

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

United States Automobile Association,
Petitioner

v.

Auto Telematics Ltd.,
Patent Owner

Case No. IPR2025-00812
U.S. Patent No. 12,236,728

PATENT OWNER'S RESPONSE

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PATENT OWNER'S EXHIBIT LIST

ATL-2001	U.S. Pat. Pub. 2010/0131304 (“Collopy”)
ATL-2002	PCT/US2009/065730 (Callopy PCT File History)
ATL-2003	<i>Journey</i> , “Cambridge Dictionary”, https://dictionary.cambridge.org/dictionary/english/journey , (retrieved January 16, 2026)
ATL-2004	<i>Journey</i> , “Merriam-Webster Dictionary”, https://www.merriam-webster.com/dictionary/journey , (retrieved January 16, 2026)

RESPONSE TO STATEMENT OF MATERIAL FACTS IN DISPUTE

Petitioner did not submit a specific statement of material facts in its Petition. Accordingly, no response is required under 37 C.F.R. § 42.23(a), and no facts are admitted.

I. Introduction

Patent Owner Auto Telematics Ltd. (“ATL” or “Patent Owner”) submits this Patent Owner Response to the Petition for *Inter Partes* Review (the “Petition”) of U.S. Patent No. 12,236,728, App. 18/676,284 (USAA-1001, “the ’728 Patent”) filed by United States Automobile Association. (“Petitioner”). *See* Paper 2.

In its Response, ATL addresses several claim construction issues that are not addressed or considered in the Petition. Namely, the proper construction of “driving period” and “driving information” as construed and limited in the context of the ’728 Patent prosecution history. Petitioner appears to rely on prior constructions and interpretations and analyzes the claims in that context. Several significant amendments were made during the prosecution of the ’729 Patent that modify the scope of the claims now challenged by Petitioner. Petitioner’s analysis fails to address and incorporate these prosecution amendments, namely, “driving period”, “vehicle journey”, and “driving information”. *See infra* III. When construed properly, the Petition fails to demonstrate that the cited references, alone or in the proposed combinations, disclose, teach, or suggest each and every limitation of the Challenged Claims.

Additionally, Petitioner strains all credulity in its Petition for at least three reasons. First, Petitioner attempts to use the claims as a roadmap for hindsight

reconstruction of the claims, but neglects to analyze the specific language of the Challenged Claims. Instead, Petitioner presents a generic characterization of some elements allegedly found in the cited references. For example, the “throughout the driving period” limitation was added by amendment in response to the initial claim rejection over Collopy of July 31, 2024, which was successfully traversed. Because it is improper to use the Challenged Claims as a roadmap to reconstruct the claims, the Petition is deficient with respect to the grounds of challenge even more so in this proceeding since Petitioner’s roadmap only looks to generic recitations of limitations rather than the specific claim language that was amended over the earlier patents.

Second, Petitioner incorrectly asserts its main obviousness reference, WO 2010/062,899, PCT/US2009/065730, (USA-1004, “Callopy”) is a different reference than U.S. Pub. No. 2010/0131304, U.S. Pat. App. 12/547,800, (USA-1002, “Collopy”):

[T]he grounds based on Callopy do not involve the same or substantially same art or arguments previously presented during original prosecution. Collopy and Callopy do not have the same disclosures, and this Petition applies references that were not applied by the examiner in any rejections of the claims.

Pet. at 5, fn. 4. However, the disclosure of Collopy *is wholly contained within*

Callopy.¹ Indeed, each of Petitioner’s substantive citations and references to Callopy, throughout each ground of challenge, has a mirrored paragraph, word-for-word, in Collopy. Petitioner does not substantively rely on any material found exclusively in Callopy and instead relies on passages that are identically disclosed in **both** Callopy and Collopy. Collopy was disclosed, considered, and used by the Examiner in a rejection during prosecution, which ATL overcame through amendment and argument. The USPTO issued the ’728 Patent over the full disclosure of Collopy. Now Petitioner asks the Board to consider Callopy as a wholly new reference, even though the entire substantive disclosure of Collopy is found and additionally incorporated by reference within Callopy. Callopy’s disclosure has already been considered via Collopy’s citation and application against the originally filed claims of the ’728 Patent.

Third, Petitioner asserts that U.S. Pat. Publication No. 2006/0053038 (USAA-1008, “Warren”) “was never before the Office, and thus, not considered by the Examiner.” Pet. at 77 (IV.A). This is wrong. The record shows that the Warren reference was submitted in an information disclosure statement filed on May 28,

¹ “[0001] This application claims the benefit of U.S. Provisional Application Serial No. 61/118,400 . . . U.S. Patent Application Serial No. 12/547,800 entitled “REAL TIME INSURANCE GENERATION” and filed on August 26, 2009 [‘Collopy’] . . . The entireties of above-captioned applications are incorporated herein by reference.” Callopy at [0001].

2024, and was considered by the Examiner on July 23, 2024. USAA-1002 at 277. Warren is clearly identified in the file history numerous times as being presented by ATL and considered by the Examiner. *See, e.g.*, USAA-1002 at 267, 269, 277, 279, 313, 315, 386, and 388.

For at least these reasons, the grounds raised in the Petition do not render obvious the claims of the '728 Patent.

II. The '728 Patent

The '728 Patent is the latest in a line of patents relating to a data-logging system for monitoring how safely a vehicle is being driven by a driver throughout a driving period using a logging system that is independent from the vehicle. The driving information, which may include a driving score, is generated from sensor data captured by a mobile telecommunications device and transmitted to a data logging server, where it may be used to determine or build a risk profile for the driver and/or vehicle being driven. The '728 Patent overcomes the prior challenges against the parent patents and the cited prior art, including Callopy/Collopy, Curry, Thompson, Warren, and Katayama.

A. Challenged Claims

Petitioner challenges all twenty-eight claims of the '728 Patent: independent Claims 1, 13, 24, and 25 and dependent Claims 2-12, 14-23, and 26-28 (“Challenged

Claims”). *See* Petition at 1.

Ground	Ind. claim(s)	Dependent claim(s)	Basis	Reference(s)
1	1	2-4	§103	Callopy, Curry, Thompson
2	-	5 (from: 1)	§103	Callopy, Curry, Thompson, Warren
3	13, 24, 25	6-12 (f: 1) 14-23 (f: 13) 26-28 (f: 25)	§103	Callopy, Curry, Thompson, Katayama

B. Prosecution History of the '728 Patent

The '728 Patent claims were initially rejected under 35 U.S.C. § 102 as being anticipated by Collopy. ATL overcame the rejection by amending the claims to further clarify differences against Collopy, including amending “*during* the driving period” to “*throughout* the driving period” and by explicitly reciting that the processing of raw sensor data (for determination of derived driving information) is carried out by the processor of the mobile device, which determines a specific driving incident (event) by comparing the raw sensor data against a predetermined threshold value, with the incident being detected if the raw sensor data exceeds the threshold value. *See, e.g.*, USAA-1002 at 201-24. Lastly, the driving incident was further specified as being from a list of specific incidents (harsh braking, harsh acceleration, harsh swerving or a vehicle accident). *Id.* at 223.

The Notice of Allowance stated:

[N]one of the references of record either alone or in combination teaches or suggest [sic] the following limitations [recitation of then Claim 24, issued as Claim 1]. *This limitation, in combination with the other elements of the claim, is not shown or suggested in the prior art of record.*

USAA-1002 at 45-46 (emphasis added). The examiner made similar assertions for then Claim 38, issued as Claim 13, *id.* at 47-48; then Claim 52, issued as Claim 24, *id.* at 49-50; and then Claim 53, issued as Claim 25, *id.* at 50-51. *See also* Index of Claims, USAA-1002 at 8. Importantly, each reference cited by the Petition for all grounds, including Collopy (which, as discussed below, is essentially identical to Callopy for purposes of the challenges), Curry, Katayama, and Thompson, were *considered by* the examiner and *of record* when the examiner entered the notice of allowance. USAA-1002 at 278-81 (Information Disclosure Statement).

III. Claim Construction

Petitioner does not contend that any term from the '728 Patent requires construction. *See* Petition at 3-4. Patent Owner proposes two terms for construction based on the Board's previous findings in earlier IPR2023-00518 for a counterpart patent and the amendments made during prosecution of the '728 Patent. These terms are "driving period" and "driving information," which are further constrained by

additional limitations not found in the earlier patents that the Board has reviewed.

A. Legal Standards for Claim Construction

The plain and ordinary meaning of a term is the “meaning that the term would have to a person of ordinary skill in the art in question at the time of invention.” *Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005) (*en banc*). The person of ordinary skill in the art (“POSITA”) is deemed to have read the claim term in the context of the entire patent. *Id.* Therefore, to ascertain the meaning of a claim, the Court must look to the claim, the specification, and the patent’s prosecution history. *Id.* at 1314–17.

The “only two exceptions to [the] general rule” that claim terms are construed according to their plain and ordinary meaning are when the patentee (1) acts as his/her own lexicographer or (2) disavows the full scope of the claim term either in the specification or during prosecution. *Thorner v. Sony Computer Entm’t Am. LLC*, 669 F.3d 1362, 1365 (Fed. Cir. 2012). To act as his/her own lexicographer, the patentee must “clearly set forth a definition of the disputed claim term,” and “clearly express an intent to define the term.” *Id.* at 1365. To disavow the full scope of a claim term, the patentee’s statements in the specification or prosecution history must represent “a clear disavowal of claim scope.” *Id.* at 1366. Accordingly, when “an applicant’s statements are amenable to multiple reasonable interpretations, they

cannot be deemed clear and unmistakable.” *3M Innovative Props. Co. v. Tredegar Corp.*, 725 F.3d 1315, 1326 (Fed. Cir. 2013). “Absent disclaimer or lexicography, the plain meaning of the claim controls.” *Toshiba Corp. v. Imation Corp.*, 681 F.3d 1358, 1369 (Fed. Cir. 2012).

