

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 IPR2023-00857
Patent No. 10,198,879 B2

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

TABLE OF CONTENTS

I.	INTRODUCTION	1
II.	SUMMARY OF ARGUMENTS	2
III.	THE '879 PATENT	3
IV.	PRIMARY PRIOR ART REFERENCES RELIED ON BY PETITIONER.....	10
	A. Curry <i>et al.</i> – Exhibit USAA-1005	10
	B. Rabu – Exhibit USAA-1013.....	12
V.	PERSON OF ORDINARY SKILL IN THE ART.....	13
VI.	CLAIM CONSTRUCTION.....	13
VII.	PETITIONER CANNOT SHOW THAT CLAIMS 1-55 ARE OBVIOUS.....	15
	A. Petitioner Cannot Show That The Challenged Claims Are Obvious Over Curry in View of Rabu	17
	1. Petitioner Fails to Indicate with Particularity How the Cited Art Maps to the '879 Claims and Misconstrues the Differences Between the '879 Claims and The Cited Art	19
	a. Ground 1A – Curry-Rabu.....	24
	b. Grounds 1B-1G – Other Curry-Rabu Combinations	41
	2. Relying On Impermissible Hindsight, Petitioner Provides Insufficient Rationale to Combine Curry and Rabu	44

a. Petitioner Fails to Establish That a POSITA Would Have Been Motivated to Modify Curry with the Teachings of Rabu	46
b. Petitioner’s Rationale To Combine Curry and Rabu Is Based Entirely on Impermissible Hindsight, Using the ’879 Patent As a Roadmap.....	52
c. A POSITA Would Not Have Combined Curry and Rabu Because Curry Teaches Away from Rabu and the Claims of the ’879 Patent.....	55
B. An IPR Should Not Be Instituted for All Grounds 1A-1G.....	58
VIII. CONCLUSION	60

TABLE OF AUTHORITIES

<i>ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.</i> , 694 F.3d 1312 (Fed. Cir. 2012).....	17, 48
<i>Alza Corp. v. Maylan Labs., Inc.</i> , 464 F.3d 1286 (Fed. Cir. 2006).....	51
<i>Apple Inc. v. Samsung Elecs. Co.</i> , 839 F.3d 1034 (Fed. Cir. 2016).....	45, 53
<i>Arendi v. Apple</i> , 832 F.3d 1355 (Fed. Cir. 2016)	51
<i>Belden Inc. v. Berk-Tek LLC</i> , 805 F.3d 1064 (Fed. Cir. 2015)	49
<i>Cf. Ruiz v. A.B. Chance Co.</i> , 357 F.3d 1270 (Fed. Cir. 2004).....	55
<i>Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.</i> , 800 F.3d 1375 (Fed. Cir. 2015).....	17
<i>Graham v. John Deere Co. of Kansas City</i> , 383 U.S. 1 (1966).....	16, 21 24
<i>Harmonic Inc. v. Avid Tech., Inc.</i> , 815 F.3d 1356 (Fed. Cir. 2016).....	17
<i>In re Fritch</i> , 972 F.2d 1260 (Fed. Cir. 1992).....	53
<i>In re Fulton</i> , 391 F.3d 1195 (Fed. Cir. 2004).....	56
<i>In re Gorman</i> , 933 F.2d 982 (Fed. Cir. 1991)	53
<i>In re GPAC Inc.</i> , 57 F.3d 1579 (Fed. Cir. 1995)	50
<i>In re Kahn</i> , 441 F.3d 977 (Fed. Cir. 2006).....	16, 50
<i>In re Magnum Oil Tools Int'l, Ltd.</i> , 829 F. 3d 1364 (Fed. Cir. 2016).....	16
<i>In re Nuvasive, Inc.</i> , 842 F.3d 1376 (Fed. Cir. 2016)	16

<i>In re Van Os</i> , 844 F.3d 1359 (Fed. Cir. 2017).....	47
<i>In re Wilson</i> , 424 F.2d 1382 (C.C.P.A. 1970)	40
<i>In re Winkhaus</i> , 527 F.2d 637, 188 USPQ 129 (CCPA 1975)	25
<i>Intercontinental Great Brands LLC v. Kellogg N. Am. Co.</i> , 869 F.3d 1336 (Fed. Cir. 2017)	45, 53
<i>InTouch Technologies, Inc. v. VGO Commc'ns, Inc.</i> , 751 F.3d 1327 (Fed. Cir. 2014).....	17
<i>KSR Int'l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007)	16,44,49,50,51
<i>Merck & Co. v. Biocraft Labs., Inc.</i> , 874 F.2d 804 (Fed. Cir. 1989).....	45
<i>Metalcraft of Mayville, Inc. v. The Toro Co.</i> , 848 F.3d 1358 (Fed. Cir. 2017).....	51
<i>Microsoft Corp. v. Enfish, LLC</i> , 662 F. App'x 981 (Fed. Cir. 2016).....	49
<i>Phillips v. AWH Corp.</i> , 415 F.3d 1303 (Fed. Cir. 2005)	13
<i>Polaris Indus., Inc. v. Arctic Cat, Inc.</i> , 882 F.3d 1056 (Fed. Cir. 2018).....	49
<i>Princeton Biochemicals, Inc. v. Beckman Coulter, Inc.</i> , 411 F.3d 1332 (Fed. Cir. 2005).....	52
<i>Sensonics Inc. v. Aerosonic Corp.</i> , 81 F.3d 1566 (Fed. Cir. 1996).....	53
<i>Stratoflex, Inc. v. Aeroquip Corp.</i> , 713 F.2d 1530, 1537, 218 USPQ 871, 877 (Fed. Cir. 1983)	25
<i>W.L. Gore & Assoc. v. Garlock, Inc.</i> , 721 F.2d 1540 (Fed. Cir. 1983)	53

35 U.S.C. § 103	passim
35 U.S.C. § 312	17
37 C.F.R. § 42.100	13
37 C.F.R. § 42.104	17

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 1-55 (the “Challenged Claims”) of U.S. Patent No. 10,198,879 B2 (“the ’879 patent”). This response is being timely filed.

I. INTRODUCTION

A dispute in a UK county 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 ’879 patent is included. Initially, the inventors developed a mobile device application that 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 (this latter information converted into a trace of the vehicle’s journey on a map). This application became known as the Witness App. 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 ’879 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. 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, and a driving score is generated that is associated with a particular driver.

II. SUMMARY OF ARGUMENTS

As set forth in detail below, the Board should not institute an IPR because Petitioner cannot show, and has not shown, that the claims of the '879 patent are obvious. With reference to Petitioner's 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 '879 patent and the references; (ii) Petitioner has provided insufficient rationale for why a person having ordinary skill in the relevant art ("POSITA") would be motivated to combine the references; (iii) Petitioner's rationale to combine the references is based on impermissible hindsight, using the '879 patent as a roadmap, and (iv) the references teach away from each other and the claims of the '879 patent. Nothing in Petitioner's Grounds 1B-1G,

which add references to the Ground 1A combination, cures the deficiencies of Ground 1A.

III. THE '879 PATENT

The '879 patent includes six independent claims 1, 21, 46, 51, 54, and 55.

Claim 1 is representative and provides:

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

determine, based on at least one of the inputs received by the user interface and sensor data from the device's 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; and

store a selection of the driving information to the memory;
wherein the driving information is derived without data from the vehicle sensors, and the mobile telecommunications device is controlled by a downloaded application to control the mobile device to process the driving information to generate a driving score associated with a particular driver.

USAA-1001 at 31:42—32:2.

Dependent claims 2-20 claim other elements of the invention of Claim 1, including configuring the mobile device to detect the occurrence of a pre-determined event (e.g., an accident) and permitting a user to confirm or deny the occurrence of the pre-determined event, and overriding driving information written to short term memory in accordance with a pre-determined sequence to conserve memory space. *See, e.g., id.* at 32:3—33:38.¹

¹ As the references on which Petitioner relies do not render obvious or otherwise invalidate independent Claim 1, and any additional references relied on in its obviousness assertions as to the claims depending therefrom (Claims 2-20) similarly fail, Patent Owner will focus its arguments on Claim 1. Patent Owner reserves the right to raise any additional arguments as to the validity of the Challenged Claim if an IPR is initiated by the Board.

