

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner,
v.

CHARGE FUSION TECHNOLOGIES, LLC,
Patent Owner.

Case IPR2025-00032

Patent 11,563,338

PATENT OWNER'S SUR-REPLY

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EXHIBIT LIST

Currently Filed – Patent Owner

Ex. No.	Description
2001	Declaration of Dr. Steven Goldberg
2002	Declaration of Dr. Steven Goldberg in Support of Patent Owner Response
2003	Deposition Transcript of Scott Andrews, August 21, 2025
2004	<i>Monteiro et al.</i> , A SOURCE CODE BASED MODEL TO GENERATE GUI - GUI Generation based on Source Code with Declarative Language Extensions, Proceedings of the Third International Conference on Software and Data Technologies - Volume 1: ICSOFT, 21-28, 2008 (“Montiero”)
2005	Opening Claim Construction Brief of Defendant Tesla, Inc. in case 1:22-cv-00488 (W.D. Texas) on January 9, 2023
2006	Declaration of Scott Andrews in IPR2020-01189. Apple Inc. v LBT IP I LLC, IPR2020-01189, EX1003, 7/22/2020

I. INTRODUCTION

Petitioner's Reply does not remedy the fundamental defects identified in Patent Owner's Response. Although styled as a response, the Reply ultimately relies on internal contradictions, strained interpretations of the '338 Patent specification, and unsupported attorney argument to paper over the Petition's failure to establish that the prior art discloses the claimed "slider by which an amount of charge may be specified."

The challenged claims require that a user *specify an amount of charge* via a slider. Petitioner continues to advance a construction of "amount of charge" that collapses concepts the '338 Patent expressly treats as distinct—namely, a *given charge amount* and a *desired charge level* expressed in terms of distance capable of being traveled. The specification is unambiguous on this point. It explains that an estimate of how far a vehicle can travel is *determined from* a given charge amount and then *used to express* the desired charge level in terms of distance. EX1001, 15:2–7. Distance is therefore an output derived from a charge amount, not the charge amount itself. Petitioner's proposed construction reverses that relationship, rendering the disclosure illogical and the claims untethered from the specification.

Petitioner's Reply highlights this contradiction rather than resolving it. On the one hand, Petitioner acknowledges that the '338 Patent determines how far a vehicle can travel *on a given charge amount* and then uses that determination to express a

desired charge level in miles. On the other hand, Petitioner insists that there is “no basis” to construe “amount of charge” as something different from a distance-based charge level. Those positions cannot be reconciled. If distance itself were the charge amount, there would be nothing left to estimate, determine, or express—exactly the sequence the specification describes. Petitioner’s construction thus nullifies the very disclosure it relies upon.

That flawed construction infects Petitioner’s obviousness theories. None of the cited references permits a user to specify an amount of charge via a slider. At most, the prior art allows a user to specify travel distance or minimum range, leaving the system to calculate charge internally based on numerous variables. The claims do not recite that functionality. Nor has Petitioner carried its burden to explain—without hindsight—how a person of ordinary skill in the art would modify the disparate references, reconcile incompatible scales, and redesign the user interface to arrive at the claimed slider.

The same overreach pervades Petitioner’s reliance on Oyobe’s vehicle sensor. The Petition depends on Oyobe to supply information indicative of an “intention to charge” in order to motivate and enable the proposed combination with Ferro. But Oyobe does not disclose any such intent. At most, Oyobe detects that a vehicle is within radio-frequency range of a location where charging equipment is installed. That signal does not indicate that the vehicle is prepared to charge, intends to charge,

or should be charged. Petitioner's Reply implicitly concedes this gap by recasting "intention to charge" as something less than actual readiness to charge, thereby confirming that Oyobe cannot provide the foundational input the Petition requires. As explained below, Petitioner's attempt to stretch Oyobe beyond its disclosure reflects hindsight reconstruction rather than evidence of what a person of ordinary skill in the art would have understood or done.