B. “Driving Period” (all claims)

The term “driving period” was construed by the Board in prior IPR proceedings regarding counterpart U.S. Patent 9,633,487. IPR2023-00518, Paper 30 at 9-14 (PTAB Sept. 17, 2024). There, the Board held that “‘driving period’ may start after the vehicle is in operation, rather than being the entire drive time,” as a POSITA would understand the term and usage within the context of the claims. *See also* IPR2023-00518, Ex. 1085, 32:3-33:1 (Deposition Testimony of ATL’s expert, Christopher Wilson). Further, the Board accepted Petitioner’s contention that the claim language “does not require that the ‘driving period’ lasts the entire period (beginning, middle, and end) of vehicle operation.” IPR2023-00518, Paper 30 at 10. Further impacting the interpretation of “driving period” was the Board’s finding that the ’487 Patent specification did not require the recited driving period to be the entire period in which the vehicle is being driven. *Id.* at 13 (emphasis in original).

Another important distinction between the ’487 Patent in IPR2023-00518 and the ’728 Patent now is the difference in claim language. In the ’487 Patent, the

“driving period” was constrained by the attributes of “the mobile device is removably attached to the vehicle” and “the vehicle is in use.” IPR2023-00518 at 10, 33. These limitations are not found in the Challenged Claims. Claim 1 of the ’487 Patent required the processing of sensor data *during* the driving period to derive driving information associated with how a vehicle was being driven. The word “during” was considered by the Board in IPR2023-00518 to be at any moment in time within the driving period. *See supra*. This language was explicitly modified during prosecution of the ’728 Patent.

The term “*during* the driving period” was modified during prosecution of the ’728 Patent to “*throughout* the driving period.” This necessarily implicates a narrower scope, as “throughout” is more than “any moment in time within the driving period,” which was the Board’s construction of “during” in IPR2023-00518. Specifically, Claim 1 of the ’728 Patent recites (in part):

[1.1] A data-logging system configured to monitor how safely a vehicle is being driven by a driver ***throughout a driving period*** and to log, during the driving period, **driving information representing movement of the vehicle whilst the vehicle is being driven by the driver**, the data-logging system comprising:

[1.5] process, using the processor, raw sensor data representing at least acceleration of the vehicle and position of the vehicle from the sensor set to generate derived driving information representing

how safely the vehicle is being driven by the driver *throughout the driving period*,

[1.6] wherein the **driving period is defined by a duration of a vehicle journey**, and the **derived driving information includes a driving score**, and

(emphases added). The features of Claim 1 of the '728 Patent clarify what is meant by "*driving period*" as distinguished from the '487 Patent.

The modification of the word "*during*" to "*throughout*" the driving period more clearly directs the claim to the monitoring of driving information for the *vehicle journey*, as claimed in element [1.6].

The Petition posits that this amendment would *not* lead a POSITA to interpret it as "limit[ing] claim scope to the entire period of driving." Petition at 2. Patent Owner agrees that the claimed "vehicle journey" should not be equated with the entire period that the vehicle is in use or, indeed, the entire period that the vehicle is being driven. This is because the vehicle journey must involve (not insubstantial movement) namely *travelling* from one place to another. The plain and ordinary meaning of "journey" is "the act of traveling from one place to another."² If a vehicle is being driven to move the vehicle merely from a garage of a house to a parking

² See ATL-2003 (*Journey*, "the act of travelling from one place to another, especially in a vehicle.", Cambridge Dictionary); ATL-2004 (*Journey*, "the act or instance of travelling from one place to another.", Merriam Webster Dictionary).

spot on the street in the front of a house, this would *not* satisfy a “vehicle journey,” because the location of the vehicle is not changing and the vehicle is not travelling from one place to another in the sense of a “journey.”

The specification teaches that to monitor driving behavior during a driving period (being defined by a duration of vehicle journey), the mobile telecommunications device needs to know when that driving period starts. *See* '728 Patent at [0014]. This is implicit in any understanding of monitoring something over time. The specification teaches that this can be done in one of two ways. First, the user can *manually* indicate the start of the driving period to the mobile device. *See* '728 Patent at [0015], [0113]. The user of the mobile device knows if the operation of the vehicle is a vehicle journey or not, because the user knows, and indicates, if they are simply maneuvering the vehicle without going on a vehicle journey or whether there is a destination that they are intending to reach that would qualify the driving period as a vehicle journey necessitating monitoring. This works for example, if the user is contractually required to log into the device as part of their work and indicate to the device when to start monitoring the vehicle journey.

The second way a vehicle journey can be determined is algorithmically using sensors in the mobile device to generate sensor data. *See* '728 Patent at [0015], [0113]. However, the mobile device does not know (and is not told) if this is a

vehicle journey or not. Accordingly, the system must determine whether a vehicle journey has commenced by processing the raw sensor data. The system processes sensor data to determine whether or not the derived driving period predetermined threshold values are met to indicate the vehicle is conducting a vehicle journey. To determine algorithmically whether the vehicle is now on a vehicle journey, the sensor data is analyzed for movement and location. The system checks for threshold value, as measured by the sensor data, to confirm that this is a vehicle journey and so recording the driving behavior is commenced. The analyzation of the sensor data, which captures movement of the vehicle *over a short period of time* while the vehicle is in use, is carried out to determine whether this is a vehicle journey that qualifies as a driving period. As such, Patent Owner agrees with Petitioner that the driving period *cannot be the entire period of time while the vehicle is in use*.

There is a difference between (1) monitoring sensor data to detect any vehicle movement, which arguably is happening all the time, and (2) monitoring sensor data *throughout* a driving period (which has a beginning, middle and end) to determine how safely a vehicle is being driven. When this is done algorithmically, as per the Challenged Claims, there needs to be a period of analysis of sensor data to establish that this is in fact a vehicle journey.

Claim 1 [1.5, 13.5, 24.5, 25.8] requires the raw sensor data of the sensor set to “represent at least *acceleration* of the vehicle *and position* of the vehicle.” This raw sensor data is then processed by the mobile device to generate “derived driving information representing how safely the vehicle is being driven *throughout* the driving period.” *Id.* [1.5]. As mentioned above, the claims implicitly require the mobile device to differentiate sensor data from the sensor set which constitute a “vehicle journey” from other sensor data which may constitute movement, but not a vehicle journey. *See* ’728 Patent at 3:27-39.

The “derived driving information includes a driving score,” [1.6], which represents how safely the vehicle is being driven throughout a vehicle journey. The specification explains that in the embodiment where there is no user input indicating a vehicle journey, the mobile device uses only sensor data from the sensor set. *Id.* at 3:40-4:2. This results in two types of raw sensor data that can be used by the mobile device to determine the beginning of a driving period for monitoring throughout the driving period. By setting thresholds at which values of sensor data are detected, the processing of the raw sensor data can distinguish between non-vehicle journey data (namely, *not* travelling between two different locations), and a vehicle journey (where the vehicle is being driven between two different locations).

Further, this understanding of “driving period” being constrained by “vehicle journey” is consistent with the prior construction adopted by the Board in IPR2024-00518. The driving period, *without* such constraint, corresponds to “*the beginning, middle or end of a vehicle’s operation,*” as stated by Petitioner and determined by the Board in IPR2024-00518. Paper 30 at 9 (emphasis added). In the ’728 Patent, the “*driving period*” is *now* further limited to “a duration of vehicle journey” [1.6, 13.6, 24.6],³ namely, from the beginning of a vehicle journey to the end of a vehicle journey (which is distinct from the entire period vehicle *operation*).

Claim 1 of the ’728 Patent requires a “*duration of a vehicle journey,*” [1.6], rather than “*from a start to an end of a vehicle journey,*” as in Claim 25. However, a vehicle journey implicitly has a start and an end, and if the data logging system is monitoring the driving period, it will monitor and detect the start and the end of that such driving period.

So, the “vehicle journey,” in the claimed context of assessing driving safety, may not commence until the vehicle has reached a movement threshold value representing at least acceleration of the vehicle and positioning of the vehicle as captured by the sensor set. The specification provides an example of automatically

³ USAA-1001, Claim 25 [25.7] uses different language: “the driving period is defined by a duration from a start to an end of a vehicle journey and the duration is comprised of a plurality of portions of time.”

detecting minimum speed. *See* USAA-1002 at [0015], [0113]. This is a capture of driving behavior for the substantial part of the time where the vehicle is moving under the control of the driver. This also excludes parts of the time where the driver is not being assessed for safety in driving behavior, and which, accordingly, does not form part of the vehicle journey (for assessment of driving safety). If *the entire period of movement* of the vehicle was the driving period, there would be no need to have an algorithmically determined start of the driving period that relies on sensor data detected by the sensor set reaching a predetermined threshold. Also, for the reasons set out above, for automatic detection that the vehicle is on a vehicle journey, there needs to be a period of analysis of sensor data of movement of the vehicle. This sensor data is collected over a relatively short period of time to confirm to the mobile device that the vehicle is on a vehicle journey. A POSITA would understand, based on the specification, that if the vehicle journey was for the entire time from when the vehicle was turned on to when it was turned off, there would be no need for having any predetermined threshold values as they would be superfluous. Logically, the duration of a vehicle journey is a substantial period of time while the vehicle is in use, as an insurance company would be interested in such a period when assessing driving safety for risk determinations. The term driving period cannot be interpreted

in a vacuum without reference to the purpose of the invention, which is to assess the driving safety.

This construction is entirely consistent with the evidence given by Mr. Wilson, as quoted in IPR2023-00518, Paper 30 at 12-13.

The testimony of Patent Owner's expert, Mr. Wilson, is consistent with our understanding of the claim terms light of the claim language and Specification. For example, the exchange between Mr. Wilson and Petitioner's counsel is provided below:

Q: So what I'm trying to understand is Let's put it this way: You have – you start driving at Time A. You get up to speed at Time B, and you drive at Time C. Is the driving period A to C, and then the system then excludes A through B? Or is the driving period B to C?

A: The driving period of Wright[11] would be B to C.

Q: Okay. And there's no discussion in your – sorry, there's no discussion in the asserted patents of how to exclude backing out of a driveway. Correct?

A: Again, the I don't recall any discussion of backing out of a driveway in the patents.

Q: And just going back to that A to B to C hypothetical – so it's B to C, because of the threshold that's set. Right?

A: B is the trigger – or the threshold is the trigger that starts the driving period or an example of a trigger that starts the driving period, according to Wright.

