right to raise any additional arguments regarding the validity of the Challenged Claim if an IPR is instituted.

a unique identifier for association of the remote mobile telecommunications device with a corresponding one of the plurality of accounts; driving information to be logged to that corresponding account, the driving information derived based on inputs received by a user interface of the remote mobile telecommunications device and sensor data from a sensor set of the remote mobile telecommunications device, the driving information derived without data from vehicle sensors; and, wherein the driving information comprises at least one of a driving score and sensor data captured and processed by the remote mobile telecommunications device during a driving period during which the remote mobile telecommunications device is removably attached to the vehicle being driven by the driver, the data logging system being further arranged to process the driving information logged to a corresponding account to generate a driving score used to determine a risk profile for at least one of the vehicle and driver.

USAA-1001 at 32:40—33:4.

Claim 7 adds to Claim 6:

wherein the driving score is used to define an insurance premium associated with the account and the data logging system is further arranged to communicate to the remote mobile telecommunications device an insurance offer generated in response to the driving information received from the remote mobile telecommunications device.

USAA-1001 at 34:15-21.³

Claims 1 and 4 require that the mobile telecommunications device be configured to determine, “based on inputs received by the user interface and sensor data from the devices sensor set, *a start of a driving period.*” USAA-1001 at 31:39-42, 32:11-14 (emphasis added). Claim 4 further requires that the mobile device be “controlled by a downloaded application” to “register the start of the driving period in response to an initialization input,” *id.* at 31:50-56, and that the mobile device “process the sensor data from the sensor set during a plurality of driving periods,”

³ Nothing in independent Claim 7 modifies Patent Owner’s positions stated for Claim 6. Thus, Patent Owner’s arguments as to Claim 6 apply equally to Claim 7. Patent Owner addresses new elements introduced in Claim 7 and reserves the right to raise any additional arguments as to the validity of the Challenged Claim if an IPR is instituted.

where the “first set of driving periods [defines] benchmark against which sensor data is compared during subsequent sets of driving periods.” Claim 4, *id.* at 32:21-29.

According to the ‘271 patent, when the sensors of the mobile device detect, for example, a threshold speed, the mobile device generates an initialization input to cause the application on the mobile device to register the start of a driving period. *See* USAA-1001 at 31:49-56. The invention’s ability to determine the start of a driving period and subsequent driving periods is an important aspect of the invention for collecting data for comprehensive analysis and presentation of data from specific driving periods. The invention provides:

[A] mobile telecommunications device adapted for installation to a vehicle and configured to log driving information associated with the vehicle when driven ... *[wherein] the mobile device [is] arranged to execute the downloaded application to control the mobile device to: register the start of a driving period during which the mobile device is installed to the vehicle and the vehicle is being driven by a driver; process sensor data ... during the driving period to derive driving information associated with how the vehicle is driven; and store a selection of the driving information to the memory.*

USAA-1001 at 1:59—2:9 (emphasis added). The ‘271 patent describes how the mobile device may be configured to determine the start of a driving period:

The initialisation input may ... be generated automatically in response to the mobile device being installed to the vehicle and/or the vehicle being driven. The initialisation input may be generated automatically

in response to the sensor data having predetermined values. For example, if the sensor data reflects a detected speed above a predetermined threshold ... *this can be used to trigger the start of the driving period*. Similarly if the sensor data reflects that the mobile device is held securely to the vehicle in a predetermined position (for example, via [an] adapter) *this can also be used to trigger the start of the driving period*. To this end, the adapter and/or the mobile device may comprise a registration module configured to register the installation of the mobile device to the vehicle and/or the adapter...

USAA-1001 at 3:26-54 (emphasis added).

Claims 1, 4, 6, and 7 also provide that driving information “*is derived without data from vehicle sensors*.” USAA-1001 at 31:47-48; 32:12-14; 32:59-60; 34:2-3. The invention determines driving information specific to an *individual* rather than driving information specific to a *vehicle* (on which driving information would be based if data were collected from the vehicle’s sensors).

Claims 1 and 4 further require that the mobile telecommunications device be configured to “process the sensor data from the sensor set during the driving period to derive driving information associated with how the vehicle is driven” and to store that driving information to the mobile device’s memory. USAA-1001 at 31:43-45; 32:15-17. Similarly, Claims 6 and 7 recite that “the driving information [is] derived based on inputs received by a user interface of the remote mobile telecommunications device and sensor data from a sensor set of the remote mobile

telecommunications device.... the sensor data captured and processed ... during a driving period during which the remote mobile telecommunications device is removably attached to the vehicle being driven by the driver.” USAA-1001 at 32:55-66; 33:20—34:9.

[T]he executed application may be arranged to control the mobile device to process sensor data from the sensor set during a plurality of driving periods to derive driving information associated with when and/or how the vehicle is driven for each of the driving periods.

USAA-1001 at 6:1-5.

[T]he processor is arranged to process sensor data from the sensor set during the driving period to derive driving information associated with when and/or how the vehicle is driven and store a selection of the driving information to the [mobile device’s] memory.

USAA-1001 at 10:49-53.

[S]ensor data captured from any one of the aforementioned data capture modules 21, 23, 25, 27 is processed by the processor module 33, to generate driving information. By driving information is intended any data which may be derived from raw sensor data captured by any of the aforementioned modules 21, 23, 25, 27.

USAA-1001 at 16:20-25.

For the data logging of Claims 6 and 7, sensor data is continuously collected and stored during each driving period.

[S]ampled sensor data is stored in data files..., [e]ach data file represent[ing] a plurality of sequentially sampled sensor data, captured over a defined period of time, which will be referred to as a ‘data file period.’ ... [W]hilst the image capture module 21 is continuously sampling image data..., this plurality of captured image data is grouped together for storage in video data files ...

Sampled sensor data and derived driving information is also continuously analysed by the processor module 33 for the purposes of detecting a driving incident. As soon as a driving incident is identified, the associated sensor data and derived driving information is stored in a data file in accordance with the data recording strategy. ... Whilst each different type of sensor data may be recorded in separate data files, in preferred embodiments, all the different types of sensor data sampled by the mobile telecommunications device 17 are stored together in a single data file in accordance with the user selected data recording strategy.

USAA-1001 at 17:4-40.

The initiation of a driving period starts this sampling and storage of data for generation of driving information.

Once the driving period has been initiated, sensor data is sampled and recorded in storage 34.... [T]he sampled sensor data is used to generate driving information The sampled sensor data and the driving information is continuously analysed by the processor module 33...

USAA-1001 at 18:49-60.

[T]he mobile telecommunications device 17 will continue to sample and record sensor data even once a driving incident has been detected, unless the mobile telecommunications device 17 detects that the driving period has terminated... If the driving period has terminated, the present method is terminated and the device stops recording sensor data.

USAA-1001 at 19:54-60.

It is thus important for the invention to define the start and end of each driving period and subsequent driving periods for the collection, analysis, and display of collected sensor data and driving information by the mobile device's downloaded application.

As required by Claims 6 and 7, to associate the driving score with a driver, the data files are uniquely associated with a mobile device, and thus a vehicle to which it is attached, and an account of a driver of the vehicle. Specifically, Claims 6 and 7 require that “driving information is logged to [a] corresponding account” and “the driving information comprises at least one of a driving score and sensor data captured and processed by the remote mobile telecommunications device during a driving period.” USAA-1001 at 12:4-7; 32:54-55; 32:61-66; 33:19-20; 34:4-7. As required by Claims 6 and 7, the driving score is used to “determine a risk profile for at least one of the vehicle and driver,” Claim 7 further requiring that “the driving score is used to define an insurance premium associated with the account.” USAA-1001 at 12:7-9.

The comprehensive data collected by the invention, including captured sensor data, including image data, such as video footage, allows it to generate a driver profile for each driver for determination of a risk profile and insurance premium. *See* USAA-1001 at 21:38—22:22.

Importantly, the mobile device itself, not a separate server, performs these determinations and presents the analysis at the user interface of the mobile device, not merely at an interface outside of the vehicle and/or separate from the mobile device. The features of all figures of the '271 patent, including FIGs. 4a and 4b, representing the method of data collection and analysis, and FIGs. 5 to 24 are performed at the mobile device.

Thus, the invention claimed by the claims as a whole is dramatically different from the state-of-the-art at the time, including the prior art references relied on by Petitioner.

IV. PRIMARY PRIOR ART REFERENCES RELIED ON BY PETITIONER

A. Curry *et al.* – Exhibit USAA-1005

Curry discloses a system and method that seek to prevent drivers from using their mobile phones at various times and/or conditions, particularly while driving. However, Curry fails to disclose, teach, or suggest a mobile telecommunications device determining a start of a driving period and then processing sensor data from a sensor set on the mobile device to derive driving information associated with how

the vehicle is driven throughout that driving period, or storing specifically a selection of such driving information to memory on the mobile device. Rather, Curry discloses a system and method that collect speed and location information only at a time at which, and for a period after which, the user's mobile device has been triggered to detect such speed and location data after a phone call is initiated by or received at the mobile device. Specifically, "[w]hen a call is made or received using a mobile phone 106, the mobile phone client 110 can record location, speed, and acceleration data from sensors embedded in the wireless device," USAA-1005 at 8:30-32, and then store that raw data "for an extended time period ... in order to provide sufficient information for a user activity mode recognition program 120," *id.* at 9:1-3, which program "estimates the context of mobile phone use ... [and] can be used to determine if the use of a mobile phone in the related context violates the pre-set permission policies." *Id.* at 9:6-11. When the program determines that the user is driving during that call, a call handling program may then control (*e.g.*, limit or prohibit) phone operation. *Id.* at 9:14-20.