Petitioner's attempt to discount Patent Owner's expert further underscores the weakness of its position. In the Petition, Petitioner defined a person of ordinary skill in the art ("POSITA") as having at least a bachelor's degree in electrical or mechanical engineering and at least two years of experience involving automotive systems, including electric vehicle power management, with additional education offsetting lesser industry experience. Petition at 2. Dr. Steven Goldberg comfortably exceeds those criteria. He holds a Ph.D. in electrical engineering and has consulted on automotive and vehicle-related electrical and control systems. Notably, Petitioner has not taken issue with Dr. Goldberg's¹ testimony or credentials in the previous IPRs involving the same parties and same patent specification in IPR2022-01217, IPR2023-00062 and IPR2023-00063. In any event, Mr. Goldberg as a compliant POSITA provides testimony that does not stretch the claims or supply missing

¹ Petitioner failed to provide the courtesy to address Dr. Goldberg with his correct name, referring to him as "Dr. Goldstein" multiple times. Reply at 11, 14.

limitations; it confirms what the intrinsic record and the prior art demonstrate—that the asserted references do not disclose a user-operable slider for specifying an amount of charge.

Ultimately, Petitioner now asks the Board to complete the work the Petition did not do: to equate distance with charge amount despite the specification’s express distinction; to harmonize incompatible user inputs and scales across multiple references without evidentiary support; and to infer motivations and implementation details absent from the Petition. The Board should decline that invitation. Because Petitioner has not established unpatentability by a preponderance of the evidence, the challenged claims should be upheld.

II. CLAIM CONSTRUCTION OF “AMOUNT OF CHARGE”

Petitioner continues to rely on a claim construction of “amount of charge” that is contrary to the specification of the ’338 Patent.

A. The Specification distinguishes “amount of charge” from “desired charge range level”

The ’338 Patent is clear on the claimed and described terminology – it teaches (1) a “desired charge percent level 718” (shown in FIG. 7); (2) a “desired charge range level 720” (shown in FIG. 7); and (3) “a *given charge amount* ... can be determined ... and utilized to express the desired charge level in terms of distance capable of being travelled.” *See* EX1001, 14:56-15:11 and FIG. 7.

Petitioner confirms the '338 Patent's disclosure where Petitioner's Reply to Patent Owner Preliminary Response ("Reply") states:

Reading the '338 Patent, 14:56–15:11 collectively, the '338 Patent describes (1) determining how far the vehicle can travel on a given charge amount; (2) utilizing this determination of how far the vehicle can travel to express a desired charge level; and (3) user selection of the "desired charge level" as either a charge percent level (expressed as a percentage amount) or charge range level (expressed as a mileage amount) using a slider.

Reply, 3; emphasis added. This admission by the Petitioner acknowledges that "given charge amount", referenced as "(1)" above, is different from "'desired charge level' as either a charge percent level (expressed as a percentage amount) or charge range level (expressed as a mileage amount)". *Id.* Petitioner contradicts this admission where it alleges "nothing in the '338 Specification or claims mandates construing "amount of charge" (1) to be something different from a charge level..." Reply, 4.

Petitioner also contradicts this admission and alleges "No basis exists in the plain reading of the claims or specification to arbitrarily limit the claims to one of the defined measures of charge level (i.e., charge percent level) and exclude the other measure of charge level (i.e., charge range level.)" Reply, 1. This is simply untrue – at least the following disclosure in the '338 Patent supports the claimed subject matter:

An estimate of how far the vehicle can travel on a given charge amount (which may be a general average and/or may be computed based on a specific itinerary and/or past driving habits) can be determined, for example, ***and utilized***

to express the desired charge level in terms of distance capable of being traveled.