Ex. 1085, 32:3–33:1. As shown above, Mr. Wilson’s testimony also supports the notion that a POSITA would understand the recited “driving period” may start after the vehicle is in operation, rather than the entire driving time.

IPR2023-00518, Paper 30 at 12-13.

In Claim 1 of the ’728 Patent, the driving period would be from B to C and the value of B would be selected by the threshold set for the sensor data to indicate that the driving period had started. The “vehicle journey” is not the entire time that the vehicle is *in use* or the entire time that the *vehicle is being driven*, as was stated the Board’s issue with Mr. Wilson’s testimony in the previous case.⁴ Instead, the *vehicle journey* is the period of time during the entire time period that the vehicle is in use (being driven) that the *safety* of the driver’s actions are to be considered in travelling between different locations. This period of time can logically be above a speed threshold as provided in the specification because the driving incidents recited in Claim 1 of “harsh braking, harsh acceleration, harsh swerving or a vehicle

⁴ IPR2023-00518, Paper 30 at 13-14 (Board finding Mr. Wilson’s testimony contradicted Patent Owner’s then proposed narrower construction of “driving period” and finding that the Specification’s description did not narrow the claim language . . . to the *entire* driving period.)

accident,” only occur once the user has commenced their vehicle journey—for example, if they are above a certain sensed movement threshold.

The claim amendments made during prosecution of the ’728 Patent render the present construction consistent with Mr. Wilson’s testimony. The Board’s construction of “during the driving period” to be a driving period other than the *entire period when the vehicle was in use* in IPR2023-00518 would be inconsistent with the Challenged Claims, which refer to assessing driver safety based on analysis of data related to a *vehicle journey*.

C. “Driving Information” (all claims)

The term “driving information” was also previously reviewed by the Board in connection with the ’487 Patent. IPR2023-00518, Paper 30 (PTAB Sept. 17, 2024). In that decision, the Board commented on Patent Owner’s contention:

“[d]riving information” as required by the claims, and as discussed above, includes “location, speed, and acceleration of the vehicle *associated with how the vehicle is driven.*” This driving information may include detected driving events, including driving anomalies

IPR2023-00518, Paper 30 at 14. The Board noted that Petitioner (USAA) did not dispute Patent Owner’s proposal. The Board did not expressly construe the term as it was not in controversy. *See Realtime Data LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms . . . that are

in controversy, and only to the extent necessary to resolve the controversy.” (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999))). In the instant proceeding, Petitioner has not raised an alternative construction for “driving information.” Petition at 4 (“no express constructions are required in this proceeding.”).

In the present situation, ATL asserts that the following features, as recited in, Claim 1, for example, further clarify what is meant by the term “driving information” because this is also dependent on what is meant by “driving period.” Claim 1 requires the driving information to fulfil five criteria:

1. for the driving information to be *generated from raw sensor data* [1.5] on the mobile device (the raw sensor data representing acceleration and position of the vehicle);
2. for the driving information to *represent movement of the vehicle* while the vehicle is being driving by the driver [1.1];
3. for the driving information to represent how *safely* the vehicle is being driven *throughout the driving period* [1.5];
4. for the driving information to *include a driving score* [1.6]; and

5. for the driving information to determine a driving incident [1.7]; ([1.7] states that the processing of the sensor data, by the processor, includes determining a “driving incident.” The use of the word “the processing” means that this processing is a reference to the term “process” of [1.5] and so this is referring to the derived driving information, which now also has to determine a driving incident.)

’728 Patent, Claim 1 [1.1, 1.5, 1.6, 1.7].

These further limitations narrow the scope of the term “driving information” used in the Challenged Claims as compared to the claims under review in the IPR2023-00518 and excludes the driving behavioral information that was proffered by Petitioner in the IPR2023-00518 and accepted by the Board. Now, ATL’s proposed construction excludes the disclosure of Curry because the term “*driving information*” is now more tightly linked to the definition of “driving period” for the above stated reasons.

IV. Cited Prior Art References

All the prior art references cited in the Petition were *explicitly listed* in the prosecution history of the ’728 Patent and *considered* by the Examiner during prosecution—except for Callopy, which (as discussed below) is substantially equivalent to another reference that was considered. USAA-1002 at 45-51. Further,

the examiner asserted that the claims were allowed over all the considered references, including Collopy, Curry, Thompson, and Katayama. USAA-1002 at 45-51. The Challenged Claims were allowed and issued over each of the cited references now relied upon by the Petition. USAA-1002 at 45-46:

Collopy:

42	2010/0131307 A1	05-27-2010	Collopy et al.
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Katayama:

81	EP 1914691 A1	04-23-2008	Japan Automobile Research Institute
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Curry:

87	WO 2010/042545 A2	04-15-2010	University of Utah Research Foundation
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Thompson:

95	Thompson et al.; "Using Smartphones to Detect Car Accidents and Provide Situational Awareness to Emergency Responders"; Mobile Wireless Middleware, Operating Systems, and Applications; 2010; p. 29-42		
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Examiner's consideration:

Examiner Signature	/TYLER D PAIGE/ (07/23/2024)	Date Considered	07/23/2024
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USAA-1002 at 278-281.

A. Callopy

The Petition argues that Callopy is a brand-new reference, never considered and distinct from Collopy. Aside from some minor, non-substantive differences, Callopy, the Petition's primary obviousness reference, is identically disclosed in Collopy, which was considered by the Examiner during prosecution of the '728 Patent. Collopy was carefully considered by the Examiner during prosecution and was used in rejections against the pending claims. These rejections were overcome by ATL's amendments and arguments. *See* USAA-1002 at 201-224 (Amendments and Response to Office Action); 39-52 (Notice of Allowability). Accordingly, the substance of Callopy has already been carefully considered by the Examiner, contrary to Petitioner's assertions in section IV.A of the Petition.

Callopy, USAA-1005, describes a dynamic insurance system which gathers information from a vehicle and enables the insurance cost for the vehicle to be modified [0018]. The primary embodiment used in support of Petitioner's arguments is described in Figures 40 to 42 and Paragraphs [0307] to [0357]. USAA-1005. However, a method of using such a system is described with reference to Figures 43 to 45 and Paragraphs [0358] to [0368]. *Id.* The overall operation of Callopy is summarized in Figure 45 and Paragraphs [0366] to [0367]: "At 4502, monitoring of the driver and the vehicle they are operating is commenced"; "At Step 4502, the

dynamically gathered data is transmitted to an insurance evaluation system. At 4506, the gathered data is analysed”; and “at 4508, the gathered data is assessed from which insurance rates can be determined.” Finally, “At 4510, the driver can be informed of the newly determined insurance rate.” USAA-1005 at [0366]-[0367], Fig. 45.

Callopy’s obtaining of gathered driving data is primarily carried out by the on-board monitoring system 4025. USAA-1005 at [0307] and [0310]. A mobile device 4005 is provided and carries out two functions: the first function is for the mobile device 4005 “to associate the operator 4010 with an [the] on-board monitoring system and a vehicle.” Id. at [0307]. This association may be by “the unique identifier (e.g., IMSI number) to identify an individual associated with the mobile device”. Id. at [0334]. The second function is to facilitate “communicating with the insurance provider 4035 via the mobile device 4005”, [0314], and “communications between an on-board monitoring system 4025 and an external system such as the insurance provider system 4035 being conducted via the mobile device 4005”, [0322]. USAA-1005.

Callopy distinguishes between the on-board monitoring system 4025 and the mobile device 4005, as is consistently seen in Figures 41 to 43 for example. Callopy uses the on-board monitoring system 4025 to “*gather sufficient data from the vehicle*

for a determination of how the vehicle is being driven to be made” USAA-1005 at [0357]. Callopy primarily uses the mobile device 4005 to *transmit* that data to the insurance provider system 4035, *e.g.*, [0307] and [0322]. This raw data is processed at the insurance provider system 4035 and parameters that could modify the insurance cost of the vehicle can then be sent back to the driver of the vehicle, via the mobile device 4005, for consideration in real time. An accelerometer 4120 and a GPS 4110, are connected to the on-board monitoring system 4025. USAA-1005 at Figure 41. However, the GPS 4110 and the accelerometer 4120 “can be located in the mobile device 4005, the on-board monitoring system 4025, or external to, but in communication with the mobile device 4005 and/or the on-board monitoring system 4025.” USAA-1005 at [0323]. Therefore, the location of these sensors is irrelevant to the operation of the system 4000 for real-time monitoring of a driver. This is because the purpose of the on-board monitoring system 4025, in conjunction with the mobile device 4005, is to *gather* data regarding the operation of the vehicle, *id.* at [0310] and [0357], and provide this to the Insurance Provider System 4035, *id.* at [0310] and [0359], where the data is then processed to determine the insurance premium based on the driver’s driving behavior. USAA-1005.

1. Prosecution History of Callopy & Collopy

Petitioner asserts:

[T]he grounds based on Callopy (USAA-1004) do not involve the same or substantially same art or arguments previously presented during original prosecution. Collopy and Callopy do not have the same disclosures, and this Petition applies references that were not applied by the examiner in any rejection of the claims.

Petition at II.B, fn. 4. Petitioner is wrong. The relevant disclosure of Collopy is wholly contained within Callopy, making it duplicative of Collopy, which was considered and applied by the Examiner and overcome during prosecution.

While Petitioner presents Collopy and Callopy as distinct references, these references *share the same disclosure*. First, Collopy and Callopy refer to the same inventor: “Fred Collopy” of Ohio. The name Callopy with an “a” appears to be a simple misspelling, as shown on the PCT application form RO/101 Request. ATL-2002 at 242.

The references also list the same co-inventors, Nard, Amin, Turocy, Takieh, Krosky, Noonan, Narvaez, and Asquith. Callopy has one additional inventor, Murphy, not named in the Collopy reference. *Id.* at 242-245.

Callopy claims priority to nine prior U.S. patent applications, including Collopy.

