

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner

v.

CHARGELOGIC LLC,
Patent Owner

Case IPR2026-00378
U.S. Patent 11,258,107

PATENT OWNER'S PRELIMINARY RESPONSE

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EXHIBIT LIST

Exhibit No.	Description
2001	March 26, 2025 USPTO Memorandum on Interim Processes for PTAB Workload Management, available at https://www.uspto.gov/sites/default/files/documents/InterimProcesses-PTABWorkloadMgmt-20250326.pdf (“Process Memorandum”)
2002	March 11, 2026 Squires Memorandum on Additional Discretionary Institution Considerations – U.S. Manufacturing and Small Business Use of AIA Proceedings, available at https://www.uspto.gov/subscription-center/2026/uspto-issues-additional-discretionary-institution-facts (“Small Business Memorandum”)
2003	Excerpts from File History of U.S. Patent Application 18/298,152 (issuing as U.S. Patent No. 12,272,189)
2004	USPTO Reexaminations – FY 2026, Quarter ending 6/30/2026, available at https://www.uspto.gov/sites/default/files/documents/reexamination-op-stats.pdf
2005	Tesla, Inc. Form 10-K for the Year Ending December 31, 2025
2006	Complaint for Patent Infringement and Jury Demand, <i>ChargeLogic LLC v. Tesla, Inc.</i> , C.A. No. 7:26-cv-00100 (W.D. Tex. March 23, 2026)
2007	Shareholder Deck for Q2 2026 Update, Tesla Investor Relations, July 22, 2026, available at https://assets-ir.tesla.com/tesla-contents/IR/TSLA-Q2-2026-Update.pdf
2008	NHTSA Part 583 American Automobile Labeling Act Report for 2026, available at https://www.nhtsa.gov/part-583-american-automobile-labeling-act-reports
2009	CM/ECF Docket Report, <i>ChargeLogic LLC v. Tesla, Inc.</i> , C.A. No. 7:26-cv-00100 (W.D. Tex.) (as of August 23, 2026)

Exhibit No.	Description
2010	Joint Proposed Scheduling Order, <i>ChargeLogic LLC v. Tesla, Inc.</i> , C.A. No. 7:26-cv-00100, Doc. 34-1 (W.D. Tex. Aug. 10, 2026)
2011	U.S. Patent 10,090,567
2012	Expert Declaration of Samuel Russ, Ph.D.
2013	U.S. Patent No. 8,427,103
2014	U.S. Patent No. 9,950,635
2015	Tesla Home Charging Website, <i>available at</i> https://www.tesla.com/home-charging (last accessed Aug. 26, 2026)
2016	The American Heritage Dictionary (2 nd College Ed. 1982) — “Phone” and “Telephone” definitions
2017	U.S. Patent No. 8,618,771
2018	Microsoft Computer Dictionary (3 rd Ed. 1997) — “PDA” definition
2019	Microsoft Computer Dictionary (5 th Ed. 2002) — “PDA” definition
2020	RESERVED
2021	U.S. Patent No. 8,004,109
2022	Apple, “Apple Reinvents the Phone with iPhone” (Jan. 9, 2007), <i>available at</i> https://www.apple.com/newsroom/2007/01/09Apple-Reinvents-the-Phone-with-iPhone/ (last accessed Sept. 9, 2026)
2023	Apple, “The App Store turns 10” (July 5, 2018), <i>available at</i> https://www.apple.com/newsroom/2018/07/app-store-turns-10/ (last accessed Sept. 9, 2026)
2024 to 2028	RESERVED

Exhibit No.	Description
2029	Tesla, “Elon Musk,” <i>available at</i> https://www.tesla.com/elon-musk (last accessed Sept. 15, 2026)

I. INTRODUCTION

Petitioner fails to carry its burden of demonstrating a reasonable likelihood that any challenged claim is unpatentable.

First, the Petition advances an express construction that Petitioner never explains, never supports, and cannot reconcile with the position it takes on the same phrase in a concurrent related IPR. Petitioner’s *own expert* does not endorse that construction; he states only that he was “instructed by counsel” to apply it. *Infra* Section III. Because every asserted ground is premised on that construction and Petitioner does not allege invalidity under its plain and ordinary meaning, Petitioner cannot meet its institution burden.

Second, the Petition errs “by collapsing the obviousness analysis into a hindsight-guided combination of elements.” *Leo Pharm. Prods., Ltd. v. Rea*, 726 F.3d 1346, 1354 (Fed. Cir. 2013). Petitioner “use[s] hindsight reconstruction to pick and choose among isolated disclosures in the prior art to depreciate the claimed invention.” *In re Fine*, 837 F.2d 1071, 1075 (Fed. Cir. 1988). As but one example fatal to the entire Petition, Petitioner proposes modifying a *residential/workplace onboard vehicle* charger designed to charge *based on fluctuating utility costs* (Sutardja) by importing the complex “current threshold” and battery-classification system specific to a *public, universal, external pay-per-use* battery charger (Hobbs). There is no basis for the proposed combination—there is only improper hindsight.

Infra Sections IV.A.3.a, B.2, C.1, E.2.

Third, Petitioner’s proposed combinations do not even teach the challenged independent claim limitations. For instance, Petitioner’s pairing of Hobbs’s current-threshold “substantial completion” alert with Sutardja does not yield a ***user-defined*** “predetermined threshold level of charge;” instead, the alert threshold remains one that the charger’s controller ***automatically selects***. *Infra* Sections IV.A.3.b; B.2, C.1, E.2.

Unsurprisingly, Petitioner cannot identify prior art reasonably supporting obviousness. In 2008—the priority date Petitioner applies—consumer EVs and EV chargers were in their infancy; the first Tesla Roadster was introduced that year. Ex. 2029. Modern smartphones were also brand new, the first iPhone® having been released only in mid-2007. Ex. 2022. The claimed invention was novel, which is why Petitioner cobbles together six references and asserts ***eighteen*** distinct obviousness combinations (under “MTC” subheadings) based on rationales that do not withstand the slightest scrutiny. The maze-like Petition with tiered “MTCs”—confusingly dispersed across dozens of claim limitations—is a textbook example of improper hindsight. Institution should be denied.

II. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner’s proposed level of ordinary skill requiring experience in unspecified “automotive systems” is too generic. Pet., 1. Experience with transmissions, cooling systems, or other systems unrelated to battery charging would not contribute to skill in the relevant art. Ex. 2012 ¶ 43. Petitioner’s specification of “electric vehicle battery charging systems” is also too narrow, as it excludes those with significant experience in battery charging systems in other applications. *Id.* The level of ordinary skill would thus require only two years of experience with electric battery charging systems, regardless of application. *Id.* Patent Owner agrees that experience in this field may offset less formal education and that advanced degrees may offset lower levels of industry experience. Patent Owner relies on the testimony of Dr. Samuel Russ, who qualifies as a POSITA under either party’s definition. *Id.* ¶ 44.