EX1001, 15:2-7; emphasis added. Reflecting this description to the slider embodiment, the user would specify “a given charge amount” which, in context of the Figure 7 embodiment of the ’338 Patent, would be “80%”. The system would then determine “an estimate of how far the vehicle can travel on [the] given charge amount” of “80%” and display that “estimate” as “110 miles”. EX1001, 15: 2-7 and FIG. 7.

Thus, the ’338 Patent specification uses these three *distinct* terms: (1) a given charge amount; (2) desired charge level in terms of distance capable of being travelled (also as “desired charge range level 720”; and (3) “desired charge percent level 718”. The terms “charge amount” as claimed as “amount of charge”, does not include both “desired charge range level 720”; and (3) “desired charge percent level 718” because if it did, the sentence at 15:2-7 would make no sense.

B. The claims recite “amount of charge” not “desired charge level”

Petitioner’s referral to “charge percent level 718” and/or a “charge range level 720” improperly imports limitations from the specification into the claims. The claims don’t recite selection of a charge *level*; whether as “desired charge percent level” or “desired charge range level.” Instead, the claims recite “a slider by which *an amount of charge* may be specified.” See limitations 1[h], 10[e], 19[l], and 28[e]. An “amount of charge” as interpreted by Patent Owner is not excluding any embodiment, but instead is supported by the ’338 Patent’s embodiment expressly

described at least at 15:2-7 of the '338 Patent specification that, as admitted by Petitioner, *expressly distinguishes* “given charge amount” from “desired charge level in terms of distance capable of being traveled.” Moreover, Petition states that the charge level only assists a user in deciding the amount of charge. Petition at 37, Andrews Declaration at ¶¶236-237.

C. The term “charge amount” cannot be used interchangeably with respect to “charge level” unless “charge amount” only *excludes* charge range level.

Petitioner alleges that “charge amount” and “charge level” in column 15, lines 2-7 are interchangeable. *See* Reply, 5–6. This is untrue unless Patent Owner’s claim construction is adopted, which would result in the Petitioner’s entire validity arguments related to the claimed slider being overcome. As Petitioner admits: “The only use of ‘amount’ in terms of a charge amount is at 15:2-7, which also refers to the ‘desired charge level.’” Reply, 4. The full recitation of 15:2-7 is:

An estimate of how far the vehicle can travel on a given charge amount (which may be a general average and/or may be computed based on a specific itinerary and/or past driving habits) can be determined, for example, and utilized to express the desired charge level in terms of distance capable of being traveled.

If, *arguendo*, “amount of charge” were to include desired range level, as Petitioner incorrectly alleges, then this sentence should be able to be rewritten as “An estimate of how far the vehicle can travel on a given ~~charge amount~~ desired range level ... and utilized to express the desired charge level in terms of distance capable of being

traveled.” This is non-sensical, however, because if a user is inputting a charge amount in terms of desired charge range level, then there would be no “estimate” of that given charge amount that is “utilized” to express the “desired charge level.” In other words, the Petitioner’s allegation that “Reversing the bolded terms in the sentences does not change the meaning of either sentence” is incorrect. Such reversal, in combination with Petitioner’s incorrect construction of the term “amount of charge” entirely nullifies the sentence and makes it entirely non-sensical as a circular sentence.

Further, this is the first time Petitioner has asserted that “charge level” and amount of charge” are interchangeable. The Petition explicitly relies on Letendre for a “slider on which an amount of charge may be specified” and points to the auto charge controller to set the length of the expected next trip, asserting that 10 miles is the specified amount of charge. Petition at 39.