[0001] This application claims the benefit of U.S. Provisional Application Serial No. 61/118,400, filed on November 26, 2008, entitled “INSURANCE OPTIMIZER AND REAL TIME ANALYTICS”, and U.S. Patent Application Serial No. 12/395,342, entitled “VISIBLE INSURANCE” and filed on February 27, 2009, and U.S. Patent Application Serial No. 12/490,033, entitled “INSURANCE VERTICAL MARKET SPECIALIZATION” and filed on June 23, 2009, and U.S. Patent Application Serial No. 12/498,446, entitled “INSURANCE VERTICAL MARKET SPECIALIZATION”, and filed on July 7, 2009, and U.S. Patent Application Serial No. 12/536,999 entitled “DYNAMIC INSURANCE RATES”, and filed on August 6, 2009, and **U.S. Patent Application Serial No. 12/547,800 entitled “REAL TIME INSURANCE GENERATION” and filed on August 26, 2009 [i.e., Callopy]**, and U.S. Patent Application Serial No. 12/612,958, entitled “INSURANCE VISIBILITY”, filed on November 5, 2009, U.S. Patent Application Serial No. 12/624,371, entitled, “INCENTIVIZED ADOPTION OF TIME-DEPENDENT INSURANCE BENEFITS” and filed on November 23, 2009, and U.S. Patent Application Serial No. 12/624,366, entitled “MONETIZATION OF PERFORMANCE INFORMATION OF AN INSURED VEHICLE,” filed on November 23, 2009. **The entireties of above-captioned applications are incorporated herein by reference.**

Callopy at [0001] (emphasis added); *see also* ATL-2002 at 245-246 (Callopy PCT File History PCT/US2009/0655730). As such, the Callopy reference is simply an omnibus PCT application combining each of the previously filed U.S. patent

applications, all of which claim priority to the original U.S. Provisional Application 61/118,400, including Collopy, which was considered, cited, used in rejection by the Examiner, and ultimately overcome during prosecution of the '728 Patent.

2. Callopy and Collopy Share the Same Disclosure

Contrary to Petitioner's arguments, Callopy and Collopy share the same disclosure and should be considered the same reference. To start, the nine figures in Collopy are reproduced in Callopy with new reference numerals:

“Callopy” WO2010/062899 (USAA-1005)	“Collopy” US2010/0131307 (ATL-2001)
FIG. 40	FIG. 1
FIG. 41	FIG. 2
FIG. 42	FIG. 3
FIG. 43	FIG. 4
FIG. 44	FIG. 5
FIG. 45	FIG. 6
FIG. 46	FIG. 7
FIG. 60	FIG. 8
FIG. 59	FIG. 9

Most of Petitioner's annotated diagrams to support its argument of obviousness [Petition III.A.1.(a); III.A.1.(b); III.A.1.(e); III.B.(a) 1.1; III.B.(a) 1.2; III.B.(a) 1.3; III.B.(a) 1.11; III.B.(a) 1.12] are based on Figure 1 of Collopy (identical to cited Figure 40 of Callopy – aside from reference numerals). Similarly, one further figure of Callopy which has been used to support the Petition's obviousness

argument at III.A.2(a) [1.11] (Figure 42) is also found in Collopy as Figure 3.⁵ The figures relied on, and subsequently annotated, by Petitioner were already of record during prosecution of the '728 Patent.

A comparison of Callopy and Collopy's specifications further shows that nearly every paragraph from Callopy cited in the Petition appears verbatim or nearly verbatim in Collopy:

	"Callopy" WO2010/062899 (USAA-1005)	"Collopy" US2010/01031307 (ATL-2001)		
Where in Petition & Claim	Cited Paragraphs from Callopy	Corresponding Identical Paragraphs in Collopy	Substantially the same paragraph in Collopy	Not explicitly recited in Collopy
III.A.1(a)	Abstract, [0017] – [0018], [0314] – [0316]	[0042] – [0044]		Abstract, [0017] – [0018]
	[0165], [0321]-[0323]	[0049]-[0051]		[0165]
	[0024], [0314] – [0316], [0165]	[0042]-[0044]		[0024], [0165]
	[0085], [0307]	[0023], [0035]		
	[0323] – [0324]	[0051] – [0052]		
	[0323] – [0324]	[0051] – [0052]		
	[0307]	[0035]		
	[0334]	[0062]		

⁵ The Petition incorrectly cites USAA-1005 at Figure 3. *See* Petition at Section III.A.2(a) [1.5]. This figure is from USAA-1006.

	“Callopy” WO2010/062899 (USAA-1005)	“Collopy” US2010/01031307 (ATL-2001)		
Where in Petition & Claim	Cited Paragraphs from Callopy	Corresponding Identical Paragraphs in Collopy	Substantially the same paragraph in Collopy	Not explicitly recited in Collopy
III.A.1(d)	[0017] – [0018], [0165], [0321] – [0323]	[0049] – [0051]		[0017] – [0018], [0165]
	[0306] – [0357]	[0034] – [0085]		
	[0307]	[0035]		
	[0004]		[0004]	
	[0308]	[0036]		
III.A.1(e)	[0307] – [0310]	[0035] – [0038]		
	[0314] – [0324]	[0042] – [0052]		
III.A.2(a) [1.1]	[0307]	[0035]		
	[0004], [0307], [0308]	[0035], [0036]	[0004]	
	[0307], [0320]	[0035], [0048]		
	[0307], [0323]	[0035], [0051]		
III.A.2(a) [1.2]	[0307]	[0035]		
III.A.2(a) [1.3]	[0307] – [0310], [0314] – [0324]	[0035] – [0038], [0042] – [0052]		
	[0346], [0321], [0329]	[0074], [0049], [0057]		
	[0032], [0038], [0323]	[0013], [0019], [0051]		
III.A.2(a) [1.5]	[0307]	[0035]		
III.A.2(a) [1.6]	[0307]	[0035]		

	“Callopy” WO2010/062899 (USAA-1005)	“Collopy” US2010/01031307 (ATL-2001)		
Where in Petition & Claim	Cited Paragraphs from Callopy	Corresponding Identical Paragraphs in Collopy	Substantially the same paragraph in Collopy	Not explicitly recited in Collopy
III.A.2(a) [1.8]	[0308], [0323] – [0324], [0330], [0333] – [0334], [0342], [0346], [0388]	[0036], [0051] – [0052], [0058], [0061] – [0062], [0074]	[0070]	[0388]
	[0307]	[0035]		
	[0323]	[0051]		
III.A.2(a) [1.9]	[0307]	[0035]		
III.A.2(a) [1.10]	[0307]	[0035]		
	[0309]	[0037]		
	[0323] – [0324], [0330], [0346], [0347], [0388]	[0051] – [0052], [0058], [0074], [0075]		[0388]
	[0346]	[0058]		
III.A.2(a) [1.11]	[0308], [0332]	[0036], [0060]		
	[0317]	[0045]		
	[0333] – [0334]	[0061] – [0062]		
	[0309]	[0037]		
	[0307]	[0035]		
	[0332] – [0334]	[0060] – [0062]		
	[0333]	[0061]		
	[0317]	[0045]		
	[0333] – [0334]	[0061] – [0062]		

	“Callopy” WO2010/062899 (USAA-1005)	“Collopy” US2010/01031307 (ATL-2001)		
Where in Petition & Claim	Cited Paragraphs from Callopy	Corresponding Identical Paragraphs in Collopy	Substantially the same paragraph in Collopy	Not explicitly recited in Collopy
III.A.2(a) [1.12]	[0307]	[0035]		
	[0443] – [0445]	[0115] – [0117]		
	[0307] – [0308], [0322], [0329]	[0035] – [0036], [0050], [0057]		
III.A.2(a) [1.13]	[0332] – [0334]	[0060] – [0062]		
III.A.2(a) [1.14]	[0309], [0323], [0324], [0330], [0332] – [0334], [0346], [0388]	[0037], [0051], [0052], [0058], [0060] – [0062], [0074]		[0388]
III.A.2(b) [2.2]	[0017] – [0018]			[0017] – [0018]
III.B.1(b)	[0014]			[0014]
	[0004], [0307], [0321]	[0035], [0049]	[0004]	
III.C.1(b)	[0330]	[0058]		
III.C.2(g) [12]	[0309]	[0037]		
	[0308], [0333], [0334]	[0036], [0061], [0064]		
III.C.2(g) [13.15], [24.16]	[0307]	[0035]		
	[0004], [0308]	[0036]	[0004]	

	“Callopy” WO2010/062899 (USAA-1005)	“Collopy” US2010/01031307 (ATL-2001)		
Where in Petition & Claim	Cited Paragraphs from Callopy	Corresponding Identical Paragraphs in Collopy	Substantially the same paragraph in Collopy	Not explicitly recited in Collopy
III.C.2(g) [22]	[0323]	[0051]		
III.C.2(m) [26]	[0330]	[0058]		

Aside from the Abstract and Paragraphs [0014], [0017], [0018], [0024], [0165], and [0388], the entire contents of Collopy, are reproduced word-for-word in Callopy. The entire disclosure of Collopy is incorporated by reference in Callopy. *See* USAA-1005 at [0001]. The six paragraphs which are not found word-for-word in Collopy are either not material to the consideration of or are duplicative of the substantive material already disclosed in Collopy. The Examiner considered and applied Collopy during prosecution of the '728 Patent, which ATL overcame by amendment and traversal. *See* USAA-1002 at 45-46. Petitioner's contention otherwise is simply wrong.

Further, the several paragraphs not explicitly recited in Collopy, which are relied upon in the Petition, are used in conjunction with paragraphs that are word-for-word identical in Collopy. Therefore, the subject matter disclosed in the several non-reproduced paragraphs was already considered by the Examiner through the Examiner's consideration of the identical disclosure that is found in Collopy.

Only twice does the Petition cite unique paragraphs of Callopy without combining them with material explicitly found in Collopy. The first of these is for the obviousness rejection against Claim 2 (Ground 1, III.A.2(b) [2.2]) and the second is for the obviousness rejection against Claim 5 (Ground 2, III.B.1(b)). Notably, both claims are *dependent claims*. Accordingly, as the Examiner found Claim 1 to be valid during prosecution over Collopy (and Thompson, Curry, and Katayama), any such objections to the present dependent claims are moot. USAA-1002 at 45-51. It is immaterial whether Petitioner considers that these paragraphs are directed to new material not considered by the Examiner. Secondly, the actual disclosures upon which Petitioner relies have already been considered by the Examiner through the virtue of considering and applying Collopy. *Id.*

Furthermore, Petitioner has used Callopy as the main reference in its Petition using a modified version of Figure 40 of Callopy eight separate times to support its obviousness arguments and has also reproduced a modified version of Figure 42 of Callopy. Substantive consideration of Callopy is essential to Petitioner's challenges. However, as Callopy's disclosure was already considered and applied by the Examiner, through consideration of Collopy, the Petition's grounds of challenge are duplicative of prior prosecution by the USPTO.