III. PETITIONER’S INCONSISTENT AND UNEXPLAINED CLAIM CONSTRUCTION POSITIONS WARRANT DENIAL

Petitioner applies the “ordinary and customary meaning of the claim terms” to all terms but one: “threshold level of charge,” which appears in all three independent claims. Pet., 2–3.¹ Petitioner proposes that “threshold level of charge”

¹ All ***italic-bold*** emphasis and alterations have been added unless otherwise indicated.

be construed to mean “a level of charge that is less than the charge level at which charging stops.” *Id.* at 2–3. Petitioner’s entire discussion of that construction is as follows:

Petitioner proposes the phrase “threshold level of charge” be construed as “a level of charge that is less than the charge level at which charging stops.” *See* Claims 1, 6, 10. *See e.g.*, EX1001, 2:45-50, 20:14-63 (“the controller 44 can continue to charge the vehicle battery 20, and can do so without interruption following battery charging to the minimum threshold level of battery charge”). Otherwise, Petitioner applies the plain and ordinary meaning of all claim terms.

Id. Petitioner states its proposed construction in a single sentence, followed by unexplained citations to the claims and two passages from the specification. *Id.* This unsubstantiated claim construction position warrants denial for four independent reasons.

First, “[w]here a petitioner specifically relies on a particular construction of a claim term in order to demonstrate unpatentability, particularly a construction different from the ordinary meaning, that claim construction is part of the unpatentability analysis, and the petitioner ***must provide a sufficient basis to support that construction.***” *Samsung Elecs. Am., Inc. v. Cobblestone Wireless, LLC*, IPR2024-00319, Paper 16 at 20 (PTAB June 24, 2024). Petitioner expressly applies its construction throughout the Petition and does not alternatively assert unpatentability under its plain and ordinary meaning. *See e.g.*, Pet., 12 (applying

construction to claim 1). And despite relying on this construction in every asserted ground, Petitioner fails to support it. Ex. 2012 ¶¶ 48–49. For example, Petitioner never explains how either cited portion of the specification—Ex. 1001, 2:45-50 or 20:14-63—supports deviating from the ordinary meaning, nor alleges an express redefinition of the term or a clear disavowal of claim scope. *See Thorner v. Sony Comp. Entm’t Am. LLC*, 669 F.3d 1362, 1367 (Fed. Cir. 2012) (plain and ordinary meaning applies “*unless the patentee explicitly redefines the term or disavows its full scope.*”). They do not support the construction. Ex. 2012 ¶ 49. The absence of support is underscored by Petitioner’s expert, Scott Andrews, declining to endorse the construction. Ex. 1003 ¶ 28.

Compounding the problem, the construction is ambiguous. Ex. 2012 ¶ 50. Petitioner defines the threshold by reference to “the charge level at which charging stops” (Pet., 2), even though, for example, Claim 1[e][iii] and [iv] require that “the predetermined threshold level of charge be[] *less than a full charge* of the battery” and that the alert be sent “*before* the charging of the battery is *complete.*” Petitioner never explains what its construction adds, excludes, or changes. Because every ground is premised on this unexplained construction and Petitioner does not allege invalidity under the plain and ordinary meaning, denial is warranted. *Cobblestone*, IPR2024-00319, Paper 16 at 20.

Second, as Tesla recognizes, express construction is necessary only to the

extent needed to resolve invalidity. *See, e.g., Tesla, Inc. v. Bulletproof Prop. Mgmt., LLC*, IPR2026-00229, Paper 2 at 8 (filed Jan. 23, 2026) (“***claim terms need only be construed to the extent necessary to resolve the controversy***”) (quoting *Wellman, Inc. v. Eastman Chem. Co.*, 642 F.3d 1355, 1361 (Fed. Cir. 2011)); *Tesla, Inc. v. Perceptive Automata, LLC*, IPR2025-01577, Paper 1 at 18-19 (filed Oct. 10, 2025) (applying plain meaning because “[t]here is no need for claim construction”). Having elected to depart from the plain and ordinary meaning of a term recited in every claim, Petitioner was required to explain both why the departure is warranted and why it is necessary to resolve its grounds of invalidity. Its failure to do either justifies denial.

Third, Petitioner’s own expert does not support the construction. Mr. Andrews states only: “I have been ***instructed by counsel*** to apply the claim construction for ‘*threshold level of charge*’ as ‘a level of charge that is less than the charge level at which charging stops.’” Ex. 1003 ¶ 28. He offers no opinion that the construction is correct or that a POSITA would have understood the phrase that way—a startling omission given that Mr. Andrews affirmatively opined on many other issues without needing to state that he was relying on any comparable instruction from counsel. Ex. 2012 ¶ 51.

It appears, then, that Mr. Andrews does not agree with the construction. Had

he agreed, he would have said so as he did elsewhere. *Id.*² That Tesla relies on its experts for claim construction in other IPR proceedings confirms the point. *See, e.g., Tesla, Inc. v. Intellectual Ventures II, LLC*, IPR2025-00638, Ex. 1003 ¶¶ 39-43 (filed Mar. 3, 2025). Expert opinions that merely apply a construction supplied by counsel, without disclosing the underlying facts or reasoning that support it, are entitled to little or no weight. 37 C.F.R. § 42.65(a); *see Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (PTAB Aug. 24, 2022) (precedential). Moreover, Petitioner advances a construction its own expert declined to endorse and never explains that absence of support. *See Revvo Techs.*, IPR2025-00632, Paper 20 at 3–5 (precedential); *see also Tesla, Inc. v. Intellectual Ventures II LLC*, IPR2025-00340, Paper 18 at 3-4 (Director Nov. 5, 2025) (informative) (vacating institution where Tesla failed to explain inconsistent claim construction positions).

Fourth, Petitioner takes inconsistent claim construction positions across proceedings without explanation. *Revvo Techs.*, IPR2025-00632, Paper 20 at 3–5. Petitioner is concurrently challenging related U.S. Patent Nos. 10,090,567 and 11,721,844 in IPR2026-00377 and IPR2026-00380, respectively. Those patents

² The strategy of petitioners applying a patent owner’s purported claim construction from co-pending litigation that is inconsistent with petitioners’ own is generally no longer permissible. *See Revvo Techs., Inc. v. Cerebrum Sensor Techs., Inc.*, IPR2025-00632, Paper 20 at 3–5 (Director Nov. 3, 2025) (precedential).

share a common specification with the '107 Patent. Petitioner proposed the same construction for “threshold level of charge” in the '844 IPR petition but proposed “plain and ordinary meaning” for “threshold level of battery charge” in the '567 IPR petition. *See Tesla, Inc. v. ChargeLogic LLC*, IPR2026-00380, Paper 1 at 2-3; *Tesla, Inc. v. ChargeLogic LLC*, IPR2026-00377, Paper 1 at 3, 59-60. Although the latter phrase has the word “battery,” there is no plausible basis for construing it differently in patents that are all directed to a **battery** charger. Ex. 2012 ¶ 52. Nor is the inconsistency academic: if plain and ordinary meaning suffices in the '567 proceeding, Petitioner cannot explain why a departure from that meaning is necessary here—and if the departure is necessary here, Petitioner’s '567 mapping is unsupported. That unexplained inconsistency warrants denial.