Because Curry addresses the problem and dangers associated with distracted driving caused by mobile device usage, it need not (and does not) disclose monitoring how a vehicle is being driven at all times. Rather than tracking a user's driving information from the start of and throughout a driving period, the Curry system triggers all motion data collection upon the initiation or receipt of a call at

the mobile device. Further, while Curry's mobile device transmits certain collected raw data to a remote server, the Curry mobile device does not derive any driving information from the data collected from sensors on the mobile device, much less driving information that is "associated with how the vehicle is driven," and likewise does not store a selection of any such derived driving information in memory on the device, all as required by Claim 1.

Curry's mobile device merely stores raw sensor data and estimates, based on the raw sensor data, a context or activity mode of mobile phone use, e.g., simply whether a user is driving, walking, or standing still, and whether a user is permitted to operate the mobile phone in that context. USAA-1005, 9:1-11.

B. Rabu – Exhibit USAA-1013

Rabu provides a method for determining an orientation angle and movement of a portable media device ("PMD") and determines differing "modes of operation" of that device based on a frequency spectrum associated with the device's motion. USAA-1013 at 2:61—3:4. However, it fails to disclose, teach, or suggest the determination of the start of a driving period, the processing at the PMD of sensor data to derive driving information associated with how the vehicle is driven throughout such a driving period, or storing a selection of such driving information into memory on the PMD. Rather, Rabu describes determining a "holder status" that indicates "whether the PMD is docked, resting on a surface, or being held," *id.* at

1:60-62, and determining a “holder motion status” that includes “determining whether the PMD is in a moving vehicle, in a stationary vehicle, being held by a moving person, or being held by a stationary person.” *Id.* at 1:62-65.

Rabu determines a frequency spectrum associated with the holder motion and from such frequency spectrum determines the motion status of the PMD, *id.* at 4:29-33, and thereafter implements a “mode of operation” for the PMD based on that motion status. In contrast to the ’271 patent’s location determination, Rabu discloses frequency analysis to determine small movements of a device for distinguishing docking status. *Id.* at 2:65—3:1; *compare to* USAA-1001 at 15:57-61. For example, while Rabu is concerned with “the difference between the first location and the second location [being] more than a threshold” to determine movement differences between a moving vehicle or walking person (USAA-1013 at 4:52-58), Rabu is not concerned with “an initialization input ... generated in response to sensor data reflecting a detected speed above a predetermined threshold,” as recited by Claim 1 of the ’271 patent. Further, although Rabu compares frequency data to a type of “benchmark” (stored frequency spectra) to determine a type of motion (USAA-1013 at 7:20-28), Rabu does not provide its frequency spectrum as “sensor data being processed during a first set of driving periods defining a benchmark against which sensor data is compared during subsequent sets of driving periods,” as recited by

Claim 4 of the '271 patent. Rabu is not concerned with distinguishing and logging data within different driving periods, as required by Claims 1, 4, 6, and 7.

C. Katayama *et al.* – Exhibit USAA-1024

Katayama is directed to “a vehicle-mounted driving recorder that can facilitate an after-the-fact analysis on not only situation data at a time of an accident but also situation data at a time of [a risk incident].” USAA-1024, [0009]. Katayama discloses storing situation data without reference to a start of a driving period. Katayama discloses activating a driving recorder “by the electric power supplied from a vehicle battery” to record situation data. *Id.*, [0039]. Further, Katayama discloses that “the situation data during a certain period is transferred from the temporary data storage section 802 to the situation data storage section 803,” but only “after the driver determines the situation as [a risk incident] or the accident and pushes the button switch 5 and then the data administration section 804 receives the input data indicating the [risk incident].” USAA-1024, [0050]-[0051]. How the situation data is recorded in Katayama, whether or not determined by driver confirmation, is dependent on a learning function (*see id.* at [0053]-[0054]), a key difference between Katayama and the '271 patent.

Katayama classifies and categorizes situation data based on importance as determined by the learning function (*id.*, FIG. 5, data administration section 804) accessing predetermined criteria (*id.*, FIG. 5, judgment criterion parameter storage

section 805) and configures its data storage based on the learned categories of situation data. *Id.*, [0012], [0051]-[0054], [0057], [0058]. Katayama stores all classified situation data to “conduct an after-the-fact analysis ... by transmitting the classified situation data to ... a center computer and analyzing them,” but leaves out situation data from this analysis if “the capacity of the situation data storage section 803 runs out.” *Id.* at [0057]. Based on the learning function, Katayama may erase a part of its stored situation data that is less important but does not store this less important situation data in short term storage separate from long term storage. *See id.*, [0055], [0058], FIG. 5. Instead, both more important and less important data are stored in the same storage (*see id.*, FIG. 5, situation data storage section 803), with the more important data being maintained and the less important data potentially being erased from situation data storage section 803 if capacity runs out. *Id.*, [0055], [0057].

According to Katayama, the difference between “temporary data storage section 802” and “situation data storage section 803” is merely that the data in “situation data storage section 803” is a categorized version of the data in “temporary data storage section 802” after a user pushes a button on the recording device to move the categorized data to “situation data storage section 803.” *See id.*, [0051]-[0054]. Katayama discloses that, thereafter, “situation data storage section 803” may overflow with too much data, and data categorized as “ordinary” may be overwritten.

See USAA-1024, [0016], [0055]. In contrast, data in long term memory of the '271 patent is not overwritten. USAA-1001 at 8:1-6; 16:53-64.

Thus, Petitioner's repeated allegation that "situation data storage section 803" of Katayama is "long term" storage like that in the '271 patent is erroneous. *See* Pet. at 38-39, 44-45, 49, 51.

D. Callopy et al. – Exhibit USAA-1045

Callopy is directed to a system for dynamic insurance customization in which "dynamic insurance rate adjustments or incentive offer(s) to adopt dynamic insurance coverage are communicated to a vehicle operator in order to allow the vehicle operator to adjust various parameters before an actual change to an insurance rate is communicated to a service provider or trusted party." USAA-1045, Abstract. Cited portions of Callopy disclose a "system for real-time monitoring of a driver to facilitate determination of insurance rate(s)" by an insurance provider. *Id.*, [00307]. *See also id.*, [00322], [00332].

In Callopy, an onboard monitoring system comprising sensors of a vehicle, in conjunction with a mobile device, monitors and gathers information regarding "a driver's driving habits, skills, route of travel, activity, etc., ... and forwards the information to the insurance provider 4035." *Id.*, [00307], [00322], FIG. 40. While some of the sensors (e.g., GPS 4110, and accelerometer 4120) can be in the mobile device, at least some of the sensors (e.g., on-board data or diagnostics system 4130)

are part of the vehicle's onboard system to "provide information regarding how a vehicle is being driven and the current condition of the vehicle." *Id.*, [00316], [00320], [00322], [00323], [00325], FIGs. 40-41.

Although local application(s) installed on the on-board monitoring system or the mobile device can "facilitate monitoring, processing, and generation of data for insurance purposes," thus "allowing the processed data to be stored as opposed to the raw data," (*id.*, [00330], FIG. 41, buffer 4170), the external insurance provider system 4035 aggregates information from different sources, including the data from the system's buffer 4170, and "employs various analytical methods (by utilizing driving analysis component 4050) to facilitate determination of an appropriate insurance rate and any other pertinent information concerning the driving habits of the driver." *Id.*, [00307], [00322], FIGs. 40-41.

The external insurance provider system 4035 also includes "an identification component 4220, an authentication component 4230, an evaluation/authorization component 4240, along with a storage device 4250 containing driver account database(s) to identify a driver and control their operation of a vehicle as required." *Id.* at [00332], FIG. 42.

Like Curry's external Driving Safety User Control and Monitoring Web Site (on device) 102, Callopy discloses "a remote monitoring system 4035 [that] can be employed to interact with the insurance provider system 4035, the on-board

monitoring system 4025 and/or the mobile device 4005,” the remote monitoring system 4035 being “any device suitable to facilitate presentation of information and means for allowing a user to interface with the information and the various components of systems 4000 and 4100, suitable devices includ[ing] a personal computer, laptop, personal digital assistant, cell phone, etc.” *Id.*, [00322], FIGs. 40-41. USAA-1005, FIG. 1, FIG. 2. In contrast to such an interface being on the mobile device of the ’271 patent, Callopy discloses this interface being external to the mobile device. USAA-1045, [00322].