D. Patent Owner’s construction of “amount of charge” is consistent with prior IPR constructions and the specification, whereas Petitioner’s is not

Petitioner asks the Board to ignore the Board’s previous findings in IPR2023-00063 related to claim construction of “amount of charge” to make mold the claim to fit Petitioner’s cited prior art to Petitioner’s hindsight reconstruction of the claimed subject matter. Specifically, even though the term “amount of charge” is in both the claims of U.S. Patent No. 10,819,135 (“’135 Patent”), and the ‘338 Patent claims, Petitioner alleges the Board’s prior construction related to “amount of charge” with

respect to the '135 Patent should be ignored. *See* Reply, 7-8. Although the claims of the '338 Patent differ by not including the “temperature control system” of the claims of the '135 Patent, there is no reason that the term “amount of charge” between the two patents should differ. In fact, the claims should be construed the same across all patents, and particularly where the construction is supported in both context of the '338 Patent and the '135 Patent to which the '338 Patent claims priority. *See SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1316 (Fed. Cir. 2015)(“Where multiple patents derive from the same parent application and share many common terms, we must interpret the claims consistently across all asserted patents.”)(internal quotation marks omitted).

Accordingly, the Board’s prior construction supports Patent Owner’s position regarding construction of the term “amount of charge.”

E. Patent Owner’s construction of “amount of charge” upholds validity

Petitioner alleges that Patent Owner’s construction does not uphold validity of the claims as the allegedly would “have no written support.” Reply, 4-5. Patent Owner disagrees. For the reasons explained in detail above, there is sufficient written support of the claimed subject matter under Patent Owner’s construction of “amount of charge” in at least 15:2-7 of the '338 Patent.

In fact, protecting validity of the claims supports Patent Owner’s position. Should ambiguity remain, claims must be construed to protect their validity. POR,

20; Reply, 5; citing *Phillips v. AWH Corp.*, 415 F.3d 1303, 1327 (Fed. Cir. 2005) (en banc). The Federal Circuit has also held “claims should be read in a way that avoids ensnaring prior art if it is possible to do so”. *Harris Corp. v. IXYS Corp.*, 114 F.3d 1149, 1153, 43 U.S.P.Q.2d 1018 (Fed. Cir. 1997). “However, claims can only be construed to preserve their validity where the proposed claim construction is ‘practicable,’ is based on sound claim construction principles, and does not revise or ignore the explicit language of the claims.” *Generation II Orthotics Inc. v. Medical Technology Inc.*, 263 F.3d 1356, 1365, 59 U.S.P.Q.2d 1919 (Fed. Cir. 2001). Here, as discussed above, (1) Patent Owner’s claim construction is practicable; (2) it is based on sound claim construction principles by being supported by at least column 15, lines 2-7 of the specification, Petitioner’s own extrinsic evidence (*see, e.g.*, POR, 24-25; citing EX1066, 1); and (3) contrary to Petitioner’s construction, Patent Owner’s construction does not revise or ignore the explicit language of the claims that recites “specify an amount of charge.”

For at least the above reasons, “specify an amount of charge” should be construed to not include specifying desired charge range level in terms of distance travelled.

III. DEFINITION OF A POSITA

Petitioner’s assertion that Dr. Steven Goldberg is not a person of ordinary skill in the art is untenable under Petitioner’s own articulated standard. In the Petition,

Petitioner defined a POSITA as having at least a bachelor's degree in electrical or mechanical engineering and at least two years of experience involving automotive systems, including electric vehicle power management, *with additional education offsetting lesser industry experience*. Petition at 2. Dr. Goldberg comfortably exceeds those criteria. He holds a Ph.D. in electrical engineering, a qualification Petitioner expressly recognizes as sufficient to offset any alleged deficiency in industry tenure.

Contrary to Petitioner's portrayal, Dr. Goldberg's experience also squarely includes automotive and electric-vehicle-related systems. In sworn deposition testimony that Petitioner omits from IPR2022-01217, Dr. Goldberg explained that he served on the board of directors of Lucid Motors, a mainstream electric-vehicle OEM, has served for several years on the board of Solid Power, a solid-state lithium-ion battery company, and performs technical diligence on behalf of his investment company, Venrock, on a number of electrical vehicle companies. IPR2022-01217, EX1019 at 80:13- 82:17. He further testified that his professional work focuses on embedded systems—describing vehicles as quintessential embedded systems involving sensors, processors, and communications—and that his experience includes telematics and vehicle measurement systems applied to electric vehicles. *Id.*

Nothing in Petitioner's POSITA definition requires employment by an automobile manufacturer, hands-on vehicle assembly, or implementation of commercial charging infrastructure. To the contrary, Petitioner expressly allows advanced technical education and training to substitute for narrower industry experience. Under that definition, Dr. Goldberg plainly qualifies as a POSITA.