In short, the disputed phrase appears in every challenged independent claim; the only construction Petitioner offers for it is unsupported by any explanation or evidence; Petitioner’s own expert applied it solely at counsel’s direction; and Petitioner advances a conflicting position for the same phrase in a co-pending IPR involving a patent with a common specification. Institution should be denied.

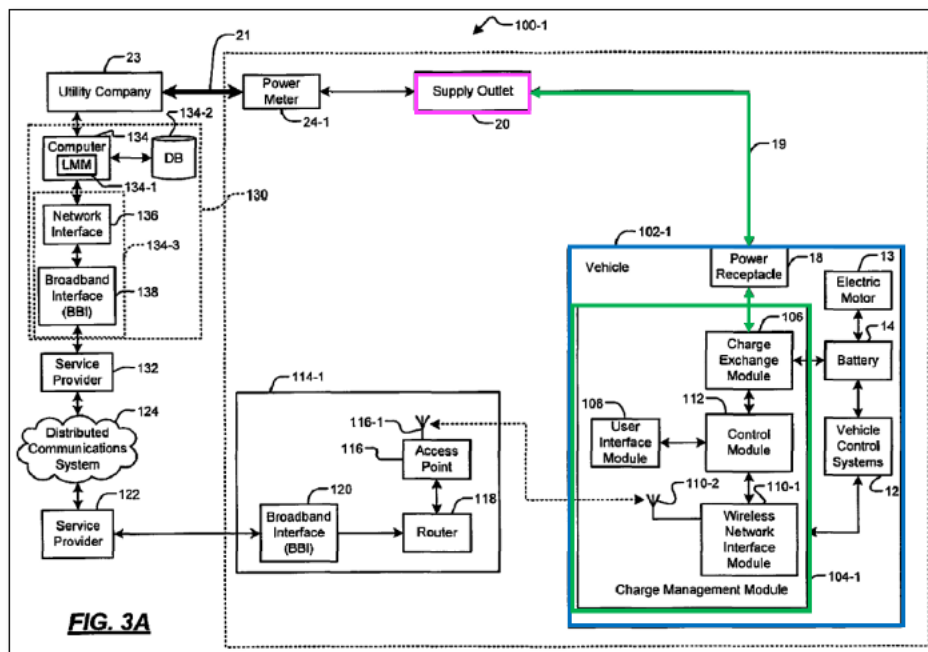
IV. PETITIONER FAILS TO CARRY ITS BURDEN ON ANY GROUND

A. Ground 1

- 1. Claim 1[a]-[b]: “[a] a battery charger having: [b] an electrical power cord releasably attachable to at least one of the vehicle and a source of power”³**

Petitioner contends that this limitation is taught by Sutardja-Hobbs-Kelty-078-Anttila (Ground 1). Specifically, Petitioner contends:

Sutardja teaches a *battery charger (i.e., CMM 104-1 with connector/cable 19)* comprising an *electrical power cord (cable/connector 19) releasably attachable to at least one of the vehicle (vehicle 102) and a source of power (supply outlet 20)....*



Pet., 7. Petitioner thus alleges that the claimed “battery charger” *is* (“i.e.”) the

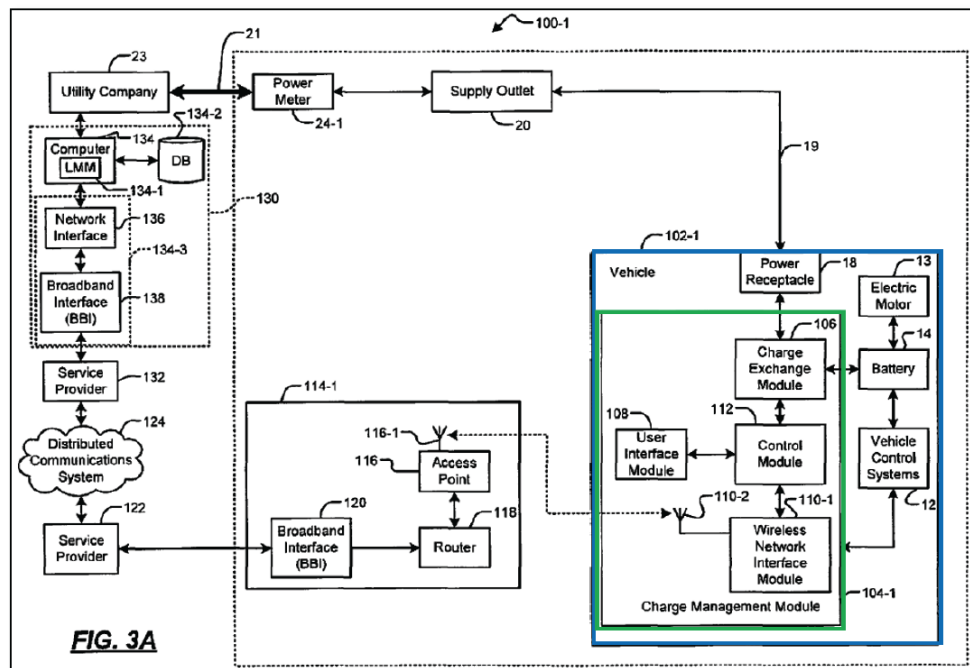
³ Patent Owner uses the same claim element reference letters set forth in the Petition.

combination of **CMM 104-1** and **connector/cable 19**.

Petitioner cannot carry its institution burden based on this implausible mapping. Petitioner contends that the combination of CMM 104-1 and connector/cable 19 *is* the claimed “battery charger,” despite those components being completely separated by power receptacle 18—a component that ***Petitioner does not contend*** forms any part of the “battery charger.” Petitioner fails to explain how connector/cable 19 and CMM 104-1 can constitute the claimed “battery charger” when an intervening component that ***Petitioner excludes*** from the “battery charger” separates them entirely. *See Bd. of Regents of the Univ. of Tex. Sys. v. Bos. Sci. Corp.*, 184 F.4th 618, 631 (Fed. Cir. 2026) (“It is not reasonable to characterize that ***artificially separated*** section of the stent coating as a ‘thread-like’ structure.”). Petitioner’s expert also fails to explain this theory—he simply repeats the same mapping. *Compare* Pet., 7-8 *with* Ex. 1003 ¶¶ 97-98; *Xerox*, IPR2022-00624, Paper 9 at 15 (expert declaration entitled to “little weight” where it simply restates the petition’s conclusory assertions). Just as it is generally improper for a petitioner to map separately recited claim elements onto a single unified structure, it is equally improper to divide the “battery charger” identification across a structural element that ***Petitioner itself*** excludes from the “battery charger.” *See Becton, Dickinson & Co. v. Tyco Healthcare Grp., LP*, 616 F.3d 1249, 1254 (Fed. Cir. 2010) (“Where a claim lists elements separately, the clear implication of the claim language is that

those elements are distinct components of the patented invention.”) (cleaned up); Ex. 2012 ¶ 55.⁴