Independent Claim 46 is similar to claim 1 and adds the limitation “the mobile telecommunications device is configured to process the sensor data by determination of at least one of: vehicle acceleration events; and vehicle braking events; wherein the determining of such events occurs when data from the sensor set accords with predefined threshold values.” USAA-1001 at 36:20-27.

Claims 54 and 55 are similar to claim 1, each replacing “the mobile device is removably attached to the vehicle” with “the mobile device is removably affixed to the vehicle.” *Id.* at 38:1-2 and 27-28. Claim 55 additionally adds the limitation “the processing involving the use of a neural network on the mobile telecommunications device to determine whether the driving information represents an acceptable or unacceptable driving pattern.” *Id.* at 38:32-36.

Claim 21 is similar to claim 1 but from the perspective of a non-transitory computer readable medium having instructions configured to be executed on a processor of a mobile device, with claim 21 substituting “driving information associated with a driver of a vehicle” for “driving information associated with a vehicle,” and substituting “a start of a driving period during which . . . the vehicle is being driven by the driver” for “a start of a driving period during which . . . the vehicle is in use.” *Id.* at 33:39-64. Claim 21 also removes the limitation of “the mobile telecommunications device is controlled by a downloaded application to control the mobile device to process the driving information.” *See id.*

Claim 51 is similar to claim 21, substituting “based on at least inputs received by the user interface and sensor data from the sensor set” for “based on at least one of the inputs received by the user interface and/or sensor data from the sensor set,” and adding the limitation that the driving information “comprises the determination of at least one of: vehicle acceleration events; and vehicle braking events; wherein the determination of such events occurs when data from the sensor set accords with predefined threshold parameters.” USAA-1001 at 37:2-3, *compare id.* at 33:52-54; *id.* at 37:14-20.

Each of the independent claims of the ’879 Patent requires that the mobile telecommunications device be configured to “determine, based on at least one of the inputs received by the user interface and sensor data from the device’s sensor set, ‘*a start of a driving period.*’” *See, e.g., id.* at 31:54-56 (emphasis added). The invention’s ability to determine the start of a driving period is an important aspect of the invention:

According to a first aspect of the present invention there is provided 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 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 1:64-2:14 (emphasis added). The '879 patent describes how the mobile device may be configured to determine the start of a driving period:

The [initialization] input may . . . be generated automatically in response to the mobile device being installed to the vehicle and/or the vehicle being driven. The [initialization] 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 – for example, 20 kilometers per hour – ***then 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] adaptor) ***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 adaptor. The registration module may comprise a proximity sensor to detect the proximity of the mobile device to the vehicle. The registration module may comprise a NFC (near field communication) device. ***The registration module may be arranged to determine a match between the location of the mobile device and the location of the vehicle.*** The match may be performed by receiving and comparing a first positioning input associated with the position of the vehicle and a second positioning input associated with the position of the mobile device. The registration module and/or adapter may be a smart holster.

USAA-1001 at 3:37-62 (emphasis added).

Claim 1 also provides that such information “*is derived without data from the vehicle sensors.*” *Id.* at 31:64-65. The invention determines driving information specific to an *individual* rather than driving information specific to a *vehicle* (which driving information would be based on data collected from the vehicle’s sensors). Because multiple people may drive a single vehicle, reliance on data generated by vehicle sensors would frustrate a primary purpose of the invention of generating individual-specific driving data.

The claimed invention further requires 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,” *id.* at 31:59-61, and to store that driving information to the mobile device’s memory.

[W]herein, the [mobile device] 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.

Id. at 10:63-67.

[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 16:48-53.

The claimed invention further requires that the mobile telecommunications device itself process driving information to generate a driving score that is associated with a specific driver of the vehicle.

Advantageously, by pairing an identifier uniquely associated with the mobile device enables the remote system to unambiguously determine the source of the driving information. Accordingly, said driving information can be matched to a particular driver and/or vehicle. This is particularly useful when assessing a risk profile of said driver.

Preferably, the mobile device is controlled by the executed application to process the driving information to generate a driving score.

Id. at 10:21-29.

[T]here is provided a data-logging system for logging driving information comprising: a database . . . arranged to store driving information associated with at least one of a vehicle and a driver; a communications interface arranged to . . . receive [from a remote mobile device] . . . driving information to be logged. . . .

Preferably, the driving information comprises a driving score. Preferably the driving information comprises sensor data captured and processed by the mobile device during a driving period during which the mobile device is installed to a vehicle being driven by a driver.

Preferably, the system is arranged to process the driving information logged to the corresponding account to generate a driving score. The driving score may be used to determine a risk profile for at least one of the vehicle and driver. The driving score may be used to define an insurance premium associated with the account.

USAA-1001 at 12:1-26.

IV. PRIMARY PRIOR ART REFERENCES RELIED ON BY PETITIONER

A. Curry *et al.* – Exhibit USAA-1005

Curry discloses a system and method 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 a driving period, the storage of a selection of such driving information into memory on the PMD, or the processing of driving information to generate a driving score associated with a particular driver. Rather, Rabu describes determining a “holder status” that indicates “whether the PMD is docked, resting on a surface, or being held by a person,” *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 '879 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* USAA-1001 at 16:15-20.

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 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 be understood by a POSITA 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). 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 two distinct ‘driving period’ attributes: (1) ‘the mobile device is removably attached to the vehicle’ and (2) ‘the vehicle is in use.’” Pet. at 4. Further, Petitioner states that “[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.²

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, Pet. at 4, is an inaccurate generalization of "driving period" that has no basis in the specification or claims. Nowhere in the '879 specification or claims is Petitioner's constructed term "monitoring period" used or defined. *See generally* USAA-1001. For example, the claims do not state that the mobile device must be removably attached to satisfy "a start of a monitoring period," as suggested by Petitioner. *See* Pet. at 4. Instead, the claims require that the mobile device be removably attached *during* the driving period: "determine, based on at least one of the inputs received by the user interface and sensor data from the device's sensor set, a start of a driving

² In the parallel District Court proceeding involving the '879 patent (among others), Petitioner sought construction of several terms including "sensor set," "driving period," "driving information," and "driving score." The Court agreed with Patent Owner that no construction was required and that the plain and ordinary meaning of each term applied.

period *during which* the mobile device is removably attached to the vehicle and the vehicle is in use,” as recited by Claim 1 of the ’879 patent (emphasis added). The claim language accurately captures the scope of the invention, and there is no need for a different construction incorporating Petitioner’s manufactured limitations.

Petitioner seeks to rewrite the claim language and then 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 their plain and ordinary meaning.

VII. PETITIONER CANNOT SHOW THAT CLAIMS 1-55 ARE OBVIOUS

Under Ground 1A, Petitioner contends that claims 1-3, 5, 6, 8, 11-13, 19-23, 25, 28-31, 39-44, 46-49, 51, 52, and 54 of the ’879 patent are unpatentable as obvious over Curry in view of Rabu. Pet. at 1. Grounds 1B-1F attack the remaining claims, other than independent claim 55, with additional references added to the Curry-Rabu combination. *Id.* at 1-2. Ground 1G asserts that claim 55 is likewise unpatentable over the Curry-Rabu combination, and further in view of Berkobin (USAA-1010). *Id.* at 2. The Curry-Rabu combination (with or without Berkobin) does not render

the claims of the '879 patent obvious, and no additional reference cures the shortcomings of Curry-Rabu.

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). 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.” *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) (“A factfinder should be aware, of course, of the distortion caused by

hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning”); *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) (“[T]he expert’s testimony on obviousness was essentially a conclusory statement that a person of ordinary skill in the art would have known... how to combine any of a number of references to achieve the claimed inventions. This is not sufficient and is fraught with hindsight bias.”).

A. Petitioner Cannot Show That the Challenged Claims Are Obvious Over Curry in View of Rabu

“In an [IPR], the petitioner has the burden from the onset 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.” 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 these burdens.