Dr. Goldberg's credible testimony confirms what the intrinsic record and the prior art themselves show- that the challenged claims of the '338 Patent should be upheld.

IV. THE CHALLENGED CLAIMS SHOULD BE UPHELD

A. The Prior Art does not render obvious at least “a slider by which an amount of charge may be specified.”

Patent Owner's construction of “an amount of charge” as discussed above, and in the Patent Owner Response, is correct. The claim limitation “a slider by which an amount of charge may be specified” does not include specifying desired distance travelled.

Letendre only allows the user to specify a distance and a minimum range, but does not allow the user to specify a percentage of charge. Reply, 13, POR, 40. Petitioner, however, ignores its own-supplied evidence that Letendre's charge controller would never be modified to allow the user to select anything but distance in terms of miles. POR, 40. Petitioner does not rebut, or characterize, the Kempton reference, which discusses Letendre, and states

The illustrative control panel in Fig. 1 is intended to minimize driver concern *by using controls that accommodate user needs*. ... Rather, the driver specifies what his or her travel needs are. The utility determines the timing of charging and discharging within those constraints. *This is the key principle behind the controller design in our proposal.*

EX1073, 162-163; EX2002, ¶93.

A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & Assoc., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). A POSITA, reading Kempton and Letendre *as a whole*, would understand that the user cannot specify “what his or her travel needs are” by simply specifying amount of charge in terms of percentage (as required by the ’338 Patent claims) because – as undisputed by Petitioner – specifying “charge range level” ... requires completing underlying calculations” that are impacted by a number of variables. Reply, 6. This is precisely why Letendre does not allow a user to simply input amount of charge in terms of percentage – because Letendre requires the user to specify, in miles, “his or her travel needs.” EX1073, 162-163; EX2002, ¶93.

B. Petitioner has not met its burden to show how a POSITA would modify the references

It is well-established that “[i]n an inter partes review ..., the petitioner shall have the burden of proving a proposition of unpatentability by a preponderance of

the evidence.” 35 U.S.C. § 316(e). “[T]he burden of proof is on the petitioner to prove unpatentable those issued claims that were actually challenged in the petition for review and for which the Board instituted review.” *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1375 (Fed. Cir. 2016)(citations omitted). Furthermore, “that burden never shifts to the patentee.” *Id.*

Petitioner alleges

PO provides no reason why a POSITA, a person of ordinary creativity with at least a bachelor’s degree in engineering, would have been incapable of resolving any (unclaimed) implementation details, including a unified scale, with basic math. EX1003, ¶¶247-249 (describing common use of sliders).

Reply, 14. Patent Owner does not need to prove a negative. Indeed, the obviousness inquiry does not merely ask whether a skilled artisan *could* combine the references, but instead asks whether ‘they *would* have been motivated to do so.’ *Adidas AG v. Nike, Inc.*, 963 F.3d 1355, 1359 (Fed. Cir. 2020). And in an IPR, the Petitioner must *present evidence* that establishes, by a preponderance of the evidence, *how* a combination of references was supposed to work. *See Pers. Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017).