Moreover, in the co-pending IPR challenging the related '844 Patent, Petitioner only identifies **CMM 104-1** as the “battery charger”—not the cable/connector 19:



Tesla, Inc. v. ChargeLogic LLC, IPR2026-00380, Paper 1 at 5-6. Similarly, Petitioner refers only to “CMM 104-1” (not connector/cable 19) as the “battery

⁴ The issue before the Board is not whether the combination of the CMM 104-1, receptacle 18 and connector/cable 19 can be considered a “battery charger,” but instead whether the CMM-104-1 and connector/cable 19 can be considered the claimed “battery charger” *without* the receptacle 18 being part of the alleged charger as *specifically proposed by Petitioner*.

charger” when addressing other claim limitations. *See e.g.*, Pet., 10 (“Sutardja teaches *a battery charger* (CMM 104-1) Sutardja’s **controller**...is housed within **battery charger (CMM 104-1)**”). Petitioner avoids mentioning connector/cable 19 as part of the “battery charger” when not required for invalidity because the mapping is illogical.

Because the claimed “battery charger” cannot encompass two components that are completely separated by a component that ***Petitioner does not consider*** to be part of the “battery charger,” Petitioner cannot carry its burden on Ground 1. Ex. 2012 ¶ 57.⁵

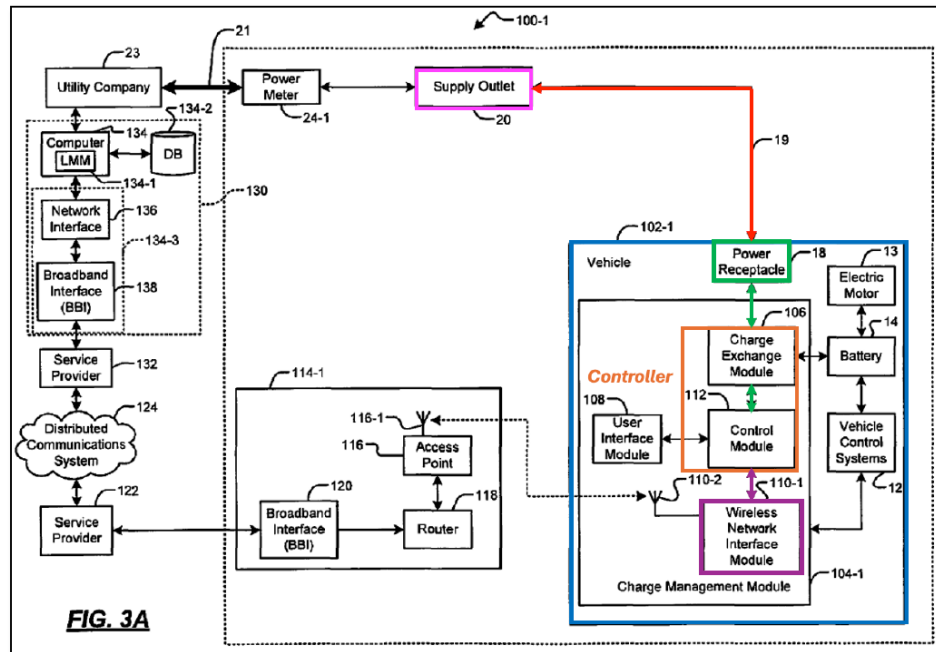
2. Claim 1[d]: “a controller electrically coupled to the electrical power cord and to the transmitter”

Petitioner fails to demonstrate that Sutardja-Hobbs-Kelty-078-Anttila (Ground 1) discloses or renders obvious: “a controller electrically coupled to the electrical power cord and to the transmitter” that “compare[s] ... a level of charge of the battery to a predetermined threshold level of charge” as required by Claim 1[e][iii]. Petitioner contends:

Sutardja teaches *a battery charger* (CMM 104-1) *having a controller* comprising one or more processors, namely the collective controller

⁵ Even if an alternative mapping could be devised on reply, it would come too late. *SAS Inst., Inc. v. Iancu*, 138 S. Ct. 1348, 1356 (2018); *see also Koninklijke Philips N.V. v. Google LLC*, 948 F.3d 1330, 1336 (Fed. Cir. 2020).

control module 112 and charge exchange module 106 (“modules 112/106”), electrically coupled to the electrical power cord (cable/connector 19) and to the transmitter.



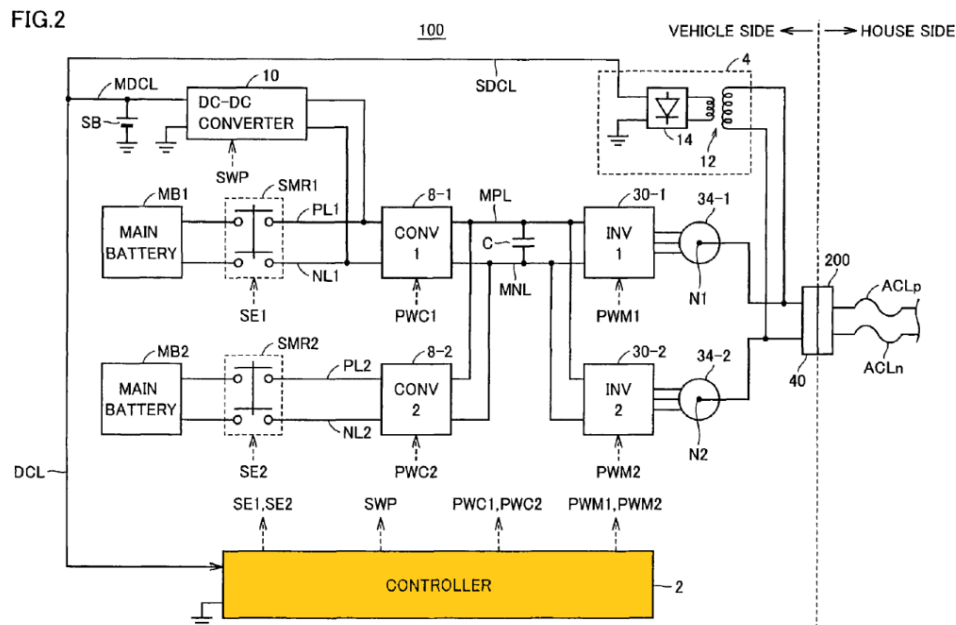
Pet., 10-11.