Petitioner contends that claims 1-3, 5, 6, 8, 11-13, 19-23, 25, 28-31, 39-44, 46-49, 51, 52, and 54 of the '879 patent are obvious over the combination of Curry and Rabu. Pet. at 6-48. Petitioner is incorrect because Curry and Rabu, individually, and in combination, fail to teach or suggest all elements of the claims, including at least claim elements [1.3], [1.6], [1.7], and [1.10]³:

[1.3] [the mobile telecommunications device comprising:] a user interface;

[1.6] the mobile telecommunications device being configured to: determine, based on at least one of the inputs received by the user interface and sensor data from the device's 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;

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

and

[1.10] the mobile telecommunications device is controlled by a downloaded application to control the mobile device to

³ For ease of reference, Patent Owner adopts Petitioner's numbering convention of the different features of the claim elements (e.g., [1.1], [1.2], etc.). *See* Pet. at xi.

process the driving information to generate a driving score associated with a particular driver,
as recited by USAA-1001 at Claim 1.

Further, Petitioner has not shown with particularity why the '879 patent is unpatentable. Specifically, Petitioner has misconstrued the differences between the claims of the '879 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, Petitioner's proposed combination of Curry and Rabu would not result in the claimed invention of the '879 patent.

1. Petitioner Fails to Indicate with Particularity How the Cited Art Maps to the '879 Claims and Misconstrues the Differences Between the '879 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. Petitioner's Curry reference (USAA-1005) has two differing page numbers on each page. An example image of page 13 (or 12) of the Curry reference is shown below:

30 The GPS receiver 314 can collect location and speed data of the mobile device. The accelerometer 316 can collect acceleration/deceleration data in different axes. Each motion measurement from the GPS sensor and accelerometer can be associated with a timestamp, and stored in a local motion data cache 304 for each pre-specified sampling interval. The activity mode recognition module 306 can use recorded time stamped data to estimate the type of activity: driving, walking, running or remaining substantially still. If no sufficient

12

13

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 is 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. Petitioner sometimes cites to the bottom page number and sometimes to the top page number.⁴ *See, e.g.*, Petitioner's citation to Curry at 7:5-22 at Pet. 24, which Petitioner later refers to 6:5-22 at Pet. 35.

Further, throughout the Petition and Dr. Michalson's expert declaration (USAA-1003), Petitioner inconsistently cites to pages of Curry such that the Petition and expert declaration citations do not match. For example, on page 88 of the Petition, Petitioner cites to USAA-1005 at 2:24—3:11, 6:5-22, 8:31—9:12 (*citing*

⁴ The same issue of miscitation to Curry applies to IPR2023-00518, IPR2023-00768, and IPR2023-00911.

USAA-1003, ¶266). But on page 178 of the expert declaration (USAA-1003, ¶266), Petitioner cites to USAA-1005 at 3:24—3:11 (*sic*), 7:5-22, 9:31—10:12. This problem occurs repeatedly.

Further exacerbating this problem, Petitioner often cites to large swaths of Curry over multiple pages, without quoting Curry, such that Patent Owner must determine the sections of Curry to which Petitioner refers. *See, e.g.*, Pet. at 16, 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 of a driving period USAA-1003, ¶102; USAA-1005, 10:15-11:14, 13:20-16:22, 17:30-18:7, Figs. 3, 4, 6; USAA-1013, 24:8-3:10 (*sic*).” The statement itself is conclusory, but the broad and erroneous citation makes it difficult for Patent Owner to know to what Petitioner is referring, regardless of the page shift.

As to the merits of Petitioner’s analysis, Petitioner fails to determine “(1) the scope and content of the prior art; [and] (2) any differences between the claimed subject matter and the prior art,” as required under *Graham*. *See Graham*, 383 U.S. at 17–18. Petitioner has not shown how the references teach or suggest all the features of the claimed invention. For example, Petitioner does not clearly and completely map portions of Curry and/or Rabu to every element of the claims in any

section of the Petition, or otherwise explain why any missing or different features would have been obvious.

Sections III.A.1(a)-(b) of the Petition merely describe the cited references individually without relating them to the claims. For example, while Sections III.A.1(a)-(b) describe Curry and Rabu individually, none of these sections includes a mapping of Curry and Rabu to the claim elements. Further, in describing the cited references, Petitioner mischaracterizes the art. For example, Petitioner suggests that “Curry describes using a ‘mobile wireless computing device’ ... to ... generate related ‘driving safety ... score[s].’” Pet. at 6 (*citing* USAA-1005 at Abstract, 2:1-27, 3:24—4:6, 4:7-11, 7:5-22, 9:31-33, FIG. 1). Petitioner, however, fails to recognize that the “*mobile wireless computing device*” may “report” or “update” (e.g., “decrease[.]”) a safety statistic, but, importantly, Curry’s *mobile device* does not calculate scores. To the extent that Curry’s mobile device 106 updates a driver safety statistic, the update regards activity mode recognition for dynamic call handling when a phone call is received or made, to prevent cell phone use, or for limited cases of identifying driving behavior for further calculation by Curry’s server. *See* USAA-1005 at 3:24—4:6, 7:5-17, 9:5-33, 13:27—14:26, FIG. 1, FIG. 3. Curry specifically discloses that its driving safety data server 104 and driving safety user control and monitoring website at remote device 102, via its driving safety evaluation module (or driving safety score evaluation 212), “calculate corresponding

safety scores.” *Id.* at 7:5-17, FIG. 1, FIG. 2. Further, on page 8 of the Petition, Petitioner ignores the aspects of Curry’s web server taught by Curry’s FIG. 2 and accompanying disclosure. *See* USAA-1005 at 12:19—13:19. Petitioner also fails to explain what, if any, aspects of Curry correspond to the specific features of the mobile device recited by the claims of the ’879 patent, or to address the specific differences. *See* Pet. at 6-8.

Further, in describing Rabu, Petitioner ignores Rabu’s use of frequency spectrum to determine holder motion. *See* Pet. at 8-10; *compare* USAA-1013 at Abstract, 2:2-11, 2:65—3:10, 4:30-33, 7:20-67, 9:25—10:42, 10:43—11:40, 11:41-12-9; FIGs. 8, 9, 10. That Petitioner ignores Rabu’s use of frequency spectrum in determining docking status is fatal when Petitioner combines Rabu with Curry. *See infra* Section VII.A.2.c.

In Section III.A.1(c) of the Petition, Petitioner immediately jumps to proposing how the Curry and Rabu references could be “obviously” integrated together, without particularly relating the integration of Curry and Rabu to the claims. *See* Pet. at 11-17. While Petitioner does cite to sections of the art, the sections are broadly and generally cited, and, as in Sections III.A.1(a)-(b), Petitioner does not point out how particular elements in the combined art map to the particular elements of Claim 1.

The result is that Petitioner does not establish the factual basis for determining obviousness under 35 U.S.C. §103, as required under *Graham*. *See Graham*, 383 U.S. at 17–18. Further, Petitioner fails to consider objective evidence present in the references themselves that would indicate non-obviousness, and instead relies on hindsight knowledge of the references to conclude that the references could be put together. *See infra* Section VII.A.2. Petitioner’s obviousness analysis is, in effect, backwards, and any mapping of the art to the claim elements that Petitioner performs is based on a hindsight-cobbled combination called the “Curry-Rabu phone.” *See* Pet. at 11-17; *see infra* Section VII.A.2.

a. Ground 1A – Curry-Rabu

Regarding claim elements [1.1] and [1.2], Petitioner persists with its argument, lacking objective evidence, that the Curry-Rabu phone generates driving scores according to the claims of the ’879 patent. *See* Pet. at 19-20. Notwithstanding that a driving score is not part of these claim elements, nothing in the Petitioner’s cited art (USAA-1005, Abstract, 7:5—8:2, 8:29—10:26, 13:27-33) indicates that the *Curry-Rabu phone* generates a driving score. Curry’s disclosure of “updat[ing] the related safety score” in the “post-processing stage” is not the same as “process[ing] the driving information to generate a driving score” of Claim 1. *See* USAA-1005 at 11:7-14; *compare* USAA-1001 at 31:67—32:1.