3. Petitioner Misrepresents the Disclosure of Callopy

Petitioner repeatedly misrepresents and omits critical parts of the alleged disclosure and teachings of Paragraph [0307] of Callopy, USAA-1005.

The Petition at page 6-7 states:

The mobile device 4005 “monitors and gathers information regarding driver 4010’s driving skills, habits etc. and forwards the information to the insurance provider 4035” and wireless communicates with an “insurance provider system 4035 via transceiver 4040 and communication component 4045.” USAA-1005, [0307].

Petition, Page 12:

Callopy similarly teaches sensor data evaluation capabilities within its **mobile phone 4005** in assessing “driving skills, habits, etc.” USAA-1005, [0307].

Petition, Page 28:

Callopy similarly describes that its **mobile device** derives, from acceleration and position data, “information regarding driver 4010’s driving skills, habits etc.” USAA-1005, [0307].

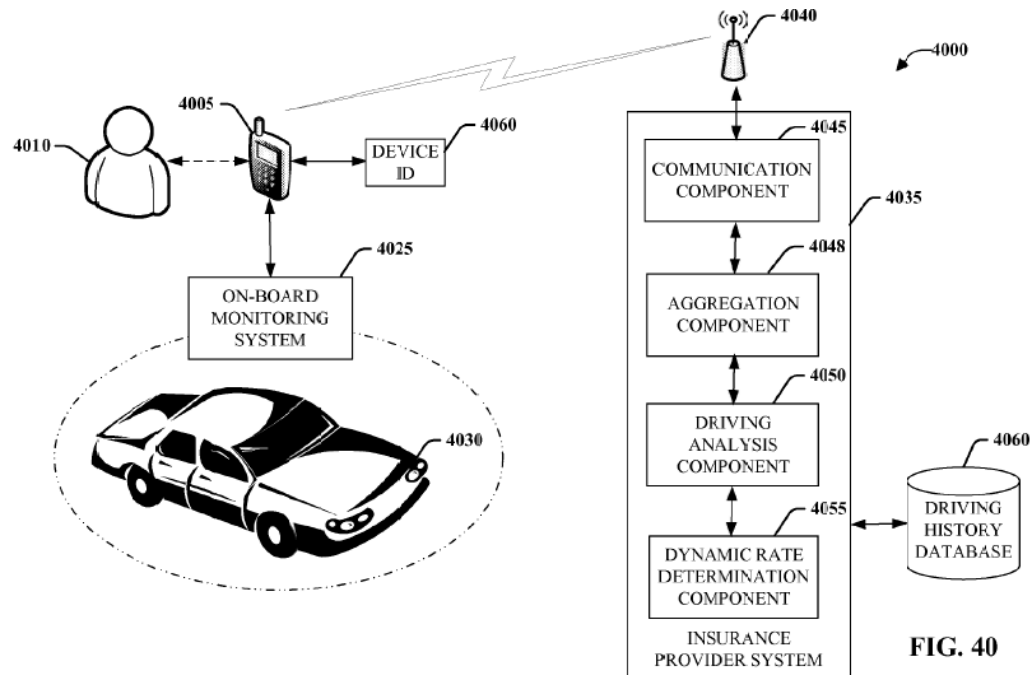
Yet, according to Callopy’s Paragraph [0307], the mobile device 4005 does *none of the asserted operations* as claimed by Petitioner:

[00307] Fig. 40 illustrates a system 4000 for real-time monitoring of a driver to facilitate determination of insurance rate(s) based on various aspects as disclosed infra. System 4000 includes an insurance policy

holder, operator 4010, **utilizing a mobile device 4005 to associate the operator 4010 with an on-board monitoring system 4025 and a vehicle 4030.** By employing wireless communications, the mobile device 4005 is in communication with an insurance provider system 4035 via a transceiver 4040 and a communication component 4045. **As vehicle 4030 is being driven by operator 4010 the driver's driving habits, skills, route of travel, activity, *etc.*, can be monitored by the on-board monitoring system 4025 in conjunction with the mobile device 4005. The on-board monitoring system 4025 monitors and gathers information regarding driver 4010's driving skills, habits, *etc.* and forwards the information to the insurance provider 4035.** The communication component 4045 can provide communication protocols, data conversion, *etc.*, as necessary, **to allow transmission of data and information between the on-board monitoring system 4025, the mobile device 4005 and the insurance provider system 4035.** Data received at the insurance provider system 4035 can be collected by an aggregation component 4048. The aggregation component can compile received data to facilitate processing by the data analysis component 4050. The insurance provider 4035 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.

USAA-1005, [0307] at 83-84 (emphases added).

Further demonstrating this distinction is Callopy's Figure 40, as referenced in Paragraph [0307] as reproduced below:



USAA-1005 at 240, Figure 40.

Callopy discloses that “the *on-board monitoring system* 4025” performs these operations and uses the *mobile device* 4005 to associate the operator of the vehicle 4010 with the on-board monitoring system 4025. USAA-1005 ¶ [0307]. At no point does Callopy’s *mobile device* perform any of the claimed operations as asserted by Petitioner. Instead, the mobile device described in Paragraph [0307] is used as a tethering device to connect the on-board monitoring system and the insurance provider 4035. Indeed, Figure 40 differentiates between the mobile device 4005 and on-board monitoring system 4025, as depicted above.

B. Curry

Curry was used as the primary reference in IPR2023-00518. It is described in that Final Written Decision, as “monitoring and controlling use of the mobile computing device.” IPR2023-00518, Paper 30 at 15. This is correct as the primary function of Curry is to prevent distracted driving (for example caused by using a mobile phone during driving). As a result, Curry is focused on being triggered by the receipt of a call or text message (or an instruction from the user to initiate such communication) and then determining the mode of movement of the device. Once the mode of movement has been determined, the action can be taken to block usage of the mobile device and thereby prevent distracted driving through the “dynamic call handling module.” *See* USAA-1006 at 2-4. (“a graphical user interface can be used to restrict use of the wireless device during certain periods such as school time or after a curfew time” and “driver safety statistic may be decreased for certain user behaviors, such as use of the device while driving a vehicle, and use of the device during restricted time periods”).

C. Warren

The Petition contends at page 77 (IV.A) that “Warren was never before the Office, and thus, not considered by the Examiner.” However, Warren (USAA-1008)

was before the office and considered by the Examiner. *See* USAA-1002 at 267, 269, 277, 279, 313, 315, 386, and 388.

21	2006/0053038 A1	03-06-2006	Warren et al.
22	2007/0027583 A1	02-01-2007	Tamir et al.
23	2009/0005975 A1	01-01-2009	Forstall et al.
24	2010/0131691 A1	05-27-2010	Chatterjee et al.
25	2011/0141006 A1	06-16-2011	Rabu
26	2011/0307188 A1	12-15-2011	Peng et al.
27	2005/0046584 A1	03-03-2005	Breed

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /T.D.P/

USAA-1002 at 277 (highlighted).

V. Grounds of Challenge

A. Legal Standards – Obviousness

The Patent Act provides that “[a] patent may not be obtained . . . if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a).

The obviousness analysis requires several threshold inquiries identified below. It is improper to use the claims as a roadmap for a finding of obviousness. The “[d]etermination of obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the

patented invention.” *ATD Corp. v. Lydall, Inc.*, 159 F.3d 534, 546 (Fed. Cir. 1998). In analyzing obviousness, only the knowledge of one skilled in the art, the prior art references, and the accepted wisdom in the field at the time may be considered. “One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.” *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988). It is improper to backtrack from the claims to try to find something related in the prior art. The Federal Circuit has held: “It is impermissible [to] simply . . . engage in a hindsight reconstruction of the claimed invention, using the [patent owner’s] structure as a template and selecting elements from the references to fill the gaps.” *In re Gorman*, 933 F.2d 982, 987 (Fed. Cir. 1991).

1. Claims cannot be found obvious if an element is absent.

If a single element of the claim is absent from the prior art, the claim is not obvious. *See CFMT, Inc. v. YieldUp Int’l Corp.*, 349 F.3d 1333, 1342 (Fed. Cir. 2003) (“Obviousness requires a suggestion of all limitations in a claim.”); *In re Rijckaert*, 9 F.3d 1531, 1534 (Fed. Cir. 1993) (reversing obviousness rejection where prior art did not teach or suggest all claim limitations).

2. A petition must address the Graham factors.

An obviousness analysis considers: (1) the scope and content of the prior art,

(2) any differences between the claimed subject matter and the prior art, and (3) the level of ordinary skill in the art. *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966). Petitions for IPR “must address the Graham factors.” *Eizo Corp. v. Barco N.V.*, Case No. IPR2014-00358, Paper 11 at 29–30 (P.T.A.B. July 23, 2014) (citing *Graham*, 383 U.S. at 17–18). For example, the Board faulted the petitioner in *Eizo Corp.* for failing to identify the differences between the claimed subject matter and the prior art. *Id.* at 29–30. In particular, the Board found insufficient the petitioner’s “conclusory assertion” that “[t]o the extent [the first reference] may not explicitly teach” the limitation, the second reference “explicitly teaches this limitation.” *Id.* at 30. The Board explained that “such an assertion fails to resolve the exact differences sought to be derived from” the second reference. *Id.* (finding that petitioner had not shown a reasonable likelihood of prevailing on that ground). Other Board decisions have reached the same result. *See, e.g., Moses Lake Indus., Inc. v. Enthone, Inc.*, Case No. IPR2014-00243, Paper 6 at 18 (P.T.A.B. June 18, 2014); *eBay, Inc. v. Paid, Inc.*, Case No. CBM2014-00125, Paper 15 at 21 (P.T.A.B. Sept. 30, 2014).