The ’271 patent thus has key differences from Callopy, including that the cited portions of Callopy (1) do not depend on only sensors in its mobile device; (2) perform all of Callopy’s data analysis for dynamic insurance customization off the mobile device (at its insurance provider system); and (3) disclose a user interface to the Callopy system that is also off the mobile device (at Callopy’s remote monitoring system), in contrast to the user interface of the claimed ’271 patent’s mobile device.

V. PERSON OF ORDINARY SKILL IN THE ART

Solely for the purpose of this Preliminary Response, Auto Telematics does not challenge USAA's proposed definition of a person of ordinary skill in the art ("POSITA"). Auto Telematics reserves the right to provide an alternative definition of a POSITA if an IPR is instituted.

VI. CLAIM CONSTRUCTION

In an IPR, claim terms are generally given their ordinary and customary meaning as would have been understood by a POSITA at the time of the invention and in the context of the entire patent disclosure. *See* 37 C.F.R. §42.100(b); *see also Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc).⁴ Here, Petitioner initially states that no express constructions are required in this proceeding," Pet. at 3. Nonetheless, Petitioner then argues that the term "driving period" of Claim 1 "establishes just two 'driving period' attributes: (1) 'the mobile device is removably attached to the vehicle' and (2) 'the vehicle is in use.'" *Id.* at 4.

⁴ In the parallel District Court proceeding involving the '271 patent (among others), Petitioner sought construction of several terms including "sensor set," "driving period," "driving information," and "driving score." As to these terms, the Court agreed with Patent Owner that no construction was required and the plain and ordinary meaning of each term applied.

Further, Petitioner states, “[t]hese attributes may be satisfied by a start of a monitoring period, whether at the onset of vehicle driving or whether instead before or thereafter.” *Id.* Petitioner posited similar arguments in the parallel District Court proceeding, which arguments were rejected by the Court, and should likewise be rejected here.

Petitioner’s proposed construction is additionally flawed because it introduces unsupported limitations for the driving period not included in the claims. Specifically, Petitioner’s characterization of the start of a driving period as a “monitoring period” that starts at any time with respect to the onset of driving, *id.*, is simply an inaccurate generalization of “driving period” that has no basis in the specification or claims. The claim language itself accurately captures the scope of the invention, and there is no need for a different construction incorporating Petitioner’s manufactured limitations for the driving period.

Petitioner seeks to rewrite the claim language and then later argue that its rewritten claims require the Board to agree to each additional limitation Petitioner argues for in its Petition. Petitioner cannot create new terms for constructing the claims to suit its arguments. The Board should decline to adopt Petitioner’s constructions and instead agree with Patent Owner that the terms “driving period” and “start of a driving period” should be construed consistent with its plain and ordinary meaning.

VII. GROUNDS 1A AND 1B ARE REDUNDANT AND/OR DUPLICATIVE

Under Ground 1A, Petitioner contends that Claim 1 of the '271 patent is unpatentable as obvious over Curry in view of Rabu, and, under Ground 1B, that Claim 1 is obvious over a redundant and/or duplicative combination of Curry, Rabu, and Katayama. *See* Pet. at 1. Petitioner's Grounds 1A and 1B are redundant regarding at least claim element [1.10].

Under Ground 1A, Petitioner alleges that Curry-Rabu reads on claim element [1.10], Pet. at 34-41, and further cites to sections of Katayama in asserting the Curry-Rabu combination for claim element [1.10]. *Id.* Under Ground 1B, Petitioner again cites to the same sections of Katayama to read on claim element [1.10]. *Id.* at 48-51. However, Petitioner does not provide meaningful distinctions between the same citations in Grounds 1A and 1B. *See* Pet. at 37-41; *compare id.* at 48-51.

Under 35 U.S.C. §103, Ground 1A as presented is deficient because it relies on Katayama without specifying Katayama in the basis for Ground 1A. Additionally, Grounds 1A and 1B are vertically redundant for applying the same references for the same set of facts when asserting Katayama in the Curry-Rabu combination while also asserting Curry-Rabu-Katayama. Because a redundant ground can create a burden for the Board, the Board may decline to consider the redundant ground. *See, e.g., Illumina, Inc. v. The Trustees of Columbia University in the City of New York*, IPR2012-00007 (Paper No. 54) at *11-12 (PTAB May 10, 2013), *citing id.* (Paper

No. 38) at *22 (PTAB March 12, 2013). *See also Liberty Mutual Ins. Co. v. Progressive Casualty Ins. Co.*, CBM-2012-00003 (Paper No. 7), at *2 (PTAB Oct. 25, 2012) (not proceeding on redundant grounds in absence of meaningful distinction). Therefore, the Board should deny institution on at least one of Grounds 1A and 1B.⁵

VIII. PETITIONER CANNOT SHOW THAT CLAIMS 1, 3, 4, 6, AND 7 ARE OBVIOUS

Under Grounds 1A and 1B, Petitioner contends that Claim 1 of the '271 patent is unpatentable as obvious over Curry in view of Rabu, and, at the same time, over Curry and Rabu, further in view of Katayama. Pet. at 1. Petitioner further contends, under Ground 1C and 1D, that claims 3 and 4 are unpatentable as obvious over additional references (Tamir and McClellan) in various other combinations with Curry and Rabu. *Id.* Further, under Ground 2, Petitioner contends that claims 6 and 7 are unpatentable as obvious over Callopy in view of Curry. *Id.* Petitioner is incorrect on all grounds.

⁵ In discussing the deficiencies of Petitioner's arguments regarding Curry, Rabu, and Katayama, Patent Owner combines its arguments for Grounds 1A and 1B for the Board's efficiency.

A patent claim is unpatentable under 35 U.S.C. §103 if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious to a POSITA at the time the application was filed. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is based on underlying factual determinations, including (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) objective indicia of non-obviousness. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966).

“In an [IPR], the petitioner has the burden ... to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (*citing* 35 U.S.C. §312(a)(3) (requiring IPR petitions to identify “with particularity ... the evidence that supports the grounds for the challenge to each claim”)). Additionally, 37 C.F.R. §42.104(b)(4) requires that the Petition “specify where each element of the claim is found in the prior art ... relied upon.” This burden of persuasion never shifts to Patent Owner. *See Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). Petitioner has not met this burden.

Further, a determination of obviousness cannot be based on “mere conclusory statements.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F. 3d 1364, 1380 (Fed. Cir.

2016). “[I]nstead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness” based on a combination of references. *See In re Nuvasive, Inc.*, 842 F.3d 1376, 1382 (Fed. Cir. 2016); *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006) (cited with approval in *KSR*, 550 U.S. at 418).

The requirement of a reason to combine cited references is a safeguard against hindsight bias, which is characterized by the “temptation to read into the prior art the teachings of the invention in issue.” *KSR*, 550 U.S. at 421 (quoting *Graham*, 383 U.S. at 36); *see also InTouch Technologies, Inc. v. VGO Commc’ns, Inc.*, 751 F.3d 1327, 1351 (Fed. Cir. 2014) (finding that testimony did not articulate reasons to combine and improperly used the challenged patent as a roadmap); *ActiveVideo Networks, Inc. v. Verizon Commc’ns, Inc.*, 694 F.3d 1312, 1327 (Fed. Cir. 2012) (finding that a conclusory statement by an expert witness that a POSITA would have known how to combine references to achieve the claimed invention “is not sufficient and is fraught with hindsight bias.”).

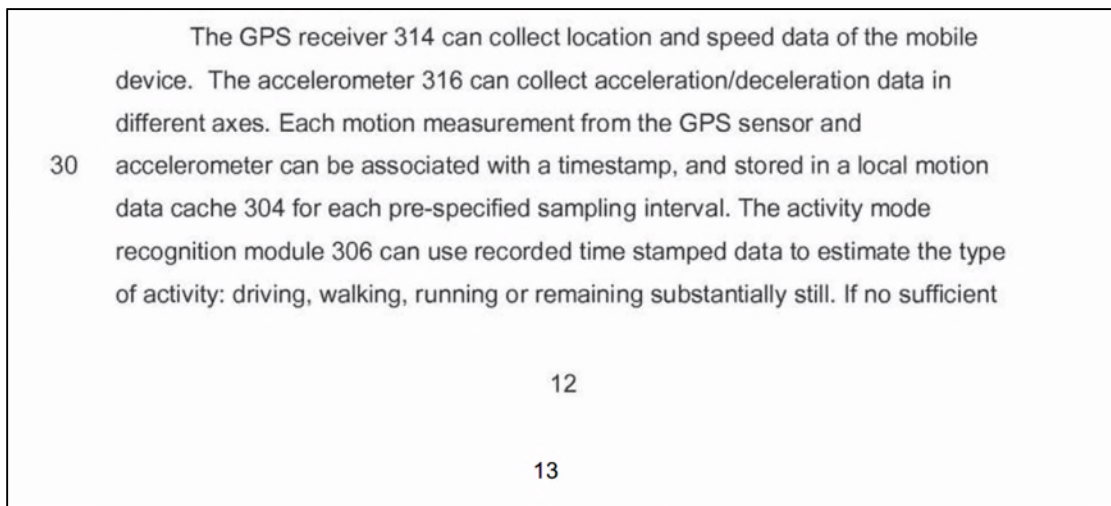
A. Petitioner Cannot Show That the Challenged Claims Are Obvious Over the Cited Art

Petitioner has not shown with particularity why the ’271 patent is unpatentable. Specifically, Petitioner has misconstrued the differences between the claims of the ’271 patent and the asserted prior art while providing insufficient rationale for why a POSITA would have been motivated to combine the cited

references to arrive at the claimed subject matter. Additionally, Petitioner's rationale to combine is based on impermissible hindsight. Notwithstanding the above, even if one were to make Petitioner's proposed combination of Curry, Rabu, and Katayama, such would not result in the claimed invention of the '271 patent.