The Petition does not present the requisite evidence to meet Petitioner’s burden of proof. Indeed, the Petition does not even acknowledge the scale difference of Letendre and Donnelly, but instead simply cherry picks the alleged slider of Letendre

Whether or not a POSITA would be able to resolve scale is not the question. The question is whether the Petitioner has satisfied their burden of proving a proposition of unpatentability *by a preponderance of the evidence*. Petitioner alleged to combine Letendre in the previous Ferro-Oyobe-Donnelly aggregation by allegedly simply including “Letendre’s graphical slider on the charge level bar graphic presented on the GUI, where the operator moves the slider to specify a desired charge. ... the displayed bar graph is modified to include a selectable slider to select Ferro’s minimum and/or maximum charge amount preference, or Letendre’s desired charged mileage.” It is also Petitioner who fails to even consider or address the fact (which is undisputed) that Donnelly’s bar graph is in percentage and Letendre’s charge is in miles – entirely different scales. There is no discussion in the Petition of how Letendre’s slider would be combined with Donnelly’s bar graph.

C. The Reply’s statements regarding Ferro’s different levels of charge depending on power source move the goalpost, further evidencing failure to clearly articulate the *prima facie* case of obviousness

The Reply now moves the goalpost from the Petition, alleging Ferro teaches more than two choices where it states: “different levels of charge depending on power source”. Reply, 15. This, however, again evidences that the Petition is deficient and requires the Board to fit the pieces of puzzle together to arrive at alleged obviousness. It is improper to combine references “like separate pieces of a simple jigsaw puzzle”

without “explain[ing] what reason or motivation one of ordinary skill in the art at the time of the invention would have had to place these pieces together.” *InTouch Techs., Inc. v. VGo Comm’cns, Inc.*, 751 F.3d 1327, 1349 (Fed. Cir. 2014).

The Petition makes no reliance on this sentence of Ferro, for good reason. In full context, this portion of paragraph [0123] in Ferro states: “Amount of charge 514 preferences may ... specify different levels of charge depending on power source 540 of the electricity used to charge the electric vehicle. If the power source is a “green” source, such as Solar power, the user may specify a higher charge level than if the power source is a more environmentally harmful, or “brown’ power source, such as coal or oil.” EX1004, [0123]. After the Reply, there are now even more questions for how one of skill in the art would combine the references to meet the slider limitation of the ’338 Patent. There is no discussion of how to combine the references not only (1) with different scales (e.g., linear of Donnelly vs non-linear of Letendre), but now (2) with increased variables (e.g., battery percentage of Donnelly, mileage of Letendre, and power source type of Ferro). *See* Reply, 15. Petitioner has provided zero evidence of **how** the POSITA would rectify these differences between Ferro, Donnelly, and Letendre. Instead, Petitioner throws the puzzle pieces on the table and asks the Board to put the puzzle together. This is improper and the Challenged Claims should be upheld because the Petitioner has not met its burden.

D. Ferro would not be combined with Oyobe without hindsight

The Reply evidences that hindsight is being used to establish the Ferro/Oyobe combination. Petitioner must establish, without using hindsight and the claims as a roadmap, why Ferro would have been combined with Oyobe. Petitioner’s premise of combining Oyobe with Ferro is “enabling ‘an intention to charge’ without the operator leaving the vehicle.” Pet., 12.

At best, Oyobe teaches that it is only within general vicinity of a charging equipment, not that there is an *intention to charge*. See EX1005, [0142]. The “at the location where charging equipment is installed” merely indicates that charging equipment is within radio-frequency range to the position detecting apparatus 108, not that there is an *intention to charge*.

The Reply states “intention to charge ... does not necessarily indicate the vehicle is prepared to charge.” Reply, 17. This statement evidences that “intention to charge” is more than mere capability to charge (which Oyobe also cannot establish), but instead a specific *intent* that the vehicle is to be charge. This statement supports Patent Owner’s position that “the signal output from Oyobe’s detecting apparatus 108 ***is unusable in Ferro’s system in the manner required to evidence the Petition’s alleged motivation to combine.***” See POR, 32-36. Oyobe addresses a specific issue – “the vehicle user can more surely be prevented from forgetting to charge the electric power storage apparatus despite the lowered SOC of the electric power storage apparatus.” EX1005, [0012]. If Oyobe’s device could decipher an *intention to charge*

– which it cannot – then Oyobe’s entire system would be rendered unnecessary. Thus, Oyobe does not provide information of an intention to charge – the exact information required by the Petition to satisfy Petitioner’s hindsight-based motivation to combine Ferro with Oyobe.