Regarding claim element [1.3], it is not clear how Petitioner is mapping Curry or Rabu to the “user interface,” and Petitioner has not considered the definition of “user interface” in relationship to the rest of Claim 1. *See* Pet. at 20-21. 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.”). The question is not 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 various instances of “user interface” cited by Petitioner.

In Claim 1, “the mobile telecommunications device [comprises] ... a user interface.” USAA-1001 at 31:44-49. Additionally, in Claim 1, “the mobile

telecommunications device [is] configured to... determine, based on at least one of the inputs received by the user interface and sensor data from the sensor set, a start of a driving period.” *Id.* at 31:52-56. The user interface of Claim 1 (and of independent claims 21, 46, 51, 54, and 55) is claimed as being comprised in (or of) the mobile device.

Regarding claim element [1.3], Petitioner incorrectly and inconsistently maps the “user interface” of Claim 1 (USAA-1001 at 31:49) to multiple elements ***both on and off the mobile phone*** 106 of Curry. *See* Pet. at 20-21 (*citing* USAA-1005 at 7:5-27, 8:5-27, 9:5-26, 10:15-26, 12:20-26, 15:7-22, 20:15-17, 20:23-25, 21:23-25). For example, USAA-1005 at 8:5-27 discloses “[a] graphical user interface ... on a data input device 102, such as a computer, laptop, smart phone, or other computerized device,” which is not the mobile phone 106. In fact, such “graphical user interface” on “data input device 102” is disclosed to ***limit a user’s interactions with mobile phone 106***: “The graphical user interface can be used to communicate, via a connection such as an internet connection, with a data server 104. The data server can include geographic data that enables parents or commercialized vehicle companies to specify permissible or restricted routes and time schedules for the use of calling or texting capability in mobile phone 106 when the phone is in driving mode.” USAA-1005 at 8:6-11.

Further regarding claim element [1.3], Petitioner cites to USAA-1005 at 8:20-27, which discloses a “client 110 unit,” which is a different user interface from the “graphical user interface” of “data input device 102.” However, this paragraph of Curry does not indicate any type of user interaction via client 110 unit other than “download[ing] ... required software from the server 104” and “request[ing] ... use permission data.” USAA-1005 at 8:23-26.

Further regarding claim element [1.3], USAA-1005 at 9:5-27 discloses signals sent outside of the mobile phone 106 to another caller and a ringtone sent to the mobile phone in lieu of a user interface display, “so that the driver can decide whether to pull over the car to take the call or call back later.” *See id.* at 9:17-20. *See also id.* at 9:23-27 (“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...,” which “interactive user control website” is external to the mobile phone 106), FIG. 1, device 102.

Further regarding claim element [1.3], Petitioner misconstrues USAA-1005 at 10:15-26 as disclosing “manually switching activity modes.” Nowhere at 10:15-26 does Curry disclose a user interface on the Curry phone allowing for manually switching an activity mode. Curry in fact discloses “the mobile phone can *automatically* switch to the GPS navigation mode to prevent the use of

communication capabilities except for emergency calls.” *Id.* at 10:22-24 (emphasis added).

Lastly, if Petitioner’s citation to USAA-1005 at 12:20-26, as reading on claim element [1.3], refers to “use permission input interface 202” and “web-based map interface 204,” these are disclosed as controlled by a parent’s inputs and are external to the mobile device 106 in the “user permission management and driving safety monitoring system located on a web server.” *See* USAA-1005 at 12:19-28, FIG. 2. Petitioner may instead be referring to USAA-1005 at 13:20-26: “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.” *Id.* at 13:20-26. If the Curry phone is in monitoring mode, the user cannot activate the motion recording process manually because Curry’s disclosed process would prevent the user from using the phone. *See id.* at FIG. 3. Otherwise, the process is automated, and recording starts only “when an outgoing call 301 is made or an incoming call 303 is received.” *Id.* at 13:25-26, FIG. 3. *See also id.* at 16:7-22 (disclosing the post-processing technique of FIG. 4).

Specifically, Curry’s driving safety user control and monitoring website 102 and driving safety data server 104 are disclosed as being external to 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 7:30-32, 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 '879 patent is significant, because the mobile device of the '879 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" at device 102 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).

The several examples above make clear that Curry’s many user interfaces do not read on the single user interface of Claim 1, and Petitioner’s attempt to cobble all of Curry’s user interfaces together fails.

In contrast, the mobile device of the ’879 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, 14:54-56; 13:57-63 (native processor of mobile phone executes the downloaded application); 13:64—14:53 (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); 18:53—19:16 (processor determines, registers, and initiates the start of a driving period corresponding with a recording strategy); 15:54-56, 17:53-55, 19:17-18 (processor continuously processes and analyzes sensor data); 16:48-51, 19:18-22 (processor generates and continuously analyzes driving information); FIG. 4a, 16:62-65, 19:23-25, 19:29-64 (processor automatically determines whether a driving incident has occurred); 17:27—18:4 (processor facilitates a data recording strategy to log data by data file periods); 19:25-28 (processor stores driving information of data file period(s) associated with a driving incident to protected storage); 20:23-51

(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); 18:33-39 (processor encrypts stored data files); 23:18-40 (processor performs benchmarking); 23:41—24:13 (processor aids a user in crash/collision management); 10:15-26 (processor pairs mobile device with driver and/or vehicle); 13:46-49, 24:14-29 (processor monitors driving performance and generates a user profile); 10:27-30, 12:16-20 (processor processes driving information to generate a driving score); 24:45—26:51 (processor facilitates data/video feedback/map display via the user interface *on the mobile phone*).

Although Curry may describe “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 ’879 patent (which do not require “receiving a phone call” or “switching activity modes”). *See* Pet. at 20-21 (*citing* USAA-1005 at 7:5-27, 8:5-27, 9:5-26, 10:15-26, 12:20-26, 15:7-22, 20:15-17, 20:23-25, 21:23-25); *compare* USAA-1001, Claims 1, 21, 46, 51, 54, and 55.

Regarding claim element [1.6], Petitioner’s citations to the art do not at least read on “user interface” (as shown above) or “start of a driving period” of “the mobile telecommunications device ... configured to... determine, based on at least

one of 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 attempts to loosely correlate a “monitoring period” related to Curry’s “monitoring/navigation mode” or “activity mode” to the driving period of the claims. *See, e.g.*, Pet. at 4, 7-8, 12, 15, and 33. In Curry, however, the “monitoring mode” is triggered by a phone call being received or made, regardless of driving status. *See* USAA-1005 at 13:20-26, FIG. 3 (301-303), FIG. 4. Curry does not teach (and Petitioner’s mapping does not point out) that a “start of a driving period” is determined by the mobile device according to 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 23-27), a POSITA would have understood that this is not what is intended nor recited by the ’879 patent’s claims. This is at least because the “monitoring” in Curry, as admitted by Petitioner (*see* Pet. at 25), 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 entire “driving period.” *See* USAA-1005 at 11:3-14; FIG. 4 (in which GPS recording starts only after an “outgoing or incoming phone call” and continues for only “X minutes” after the phone call ends). 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, 8:29—9:20, 13:20-14:26.

Petitioner’s expert admits that “Curry contemplates an all-or-nothing approach to restrictions on phone activity when phone 106 is placed in a “monitoring operating mode” for “correlat[ing] different driving contexts with different phone restrictions.” USAA-1003, ¶91. In any case, Curry’s monitoring of driving is correlated with restricting phone use and/or limited to receiving or making a phone call. Thus, Curry’s “monitoring period” is not the “driving period during which the mobile device is removably attached to the vehicle and the vehicle is in use” of Claim 1, which, importantly, is not similarly restricted.

Further regarding claim element [1.6], Rabu is directed to “determin[ing] a motion and orientation status of [a] PMD” by analysis of frequency spectrum. USAA-1013 at 1:41-42; *see id.* at 4:30-33. Although Petitioner suggests that Rabu’s “docking status,” or “docking station” can read on “removably attached to a vehicle” of claim element [1.6] (*see* Pet. at 23-24), Rabu does not determine the start of a driving period based on inputs received by the user interface and sensor data, as required by claim element [1.6]. Thus, Rabu cannot cure Curry’s deficiencies regarding “the start of a driving period” of claim element [1.6]. Such oversights by Petitioner make clear that Petitioner has not particularly pointed out how the cited

parts of Curry and Rabu map to claim element [1.6] nor considered the whole of the claim elements.