1. Petitioner Fails to Indicate with Particularity How the Cited Art Maps the Claims of the '271 Patent and Misconstrues the Differences Between the Claims and the Cited Art

As an initial matter, Patent Owner objects to Petitioner's misciting of Curry throughout the Petition. At least due to Petitioner's incorrect citations, the Petition is substantially defective. Patent Owner notes that USAA-1005, Petitioner's Curry reference, has two differing page numbers on each page. An example screenshot image of page 13 (or 12) of the Curry reference is shown below:



USAA-1005 at 13 (showing Petitioner's renumbering of page 12 of the original International Publication No. WO 2010/042545 A2).

The bottom page number should be the correct page for citations, because such page numbering begins on the first page of the Curry reference as page 1. The top page number on each page is incorrect because that page numbering does not include the first page of the Petitioner's USAA-1005 reference. Petitioner sometimes cites to the bottom page number and sometimes to the top page number.⁶

Further, throughout the Petition and Dr. Michalson's expert declaration, Petitioner inconsistently cites to pages of Curry such that the Petition and expert declaration citations do not match. For example, on pages 22-28 of the Petition, Petitioner cites to USAA-1005 at 15:7-22 (*citing* USAA-1003, ¶¶138-140). But on pages 93-96 of the expert declaration (USAA-1003, ¶¶138-140), Petitioner cites to USAA-1005 at 16:7-22. This problem occurs repeatedly.

Further, exacerbating this miscitation, Petitioner often cites to large swaths of Curry over multiple pages, without quoting Curry, such that Patent Owner must somehow figure out the sections of Curry to which Petitioner refers. *See, e.g.*, Pet. at 17, where Petitioner states, "These among other advantages would have amply motivated a POSITA to integrate Rabu's teachings into Curry in a manner enabling Curry's phone 106 both to determine, based on user inputs and sensor data, a start

⁶ The same issue of miscitation to Curry applies to IPR2023-00518, IPR2023-00857, and IPR2023-00768.

of a driving period USAA-1003, ¶115; USAA-1005, 9:15-10:14, 12:20-15:22, 16:30-17:7, FIGS. 3, 4, 6; USAA-1013, 24:8-3:10.” The statement itself is conclusory, but the broad citing makes it even harder for Patent Owner to know to what Petitioner is referring.

(i) Ground 1A⁷

Petitioner contends that Claim 1 of the '271 patent is unpatentable as obvious over Curry in view of Rabu, and further in view of Katayama. Pet. at 6-51. This is incorrect, as Curry, Rabu, and Katayama, individually, and in combination, fail to teach or suggest all of the elements of the claims, including at least the elements numbered by Petitioner as [1.3], [1.6], [1.7], and [1.10].⁸ See USAA-1001 at 31:38-45; 31:49-56.

⁷ Petitioner cites to Katayama without explanation in Ground 1A, although the combination for Ground 1A is cited as Curry-Rabu. See Pet. at 37-41. Patent Owner reserves comments on the specific teachings of Katayama until discussing Ground 1B.

⁸ For ease of reference, Patent Owner adopts Petitioner's naming convention of the different features of the claim elements (e.g., [1.1], [1.2], etc.). See Pet. at xi-xv. Patent Owner rejects any implications or inferences arising from such naming convention.

In an attempt to determine “(1) the scope and content of the prior art; [and] (2) any differences between the claimed subject matter and the prior art,” Petitioner has not particularly pointed out how the cited parts of Curry, Rabu, or Katayama map to the claim elements. Petitioner also misapplies aspects of the cited art of Curry, Rabu, and Katayama. None of the references that Petitioner relies on teaches or suggests all of the features of the claimed invention, or at least the features of claim elements [1.3], [1.6], [1.7], and [1.10].

Petitioner does not clearly and completely map portions of Curry and/or Rabu and/or Katayama to every element of the claims in the Petition. Sections III.A.1.(a)-(b) and B.1.(a) of the Petition merely describe each of the cited references individually without relating them to the claims. *See* Pet. at 6-10, 41-44. In Sections III.A.1.(c) and B.1.(b), Petitioner combines the Curry, Rabu, and Katayama references regarding how they could be integrated, indicating generic benefits and advantages of combining them, without indicating how individual features of these references read on the claims. *See id.* at 11-18, 44-48.

By the time Petitioner references Claim 1 of the '271 patent in Sections III.A.2 and B.2, it does not clearly, distinctly, completely, and with particularity, map Curry, Rabu, or Katayama to every element of the claims, or explain why any missing or different features would have been obvious. Petitioner has the burden to do so.

Regarding Ground 1A, it is not clear how Petitioner is mapping Curry or Rabu to [1.3] regarding the “user interface,” and even as mapped, Petitioner has not considered the definition of “user interface” in relationship to the rest of Claim 1 (e.g., as the term is defined in the specification of the ’271 patent). *See* Pet. at 21-22, 24-28.

Claim terms should be interpreted in light of the claim as a whole. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1537, 218 USPQ 871, 877 (Fed. Cir. 1983) (“the question under 35 U.S.C. §103 is not whether the differences [between the claimed invention and the prior art] would have been obvious” but “whether the claimed invention as a whole would have been obvious.”). In this case, the question is not just whether the claim recites a “user interface” and whether the art discloses a user interface, but the meaning that the user interface has in the whole of Claim 1 and the differences between that and the cited art.

Further, a claim should be interpreted in light of the specification, and although it is generally considered improper to read limitations contained in the specification into the claims, this is not the case here. *See In re Winkhaus*, 527 F.2d 637, 188 USPQ 129 (CCPA 1975). Here, clear limitations for the user interface are recited in the claim, and the user interface is clearly defined in both the specification and the claims to be an essential part of the mobile device. These limitations contrast from the “user interface” cited by Petitioner.

In Claim 1, “the mobile device [comprises] ... a user interface.” USAA-1001 at 31:30-37. Additionally, in Claim 1, “the mobile device [is] configured to... determine, based on the inputs received by the user interface and sensor data from the sensor set, a start of a driving period.” *Id.* at 31:38-41. In contrast, Petitioner maps the user interface of the claims to Curry’s “graphical user interface” (GUI) (USAA-1005 at 7:20-27; 8:5-18; 20:15-17), which, as disclosed by Curry, is actually the GUI at the “driving safety user control and monitoring website” on device 102 of Curry. USAA-1005 at FIG. 1, 102. This GUI cannot read on the user interface of the claims of the ’271 patent, at least because the user interface of the independent claims (Claims 1, 4, 6, and 7) is claimed as being comprised in (or of) the mobile device. For example, Petitioner asserts that “Curry-Rabu makes that determination [of start of a driving period] based on concurrent use of inputs received by the user interface and sensor data from the sensor set.” Pet. at 29. However, the user interface to which Petitioner refers is located outside of the Curry-Rabu phone according to Petitioner’s combination.

Specifically, Curry’s driving safety user control and monitoring website 102 and driving safety data server 104 are disclosed as being outside of Curry’s mobile phone 106 and mobile phone client 110. USAA-1005 at FIG. 1; 7:30—8:27. Curry’s mobile phone client is wirelessly connected to the driving safety data server, which is centrally managed for providing software for download to the mobile phone client

in a computer network and for providing use permission data to the mobile phone client. *Id.* at 7:31; 8:21-26.

Importantly, Curry's driving safety data server 104 performs certain aspects of Curry's system that Curry's mobile phone does not perform. Curry discloses, "The mobile device control module can be downloaded and operated on the wireless device, with some aspects of the control module operated on and communicated with the data server." *Id.* at 3:13-15. The difference here between Curry and the '271 patent is significant, because the mobile device of the '271 patent does much more than Curry's mobile phone client 110. Curry's mobile phone client 110 uses data in the motion data cache to "estimate the *context* of the mobile phone use" (emphasis added) for dynamic call handling (allowing or blocking phone use) but otherwise passes sensor data from the motion data cache 118 as "driving safety performance data" to the "driving safety data server" 104 for further processing and scoring and to the "driving safety user control and monitoring website" for visualization of the driving safety performance data related to the specific *content* of the sensor data (e.g., "to enable visualization of possible violations of mobile phone use or unsafe driving behavior"). *See* USAA-1005 at FIG. 1; 7:30—9:33 (listing each of the features performed by various elements of Curry's system).