Despite Sutardja explicitly referring to element 112 as the “control module,” Petitioner maps the claimed “controller” to both “control module” 112 and “charge exchange module” 106. Neither Petitioner nor its expert explains why the claimed “controller” expands beyond “control module” 112.

Petitioner fails to carry its burden because it has not provided “a detailed explanation of the significance of the evidence,” including an explanation as to why the alleged “controller” of Sutardja expands beyond “control module” 112. See 37 C.F.R. § 42.104(b)(5); *Shopkick, Inc. v. Novitaz, Inc.*, IPR2015-00277, IPR2015-

00278, Paper 7 at 23 (PTAB May 29, 2015) (denying institution where the petitioner did not “adequately explain the significance of the evidence”). Indeed, Petitioner provides no claim construction or reasoned explanation for its mapping. *See First Solar, Inc. v. Rovshan Sade*, IPR2023-00881, Paper 13 at 20 (PTAB Nov. 16, 2023) (denying institution and explaining that “[w]ithout a claim construction or reasoned explanation, it is difficult to understand why a single pipe serving as a support post would be a ‘support frame’ as claimed.”).

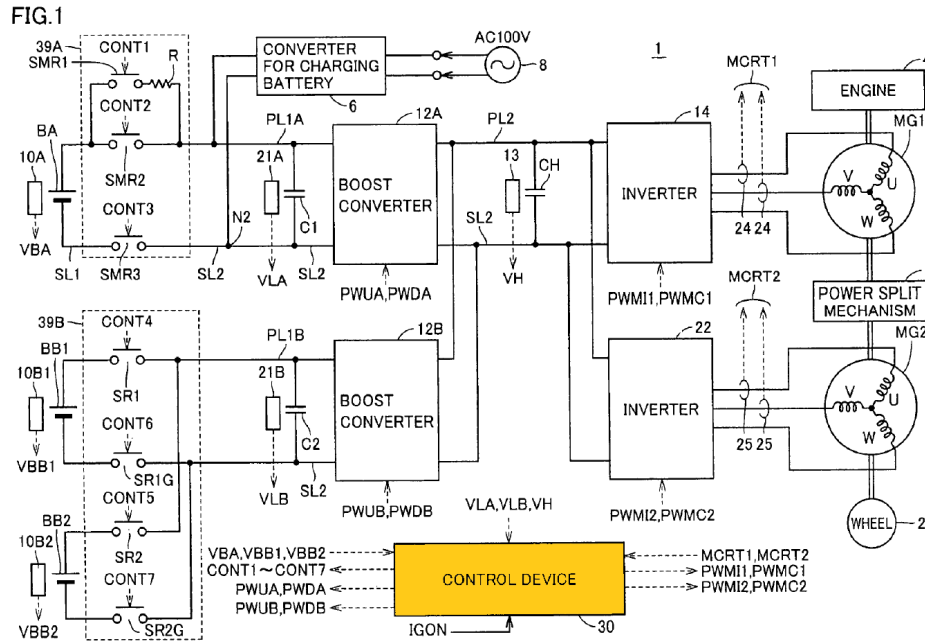
The prior art demonstrates why this is problematic. For example, U.S. Patent No. 8,618,771 (assigned to Toyota) depicts its “controller 2” (orange) as a single contiguous device:



Ex. 2017.

Similarly, U.S. Patent No. 8,004,109 (also assigned to Toyota) depicts its

“control device” 30 (orange) as a single contiguous device:



Ex. 2021. In contrast, Petitioner identifies the alleged “controller” of Sutardja as encompassing *both* “control module 112” and “charge exchange module” 106 without any claim construction or explanation. A POSITA would typically understand the “control module” of an electronic device to be the “controller” of the device, absent additional information reflecting (i) that additional hardware/circuitry of the electronic device performs the function of a controller or (ii) that the meaning of “controller” in the particular context encompasses additional hardware/circuitry.

Petitioner’s unexplained “controller” mapping is material. The language of element 1[d] requires that the “controller” is “electrically coupled to the electrical power cord” and later element 1[e][iii] requires that the claimed controller be configured to “compare ... a level of charge of the battery to the predetermined

threshold level of charge.” As to the requirement of 1[d], control module 112 is *electrically isolated* from the power by charge exchange module 106, which is the component that electrically interacts with the cable and power supply. Ex. 2012 ¶ 63. Thus, the control module 112 is neither directly nor indirectly “electrically” coupled to the cable/connector 19. *Id.*

As to the requirement of 1[e][iii], it is the charge exchange module 106—not control module 112—that Petitioner contends performs the claimed comparison. Pet., 17 (identifying “charge monitoring module 150” of charge exchange module 106 as performing the claimed function); Ex. 2012 ¶ 67. Thus, by Petitioner’s own admission, control module 112 alone cannot satisfy the requirements of the claimed “controller.”

Petitioner identifies *only* the “control module” 112 and “charge exchange module” 106 as the “controller” apparently because those are the components Petitioner believes it needs for invalidity. Because Petitioner fails to provide any explanation for its “controller” mapping or propose a claim construction to justify that mapping, Petitioner cannot carry its burden as to this claim element.

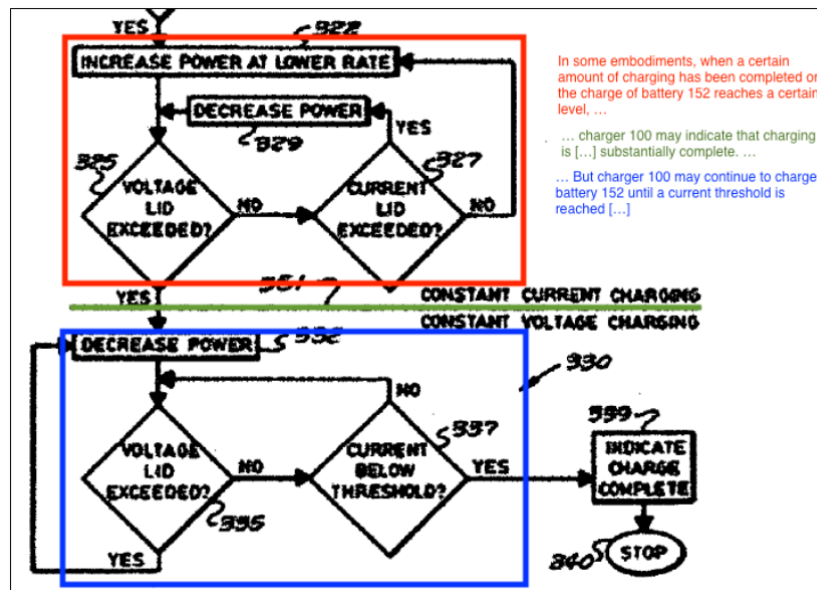
3. Claim 1[e][i-ii]: “the [battery charger] controller configured to ... [i] receive, via a user-manipulatable control, data indicative of a predetermined threshold level of charge [ii] by which the controller sends an alert, the predetermined threshold level of charge being less than a full charge of the battery,”

Petitioner’s obviousness theory for this limitation relies on Sutardja for the

user-input half of the limitation, contending that Sutardja’s user enters “charging parameters” including “charge levels of the batteries.” Pet., 12-13.