A POSITA would have understood, based on the whole of Claim 1 and the plain meaning of the Claim 1 terms, that during a driving period, the vehicle of the '879 patent is being driven. The POSITA would further have understood that driving information is collected by the mobile device during the driving period, the start of which is determined by the mobile device. 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 suggests that receipt of a phone call would act in the same way as the invention claimed in the '879 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 phone would never record the start of a driving period, and claim element [1.6] would never be realized.

Thus, regarding claim element [1.7], the Curry-Rabu combination would defeat the '879 patent's purpose of the mobile device 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 immediately notifying an entity, such as emergency services, for an immediate response. USAA-1001 at Claim 1; 18:40—20:51 (describing the method of FIG. 4a); 13:64—14:53, 20:5-22, 28:1-8 (providing immediate notification to a recipient of a detected driving incident). Instead, Curry’s mobile device post-processes data only after a call is received or made to “estimate[] the context of mobile phone use.” *See* USAA-1005 at 9:5-20, 11:3-14, 13:20—14:26, 16:7-22. Petitioner admits to this limitation of Curry’s mobile phone (*see* Pet. at 28), which monitors whether a user is driving at the time of a call, and which would defeat the purpose of the ‘879 patent for continuously monitoring, by the mobile device, how a vehicle is being driven (regardless of type of phone use). Thus, Petitioner has not shown that the Curry-Rabu combination reads on claim elements [1.6] and [1.7].

Further, Petitioner erroneously cites to Curry to allege that Curry’s mobile phone can “process the derived driving information to generate ‘driving safety performance data’ for the user, including a ‘driving safety score’ that can be wirelessly communicated to third parties....” Pet. at 27 (*citing* USAA-1005 at Abstract, 4:1-6, 7:13-17, 8:29—10:12, 11:3-17, 13:27-33). However, none of these portions of Curry disclose Curry’s mobile phone generating “driving safety performance data” or a “driving safety score.” Rather, these cited portions disclose that Curry’s mobile phone can: “record data from the GPS receiver” (*id.* at Abstract);

“determine a type of activity” (*id.*); “collect speed and location information and report that information back to the data server” (*id.* at 4:1-6); “[w]hen a call is made or received..., record location, speed and acceleration data from sensors” (*id.* at 8:30-31); “estimate[] the context of mobile phone use” (*id.* at 9:7); “determine if the use of a mobile phone in the related context violates the pre-set permission policies” (*id.* at 9:10-11); “communicate to a caller that the mobile phone user is currently driving” and “signal to the driver with a different ringtone” (*id.* at 9:17-18); “transmit[] [motion data and activity mode estimation results] to the driving safety data server 104” (*id.* at 9:23-25); “record[] the position, speed and acceleration data for a certain time period” (*id.* at 11:4); “[i]n the post-processing stage... determine the context of a phone call ... and *adjust* the related safety score ... if a violation is identified” (*id.* at 11:7-10, emphasis added); “track location, speed and acceleration data of a driver” (*id.* at 11:16-17); and “estimate the type of activity” [using recorded time stamped GPS and accelerometer data] (*id.* at 13:27-33).

Collecting, tracking, or recording sensor data when a call is made or received, transmitting the sensor data to a data server for further processing, and post-processing sensor data to estimate a context or type of activity or to adjust a known score is not “process[ing] the sensor data from the sensor set during the driving period to derive driving information associated with how the vehicle is driven,”

according to claim element [1.7], according to Claim 1 as a whole, or in light of the specification of the '879 patent.

Petitioner's bloated explanation of the capabilities of Curry's mobile phone under claim element [1.7] distorts Petitioner's cited references as later applied to claim element [1.10]. Petitioner concedes that an assessment of "unsafe driving behavior such as speeding, abnormal deceleration and sharp turns" is performed by Curry's data server, *not* by Curry's mobile phone. *See* Pet. at 29 (*quoting* USAA-1005 at 9:22-28). Petitioner's expert merely parrots the Petition in this regard. *See* USAA-1003, ¶137. Petitioner again distorts the capabilities of the Curry mobile phone when discussing the "downloaded application" of claim element [1.10]: "a client application 110 ...(*downloaded application*) enables the phone to process sensor data from a driving period to derive information associated with a user's driving behavior, including ... whether the user engages in behaviors such as "speeding, abnormal acceleration, abnormal deceleration, and taking sharp turns." Pet. at 34 (*citing* USAA-1005 at 7:5-29, 9:5-11, 8:21—9:33). Again, none of these Curry references disclose what Petitioner alleges; e.g., although Curry's mobile phone can detect talking or texting (estimating the context of mobile phone use), Curry's mobile phone does not process data to assess abnormal driving behavior as Petitioner states and as claimed in the '879 patent. *See* USAA-1005 at 7:5-29, 9:5-

11, 8:21—9:33. Petitioner’s expert again merely parrots the Petition. *See* USAA-1003, ¶149.

Further regarding claim element [1.10], the cited portions of Curry do not disclose, teach, suggest, or make obvious, in combination with Rabu, “control[ing] the mobile device to process the driving information to generate a driving score associated with a particular driver.” Petitioner cites to Curry at 11:7-10 for “the activity mode recognition module can ... determine the context of a phone call ... and adjust the related safety score for the user if a violation is identified,” but Petitioner fails to explain how “determin[ing] the context of a phone call” as disclosed in Curry reads on “process[ing] the driving information” of the claim, or how “adjust[ing] the related safety score” as disclosed in Curry reads on “generat[ing] a driving score” of the claim. *See* Pet. at 35.

Petitioner cites to FIG. 1 of Curry (Pet. at 35), which illustrates that data from Curry’s “motion data cache 118” is transmitted from the Curry mobile device to the driving safety data server, which performs most of the data processing, facilitates use permission for the Curry mobile 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, prevent talking/texting while driving based on information determined in the post-processing stage, and “adjust the related safety score ... after the fact,” it does not “process the driving information to generate a

driving score associated with a particular driver,” as recited by Claim 1. *See* USAA-1005 at 11:7-12.

Although Petitioner attempts to explain that Curry’s “client 110 processes the stored information ... to generate a ‘driving safety score’ for the user...,” Petitioner, without particularity, cites to Curry at 13:3-19, which describes Curry’s server in communication with driving safety user control and monitoring web site 102 calculating scores, not Curry’s mobile device. *See* Pet. at 35; *compare* USAA-1005 at 13:3-19, FIGs. 1 and 2, which illustrate driving safety user control and monitoring web site 102 (external to mobile phone client 110), including driving safety score evaluation 212 (which determines scores). Petitioner’s citations to Curry at 3:1—4:6 (disclosing a summary), 7:5-22 (disclosing that the mobile phone records sensor data and transmits it to a centrally managed data server, which performs statistical analysis on the sensor data and calculates safety scores), 8:29—12:18 (disclosing limited functions of Curry’s mobile device as “motion data recording,” “user activity mode recognition,” “dynamic call handling,” “motion data uploading,” and automatically switching between “GPS mode and communication mode” depending on recognized activity mode), 13:27—14:26 (disclosing activity mode recognition), 16:13-18 (disclosing that “risky behaviors of talking while driving or texting while driving *may not be identified in real-time due to limited data, but the post-processing technique* [of Curry] can deliver high-confidence estimation results. In this manner,

any unsafe driving behaviors can be penalized *after the fact* by deducting the driving safety score *in the data server...*)” (emphasis added), and 17:1—18:4 (disclosing activity mode recognition performed only when a call is received or placed and determined after the fact using a use permission database) do not cure Curry’s shortcomings with regard to Claim 1 of the ’879 patent.

Rabu, which is directed to “determin[ing] a motion and orientation status of [a] PMD,” USAA-1013 at 1:41-42, also does not cure Curry’s deficiencies. Rabu does not determine the start of a driving period based on inputs received by the user interface and sensor data, as required by claim element [1.6], 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], or process the driving information to generate a driving score, as required by claim element [1.10]. 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.