While Petitioner asserts that "Curry's client 110 determines phone 106's operating mode and, based on phone sensor data, derives driving behavior

information used to generate a user driving safety score,” Curry’s phone does not “generate a user driving safety score.” *See* Pet. at 12. *See also* Pet. at 20 (“[U]s[ing] the derived information to generate a ‘driving safety score’” is not generating a score.). *See also infra* Part VIII.A.1 Ground 2 discussion regarding determination of scores by Curry’s driving safety data server.

In contrast, the mobile device of the ’271 patent, using native processing functionality, performs all the features of Claim 1 and more without needing to pass sensor data or other driving information to a server for post-processing. *See* USAA-1001 at FIG. 3; 14:32-34; 13:36-42 (processor executes the downloaded application); 13:43—14:31 (processor’s execution of application includes forwarding data related to a driving incident to an insurance server and/or emergency services and/or a personal contact of the driver); 18:30-48 (processor determines, registers, and initiates the start of a driving period); 15:29-31, 18:49-54 (processor continuously processes and analyzes sensor data); 16:20-23 (processor generates driving information); 16:34-37, 18:55-57, 18:63—19:28 (processor determines whether a driving incident has occurred); 16:65—17:40 (processor facilitates a data recording strategy to log data by data file periods); 18:57-60 (processor stores driving information of data file period(s) associated with a driving incident to protected storage); 19:60—20:15 (processor determines the end of a driving period and the expiration of a data file period, and initiates a new data file period if the

driving period has not ended); 18:1-7 (processor encrypts stored data files); 22:46-67 (processor performs benchmarking); 10:1-12 (processor pairs mobile device with driver and/or vehicle); 13:26-27 (processor monitors driving performance and generates a user profile); 10:13-16 (processor processes driving information to generate a driving score); 10:28-35 (processor facilitates data/video feedback/display).

Although Curry may “[describe] various examples of UI-enabled user interactions including receiving a phone call while driving, and manually switching activity modes,” these features allegedly disclosed by Curry for performance by and within the mobile phone client 110 of Curry are limited and otherwise do not read on the independent claims of the ’271 patent (which do not recite “receiving a phone call” or “manually switching activity modes”). Pet. at 21-22 (*citing* USAA-1005 at 7:5-27; 8:5-27; 9:5-26; 10:15-26; 12:20-26; 15:7-22; 20:23-25). *See* USAA-1001, Claims 1, 4, 6, 7. Further, these sections of Curry do not disclose “the mobile device configured to... determine, based on the inputs received by the user interface and sensor data from the sensor set, a start of a driving period,” as recited by Claim 1.

Petitioner’s citations to the art do not read on “driving period” of Claim 1. Petitioner attempts to loosely correlate a “monitoring period” related to Curry’s “monitoring mode” or “monitoring operating mode” to the driving period of the claims. *See, e.g.,* Pet. at 4, 12-13, 16, 26, and 33. In Curry, the “monitoring mode”

is triggered by a phone call being received or made, regardless of driving status. *See* USAA-1005 at 12:20-26. Curry does not teach (and Petitioner’s mapping does not point out) that a “start of a driving period” is determined at the time of receiving or making a call such that the mobile communications device would meet claim element [1.6].

Although Petitioner argues, with respect to claim element [1.6], that the start of a driving period could be triggered by a phone call to collect data for determining an activity mode (*see* Pet. at 24-28), a POSITA would have understood that this is not what is intended nor recited by the ’271 patent claims. This is at least because the “monitoring” in Curry, as admitted by Petitioner (*see id.*), refers to monitoring for a phone call being received or made and monitoring GPS and accelerometer data during the phone call and some time thereafter, but not for the “driving period.” *See* USAA-1005 at 11:3-14; Fig. 4. Curry discloses that the purpose of this is for “user activity mode recognition,” to block calls from being made or received while driving (e.g., “if the cell phone is [not] allowed to function based on use permission data”). *See id.* at 4:16-28; 8:30—9:20; 12:20-13:26. Petitioner’s expert further admits that “Curry contemplates an all-or-nothing approach to restrictions on phone activity when phone 106 is placed in a monitoring operating mode.” USAA-1003, ¶104. Curry’s “monitoring period” is not the “driving period” of Claim 1.

A POSITA would have understood, based on the plain meaning of the claim terms, that during a driving period, the vehicle of the '271 patent is being driven. The POSITA would further have understood that driving information is collected by the mobile communications device during the driving period, which has a start. A POSITA's understanding would not have been limited to Petitioner's definition of driving period being just Curry's (or Petitioner's interpretation of) monitoring period. Further, nothing in Curry or Rabu (or Katayama) suggests that receipt of a phone call would act in the same way as the invention claimed in the '271 patent to determine the start of a driving period.

If, in the Petitioner's view, the receipt of a phone call, as in Curry, determines the start of a driving period and a phone call is never received or made, Petitioner's Curry-Rabu (or Curry-Rabu-Katayama) device would never record the start of a driving period, and claim elements [1.6] and [1.7] would never be realized. Further, the combination would defeat the '271 patent's purpose of continuously "process[ing] the sensor data from the sensor set during the driving period to derive driving information," which is used to gather real-time data to detect a driving incident, for correlation with and plotting against a visual map anytime a user wishes to visualize the data and capture a recording, and for notifying emergency services for an immediate response. USAA-1001 at Claim 1; 17:22—20:15 (describing the method of FIG. 4a); 13:60—14:4, 19:47-53, and 27:28-30 (providing immediate

notification to a recipient of a detected driving incident). Instead, Curry post-processes data only after a call is received or made. *See* USAA-1005 at 10:3-14; 12:20-13:26; 15:7-22. Such a limitation of Curry, which monitors whether a user is driving at the time of a call, would defeat the purpose of the ‘271 patent for continuously monitoring how a vehicle is being driven. Thus, Petitioner has not shown that the Curry-Rabu (or Curry-Rabu-Katayama) combination reads on claim elements [1.6] and [1.7].

Regarding claim element [1.10], Petitioner leans on its arguments for [1.6] above in incorrectly asserting that the Curry-Rabu phone can “determine ... a start of a driving period.” Pet. at 34. Petitioner then cites to Curry as disclosing a “downloaded client application 110” but admits that “raw data” and “driving behavior information ... is stored locally prior to later transmission to a ‘driving safety data server.’” *Id.* Petitioner then cites to FIG. 1 of Curry, which illustrates data from Curry’s “motion data cache 118” being transmitted from the Curry device to the driving safety data server, which performs most of the data processing, facilitates use permission for the Curry device’s dynamic call handling, and scores users. USAA-1005 at FIG. 1; 8:20-27; 9:22—10:5. Although the Curry device may determine the context of a phone call and prevent talking/texting while driving based on information determined in the post-processing stage, it does not generate a user’s safety score based on these limited situations. *See* USAA-1005 at 11:7-12.

Further, because the bulk of Curry's processing is performed off of the mobile device, and is post-processed after-the-fact, Curry does not "register the start of the driving period in response to an initialization input generated automatically in response to the sensor data having predetermined values, wherein the initialization input is generated in response to sensor data reflecting a detected speed above a predetermined threshold," as recited by claim element [1.10], which Petitioner admits that Curry does not specifically show. *See* Pet. at 39-41.

Rabu, which is directed to "determin[ing] a motion and orientation status of [a] PMD," USAA-1013 at 1:41-42, does not cure these deficiencies. Rabu does not determine the start of a driving period based on inputs received by the user interface and sensor data, or register the start of the driving period in response to an initialization input, as required by claim elements [1.6] and [1.10], or process the sensor data during the driving period to derive driving information associated with how the vehicle is driven, as required by claim element [1.7]. Rabu instead is concerned with holder motion status, which is primarily determined by analysis of frequency spectrum to determine small movements. *See* USAA-1013 at 4:30-33.

(ii) Ground 1B

In Ground 1B, Petitioner alleges that Curry-Rabu-Katayama renders claim element [1.10] obvious, primarily applying Katayama. *See* Pet. at 48-51. Petitioner identifies aspects of storage to memory found in Katayama but does not identify how

those storage features read on aspects of claim element [1.10]. *See id.* Claim element [1.10] does not recite aspects of storage to memory for which Katayama is cited, and cited sections of Katayama ([0001]-[0002], [0011]-[0016], [0027], [0046]-[0050], [0054], [0083]) do not, and are not shown to, recite aspects of claim element [1.10]. *See* Pet. at 49-51. Specifically, Petitioner cites Katayama for “transfer[ring] situation data ... from the local memory’s temporary storage section to its long term section for potential post-processing or later transmission,” and “determining ... whether ... digitalized situation data meets predetermined criteria for long term storage.” Pet. at 48-50. However, these features are not in claim element [1.10].

None of the cited portions of Katayama (USAA-1024, [0001]-[0002], [0011]-[0016], [0027], [0031], [0044]-[0051], [0053], [0054], [0057], [0083]) are directed to, disclose, teach, or suggest:

[1.10] the mobile communications device is **controlled by a downloaded application** to control the mobile device to **register the start of the driving period** in response to an **initialization input generated automatically in response to the sensor data having predetermined values**, wherein the initialization input is generated in response to **sensor data reflecting a detected speed above a predetermined threshold**.