3. A petition must provide articulated reasoning with rational underpinnings to combine or modify references.

The conclusion of obviousness based on a combination of references must also be supported with explicit analysis of a reason to combine those references. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). The Federal Circuit has stated

that such reasons must be more than “mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006); *accord Innogenetics, N.V. v. Abbott Labs.*, 512 F.3d 1363, 1374 (Fed. Cir. 2008) (agreeing with the district court’s reasoning that “some kind of motivation must be shown from some source, so that the jury can understand why a person of ordinary skill would have thought of either combining two or more references or modifying one to achieve the patented method”); *see also LG Elecs., Inc. v. Cellular Commc’ns Equip. LLC*, Case No. IPR2016-00197, Paper 7 at 7–11 (P.T.A.B. Apr. 29, 2016) (faulting a petition’s obviousness analysis for lack of sufficient articulated reasons with rational underpinnings for modifying references to achieve particular elements required in the claims).

B. Claim 1 – Difficulty of Suggested Combination of Callopy, Curry, and Thompson.

There is no embodiment in Callopy where the insurance provider system 4035 does not have a communication component 4045, and aggregation component 4048, and driving analysis component 4050 and a dynamic rate determination component 4055. In the Petition, all the modified diagrams of Figure 40 of Callopy showing Petitioner’s imaginary ‘CCT phone’ (Callopy, Curry, Thompson), also *always* show these components to be present without modification. Petition at 17, 20, 23, 24, 39,

43. Accordingly, even under Petitioner's best efforts at creating an imaginary device (the CCT phone or even the CCTK phone) that has the functionality of the mobile device of the present invention, there is *always* the insurance provider system 4035 present for carrying out the processing functions.

This then calls into question what the imaginary CCT phone is doing and what the Insurance Provider system 4035 is doing. Logically, moving *any* of the functionality of the insurance provider system to the imaginary CCT phone would cause changes in the operation of the Insurance Provider System. So, the diagrams showing the imaginary CCT phone (modified Figures 40 and 42 of Callopy) presented in the Petition are misleading in that they suggest that there would be *no modification* of the operation and functionality of the Insurance Provider system.

The modified system proposed by Petitioner of the CCT phone working in conjunction with the Insurance Provider system 4035, would be complicated to implement. More specifically, some of the insurance provider system functionality would need to be moved to the imaginary CCT phone and some of the remaining functionality would remain. How much would be moved and how much would be retained in the modified Insurance Provider System is not addressed. Would the dynamic determination component 4055 which relied on the driving history database 4060 "which stores information pertaining to the vehicle operator 4010, e.g.,

previous driving history, along with other data as required” [0308] be moved to the mobile device? Would the driving analysis component 4050 be moved to the mobile device? If part of the driving analysis component 4050 would be moved to the mobile device, which part and how would the two different parts operate? Similarly, the aggregation component 4048 which “gathers information from as many sources as required to facilitate generation and presentation of insurance rate(s)” [0308] would have to be modified to work with the imaginary CCT phone. The Petition is silent as to these questions. To make Petitioner’s imaginary CCT phone work, the functionality of the insurance provider system 4035 would have to be modified in a way not described or suggested by Callopy. Furthermore, this would need to be carried out without knowledge of the invention—namely, without the benefit of hindsight.

Petitioner states that this would have only required “routine programming knowledge.” Petition at 14. However, Petitioner offers no evidence to support the suggestion that the CCT phone or CCTK phone would be obvious for a POSITA to implement with the on-board monitoring system 4025 and the Insurance Provider system 4035 and how that would be done. Given that Petitioner is suggesting a major change in the operation of the Callopy System (as explained above) the specific configuration suggested by Petitioner needs to be routine and enabling. Without

clear evidence and support for such a particular reconfiguration of the components, the “routine programming knowledge” of the POSITA would not be able to bridge the gap of information required to achieve the CCT phone. Thus, the combination would not be obvious to the POSITA, as Petitioner has proposed, as such a combination would not be straightforward. This undermines the claimed motivation to combine Curry and Callopy to arrive at the claimed invention.

C. Stated Basis for Motivation to Combine

Petitioner offers the following reasons to combine Callopy and Curry:

While Callopy broadly describes its system as using “various analytical methods” to “facilitate determination of an appropriate insurance rate,” it otherwise does not provide specific implementation detail on how the rate is calculated. *Id.*, [0307]; *id.*, [0004]. Without such detail, a POSITA seeking to implement Callopy’s teachings would have been motivated to seek well-known insurance rate calculation techniques for further guidance.

Petition at 11 (citing USAA-1003, ¶100).

First, it is well understood that most insurance companies consider specifics of the analytical methods used to calculate insurance premiums to be confidential. These specific details would not likely be published for competitors to benefit from and this would be consistent with the disclosure of Callopy. Second, Petitioner claims that a POSITA would seek to implement “well-known insurance rate

calculation techniques.” Petition at 11. If such techniques were well-known, there would be no need to turn to Curry, as a POSITA would already be aware of these techniques from their general/common knowledge. Third, if such “well-known techniques” were to be sought by a POSITA (not admitted), they would be implemented in accordance with the structure of Callopy to update/replace the corresponding functionality present in Callopy. Accordingly, as analysis of driving habits 4506 is carried out at the insurance provider system 4035 (in the driving analysis component 4050 or the dynamic rate determination component 4055), the natural place to implement any such new techniques would be on the insurance provider system 4035, rather than on the mobile device 4005, contrary to Petitioner’s suggestions. As discussed above, Callopy’s mobile device 4005 is the go-between for the on-board monitoring device 4025 and the insurance provider 4035. *Supra* at V(A)(3). Lastly, Petitioner posits that Callopy “broadly describes its system as using ‘various analytical methods’ to ‘facilitate determination of an appropriate insurance rate,’ it otherwise does not provide specific implementation detail on how the rate is calculated.” Petition at 11. However, Callopy does describe general insurance rate calculation techniques. *See, e.g.*, USAA-1005 at ¶¶ [0369] and [0396]. Adjustment of the insurance premium due to the gathered data is described throughout Callopy. *See, e.g., id. at* ¶ [0166]. Also, the use of artificial intelligence to calculate insurance

premiums is described at ¶¶ [0352] to [0355]. *Id.* Accordingly, contrary to Petitioner’s view, Callopy describes many different general techniques for calculating insurance rates and adjustment of the insurance rates in response to analysis of the gathered data.

The level of “specific implementation detail” that Petitioner seeks to import into Callopy is the general concept of using “safety scores” of Curry in the imaginary CTT phone as a result of the alleged deficiency in Callopy. *See* Petition at 12-13. However, Callopy already describes how the system can “compute a safety metric for a current or substantially current operation condition of vehicle 4710.” USAA-1005 at ¶ [0401]. This further undermines Petitioner’s stated motivation to combine Callopy with the “safety scores” of Curry.

D. Diverging Disclosures of the Cited References

Callopy and Thompson, like the ’728 Patent’s claimed invention, relate to monitoring driving of a vehicle. In Callopy, this is for insurance purposes. In Thompson, this is for research purposes. In this regard, Callopy and Thompson are directed to use of the vehicle by a driver substantially whenever it is driven. Callopy can determine “a rate of a journey (*e.g.*, travel from two different points)” USAA-1005 at ¶ [0261] and “if a driver meets a standard (*e.g.*, travel for a journey without speeding).” *Id.* at [0269]. Similarly, Thompson “begins recording accelerometer

information and looking for potential accidents above 15mph.” USAA-1007 at §1.32, p. 8.

Curry, on the other hand, operates differently, having a different objective—namely, “monitoring and controlling *the use* of a mobile computing device.” USAA-1006 at 2-3. While Curry is also concerned with driving safety, it does not try to monitor substantially all the time that the vehicle is being driven. Rather, the primary function of Curry is to prevent distracted driving (for example caused by using a mobile phone while driving). Curry ensures that “drivers will not be distracted by wireless devices.” USAA-1006 at p. 11,⁶ l. 33 – p. 12, l. 1. This is achieved by comparing “data in the motion data cache . . . with the user permission data to enable a driver safety statistic to be calculated *based on when and where the wireless computing device was used* and the motion of the device.” USAA-1006 at p. 3, ll. 27-30 (emphasis added). Curry’s stated objective is to “prevent the cell phone use under complex/critical driving contexts.” USAA-1006 at p. 15, ll. 30-31.

As a result, Curry is triggered by the receipt of a call or text message (or an instruction from the user to initiate such communication) and then determining the mode of movement of the device. “Right after an incoming phone or text message is

⁶ Citations to Curry, USAA-1006, reference the exhibit pagination and not the original page numbering and formatted as page x, line y.

received or an outgoing phone call is made, the GPS sensor and accelerometer can start to record a motion time series.” USAA-1006 at p. 16, ll. 8-10 and

If the mobile phone is not in monitoring mode, the motion recording process can be activated 302 on the phone. This may be accomplished by the user of the phone, or through an automated process by the mobile phone client when a selected type of motion is detected. For example, the reporting process may be activated when an outgoing call 301 is made or an incoming call 303 is received.

USAA-1006 at p. 13, ll. 22-26.

Once the mode of movement has been determined, action can be taken to block usage of the mobile device and thereby prevent distracted driving. “If the activity mode is recognized in real-time, the dynamical call handling module 308 can allow or disallow users to receive or make a call, text a message.” USAA-1006 at p. 14, ll. 5-6.

In IPR2023-00518, Curry was determined to be relevant to the claims of the ’487 Patent because the triggering of the driver behavior monitoring (namely the start of the driving period as determined in the claims of the ’487 Patent) was by the receipt of the text message or call on the mobile device and then determining the mode of travel to see if the call should be blocked. IPR2023-00518, Paper 30 at 37-38. The “driving period,” as defined in the claims of the ’728 Patent, is tied to a driving period (defined by a vehicle journey) and the monitoring is *throughout* the

driving period. *See, e.g.*, USAA-1001, Claim 1 [1.5] and [1.6]. This is distinct from the disclosure of Curry, which is directed to a different type of system that is not trying to monitor how safely the vehicle is being driven *throughout* a vehicle journey. In fact, if a driver does not receive a call during the vehicle journey, the Curry mobile device will not record any data at all. This is a fundamental difference in operation. A POSITA would therefore understand that Curry would not be compatible with Callopy or Thompson.