Petitioner then relies on Hobbs for the *alert before charging stops*. Petitioner contends that Hobbs discloses “a second charge threshold, less than a full charge, *at which the controller sends an alert*” (Petitioner’s alleged “notification threshold”) because Hobbs’s charger 100 “*may indicate* that charging is ... *substantially complete*” when “*the charge of battery 152 reaches a certain level*,” yet “continue[s] to charge battery 152 until a *current threshold* is reached.” Pet., 14.

Petitioner proposes modifying Sutardja to incorporate Hobbs’ complex current threshold system (see annotated Figure 3 below) for the purpose of reaching the user-defined “predetermined threshold” limitation:



Pet., 15. Indeed, according to Petitioner, “a POSITA would have appreciated once

the user inputs Sutardja's desired charge amount (predetermined levels of charge), Hobbs would look up the *associated current threshold in Hobbs's look-up table* to Sutardja's charge amount." Pet., 19.

a) The Combination Was Not Obvious.

Petitioner fails to demonstrate obviousness for several reasons.

First, there would have been no motivation to combine Sutardja and Hobbs. Ex. 2012 ¶ 72. Sutardja is specific to a residential or work vehicle battery charger system that can schedule charging times based on energy costs. Ex. 1004, 1 (titled "PLUG-IN *VEHICLE*"); *id.* ("control module stores a first set of charging parameters for charging a battery *in a vehicle*"); *id.* ¶ [0229] ("Many people arrive *home after work* at about the same time....If a significant number...plug in their vehicles for recharging batteries at the same time, the demand for power may exceed the available supply."); *id.* ¶ [0239] ("A vehicle 102-1 is charged at...a *home or work location*.").

In stark contrast, Hobbs is directed toward a public, pay-per-use, universal battery charger. Ex. 1006 ¶ [0009] ("One object of the present invention is to provide a charger that can automatically *identify the type of battery*...."); *Id.* ¶ [0026] ("Chargers in accordance with the present invention may automatically charge at the correct battery voltage for *various types of batteries*."); *Id.* ¶ [0030] ("[C]hargers in accordance with the present invention may be used for *stationary*

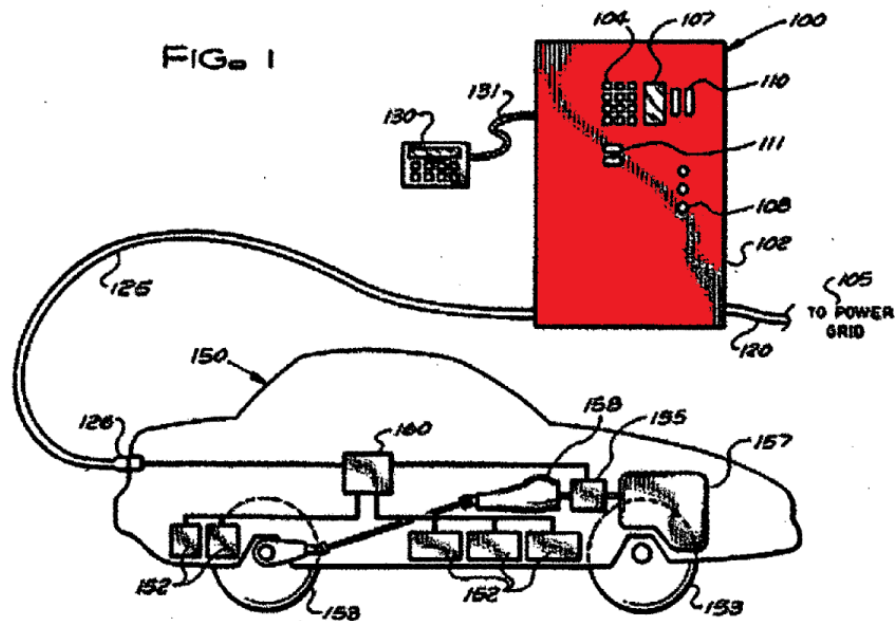
battery charging...., portable electric energy equipment, and distributed or renewable electrical energy battery applications.... such as, solar, wind, tidal or wave, and geothermal primary energy sources.”); *Id.* ¶ [0033] (“Charger 100 may deliver electricity for *many different battery chemistries or classifications....*”). *Id.* ¶ [0036] (“[A] user may activate or enable charger 100 *by swiping a card....*”); Ex. 2012 ¶ 73.

The only reason Hobbs teaches its complex “current threshold” and “look-up table” based system is because its charger is for *universal charging* where the battery can be of many different types. *Id.* ¶ 74. There is no logical reason a POSITA would incorporate *any* of the complex “current threshold” features of Hobbs’s *universal charger* into Sutardja’s *vehicle-specific* charger. *Id.* Hobbs requires table 272 because the bulky charger 100 is a public, universal battery charger capable of charging *many different battery types* and that must *identify an unknown battery* before charging. *See* Ex. 1006 ¶ [0052] (“Look-up table 272 may be part of a *battery classifier or system configured to identify the type of battery....*”); Ex. 2012 ¶ 74. Sutardja’s CMM 104-1, by contrast, is an in-vehicle charger specifically designed for a vehicle battery 14. Ex. 2012 ¶ 74. Importing a battery-classification look-up table into a charger permanently wired to one *known* battery serves no purpose. *Id.*

The proposed combination is the product of improper hindsight. Petitioner *needs* Hobbs to try to satisfy its proposed construction of “predetermined threshold

level of charge,” and it therefore mashes Hobbs’ complex “current threshold” system with Sutardja without answering the most basic obviousness question: Why would a POSITA reach for Hobbs’s **universal** battery charger when Sutardja is directed to a **vehicle** charger that has no need to identify different battery types and thus has no need for any of Hobbs’ “current threshold” functionality? Ex. 2012 ¶ 75. Petitioner offers no answer because there is no logical reason, because this theory is premised on improper hindsight. *See KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 421 (2007).

Second, even if a POSITA had been motivated to combine Hobbs’s universal-charger, current-threshold-based system with Sutardja, Petitioner fails to explain how Hobbs’s complex **external** charger 100 feature could be implemented in the **on-board** vehicle charger of Sutardja. Ex. 2012 ¶ 76. Petitioner proposes taking the functionality of that **bulky external** universal charger 100 (**red**, below) and importing it into Sutardja’s **on-board** vehicle charger. Pet., 18-19.