By not mapping the art to the claims correctly or with particularity, Petitioner fails to consider all aspects of the claim as a whole, which Petitioner must do to assess the obviousness of the claimed subject matter. *See In re Wilson*, 424 F.2d 1382, 1385 (C.C.P.A. 1970).

b. Grounds 1B-1G – Other Curry-Rabu Combinations

Petitioner’s mappings of the cited art to the claims in Grounds 1B-1G (including independent claims 21, 46, 51, 54, and 55) fail at least for the same reasons as described for Ground 1A according to the table below.

Claim 1 Limitation	Corresponding Claim Limitations
[1.3]	[21.2a], [21.2b], [46.3], [51.2a], [51.2b], [54.3], [55.3]
[1.6]	[21.6], [46.6], [51.6], [54.6], [55.6]
[1.7]	[21.7], [46.7], [51.7], [54.7], [55.7]
[1.10]	[21.9], [46.12], [51.9], [54.10], [55.11]

Regarding Petitioner’s mappings for [21.2a], [21.2b], [51.2a], and [51.2b], Petitioner ignores the several user interfaces that Curry discloses and instead mis-maps the display and user interface of the claims to disclosures within Curry that apply to other device interfaces without specifying their differences or acknowledging that those other device interfaces are external to Curry’s mobile phone 106. *See* Pet. at 39. The failures of Petitioner’s citations of Curry to claim elements [21.1a], [21.2b], [51.2a], and [51.2b] are set forth in the table below. *See also supra* at 25-30 (discussing Petitioner’s similar failures to map aspects of Curry to the “user interface” of claim element [1.3]).

Petitioner's Curry Citation (USAA-1005) alleging mobile phone user interface	Curry Discloses...	Petitioner's Mapping Fails Because...
Pet. at 38 (USAA-1005 at 8:5-18)	"graphical user interface ... on data input device 102" used by parents and commercialized vehicle companies to permit or restrict routes, schedules, calling, and texting by mobile phone 106. <i>See</i> USAA-1005 at 8:5-18.	Not on mobile phone 106 (<i>see</i> USAA-1005, FIG. 1) according to specified purpose (<i>see id.</i> at 8:5-18). <i>See also supra</i> at 26.
Pet. at 39 (USAA-1005 at 8:20-27)	Client 110 for "use permission data retrieval." <i>See</i> USAA-1005 at 8:20-27.	Discloses only downloading client 110 to mobile phone and requesting use permission data. <i>See</i> USAA-1005 at 8:20-27. <i>See also supra</i> at 27.
Pet. at 39 (USAA-1005 at 9:5-18)	Client 110 for "user activity mode recognition" and "dynamic call handling." <i>See</i> USAA-1005 at 9:5-18.	Discloses only phone call received by mobile phone 106 and signal sent to caller (no graphical user interface of phone 106). <i>See</i> USAA-1005 at 9:5-18. <i>See also supra</i> at 27.
Pet. at 39 (USAA-1005 at 21:15-17)	Data in motion data cache transmitted from mobile phone 106 and stored on data server, which calculates driver safety statistic. <i>See</i> USAA-1005 at 21:15-17.	Curry claim 13 recites mobile phone sending data to data server for subsequent storage and driver safety statistic calculation by data server (no graphical user interface of phone 106). <i>See</i> USAA-1005 at 21:15-17.
Pet. at 39 (USAA-1005 at 8:5-27)	See first and second rows of this table	See first and second rows of this table

Petitioner's Curry Citation (USAA-1005) alleging mobile phone user interface	Curry Discloses...	Petitioner's Mapping Fails Because...
Pet. at 39 (USAA-1005 at 9:5-27)	Client 110 for “user activity mode recognition,” “dynamic call handling,” and “motion data uploading.” <i>See</i> USAA-1005 at 9:5-27.	Discloses only phone call received by mobile phone 106 and signal sent to caller (no graphical user interface of phone 106); discloses mobile phone sending data to data server for subsequent display on “interactive user control website” on device 102. <i>See</i> USAA-1005 at 9:5-27. <i>See also id.</i> , FIG. 1. <i>See also supra</i> at 27.
Pet. at 39 (USAA-1005 at 10:5-26)	System sharing safety score via data exchange server or data exchange interface; mobile phone 106 automatically switching between GPS mode and communication mode. <i>See</i> USAA-1005 at 10:5-26.	Discloses data server 104 (<i>see</i> USAA-1005, FIG. 1) and data sharing interface for third party 216 (<i>see id.</i> , FIG. 2), both external to mobile phone 106. <i>See id.</i> at 10:5-26. <i>See also supra</i> at 27-28.
Pet. at 39 (USAA-1005 at 11:15-26)	Mobile phone 106 tracking sensor data and sending to data server. <i>See</i> USAA-1005 at 11:15-26.	No graphical user interface of phone 106 disclosed. <i>See</i> USAA-1005 at 11:15-26.
Pet. at 39 (USAA-1005 at 13:20-26)	Manual or automatic activation of monitoring mode on mobile phone 106. <i>See</i> USAA-1005 at 13:20-26.	No graphical user interface of phone 106 specifically disclosed. <i>See</i> USAA-1005 at 13:20-26. <i>See also supra</i> at 28.

Petitioner's Curry Citation (USAA-1005) alleging mobile phone user interface	Curry Discloses...	Petitioner's Mapping Fails Because...
Pet. at 39 (USAA-1005 at 16:7-22)	Post-processing by mobile phone 106 to identify activity based on call received or made; deducting driving score in data server by post-processing after the fact. <i>See</i> USAA-1005 at 16:7-22.	Discloses data server deducting driving score (external to mobile phone 106). <i>See</i> USAA-1005 at 16:7-22. <i>See also supra</i> at 28.
Pet. at 39 (USAA-1005 at 21:23-25)	Claim representing graphical user interface as disclosed by driving safety user control and monitoring website on device 102 and data sharing interface for third party 216. <i>See</i> USAA-1005 at 21:23-25.	Discloses website interface to data server 102 (<i>see</i> USAA-1005, FIG. 1) and data sharing interface for third party 216 (<i>see id.</i> , FIG. 2), both external to mobile phone 106. <i>See also id.</i> at 21:23-25.

2. Relying On Impermissible Hindsight, Petitioner Provides Insufficient Rationale to Combine Curry and Rabu

Although Petitioner argues that some of the individual elements were known in the cited references and that combining those references would have yielded the claimed invention, Petitioner fails to 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”). Throughout the

Petition, Petitioner states a POSITA *would* have done it, but without evidence, Petitioner is offering only that a POSITA *could* have done it.

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) (emphasis added); *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.

Petitioner does not provide a reason to combine Curry and Rabu that is not based on the '879 patent itself. Nowhere in Section III.A.1 does Petitioner provide a reasoned motivation, beyond what is suggested by the '879 patent, to combine Curry and Rabu into “Curry-Rabu,” *e.g.*, something in Curry that would cause a POSITA to modify Curry, and further, to search out Rabu. Without a motivation to combine, as would be understood by a POSITA at the time of the claimed invention, there would be no “Curry-Rabu device” as Petitioner proposes. *See* Pet. at 11-17. *See also Intercontinental Great Brands LLC v. Kellogg N. Am. Co.*, 869 F.3d 1336, 1343 (Fed. Cir. 2017) (citing *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1047–48, 1051 (Fed. Cir. 2016) (en banc)) (requiring that Petitioner provide, with

particularity, rationale to combine the teachings of the cited art, *i.e.*, “whether the relevant skilled artisan had a motivation to combine pieces of prior art *in the way eventually claimed in the patent at issue*”) (emphasis added).

In its obviousness analysis in Section III.A.1(c) of the Petition, Petitioner suggests only what benefits and capabilities would result from integrating Curry and Rabu together into a combination inspired by the claims. *See, e.g.*, Pet. at 15-16. Further, as shown in Section VII.A.1 of this response, Petitioner combines aspects of each of Curry and Rabu piecemeal for convenience of Petitioner’s conclusory arguments.

a. Petitioner Fails to Establish That a POSITA Would Have Been Motivated to Modify Curry with the Teachings of Rabu

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 reasons that “the resulting Curry-Rabu device would define and determine different types of driving periods based on user inputs and sensor data, and restrict phone use and/or adjust user driving scores depending on a type of driving period determined.” *Id.*

Petitioner’s rationale of enhancing Curry’s phone’s “to promote safe driving” and creating a device with added functionality such as “defin[ing] different types of driving periods,” “restricting phone use,” and “adjust[ing] driving scores depending on a type of driving period” are nothing but unsupported conclusory statements that

the combination “would have been obvious” based merely on a piecemeal construction relying on impermissible hindsight. *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.