USAA-1001 at 31:49-56 (emphasis added).

Petitioner asserts that an obvious variation on “an initialization input generated automatically in response to the sensor data having predetermined values”

would be Katayama's manual button push from the driver (citing Katayama at [0048] and [0050]), but this feature of Katayama simply does not read on claim element [1.10], and Petitioner provides no explanation for why a *manual* button push would suggest *automatic* generation of an initialization input when Katayama does not discuss such a feature for initiating anything, let alone the start of a driving period. *See* Pet. at 50. Further, the driver manually pushing a button in response to the driver's observations is not the same as the mobile device generating an initialization input *automatically* in response to a speed threshold being met.

For example, of Petitioner's cited sections in Katayama, Katayama discloses that "whether or not the speed of the vehicle is not over the predetermined lower limit speed" is determined by digitizing *all* situation data for after-the-fact analysis (USAA-1024 at [0048]), *not* that "a detected speed above a predetermined threshold" causes an initialization input to be generated to cause registration of a start of a driving period during which sensor data will be collected, processed, and stored, as recited by Claim 1. Katayama thus works significantly differently from the claimed invention.

For "sensor data reflecting a detected speed above a predetermined threshold," Petitioner cites to Katayama at [0048]-[0051], in which "the speed of the vehicle exceeds the predetermined upper limit speed..." and "whether or not the content of ... situation data meets the predetermined condition is judged based on results of

the digitalized values on which a logical operation ... is performed' and if the condition is met, 'situation data during a certain period is transferred'" (Pet. at 49-50), but these sections of Katayama refer to determining whether vehicle speed exceeds a predetermined lower limit speed *after all sensor data is digitalized, for classification purposes, and for after-the-fact analysis, **not*** to generate an initialization input to determine when to start recording at the start of a driving period, as in the '271 patent. Additionally, Katayama at [0053] refers to an automated learning function regardless of the driver's manual input, but the learning function classifies all data for after-the-fact analysis, without regard to exceeding a threshold during a driving period. *See* USAA-1024, [0048]. Thus, the cited portions of Katayama do not read on claim element [1.10] as a whole.

None of Petitioner's continued references to Katayama's storage method and elements cures Curry-Rabu-Katayama's deficiencies as to an automatically generated initialization input controlling the mobile device to register the start of a driving period, at least because the claims do not rely on an "already-determined start of that driving period" from situation data in long term memory. *See* Pet. at 38-39, 50-51 (citing both Curry and Katayama for "avoid[ing] inadvertent erasure of important situation data" via "digitalization of temporarily stored situation data for purposes of determining, at the 'time of recording,' whether that digitalized situation data meets predetermined criteria for long term storage"). The '271 patent

determines the start of a driving period when it is detected, not after-the-fact from all recorded situation data. The claims do not recite an “already-determined” start of a driving period.

Further, regardless of the applicability of Katayama’s storage to the claims of the ’271 patent, Katayama, due to its learning process and application of importance criteria to categorize all sensor data in “temporary data storage section 802,” is not configured like the ’271 patent with regard to storing sensor data and driving information. *See* discussion *supra* Part IV.C. Because part of what Petitioner is calling long term storage in Katayama is configured to be erased when filled, Katayama’s storage is unlike the storage of the ’271 patent, which persists data in long term storage based on whether a driving incident has occurred, without judging the importance of any sensor data. *See* USAA-1001 at 8:3-6; 16:47-64; 17:41-46; 24:40-43. *See also* USAA-1024, [0051]-[0057].

(iii) Grounds 1C and 1D

Petitioner’s arguments (Pet. at 52-53; 57-58) fail for Claims 3 and 4 at least because they fail for both Curry and Rabu as discussed above for claim elements [1.1]-[1.10] and as applied by Petitioner for claim elements [4.1]-[4.9], respectively. Neither Tamir nor McClellan are cited to cure these shortcomings of Curry and Rabu.

(iv) Ground 2

In Section III.E., Petitioner incorrectly alleges that the combination of Callopy and Curry renders Claims 6 and 7 obvious. *See* Pet. at 59-80. Petitioner fails to particularly point out how Callopy and/or Curry disclose, teach, or suggest every aspect of the claim elements [6.9] or [7.9].

For both claim elements, Petitioner admits that “Callopy does not explicitly teach calculating scores ... for determining insurance premiums.” Pet. at 61. Petitioner then alleges, based on Curry, that “doing so would have been obvious to a POSITA” and provides conclusory explanation that “the use of a score was well-known by the critical date, as evidenced by Curry.” *Id.* However, showing “use of a score” is not sufficient for reading on the particular elements of Claims 6 and 7, because “use of a score” is not the same as deriving “driving information comprising at least one of a driving score and sensor data” as in claim elements [6.9] and [7.9]. Thus, contrary to what Petitioner argues, Curry also does not teach calculating scores by the mobile phone.

As discussed above (*see supra* VIII.A.1, Ground 1A), Curry’s driving safety data server 104, which is separate from Curry’s mobile phone, performs certain aspects of Curry’s system that Curry’s mobile phone does not perform, including calculating driving scores. Regarding Curry’s data server calculating driving scores, Curry discloses:

[T]he driving safety data can be recorded in mobile phones and then transmitted to a centrally managed data server through wireless communication links, such as GSM/GPRS. ... A driving safety evaluation module can be used to perform a statistical analysis on collected raw driving data. The evaluation module can then calculate corresponding safety scores. The safety scores can be used by consumers and insurance agencies to determine insurance premiums for related drivers.

USAA-1005 at 7:8-17.

Curry's driving safety score evaluation 212 is part of Curry's driving safety user control and monitoring website, not part of Curry's mobile phone client. *See id.* at FIG. 2, which illustrates that Curry's driving safety user control and monitoring website processes safety data provided by the mobile phone client. *Id.* at 7:8-11. Further, any use permission input is not provided via Curry's mobile phone but via a GUI on Curry's data input device 102 (i.e., driving safety user control and monitoring website). *Id.* at 8:5-18. Curry does not disclose a GUI for the mobile phone client 110/210 for viewing or analyzing driving safety data. In fact, even "motion data and activity mode estimation results of a user of the mobile phone 106 can be transmitted to the driving safety data server 104, and further displayed through an interactive user control website to enable visualization of possible violations of mobile phone use or unsafe driving behavior." *Id.* at 9:23-28. Even if Curry's mobile phone could be said to display such a website, driving safety data is

still transmitted from Curry's mobile phone to Curry's driving safety data server 104 first to process the data and calculate scores. *Id.* Curry provides an interactive user control interface to its data input device 102, but Curry does not disclose providing such interface for operation on Curry's mobile phone 106. *See id.* Such an interactive interface on Curry's mobile phone would defeat Curry's main purpose of "preventing cell phone use while driving" via usage restrictions. *Id.* at 7:5-22.

Rather, Curry's mobile phone 106 passes driving safety performance data via mobile phone client 110 to the central data server 104 to evaluate and score the data. *See* USAA-1005 at 11:15-23; FIG. 1; FIG. 2; 12:1-19; 14:17-26; 16:16-18. Any adjusting of already calculated scores by the mobile phone, if done at all, is limited to a post-processing stage to "determine the context of a phone call to a selected user based on previously collected motion data, and adjust the related safety score for the user if a violation is identified." *Id.* at 11:3-14. However, it is unclear in Curry which system element actually adjusts the safety score, as Curry's user mode recognition program of activity mode recognition module is delegated to "identify the context of a phone call," as part of "determin[ing] a type of activity based on the motion data cache and send[ing] data from its motion data cache and activity mode recognition module to the server for further analysis." *Id.* at 3:9-10; 4:21-22; 9:6-11; 13:31-33; 14:19-23.

Curry further suggests a complexity tradeoff of locating “more modules, caches, and databases on the mobile device” but does not specify what those modules, caches, and databases might be. *See id.* at 12:3-18. In summary, Curry’s mobile phone relies on data server 208 to perform its safety evaluation and scoring using motion data that the mobile phone transmits to the server. *Id.* at 13:1-19.

Thus, Petitioner is incorrect that “Curry describes setting an initial driving score ... and sharing the score with an insurance company to determine insurance premiums” in relationship to Curry’s mobile phone. Pet. at 62. Petitioner cites to Curry at 13:3-14, but this passage of Curry does not disclose that Curry’s mobile phone sets an initial driving score. *See* Pet. at 62. Rather, in this passage, Curry discloses that “[t]he safety performance data [208 in FIG. 2] and use permission data [206 in FIG. 2] can be crossed checked with each other and used in a later driving safety score evaluation module 212.” USAA-1005 at 13:3-5. These elements are external to Curry’s Mobile Phone Client 210 on Driving Safety User Control and Monitoring Web Site 102. *See id.* at FIG. 1, FIG. 2. Petitioner also cites to Curry at 7:13-17, which discloses, “A driving safety evaluation module [212 in FIG. 2] can be used to perform a statistical analysis on collected raw driving data. The evaluation module can then calculate corresponding safety scores.” Pet. at 62; USAA-1005 at 7:13-15. This reference, again, points to the same element of Curry outside of the mobile phone. *See* USAA-1005 at FIG. 2. Similarly, Petitioner cites to Curry at 10:2-

12, but this passage discloses that “[t]hrough a data exchange server [Driving Safety Data Server 104 of FIG. 1] or a data exchange interface [Driving Safety User Control and Monitoring Web Site 102 of FIG. 1], *a system user* can share the safety score of the user of the mobile phone 106 with a third party such as an insurance company 130 to obtain insurance premiums.” Pet. at 62; USAA-1005 at 10:2-4 (emphasis added). Here, Curry discloses that the system user, not the user of the mobile phone, uses a resource (data exchange server or data exchange interface) outside of the mobile phone to share the safety score. *See* USAA-1005 at 10:2-4.