That the claims do not recite any particular alignment relative to a charger, or that the Specification does not limit vehicle sensors to only detecting vehicles aligned with a charger is not relevant to the issue. *See Reply*, 17-18. The issue is whether the Petition improperly used hindsight and the claims as a roadmap to conjure an unsupported reason to combine Ferro with Oyobe. The arguments Patent Owner Response evidence that using the claims as a roadmap is exactly how the alleged motivation to combine was developed. POR, 31-36. In reality, however, the POSITA would not look to Oyobe to obtain information of an *intention to charge*, the exact information needed and foundational to Petitioner’s motivation to combine Ferro with Oyobe. Because Oyobe does not provide any information of *intention to charge*, but instead only indicates generally that the vehicle is within radio-frequency range of a charging equipment location, one would not combine Oyobe with Ferro.

The Challenged Claims should be upheld for at least this additional reason.

E. Petitioner Improperly Expands Scope of “sending an alert”

Petitioner’s Reply fails to meaningfully address the “sending an alert” limitation as recited in the challenged claims. Rather than analyzing the claim

language in context, Petitioner relies on a narrow and inapposite citation from the specification addressing an unrelated embodiment involving wireless charging nodes. Reply at 20 (citing EX1001, 20:23–27). That passage does not concern pet safety, interior temperature maintenance, or continued operation of vehicle systems while the vehicle is parked, and thus does not supply the claimed alert functionality.

The challenged claims make clear that the “sending an alert” limitation is tied directly to maintaining operating conditions suitable for a pet left inside a parked vehicle. See, e.g., claims 1[j]–1[m]. The specification confirms this context. Figure 6 and the accompanying disclosure describe alerts sent to the operator in connection with the “pet in car” mode, where the system monitors conditions affecting the pet’s safety. EX1001, 13:50–55. The ’338 Patent further explains that the “pet in car” feature may automatically generate alerts so that a user may safely leave a pet in a parked vehicle, including when operating conditions can no longer be maintained. EX1001, 15:62–16:5.

Petitioner’s reliance on an alert allegedly generated within the vehicle divorces the limitation from its purpose and from the claim language itself. An alert sent only within the vehicle—where the operator is necessarily absent—would defeat the function of the claimed system and render the “pet in car” safeguards meaningless. The claims require sending an alert to the operator to inform them that

the vehicle can no longer maintain conditions suitable for the pet, not merely generating an internal notification unrelated to pet safety.

By ignoring this claim context and instead latching onto an unrelated disclosure, Petitioner again asks the Board to overlook the structure and purpose of the claims in favor of a result-driven reading. The cited references do not disclose or suggest sending an alert to an operator in the manner required by the challenged claims, and Petitioner has not met its burden to show otherwise.

F. Petitioner’s Utilization and Narrow “Motivations” to Combine are improper

Petitioner again mischaracterizes Patent Owner’s argument. Patent Owner does not dispute that individual elements existed in the prior art; rather, Patent Owner showed that Petitioner failed to articulate a plausible rationale explaining why a POSITA would have been motivated to combine these particular references in the manner required by the claims. A patent is not rendered obvious merely because its elements were independently known. *Virtek Vision Int’l ULC v. Assembly Guidance Sys., Inc.*, 97 F.4th 882, 886 (Fed. Cir. 2024)

Nor may obviousness rest on combinations for which Petitioner does not provide a plausible rationale as to why the prior art references would have worked together. *Power-One, Inc. v. Artesyn Techs., Inc.*, 599 F.3d 1343, 1352 (Fed. Cir. 2010).