Indeed, Petitioner explicitly proposes that a “POSITA would have appreciated once the user inputs Sutardja’s desired charge amount (predetermined levels of charge), *Hobbs* would look up the associated current threshold in *Hobbs’s look-up table* to Sutardja’s charge amount” based on charger 100. Pet., 19. Petitioner fails to present any evidence that a POSITA would have had a reasonable expectation of success of imparting this complex functionality from Hobbs’ **bulky external charger 100** into Sutardja’s *on-board* battery charger. Ex. 2012 ¶ 77. Petitioner simply ignores that Hobbs is directed toward a fundamentally different and more complex universal battery charging system, which is bulky because it needs to have the capability to accommodate the current charge levels of many battery types. *Id.*

Third, Sutardja’s user-input *charge-level* parameter and Hobbs’s separate, hardware-derived *current* threshold are two conceptually distinct thresholds. *Id.* ¶

78. Hobbs relies on a **current**-based, look-up-table value rather than the user-input **charge**-percentage value that Petitioner attributes to Sutardja. Hobbs teaches a battery charger that monitors “whether the charging current has dipped below a **current** threshold (step 337).” Ex. 1006 ¶ [0107]. That “current threshold” is “stored in look-up table 272 for ... battery 152,” is specific to the type of battery pack being charged, and is automatically selected by the system. *Id.* When the charging current drops below the current threshold, Hobbs’s charger stops charging or indicates that charging is complete. *Id.* ¶ [0109].

Hobbs’s current threshold is a measurement of the rate at which charge **flows** (e.g., electrons), not a measurement of the amount of energy **stored** in the battery. Ex. 2012 ¶ 79. These are distinct physical parameters: a current threshold is the rate at which charge **can be pushed** to the battery, while a charge-level threshold tells the charger how **much energy the battery has accumulated**. *Id.* Claim 1 requires “data indicative of a predetermined threshold level of charge,” meaning a level of energy storage, not a rate of charge flow. *Id.*

Petitioner’s attempt to bridge the gap through improperly incorporated-by-reference testimony vaguely discussing Ohm’s law (Pet., 19 (citing Ex. 1003 ¶ 124)) only underscores the problem: a proportional relationship between voltage and current at a given resistance says nothing about how much charge a particular battery has accumulated, which is why Hobbs’s current thresholds must be indexed to

battery type. Ex. 2012 ¶ 80 (citing Ex. 1006 ¶¶ [0052], [0107]). A POSITA would have understood that estimating the amount of charge in a battery is technically difficult and considerably more complicated than waiting to switch from constant-current to constant-voltage charging. *Id.* ¶ 80. Petitioner never explains how Hobbs’s current-threshold-based charging system would even be operable with, or could be incorporated into, Sutardja’s fundamentally different charger system.

Fourth, Petitioner’s asserted rationale—that the modification would “improve user convenience by notifying users the vehicle is ready for use ... while still permitting continued charging to a higher charging endpoint” (Pet., 16)—is irreconcilable with the expressly stated purpose of *both* references. Ex. 2012 ¶ 82. A benefit that neither reference seeks, and that cuts against what one of them aims to achieve, supplies no “rational underpinning.” *KSR*, 550 U.S. at 418.

Beginning with Sutardja, its stated object is *not* user convenience but relieving the burden that mass simultaneous vehicle charging places on the *utility’s* distribution system. Ex. 2012 ¶ 83. Sutardja explains that because “[m]any people arrive home after work at about the same time,” “the demand for power may exceed the available supply.” Ex. 1004 ¶¶ [0229]-[0230]. Sutardja’s solution is that “utility companies may employ a charge management system (CMS) to coordinate charging of batteries in vehicles at multiple locations,” and may even “take back charge from selected... batteries via the CMS....” *Id.* ¶¶ [0231]-[0232]. User interface module

108 lets the user “generate default and/or custom charging parameters” *up front*—charging times, completion time, priority, expected next use, and acceptable costs—which the CMM transmits to the utility for scheduling. *Id.* ¶¶ [0234]-[0236], [0253]. Sutardja is explicit: the user “may request a full charge daily between 9 pm and 6 am,” and “[t]he utility company 23 may charge the battery 14... between 9 pm and 6 am *without interacting with the user.*” *Id.* ¶ [0262]. The system *removes* the user from the charging session for *the utility company’s* benefit, not to interrupt the user with a mid-session alert. Ex. 2012 ¶ 83.

Petitioner’s asserted benefit is not merely absent from Sutardja; it is affirmatively *counterproductive*. An alert provides no benefit to a user at home overnight or at work all day; that user *expects* the desired “driving range” (Pet., 16) when departing. *Id.* ¶ 84. Sutardja’s utility executes a schedule built from the charge levels and completion times the user supplied in advance, supplying power “in a staggered manner to multiple users” so that it will not “*load[] the power distribution system.*” Ex. 1004 ¶ [0263]. A user who departs mid-schedule in response to an alert defeats that coordination, and unplanned charging beyond the scheduled level is precisely the uncoordinated demand Sutardja exists to prevent. *Id.* ¶¶ [0229]-[0231]; Ex. 2012 ¶ 84. Indeed, Sutardja contemplates the opposite: sessions so long that a CMS may *take charge back out* of the battery and “recharge these batteries later during periods of lower demand.” Ex. 1004 ¶ [0231]; Ex. 2012 ¶ 84.

Hobbs does not supply the missing rationale either. Ex. 2012 ¶ 85. The reason charger 100 may “indicate that charging is complete at one current threshold ... and stop charging at a lower current threshold” is to “facilitate *minimizing the charging time if the user is waiting* for the charge to be completed, but *maximizing the amount of charging that takes place if the user is not ready to use*, for example, vehicle 150,” together with the battery-health benefit of “giving it a deeper charge periodically.” Ex. 1006 ¶ [0111]. That is a throughput-and-battery-care rationale for a *public, pay-per-use* machine serving a queue of unknown battery types—not a rationale for telling a user that a self-selected trip-readiness level has been reached. Ex. 2012 ¶ 85. Hobbs never describes its indication as confirming that the vehicle is “ready for use” at a user-chosen level, and Hobbs’s charger has no notion of the planned trip or driving-range planning on which Petitioner’s rationale depends. *Id.*

Tellingly, Petitioner cannot support its convenience rationale from either reference. For the proposition that a user needs to know whether the charge “was high enough to make a planned trip,” Petitioner cites *Kelty-078*—a reference it does not rely on for this limitation. Pet., 16-17 (citing Ex. 1005, 4:53-5:57). A motivation that must be imported from outside the asserted combination, and that contradicts the stated object of the reference being modified, is a sign of working backward from the claim rather than forward from the prior art.