Additionally, Callopy and Thompson use the mobile device to transmit motion data to the Server where it is processed, further distinguishing them from Curry. As mentioned above, in the Callopy system “the dynamically gathered data [by the on-board monitoring system] is transmitted to an insurance evaluation system.” USAA-1005 at [0367]. Thompson states “Figure 1.2 shows how sensors built into a smartphone detect a major acceleration event indicative of an accident and utilize the built-in 3G data connection to *transmit that information to a central server*. That server then processes the information and notifies the authorities as well as any emergency contacts.” USAA-1007 at 2, ¶ 4.

Petitioner asserts that the Curry mobile device processes raw sensor data to derive driving information:

Raw data and resolved driving behavior information are stored in the phone (e.g., “motion data cache 118,” “local driving safety performance database 324) and processed to (1) determine an operating mode of the phone (e.g., “GPS monitoring/navigation mode,” “communication mode”) and (2) generate a user driving safety score.” USAA-1006, Abstract, 3:2-4:6, 13:3-14:26, 17:1-18:3, Figs. 1, 3, 6. USAA-1003, 83.

Petition at 8-9.

However, the generation of the driving score data is described as occurring at the server:

The motion data cache can also be used to record the location, speed, and acceleration of the mobile wireless computing device each time a phone call is transmitted from or received by the wireless device. *The data in the motion data cache can be transmitted to and stored on the data server.* The data in the motion data cache can be compared with the user permission data to enable a driver safety statistic to be calculated based on when and where the wireless computing device was used and the motion of the device.

USAA-1006 at p. 3, ll. 24-30.

“The motion data from a mobile phone can be transmitted to the driving safety performance database in the data server 208.” USAA-1006 at p. 13, ll. 1-2.

Data from the motion data 20 cache 304 and the activity mode recognition module 306 can be transmitted to a local driving safety performance database 324. The **collected driving safety information**

can be sent back to the server 322 through mobile phone communication links 320. If the use permission database, activity mode recognition module 306, and motion data cache 304 all signal that the mobile phone is not traveling at a high rate of speed, and is available for use, based on time and location, then it can be placed in a “ready to use” mode 313.

USAA-1006 at p. 13, ll. 19-26.

E. The Challenges Fail to Render Obvious the ‘728 Patent Claims

1. Claim 1

a) Element [1.5]

Petitioner considers that Curry discloses processing “raw sensor data” to “generate various types of derived information relating to driving.” Petition at 28.

In support of this, Petitioner states:

[I]n Curry, a mobile phone processes sensor data to derive “driving behavior” information, e.g., “talking...or texting...while driving” and “speeding, abnormal acceleration, abnormal deceleration, and taking sharp turns.” USAA-1006, 7:5-29, 8:21-27, 8:30-9:33, 10:15-26, 11:3-14.

Petition at 28 (citing USAA-1006).

First, *user behaviors* such as “talking . . . or texting . . . while driving” are not *driving information* as defined in [1.1] because they do not relate to movement of the vehicle. These are *user behaviors* in terms of user interaction with the mobile

device. This has been repeatedly referred to in the Petition and is misleading *See* Petition at 20, 28, 30, 33, 35, 37, and 41.

Petitioner's reference to "speeding, abnormal acceleration, abnormal deceleration, and taking sharp turns" is presented out of context in the Petition repeatedly. *See* Petition at 8, 20, 28, 30, 33, 35, 36, 37, and 41. There are only two times this is mentioned in Curry:

In the first mention at USAA-1006 at 2, l. 24 - 3, ll. 6:

The motion data cache can also be used to record the location, speed, and acceleration of the mobile wireless computing device each time a phone call is transmitted from or received by the wireless device. The data in the motion data cache can be transmitted to and stored on the data server.

USAA-1006 at 3, ll. 3-6.

Firstly, the processing of the data in the motion cache and is carried out *at the data server*. Secondly, the data in the motion cache is not "driving information" as defined by Claim 1 (see below).

Curry explains the driver safety statistic is based on where and when the computing device was used and the motion of the device. "The data in the motion data cache can be compared with the user permission data to enable *a driver safety statistic* to be calculated based on *when and where the wireless computing device*

was used and the motion of the device.” USAA-1006 at 3, ll. 27-30 (emphases added). Accordingly, the Curry driver safety statistic is a measure of the user interaction with the wireless device (mobile device) and raw sensor data. There is no disclosure of the driver safety statistic only relating to the claimed “how safely a vehicle is being driven by the driver throughout the driving period,” [1.5]; rather the Curry driver safety statistic is always in combination with the user interaction with the wireless device.

Curry goes onto describe this in the same paragraph:

The driver safety statistic may be decreased for certain user behaviors, such as *use of the device* while driving a vehicle, and *use of the device* during restricted time periods. *In addition*, the wireless device may collect data during periods other than when phone calls are answered or made. For example, the wireless device may collect speed and location information and report that information back to the data server. *The driver safety statistic* can also be *decreased* based on driving behavior, such as speeding, abnormal acceleration, abnormal deceleration, and taking sharp turns. The safety statistic can be reported to or calculated at the data server.

USAA-1006 at p. 3, l. 30 – p. 5, l. 6 (emphases added).

This paragraph in Curry states that the driver safety statistic is modified, *e.g.*, “decreased” by “*speeding, abnormal acceleration abnormal deceleration, and taking sharp turns*”. *Id.* (emphasis added).

While this data “*may be collected in periods other than when phone calls are answered or made*” this is always “*in addition*” to the calculation of driver behavior related to use of the device “*while driving*” or “*during restricted periods.*” *Id.* Once again, this requires the server to have first computed the driver safety statistic and then modify it using the sensed driving behavior and so calculating such behavior is not independent of data representing monitoring of user interaction with the wireless device which is not driving information. This lack of independence is important for points raised in the discussion of incompatibility of Curry and Callopy and indicates that the combination is driven by impermissible hindsight considerations.

The second mention is in the context of a section headed “Motion data uploading,” where it is stated:

Through mobile phone communication links, *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 such as speeding, abnormal deceleration and sharp turns.

USAA-1006 at p. 9, ll. 23-28 (emphases added).

First, this paragraph confirms that the processing is not carried out on the processor of the mobile device as the paragraph clearly states that this is carried out on the “safety data server.” *Id.* Secondly, what is the “driving information” in this

instance? It is not the “motion data” as this is raw data collected from the sensors, and it is not the “activity mode estimation results” because these simply provide the current mode of activity. Accordingly, Petitioner’s references to “speeding, abnormal acceleration, abnormal deceleration, and taking sharp turns” simply does not meet the requirements of Claim 1 regarding “driving information.”

Both paragraphs make clear that driving is not independent of user behavior. The only “processing” that is carried out on the wireless device of Curry is in relation to determining user activity at and following the time when a mobile call is made or received:

The data can be recorded to a local motion data cache 118 for *further processing*. The local data cache can be used to store raw data for an extended time period of time in order to provide sufficient information *for a user activity mode recognition program 120*. And “Based on collected data in the motion data cache 1 18, a user activity mode recognition program 120 *estimates the context of mobile phone use*.”

USAA-1006 at p. 7, l. 30 – 8, l. 7 (emphases added). For at least this reason, the Petition fails to demonstrate that Claim 1 is obvious over the proposed combination of Callopy, Curry, and Thompson.

b) Element [1.6]

As Patent Owner discussed above, the claimed “driving period” is defined with respect to a “vehicle journey.” *See supra*, III(B). The Petition does not offer any constructions for the Challenged Claims. As discussed above, the modification of the word “*during*” to “*throughout*” the driving period more clearly directs the claim to the monitoring of driving information for the *vehicle journey*. *See supra* III(B). Which is not disclosed, taught, or suggested by the cited references alone or in combination. The Petition also fails to address “driving period” as properly construed in the ’728 Patent. The Petition’s grounds of challenge fail to render obvious the Challenged Claims.

Curry is a different type of monitoring device that has no association with a duration of a vehicle journey. Rather, it is triggered by text or call to a mobile device, which may or may not occur during a vehicle journey and which is completely independent of that vehicle journey duration. Curry mentions “Based on a statistical analysis method, the raw driving performance data of a user of the mobile phone 106 can be processed to provide a driving safety index or score for the user.” USAA-1006 at p. 9, ll. 31-33. The processing is carried out on “a user permission management and driving safety monitoring system located on a web server.” USAA-1006 at p. 11, l. 19 – p. 12, l. 19 and Figure 2. The score is determined after the raw

data has been sent to the web server in a “later driving safety score evaluation module 212.” USAA-1006 at p. 13, l. 4. Accordingly, the driving score of Curry does not form the “derived driving information,” which is generated by the processor *on the mobile device* in the Challenged Claims [1.5]. Combining Curry with Collopy would result in any driving score being generated on the insurance provider system 4035. Also, as Curry does not provide data relating to the safety of the vehicle being driven *throughout* the driving period (vehicle journey), Curry, and the proposed combination, does not generate “derived driving data” as required by Claim 1 [1.6].

For at least this reason, the Petition fails to demonstrate that Claim 1 is obvious over the proposed combination of Collopy, Curry, and Thompson.

c) Element [1.8]

The proposed combination of Collopy, Curry, and Thompson fails to disclose, teach, or suggest at least element [1.8], “generate the derived driving information without data from vehicle sensors throughout the driving period in which the mobile telecommunications device is within the vehicle and the vehicle is being driven by the driver.”

As shown in Collopy Figure 41, the on-board monitoring system 4025 of Collopy has access to GPS 4110, and an accelerometer 4120, on-board data (diagnosis) system 4130 and a camera 4140. The embodiment shown, shows all

these components being connected (accessible) to the on-board monitoring system 4025.