Here, Petitioner relies on a patchwork of references—Oyobe, Donnelly, Letendre, Zeigler, Galvez-Ramos, and others—without explaining how a POSITA would integrate these disparate systems into a coherent architecture, reconcile incompatible inputs and scales, or redesign the user interface to achieve the claimed functionality. That is precisely the type of hindsight-driven “pick and choose” approach the Federal Circuit has rejected. *InTouch Techs., Inc. v. VGo Commc’ns, Inc.*, 751 F.3d 1327, 1349 (Fed. Cir. 2014).

Petitioner’s Reply shows only that a POSITA *could* assemble selected features with the claims as a roadmap—not that a POSITA *would* have done so. *See Belden Inc. v. Berk-Tek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“[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.”) Petitioner provides no reasoning as to why a multitude of references are obvious to combine together and instead takes the position that there is no logical limit to a number of references to combine.

G. The Petition and Reply overextend the Knockeart disclosure

The Reply alleges that “PO argues Knockeart does not “monitor or input selected modes of operation.” *Id.*, 56. This is not a requirement of the claims or the combination. The Ferro system already implements a GUI on a touch screen for inputting charging preferences and a mode of operation (e.g., HVAC mode). Pet., 31-

33, 46-47.” Reply, 22. This mischaracterizes Patent Owner’s position, and overextends Knockart. The combination of Ferro (and the other five references) with Knockart would not be made without hindsight and using the claims as a roadmap. The Petitioner’s position is that Ferro’s “GUI would be adapted to be displayed on “a removable personal device communicating with an in vehicle system”. Reply, 22. The alleged motivation is allegedly “A POSITA would have appreciated displaying the GUI on a removable device would allow the user to view charging information when they are away from the vehicle.” Pet., 73. This overextends Knockart, however.

Knockart only discusses augmenting an on-board computer GUI *while* the operator is in the vehicle. *See e.g.*, EX1010, 8:52-55:

When on-board computer 210 **executes a route guidance application** and makes use of I/O interfaces 340 on the removable device, it displays traveler information screens on display 342, such as turn-by-turn and text instructions for route guidance, map and point-of-interest information, route-Specific traffic information, or other text messages related to route guidance. Other applications in which the on-board computer makes use of I/O interfaces 340 include emergency and roadside assistance.

Thus, Knockart’s display is focused on “[s]ystems which provide route planning and guidance Services to an operator of a vehicle”. EX1010, 1:15-17. There is no indication that Knockart’s I/O device would be capable of displaying the necessary information of a Ferro’s full “GUI would be adapted to be displayed on “a

removable personal device communicating with an in vehicle system” as required by the alleged combination. Reply, 22. This is further unreasonable *while the user is away from the vehicle* as alleged by Petitioner. Knockeart expressly identifies the functionality “when the removable personal device is not docked in the vehicle” as “selection of navigation-related data ... uploading of travel-related data ... or downloading of data or program updates to the removable device for maintenance of the on-board computer.” EX1010, 8:14-26. There is no discussion of providing a full vehicle GUI, as alleged by the Petitioner, unless information gleaned solely from the ’338 Patent is used as a roadmap.

V. CONCLUSION

For the reasons stated above, Patent Owner respectfully asks the Board to uphold patentability of all Challenged Claims.

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Respectfully submitted,

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CERTIFICATE OF WORD COUNT UNDER 37 C.F.R. § 42.24(b)(1)

I, the undersigned, do hereby certify that the foregoing Patent Owner Response, including footnotes, contains no more than 5,600 words, as measured by the Word Count function of Microsoft Word as specified by 37 C.F.R. § 42.24(b)(1).

/s/ Bradley D. Liddle

Bradley D. Liddle

CERTIFICATE OF SERVICE

I hereby certify that on January 9, 2026, a true and correct copy of the foregoing PATENT OWNER'S SUR-REPLY was served by electronic mail upon the following counsel of record for Petitioners:

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