In these and other ways, Petitioner misconstrues what Curry discloses. Further, Petitioner states, “Curry teaches that insurance companies determine insurance premiums using a driving safety score determined by a mobile device from the sensor data.” Pet. at 63 (*citing* USAA-1005 at 7:15-17). However, in the cited passage, Curry discloses that “[t]he evaluation module can then calculate corresponding safety scores.” USAA-1005 at 7:14-15. As disclosed by Curry, the “evaluation module” indeed uses the sensor data uploaded from the motion data cache 118, but the evaluation module 212 is outside of the mobile phone on device 102. *See id.* at FIG. 1, FIG. 2. Curry may teach “how sensor data is analyzed to detect ‘driving safety violations,’” but this is done by Curry’s driving safety data server, not by Curry’s mobile phone. Pet. at 63-64; USAA-1005 at 7:15-17, 10:2-12, 11:10-12, 13:3-19, FIG. 1, FIG. 2.

Finally, Petitioner recognizes that “Curry does not explicitly teach ‘generating’ a driving score,” but rationalizes, without any support, that “Curry’s description of adjusting an initial safety score based on driving behavior” would make generating a driving score obvious to a POSITA. Pet. at 65, *citing* USAA-1005 at 13:3-19. FIG. 1, FIG. 2. For this and the reasons above, Curry does not support the proposition that the Callopy-Curry phone generates or calculates a driving score. No aspect of Callopy is cited to cure this deficiency. Thus, Callopy-Curry does not disclose at least this aspect of Claims 6 and 7.

2. Relying on Impermissible Hindsight, Petitioner Provides Insufficient Rationale to Combine the Cited References

In arriving at a rationale to combine references, “the question under 35 U.S.C. §103 is not merely what the references expressly teach but what they *would have suggested* to one of ordinary skill in the art at the time the invention was made.” *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989); *Intercontinental Great Brands LLC v. Kellogg N. Am. Co.*, 869 F.3d 1336, 1343 (Fed. Cir. 2017) (requiring that Petitioner provide, with particularity, rationale to combine the teachings of the cited art). Petitioner has not provided sufficient rationale to combine the cited references.

(i) Grounds 1A and 1B – Curry-Rabu or Curry-Rabu-Katayama

Petitioner states that “[a POSITA] would have found obvious integration of Rabu’s dock-status sensing and associated mode-shifting capabilities into Curry’s

phone... to promote safe driving.” Pet. at 11. Petitioner further reasons that “the result is a device with added functionality... capable of defining and determining different types of driving periods based on user inputs and sensor data ... and of appropriately restricting phone use and/or adjusting user driving scores depending on a type of driving period determined.” *Id.* at 11-12.

Petitioner’s rationale of enhancing Curry’s phone’s “to promote safe driving” and creating “a device with added functionality” are generic and nothing but conclusory statements that the combination “would have been obvious.” *See In re Van Os*, 844 F.3d 1359, 1361 (Fed. Cir. 2017). Section 103, however, does not permit such unsupported statements to form the basis of an obviousness argument.

As to combining Curry and Rabu, Petitioner argues that “[t]he POSITA would have found obvious that enhancing Curry’s system based on Rabu would introduce multiple additional advantages” and lists generic advantages. Pet. at 16-17. As to combining Katayama with Curry-Rabu, Petitioner lists even more generic advantages. Pet. at 47. In both cases, Petitioner’s expert includes the same lists without identifying where Curry, Rabu, and Katayama suggested any needed improvements. *See* USAA-1003, ¶¶ 111-114, 178. Rationalizing advantages, *after the fact*, of combining references does not provide a sufficient basis for why it would have been obvious to combine the references in the first place. *See, e.g., ActiveVideo Networks Inc.*, 694 F.3d at 1328 (finding expert testimony of motivation to combine

“to build something better,” “more efficient, cheaper, or” something that “had more features” was generic and insufficient).

By at least these examples, Petitioner states what a POSITA *could* have done by combining Curry and Rabu but fails to provide sufficient rationale for why a POSITA *would have been motivated to* combine Curry and Rabu. “[O]bviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.” *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015); *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1068–69 (Fed. Cir. 2018) (finding that “the Board focused on what a skilled artisan would have been *able* to do, rather than what a skilled artisan would have been *motivated* to do”). Here, Petitioner fails to provide sufficient motivation for the referenced combination not based on impermissible hindsight.

Petitioner further argues that “the POSITA would have found relevant solutions and further motivations within Rabu, and would have expected success in incorporating Rabu’s solutions within Curry.” Pet. at 14 (*citing* USAA-1003, ¶106, which again mostly parrots the Petition). Both Petitioner and Petitioner’s expert additionally mention that both Curry and Rabu have “a ‘generally conventional’ accelerometer.” Pet. at 14; USAA-1003, ¶106. However, “relevant” solutions and feature similarities are not sufficient motivations to combine. *See KSR*, 550 U.S. at

418; *see also Microsoft Corp. v. Enfish, LLC*, 662 F. App'x 981, 990 (Fed. Cir. 2016) (determining that the Board correctly concluded that Microsoft “gave no reason for the motivation of a person of ordinary skill to combine [prior art references] except that the references were directed to the same art or same techniques”). Use of an accelerometer as a generic feature of both Curry and Rabu does not sufficiently explain why a POSITA would have looked to combine these references.

Although Petitioner argues that the individual elements were known in the cited prior art references and that combining those references would have yielded the claimed invention, Petitioner does not explain *why* a POSITA would have combined those elements in the claimed manner. *See KSR*, 550 U.S. at 418 (“[A] patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art”). Petitioner ineffectively leans on *KSR* to contend that “configuring Curry’s systems to leverage Rabu’s teachings would have required only routine programming knowledge that was well within the skill of a POSITA.” Pet. at 17. But this argument merely recognizes that the POSITA *could* have done it, not *would* have done it, given the very different purpose of Rabu for detecting docking status using frequency analysis of motion sensor data.

Petitioner provides several conclusory statements regarding what a POSITA would have found obvious, but such statements provide no support or rationale for

why a POSITA would have looked to the cited references in the first place. For example, Petitioner states that “a POSITA would have found obvious enhancement of the Curry-Rabu phone through implementation both of Katayama’s teachings on partitioning local memory into several sections..., and data handling...” Pet. at 44. Petitioner posits that this is because the “Curry-Rabu phone’s local memory has limited capacity.” *Id.* Petitioner suggests that merely storing sensor data “in local memory prior to its later transmission” provides enough of a risk of “being inadvertently erased and overwritten” to have motivated a POSITA to “partition ... the local memory into temporary and long term sections” for Curry. *See id.* at 37-38, 44-45; USAA-1003, ¶¶ 163, 171-173. This reasoning does not consider why any data would need to be partitioned from other data in Curry (or Rabu), or what partitioning would be done, and Petitioner’s expert does not provide any additional evidence to support such a motivation, other than generically “furthering Curry’s goals of ‘detect[ing] and prevent[ing] unsafe driving behavior[s]’” and “enabling identification of accidents and ‘risk incidents,’ with corresponding improvements to driving safety metrics.” *See* Pet. at 45-46; USAA-1003, ¶¶ 174, 177. While a suggestion to store data may provide a motivation to *have* memory, it does not follow that a suggestion to store data provides motivation to *partition* memory with a learning function to classify data before partitioning, as taught by Katayama. *See* USAA-1024, [0016], [0044], [0046], [0053].

As a further example, Petitioner states that “consistent with Curry’s description of allowing drivers to ‘talk[] while driving through headsets,’ a POSITA would have found it obvious... to leverage accelerometer motion and orientation data to determine that a driver may utilize a docked phone’s speaker mode while driving.” Pet. at 15. Again, while this statement may identify what might be gained by the cited combination, it provides absolutely no motivation for the combination other than impermissible hindsight.