The on-board monitoring system 4025 is configured to “obtain information from, an on-board data system 4130.” USAA-1005 at [0325]. The operative coupling between the on-board data system 4130 and the on-board monitoring system 4025 can be “hardwired,” for example, using an “ODB-II connector” *or* “wireless.” USAA-1005 at [0325]. The on-board data system 4130 includes “an engine control unit/module (ECU/ECM) located on vehicle 4030 (see FIG. 40) that monitors various sensors located throughout the engine, fuel, and exhaust systems”. *Id.* at [0325]. The on-board data system 4130 also includes “a transmission control unit (TCU), powertrain control module (PCM, which can be a combined ECU/TCU), and other control units/on board diagnostic systems located in an automobile monitoring sensors associated with the transmission system, braking system, windows, doors, windscreen wipers, climate control, etc., and information obtained there from can allow the on-board monitoring system 4025 to build an accurate picture of how the vehicle is being operated.” USAA-1005 at [0325].

The on-board monitoring system 4025 described in Callopy generates data that is obtained from the vehicle’s sensors and that allows “the on-board monitoring system 4025 to build an accurate picture of how the vehicle is being operated.”

USAA-1005 at [0325]. This feature thus does not disclose, teach, or suggest the limitation [1.8], which requires the derived driving information to be obtained *without data* from the vehicle sensors throughout the driving period.

There is no embodiment shown in Callopy where the on-board monitoring system 4025 is *not connected* to the on-board data system 4130. In fact, all the diagrams shown in the Petition show Petitioner's imaginary "CCT phone" or "CCTK phone" to *always* be connected to the on-board monitoring system 4025. Petition at 17, 20, 23, 24, 39, 40, and 43. Accordingly, even under Petitioner's best efforts at creating an imaginary device (the CCT phone or even the CCTK phone) that allegedly has the functionality of the claim invention, there is always an operative connection to the vehicle's sensors, which limitation [1.8] obviates. Hence, Petitioner's view that "there is no need to use data from the vehicle sensors" (Petition at 36) would require further modification of Callopy to not use the existing connection to the vehicle sensors. Such selection is being carried out with the impermissible benefit of hindsight. The disclosure of Callopy even extends to "devices that collect and integrate information as black boxes" [0302].

One of the key advantages of the present invention, as recited in the independent claims, is that the requirement to not obtain sensor data from the vehicle sensors [1.8]. This requirement leads to a key advantage that the present mobile

device of the invention is independent of the vehicle and does not need to be operatively connected in any way to the vehicle. This means that the mobile device of the present invention can be used in any vehicle regardless of age and configuration. It also means that the mobile device for a driver can be used in different vehicles consistently to monitor the safety of the driver's driving. Because of the requirement for Petitioner's CCT or CCTK phone to be connected to the on-board monitoring system of the vehicle, this advantage is lost in the CCT or CCTK imaginary phones.

For at least this reason, the Petition fails to demonstrate that Claim 1 is obvious over the proposed combination of Callopy, Curry, and Thompson. Each of the other independent claims 13, 24, and 25 containing the same or similar limitations are likewise not rendered obvious by the challenges presented in the Petition. *CFMT*, 349 F.3d at 1342; *In re Rijckaert*, 9 F.3d at 1534).

2. Claim 2

Claim 2 requires the storage [2.1] and transmission [2.2] of *raw data* from the mobile device to the server. This additional limitation adds to the requirement in [1.9] to transmit at least some of the derived *driving information* to the server.

Petitioner argues that the imaginary "CCT phone is configured to transmit both processed sensor data and raw values" Petition at 45. The support for this is

stated to be from Curry that its mobile device transmits “*motion data and activity mode estimation* results of a user.” USAA-1006 at p. 9, ll. 23-28. However, Petitioner misinterprets the term “driving information” [1.1] to be broad enough to include user behavior “Curry similarly describes driving behavior information such as “talking ..or texting...while driving”. Petition at 20 (quoting USAA-1006, 7:5-29). This is not equivalent to the claimed driving information “representing movement of the vehicle whilst the vehicle is being driven by the driver” [1.1]. Further “activity mode estimation results” is also not “driving information” as defined in Claim 1 because it does not fulfil the criteria described above. See supra, Section III(C) (five limitations imposed on driving information). In particular, the Curry activity mode does not represent the safety of the vehicle [1.5], is not throughout the driving period [1.1] and [1.5], does not include a driving score [1.6] and does not determine a driving incident [1.7]. Curry’s activity mode estimate results are only used to determine the activity of the user (when a mobile phone interaction is detected) and if use of the mobile phone is not permitted when undertaking that activity, use is prevented.

Curry states “A dynamic call handling module is configured to place the wireless device in a selected mode based on the activity mode.” USAA-1006 at 4, ll. 16-17. And, “the activity mode recognition module identifies a specific type of

restricted activity, such as driving.” *Id.* at 4, ll. 21-22. Curry continues “[t]he module may disable the wireless device from making or receiving calls in certain modes, such as the driving mode.” USAA-1006 4, ll. 16-22.

Accordingly, both types of information (1) raw sensor data *and* (2) driving information are not transmitted by Curry or the “CCT” combination. . *CFMT*, 349 F.3d at 1342; *In re Rijckaert*, 9 F.3d at 1534). For at least this reason, the Petition fails to demonstrate that Claim 2 is obvious over the proposed combination of Callopy, Curry, and Thompson.

3. Claim 4

Dependent Claim 4 specifically requires that the sensor data has to have a predetermined value to initiate the start of the driving period. Here, the definition of a driving period is now much more specific in the ’728 Patent claims: the start of a driving period is tied to the start of a vehicle journey and this is not disclosed in Curry. Rather, in Curry, any activation of the sensor data is initiated by a receipt of or placing of a call or text message which has no relation to the start of a vehicle journey. USAA-1006 at 3, ll. 25-26.

This definition distinguishes the invention from the some of the statements made by Petitioner and accepted by the Board in IPR2023-00518, which referred to the “start of the driving period being determined by input received though the user’s

phone such as a use accepting a phone call, or manually switching between activity modes using the phone's touch screen and GUI." IPR2023-00518 Paper 30 at 27.

For at least this reason, the Petition fails to demonstrate that Claim 4 is obvious over the proposed combination of Callopy, Curry, and Thompson. *CFMT*, 349 F.3d at 1342; *In re Rijckaert*, 9 F.3d at 1534).

4. Claim 25

The combination of features recited in Claim 25 [25.6] and [25.7] require the driving period to be determined by the sensor data, namely accelerometer data and position data. This is not carried out by any of the prior art.

Claim 25 is to a mobile device configured to *log* driving information [25.1]. Therefore, the driving information implicitly must be stored on the mobile device. Further, Claim 25 also recites a memory [25.4].

Petitioner relies upon Thompson (USAA-1007) for this supposed disclosure or teaching. Petition at 32. Thompson is a research paper with a single objective: detecting crashes using a mobile device. This is done by analyzing accelerometer data once the vehicle is above a certain speed.

However, Thompson does not disclose processing both the accelerometer data and the position data to derive driving information as required by element [25.8]. Further, this information does not represent how safely the vehicle is being driven

throughout the driving period. Rather, any incident detected by Thompson is merely based on accelerometer data above a threshold 4G as the example given, which is said to represent a crash. USAA-1007 at 8, Paragraph 1.3. This information is sent to the server for processing. *Id.* at 2. There is no processing of raw data on the Thompson device. *Id.* The logging of the driving information [25.1], as mentioned above, requires the storing of driving information on the mobile device. This is not shown in any of the cited references against Claim 25. Driving information is different from raw sensor data in Claim 25. Namely, the mobile telecommunication device of Claim 25 is said to “log driving information” and has a memory. Therefore, the derived driving information must be logged (stored) to the device. The Thompson device records raw data but does not process it. It does not therefore log the driving information as required by [25.1] nor is the raw data processed on the Thompson phone as required by [25.8]. The proposed combination fails to disclose, teach, or suggest each and every limitation of Claim 25. *CFMT*, 349 F.3d at 1342; *In re Rijckaert*, 9 F.3d at 1534). For at least this reason, the Petition fails to demonstrate that Claim 25 is obvious over the proposed combination of Callopy, Curry, Thompson, and Katayama.

5. Claim 26

Claim 26 further clarifies that the “end of a driving period” is also detected when the sensor data has values below a predetermined threshold for a period of time. This feature is not disclosed in any of the cited prior art and enables the mobile device to implement a *fully automatic* and function of logging driving information independent of the vehicle in which the device is located. As mentioned above, Claim 1 includes further limitations on the types of driving incidents, which can include “harsh breaking, harsh acceleration, harsh swerving or a vehicle accident.” Further, the present claim is specifically directed to a device that logs driving information, which is associated with how safely the vehicle is being driven *throughout* a driving period. The Petition fails to address any of these shortcomings with respect to Claim 26. *CFMT*, 349 F.3d at 1342 (“Obviousness requires a suggestion of all limitations in a claim.”); *In re Rijckaert*, 9 F.3d at 1534 (reversing obviousness rejection where prior art did not teach or suggest all claim limitations).

For at least this reason, the Petition fails to demonstrate that Claim 26 is obvious over the proposed combination of Callopy, Curry, Thompson, and Katayama.

6. Other Challenged Claims

Patent Owner submits that for the same reasons stated above the Petition fails to demonstrate that Claims 1-28 are rendered obvious over cited grounds of challenge. Namely, the Petition fails to address the term “driving period” as properly construed and limited by the Challenged Claim’s further limitations that were not present in earlier IPRs, such as IPR2023-00518. The cited references in the instant grounds of challenge fail to disclose, teach, or suggest each and every element of the Challenged Claims. *CFMT*, 349 F.3d at 1342 (“Obviousness requires a suggestion of all limitations in a claim.”); *In re Rijckaert*, 9 F.3d at 1534 (reversing obviousness rejection where prior art did not teach or suggest all claim limitations).

VI. Conclusion

For the foregoing reasons, the Board should find that Petitioner has not carried its burden of proving that any Challenged Claim of the ’728 Patent is invalid.

Date: January 16, 2026

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), I certify that this Response complies with the type-volume limits of 37 C.F.R. § 42.24(b)(2) because it contains **13,786** words, excluding the parts of this Patent Owner's Response that are exempted by 37 C.F.R. § 42.24(a)(1), according to the word processing system used to prepare this Patent Owner's Response.

/Matthew C. Juren/
Matthew C. Juren

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), I hereby certify that on this 16th day of January, 2026, I electronically filed the foregoing document and served a copy of the same on counsel for Petitioner at the following e-mail addresses, as authorized in the Petition:

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