Petitioner purports further advantages of this piecemeal construction of Curry and Rabu, such as “leverag[ing] orientation and motion data from its accelerometer to determine both vehicle motion and phone docking status upon a user accepting a phone call while the vehicle is in use...,” without any motivation within Curry that would suggest or require any different treatment based on docking of the phone. Pet. at 11-12. The word “dock” never appears in Curry, and Curry even suggests that docking status is not essential for its purpose when Curry notes that “[r]esearchers have shown that using mobile phones while driving is four times as likely to get into crashes, and the increased crash risk is similar for hands-free and hand-held phones.” USAA-1005 at 2:6-8. Rather, Curry’s technology permits or restricts phone use regardless of docking (“hands-free”) status and is concerned with movement of the phone in certain activities and geographic locations and over certain time periods, that is, generally, “based on when and where the wireless computing device was used and the motion of the device ... for certain user behaviors, such as use of the device while driving a vehicle, and use during restricted time periods.” *See id.* at

3:16-32. Thus, a POSITA would not have found a motivation in Curry to combine Rabu for Rabu's specific docking-status technology.

Petitioner further alleges that a "POSITA would have found obvious that enhancing Curry's system based on Rabu would introduce multiple additional advantages" but then merely lists generic advantages. Pet. at 15-16. Petitioner's expert includes the same list without identifying where Curry or Rabu suggest any needed improvements or what in Curry or Rabu would have motivated a POSITA to make those improvements. *See* USAA-1003, ¶¶97-101. Rationalizing advantages of combining references, *after the fact*, 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).

For example, Petitioner's expert seems to suggest that Curry's dynamic call handling invention would not be needed to prevent phone calls if Curry had Rabu's docking technology: "The combination would have improved safety for the user, passengers, and those outside the vehicle since the user is more likely to participate in Curry's monitoring ... [U]sing Rabu's dock, a user is less likely to be distracted while driving the vehicle when using the phone for calls." USAA-1003, ¶99. Such a conclusion would not have been reached by a POSITA with Curry in hand, but only

in hindsight having both Curry and Rabu to piece together in light of the '879 patent's disclosure.

By at least these examples, Petitioner states what a POSITA *could* have done by combining Curry and Rabu but again fails to provide sufficient support or 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) (emphasis added); *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1068–69 (Fed. Cir. 2018). The motivations Petitioner proposes simply do not have sufficient basis under the requirements of 35 U.S.C. §103 to arrive at the claims of the '879 patent.

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 13. Both Petitioner and Petitioner’s expert then assert that both Curry and Rabu have a “generic” or “generally conventional” accelerometer. Pet. at 17; USAA-1003, ¶93. 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”).

Although Petitioner argues that the individual elements were known in the cited references and that combining those references would have yielded the claimed invention, Petitioner fails to 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 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. For example, Petitioner’s expert admits that, rather than being concerned about where a phone is docked or held, “Curry ... takes into account the context within which a phone is used. But Curry is focused more on functionality than implementation details. As such, Curry would have motivated a POSITA to seek related practical solutions.” USAA-1003, ¶92. Petitioner’s expert merely speculates on why Curry does not address docking, 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. As the Federal Circuit has explained, “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). “[W]hile ‘common sense’ can be invoked, even potentially to supply a limitation missing from the prior art, it must still be supported by evidence and a reasoned explanation....[T]his is particularly true where the missing limitation goes to the heart of an invention.” *Arendi v. Apple*, 832 F.3d 1355, 1363 (Fed. Cir. 2016). Petitioner’s speculation violates these propositions and should not support institution.

Further, 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 does not consider the specific teachings of the cited art in its rationale to combine, but rather bases Petitioner’s own inferences on hindsight by patching together pieces of the cited art to fit the claims, which is impermissible in an obviousness analysis. 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.”).

b. Petitioner's Rationale to Combine Curry and Rabu Is Based Entirely on Impermissible Hindsight, Using the '879 Patent as a Roadmap

Petitioner's reasons for combining Curry and Rabu are not supported by sufficient evidence, and Petitioner instead relies on hindsight for its analysis, disregarding the subject matter as a whole. The Federal Circuit explained that the invention must be considered "as a whole."

[I]n making the assessment of differences between the prior art and the claimed subject matter, section 103 specifically requires consideration of the claimed invention "as a whole." Inventions typically are new combinations of existing principles or features. The "as a whole" instruction in title 35 prevents evaluation of the invention part by part. Without this important requirement, an obviousness assessment might successfully break an invention into its component parts, then find a prior art reference corresponding to each component. This line of reasoning would import hindsight into the obviousness determination by using the invention as a roadmap to find its prior art components.

Princeton Biochemicals, Inc. v. Beckman Coulter, Inc., 411 F.3d 1332, 1337 (Fed. Cir. 2005).

To avoid hindsight bias, the obviousness inquiry is not limited to whether the elements of the '879 patent's mobile communications device were known in the art as disparate puzzle pieces; nor is the inquiry complete with whether a POSITA would have understood Curry in combination with Rabu to teach the '879 patent's

logging of vehicle behavior. Rather, Petitioner must provide, *with particularity*, rationale to combine the teachings of the cited art, *i.e.*, “whether the relevant skilled artisan had a motivation to combine pieces of prior art in the way eventually claimed in the patent at issue.” *Intercontinental Great Brands LLC*, 869 F.3d at 1343 (*citing Apple Inc.*, 839 F.3d at 1047–48, 1051). Petitioner does not provide such rationale.

Petitioner’s rationale to combine Curry and Rabu relies on using the ’879 patent as a roadmap for reconstructing the claims based on hindsight bias. Petitioner asserts reasons as to why a POSITA would have been motivated to modify Curry that appear to be nothing more than a desire to provide a mobile telecommunications device that meets the elements claimed in the ’879 patent. However, in laying out an obviousness analysis, it is “impermissible to use the claimed invention as an instruction manual or ‘template’ to piece together the teachings of the prior art so that the claimed invention is rendered obvious.” *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).

Considering the cited art as a whole, and without the benefit of hindsight, a POSITA would never have picked up Rabu in the first place, let alone picked out sections of Rabu for its teaching of determining a frequency spectrum of a portable media device, comparing that frequency spectrum to a database of frequency spectra to determine a motion status and mode of operation of the portable media device, and further using such data to distinguish whether the portable media device is in a dock, resting on a surface, being handled by a person, located in a moving vehicle, or located in a stationary vehicle. *See* USAA-1013, Abstract. Whereas Rabu requires the use of frequency data to make these specific distinctions and determinations, such use of frequency data would have been considered not only unnecessary but overkill by a POSITA, both for the '879 patent and for Curry.

Curry has no use for the frequency data analysis of Rabu, as Curry teaches receiving GPS data only when a phone call is received or made, while in a driving mode, to mitigate the power burden of always-on GPS while permitting or restricting phone use based on the driving mode. *See* USAA-1005 at 3:2-4:28. *See also id.* at 14:28-33 (“[I]f the GPS is always on, the battery of a GPS-enabled phone can only last a very short time period, e.g. 4-5 hours. To reduce battery consumption, the GPS receiver is re-activated only right after a phone call is made or received”). Of note, this feature of Curry would also have discouraged a POSITA from picking up Curry in the first place, because Curry does not use, and in fact discourages the continuous

monitoring of, position data, such as by way of always-on GPS. *See id.* at 3:2-4:28, 14:28-33.