Petitioner also attempts to cite to motivations within Curry that are simply not there. For example, Petitioner states that “Rabu would have motivated a POSITA to enhance Curry’s phone by configuring it to leverage orientation data from the same accelerometer to determine whether the phone is removably attached to the vehicle.” Pet. at 25. There are multiple problems with this statement. First, Petitioner’s primary reference is Curry, and motivation in this case, if it exists, should exist in Curry; thus, Petitioner’s analysis is backwards and is thus smacking of hindsight. Second, Petitioner does not point out where in Curry such an enhancement is suggested. Third, Rabu regards using frequency data to determine small movements for docking status and, to arrive at the claims, would not make technical sense in combination with Curry that judges when to disallow a phone call based on driving status. *See* USAA-1013 at 2:65—3:1, 4:29-33; USAA-1005 at 3:2—4:28, 14:28-33;

see also supra Part VIII.A.3. Like this one, most of Petitioner’s statements are simply conclusory.

Petitioner also erroneously suggests that Curry’s silence on a particular topic or feature somehow provides sufficient reason for a POSITA to have searched out Rabu and/or Katayama. For example, regarding claim element [1.9], Petitioner asserts, “[a] POSITA would have found it obvious to configure a Curry-Rabu phone to derive driving information based on its recorded sensor data alone when considering Curry’s disclosures of data obtained by embedded sensors ... used to derive the driving information.” Pet. at 33. From this, Petitioner reasons, “[i]n those disclosures, Curry never once describes or suggests leveraging the vehicle’s sensors.” *Id.* at 34. Petitioner merely speculates on Curry’s silence, but, based on the Federal Circuit’s explanation of “rational underpinning,” this speculation does not “support the legal conclusion of obviousness.” *See In re Kahn*, 441 F.3d at 988; *In re GPAC Inc.*, 57 F.3d at 1579. “The legal conclusion of obviousness must be supported by facts” and cannot “resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies.” *In re Warner*, 379 F.2d 1011, 1017 (CCPA 1967). Petitioner’s speculation violates this proposition.

Petitioner’s gap-filling analysis seeks to compensate for what is absent from the references themselves. But “[t]o draw on hindsight knowledge of the patented invention, when the prior art does not contain or suggest that knowledge, is to use

the invention as a template for its own reconstruction—an illogical and inappropriate process by which to determine patentability.” *Sensonics Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570 (Fed. Cir. 1996). “The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made.” *Id.* Thus, the Board should not give weight to Petitioner’s speculation about what is missing in Curry. “Legal determination of obviousness ... should be based on evidence rather than on mere speculation or conjecture.” *Alza Corp. v. Maylan Labs., Inc.*, 464 F.3d 1286, 1290 (Fed. Cir. 2006).

(ii) Ground 2 – Callopy-Curry

Throughout the Petition, Petitioner impermissibly bases its own inferences on hindsight by patching together pieces of the cited art to fit the claims. *See Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017) (“[W]e cannot allow hindsight bias to be the thread that stitches together prior art patches into something that is the claimed invention.”). Petitioner’s reasoning behind its Callopy-Curry combination is no exception.

For example, Petitioner alleges that “[a] POSITA would have found obvious implementing Callopy’s vehicle monitoring system for determining insurance premiums with Curry’s driving score based on its collected driving data for determining insurance premiums.” *Id.* at 62. First, this statement ignores aspects of

the claim language in that Curry's mobile phone does not calculate driving scores.

See supra Part VIII.A.1 for Grounds 1A and 2.

Second, that Curry suggests a complexity tradeoff of locating “more modules, caches, and databases on the mobile device” without specifying what those modules, caches, and databases might be (*see* USAA-1005 at 12:3-18) does not provide enough justification for Petitioner's assertion that “determining the driving score at the mobile device” would have been obvious. *See* Pet. at 62.

Curry's data server 208 performs its safety evaluation and scoring using motion data that the mobile phone transmits to the server (USAA-1005 at 13:1-19), but there is no indication in Callopy or Curry that the mobile phone specifically calculating scores for individual drivers would serve Callopy's purpose of dynamic insurance customization or Curry's purpose of monitoring and preventing mobile phone use while driving. To this point, it is especially notable that Callopy discloses receiving and aggregating data from multiple different sources “to facilitate generation and presentation of insurance rate(s),” which would be some of the same information contributing to a driver score. *See* USAA-1045, [00307]-[00308].

Thus, the cited portions of Callopy are concerned with aggregate data from multiple sources, not merely specific phone sensor data over specific driving periods. *See* USAA-1045, [00307]-[00310], [00322], [00325]-[00326], FIGs. 40-41. Curry's analysis on its mobile phone is concerned with determining context of phone

use for limiting such use during driving, and any scoring associated with Curry's mobile device is limited to such context. *See* USAA-1005 at FIG. 1, FIG. 2; 3:9-10; 4:21-22; 9:6-11; 11:3-23; 12:1-19; 13:31-33; 14:17-26; 16:16-18.

In contrast to Petitioner's assertions, a POSITA would *not* have been motivated to modify Callopy's system to include Curry's mobile device, at least because Curry does not "[teach] that insurance companies determine insurance premiums using a driving safety score *determined by a mobile device* from the sensor data." Pet. at 63 (*citing* USAA-1005, 7:15-17, which does not disclose what Petitioner says it discloses); *see supra* Part VIII.A.2. Callopy's system modified to include Curry's mobile device thus would not read on or make obvious "the driving information comprises at least one of a driving score and sensor data captured and processed *by the remote mobile telecommunications device*," as recited by claim elements [6.9] and [7.9] (emphasis added).

Further, "Callopy's lack of implementation details regarding those 'analytical methods' or how insurance provider system 4035 calculates the insurance rates would" *not* have caused a POSITA to turn to Curry, at least because Curry does not provide all of that guidance in the way the claims recite, per the discussion above. *See* Pet. at 63.

Further still, Petitioner mischaracterizes all that Curry teaches such that Petitioner's rationale for combining Curry with Callopy is misplaced. Specifically,

Petitioner alleges that “Curry teaches that, by performing analyses at the mobile device, ‘the amount of communication needed to operate the system can be reduced.’” *Id.* at 64-65 (*citing* USAA-1005 at 12:10-13). However, this passage of Curry does not refer specifically to calculating scores but refers generally to the location of software and firmware (in the way of more modules, caches, and databases) used to create the functionality of the system for monitoring and controlling the use of a mobile computing device.

Petitioner makes a final effort to address Curry’s failure to disclose determination of a driving score by arguing that “a POSITA would have ... found obvious generating a driving score from Curry’s description of adjusting an initial safety score based on driving behavior.” Pet. at 65. Curry, however, fails to disclose determination of a driving score by the mobile device 106. *See* USAA-1005 at 13:3-19, FIG. 1, FIG. 2. Petitioner’s expert adds no evidence to support any other conclusion. *See* USAA-1003, ¶217.

To avoid hindsight bias, the obviousness inquiry is not limited to whether the elements of the ’271 patent’s mobile communications device were known in the art as disparate puzzle pieces or whether a POSITA would have understood the proposed combinations of cited references to teach the ’271 patent’s logging of vehicle behavior. Rather, Petitioner must provide, *with particularity*, rationale to combine the teachings of the cited art “in the way eventually claimed in the patent

at issue.” *Intercontinental Great Brands LLC*, 869 F.3d at 1343. Petitioner does not provide such rationale. Rather, Petitioner relies upon the teachings of the ’271 patent itself to argue that the cited art discloses or renders obvious these very teachings.

Petitioner’s rationale for the proposed combinations relies on using the ’271 patent as a roadmap for reconstructing the claims based on hindsight bias. Petitioner’s rationale is nothing more than a desire to provide a mobile telecommunications device that meets the elements claimed in the ’271 patent. However, in laying out an obviousness analysis, “[i]t is impermissible [to use] applicant’s structure as a template and select[] elements from references to fill the gaps.” *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992). *See also In re Gorman*, 933 F.2d 982, 987 (Fed. Cir. 1991). “To draw on hindsight knowledge of the patented invention, when the prior art does not contain or suggest that knowledge, is to use the invention as a template for its own reconstruction—an illogical and inappropriate process by which to determine patentability.” *Sensonics, Inc.*, 81 F.3d at 1570 (*citing W.L. Gore & Assoc.*, 721 F.2d at 1553).

IX. CONCLUSION

USAA's Petition fails as Petitioner cannot show, and has not shown, that the claims of the '271 patent are obvious in light of the cited references. Accordingly, Patent Owner Auto Telematics Ltd. respectfully requests that the Board deny USAA's request for *inter partes* review as there is no likelihood of success that USAA will succeed on any of the challenged claims.

August 31, 2023

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CERTIFICATE OF COMPLIANCE WITH 37 C.F.R. §42.24

Pursuant to 37 C.F.R. §42.24, Patent Owner Auto Telematics Ltd., certifies that, based on the word count of the word processing application used to prepare this paper, the number of words in this Patent Owner Preliminary Response is 13,971. This word count does not include the items that may be excluded from the count under 37 C.F.R. §42.24(a) including the table of contents, table of authorities, list of exhibits and this certificate.

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CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §42.6(e), undersigned counsel certifies that on August 31, 2023, this paper – Patent Owner Auto Telematics Ltd.’s Preliminary Response Pursuant to 37 C.F.R. §42.107 – was served via electronic mail upon the following counsel of record for Petitioner:

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