Petitioner and Petitioner's expert provide insufficient explanation as to why a POSITA would have combined the teachings of Curry and Rabu, let alone the additional references, in the manner proposed. Petitioner relies upon the teachings of the '879 patent itself to argue that Curry discloses or renders obvious these very teachings, reading limitations of the '879 patent into the cited art, which amounts to a hindsight analysis. *Cf. Ruiz v. A.B. Chance Co.*, 357 F.3d 1270, 1275 (Fed. Cir. 2004) ("This form of hindsight reasoning, using the invention as a roadmap to find its prior art components, would discount the value of combining various existing features or principles in a new way to achieve a new result — often the very definition of invention"). "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.*

c. A POSITA Would Not Have Combined Curry and Rabu Because Curry Teaches Away from Rabu and the Claims of the '879 Patent

A POSITA would also not have been motivated to look to the combination of Curry-Rabu to arrive at the '879 patent's claims at least because aspects of Curry teach away from Rabu and the '879 patent. "A reference may be said to teach away when a person of ordinary skill, upon reading the reference . . . would be led in a

direction divergent from the path that was taken by the applicant.” *In re Fulton*, 391 F.3d 1195, 1201 (Fed. Cir. 2004).

A POSITA would not have been motivated to look to Curry to arrive at the ‘879 patent’s claims at least because Curry would have discouraged the POSITA from using always-on navigation and positioning, which the invention uses. Specifically, Curry teaches that, “[t]o reduce the power consumption, the embedded GPS receiver 314 in a mobile phone is typically turned off by default when a mobile phone is in standby mode or . . . is not charged. Otherwise, if the GPS receiver is always on, the battery of a GPS-enabled phone can only last a very short time period, e.g., 4-5 hours. To reduce the battery consumption, the GPS receiver is re-activated only right after a phone call is made or received.” USAA-1005 at 14:28-15:7. Thus, a POSITA at the time of the invention would not have looked to Curry for insight to arrive at the ‘879 patent’s reliance on always-on positioning as that concept is disparaged by Curry. Petitioner ignores this teaching of Curry and has failed to provide sufficient reason as to why a POSITA would have looked to Curry, let alone modified Curry with Rabu, when such modification would have added even more data processing (beyond what is needed by always-on positioning) to incorporate Rabu’s methods of analyzing frequency (in concert with always-on positioning) to determine motion status and type of motion of Rabu’s portable media device (*see* USAA-1013 at 2:48-3:10; 4:15-58).

Rabu teaches determining a motion status and selecting a mode of operation of a portable media device based on the motion status, using orientation angle of the portable media device and a frequency spectrum of the motion of the portable media device. *See* USAA-1013, Abstract. Thus, a POSITA at the time of the invention likewise would not have looked to Rabu for insight to arrive at the ‘879 claims because the use of frequency spectrum data to determine motion and orientation of a phone would not have been necessary to arrive at the claims of the ‘879 patent. *See* USAA-1001, Abstract. Additionally, the frequency spectrum technology would have been considered excessive by a POSITA at the time of the ‘879 invention. Curry specifically teaches that a combination of “information from GPS and accelerometer sensors” can be used “to precisely identify the type of activity,” with no further suggestion of a lack of data or need for more advanced technology for “distinguish[ing] driving, walking or running modes.” USAA-1005 at 16:26—17:23.

Nothing in Curry suggests that using the frequency spectrum of Rabu to determine how a vehicle is being driven would instead be better than using always-on GPS or other positioning for mitigating Curry’s cited power consumption issues such that it would make technical sense to put Curry and Rabu together to arrive at the ‘879 Patent. A POSITA at the time of the invention would instead have been discouraged to combine Curry with Rabu because Rabu’s frequency spectrum positioning determination would have likely required even more processing power.

See USAA-1013 at 4:15-5:14 (describing processor 404 that can “determine the angle [the PMD] is tilted” and “a frequency spectrum,” “receive inputs from accelerometer 409, GPS device 405, and gyroscope 407 to calculate an orientation angle of PMD 400,” as well as “use [continuous] input from GPS device 405”). Similarly, nothing in Rabu suggests that using Curry’s triggered GPS-positioning determination would have been a suitable solution for determining a mobile device’s specific orientation. *See* USAA-1013 at 8:13-10:42.

A POSITA simply would not have been motivated to modify Curry to arrive at the claims of the ‘879 patent or to seek out Rabu for any of Curry’s alleged shortcomings. Therefore, a POSITA at the time of the invention would not have been led to combine Curry and Rabu to arrive at the claims of the ‘879 patent and instead would have been led away from making such a combination.

B. An IPR Should Not Be Instituted for All Grounds 1A-1G

For at least the foregoing reasons, Petitioner has failed to show that the challenged claim 1 (and claims 2, 3, 5, 6, 8, 11-13, 19-23, 25, 28-31, 39-44, 46-49, 51, 52, and 54, all addressed by Petitioner under Ground 1A) is obvious over Curry in view of Rabu. As shown, Petitioner’s rationale to combine these references is conclusory, does not have the factual support necessary to guard against impermissible hindsight, and ignores aspects of the references that indicate

undesirability of combining the references as proposed. Therefore, the Board should not institute IPR for Ground 1A.

Further, an IPR should not be instituted for Grounds 1B through 1F for the same reasons as set forth above for claim 1. Adding additional references to the Curry-Rabu combination for claims 4, 6, 7, 9, 10, 14-18, 24, 26, 27, 32-38, 45, 50, and 53 does not change the patentability of claim 1 (or of independent claims 21, 46, 51, and 54 having similar limitations to claim 1) and thus the patentability of any of the dependent claims. Petitioner's additional cited references of Tamir, Balachandran, Katayama, Thompson2010, and Willis do not affect the patentability analysis, and those references cannot cure the deficiencies identified above for the Curry-Rabu combination. Thus, claims 4, 6, 7, 9, 10, 14-18, 24, 26, 27, 32-38, 45, 50, and 53 also remain patentable under 35 U.S.C. §103.

Regarding Ground 1G for independent claim 55, Berkobin added to the claim 1 combination also does not affect the patentability analysis of this claim. Berkobin generally discloses artificial intelligence, but the subject matter of Berkobin cannot cure the shortcomings of the Curry-Rabu combination to which it is added. Thus, claim 55 remains patentable under 35 U.S.C. §103. Therefore, the Board should not institute IPR for Ground 1G.

VIII. CONCLUSION

USAA's Petition fails as Petitioner cannot show, and has not shown, that the claims of the '879 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.

September 21, 2023

Respectfully submitted,

/s/Steven E. Tiller

Steven E. Tiller, Reg. No. 39,859

Gregory Stone, Reg. No. 43,165

Lisa M. Schreihart, Reg. No. 80,016

Whiteford, Taylor & Preston L.L.P.

Seven Saint Paul Street – Suite 1500

Baltimore, Maryland 21202-1636

(410) 347-9425

Attorneys for Patent Owner,

Auto Telematics Ltd.

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 13,863. 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.

September 21, 2023

Respectfully submitted,

/s/Steven E. Tiller

Steven E. Tiller, Reg. No. 39,859

Gregory Stone, Reg. No. 43,165

Lisa M. Schreihart, Reg. No. 80.016

Whiteford, Taylor & Preston L.L.P.

Seven Saint Paul Street – Suite 1500

Baltimore, Maryland 21202-1636

(410) 347-9425

*Attorneys for Patent Owner,
Auto Telematics Ltd.*

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), undersigned counsel certifies that on September 21, 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:

Via Email Only (by consent):
W. Karl Renner
IPR36137-0027IP1@fr.com

Thomas Rozylowicz
tar@fr.com

Andrew B. Patrick
patrick@fr.com

Michael T. Zoppo
zoppo@fr.com

Ryan Chowdhury
rchowdhury@fr.com

PTABInbound@fr.com

axf-ptab@fr.com

IPR2023-00857

U.S. Patent No. 10,198,879 B2

September 21, 2023

Respectfully submitted,

/s/Steven E. Tiller

Steven E. Tiller, Reg. No. 39,859

Gregory Stone, Reg. No. 43,165

Lisa M. Schreihart, Reg. No. 80,016

Whiteford, Taylor & Preston L.L.P.

Seven Saint Paul Street – Suite 1500

Baltimore, Maryland 21202-1636

(410) 347-9425

Attorneys for Patent Owner,

Auto Telematics Ltd.