Fifth, Petitioner’s generic “REOS” arguments fail to demonstrate a reasonable

expectation of success in incorporating Hobbs' current-threshold system from its *bulky external*, pay-per-use, *universal* charger 100 into Sutardja's *on-board vehicle* charger. Ex. 2012 ¶ 86. Petitioner's entire "analysis" is that a "POSITA would have had a REOS in incorporating Hobbs's threshold-notification functionality into Sutardja's charging-management system and the inclusion of a second threshold, a charge level lower than a full charge level." Pet., 17. Mr. Andrews's conclusory testimony that "this modification would have had a reasonable expectation of success because only straightforward and routine *changes to programming instructions* would have been required" is implausible on its face. Ex. 1003 ¶ 120. Incorporating Hobbs' complex current-threshold look-up table system into Sutardja would require considerable *hardware* modifications to Sutardja's on-board vehicle charger. Ex. 2012 ¶ 86. A POSITA would have had no reasonable expectation of success, particularly given that Hobbs' charger is an *external universal* battery charger and Sutardja's is an *on-board vehicle* charger. *Id.*

b) The Combination Does Not Possess All Claim Limitations.

Even if the prior art could be combined, the combination would still fail to teach "data indicative of a predetermined threshold level of charge by which the controller sends an alert" received "*via a user-manipulatable control.*" Two independent defects undermine Petitioner's mapping. Ex. 2012 ¶ 87.

First, Hobbs does not teach that a user may input a level of charge at all. *Id.* ¶

88. Petitioner’s contrary characterization is unsupported. Petitioner acknowledges that Sutardja does not teach “a level of charge that is less than the charge level at which charging stops,” which is Petitioner’s expressly applied construction for “threshold level of charge.” Pet., 12.

To account for that missing feature, Petitioner proposes modifying Sutardja based on Hobbs’ alleged teaching of the “substantially complete” alert, which Petitioner corresponds to a “second charge threshold, less than a full charge, at which the controller sends an alert.” Pet., 14. However, Hobbs does not teach that the *user* may input a battery *charge level*. Ex. 2012 ¶ 89. Petitioner relies on Hobbs’s teaching that “fast or opportunity charging may take place for *a particular amount of time or energy*....” (Ex. 1006 ¶ [0111]) and attempts to tie that to: “when a certain amount of charging has been completed or the charge of battery 152 reaches *a certain level*, charger 100 may indicate that charging is complete (step 339) or substantially complete” (*id.*). Pet., 14. But a “particular amount of . . . energy” set by the user is not the same as “a certain level” of “charge of battery”—the former refers to *the amount of power* to be delivered to the battery, irrespective of the resulting level of charge. Ex. 2012 ¶ 89. The two are not interchangeable: delivering a fixed quantity of energy (e.g., 10 kWh) yields different resulting charge levels depending on battery capacity and state of charge when charging began—which is precisely why Hobbs must first identify the battery type in look-up table 272. *Id.*

(citing Ex. 1006 ¶¶ [0052], [0107]).

Nothing in Hobbs teaches that the charger allows a user to input the particular charge level sought; it teaches only that the user can input an amount of time (e.g., 30 minutes) or energy (e.g., kWh), and *solely for purposes of “fast or opportunity charging.”* *Id.* ¶ 90 (citing Ex. 1006 ¶ [0111]). Neither input is a level of charge of the battery—that is, the extent to which the battery is charged (e.g., 50%). *Id.* Thus, Hobbs does not teach a user-input level of battery charge as the claims require. A POSITA would have understood that Hobbs is performing constant-current charging followed by constant-voltage charging, and that the transition between those phases is only *loosely correlated* with the battery’s actual level of charge. *Id.* That boundary is dictated by the *controller*, not by the user: Hobbs’s charger observes how the battery behaves during charging and adjusts accordingly. *Id.*

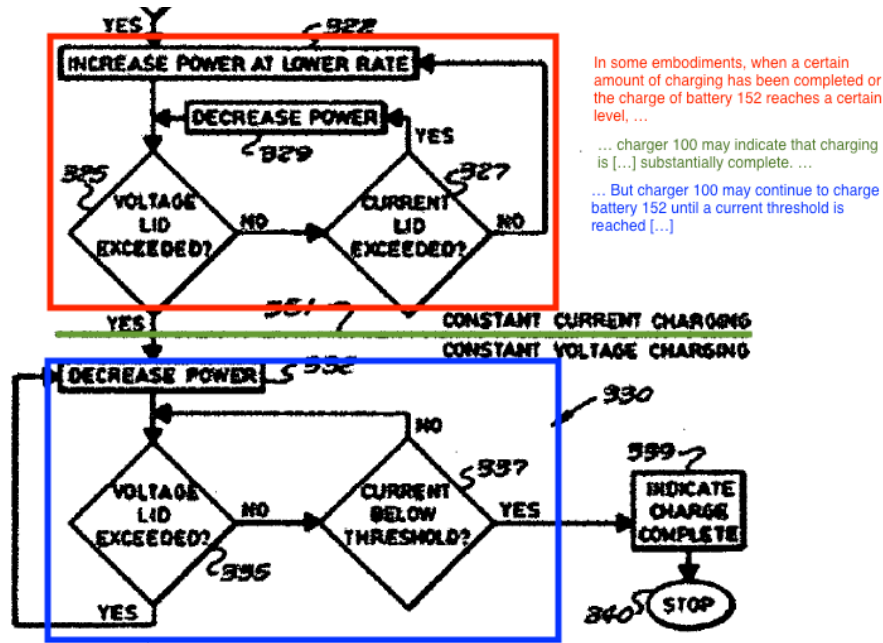
The mechanics confirm the point. Both thresholds Petitioner relies on sit within Hobbs’s *constant voltage* phase 330, where charger 100 “gradually reduce[s] the charging power level to maintain the same charging voltage” until “a reduction in charging current indicates that charging is complete.” Ex. 1006 ¶ [0073]; *see also id.* ¶¶ [0107]-[0108]. Both the “complete” indication and the stop-charging point are therefore *current* values observed as the charging taper proceeds—an artifact of how a battery of the identified type accepts charge near the end of a charging cycle, not a level the user dials in. Ex. 2012 ¶ 91.

Second, even accepting *arguendo* that Hobbs permitted a user to input a “level of charge,” Hobbs does *not* teach that any such input **triggers** the “substantial completion” alert. Claim 1[e][i] requires that the “data indicative of a predetermined threshold level of charge” be “receive[d], via a ***user-manipulatable*** control,” so for Hobbs to teach this limitation under Petitioner’s proposed construction it must teach that the “substantial completion” alert threshold itself is ***user-defined***. It does not. Ex. 2012 ¶ 92.

The only user inputs Hobbs describes are an amount of time or energy for fast or opportunity charging. Ex. 1006 ¶ [0111]. Hobbs nowhere teaches that the “***amount of time or energy entered by the user*** triggers the indication that charging is “substantially complete.” Ex. 2012 ¶ 93. A POSITA would understand that the “substantially complete” alert issues automatically when the charging current falls below a ***system-determined current threshold stored in look-up table 272***—a value Hobbs expressly states is “selected (e.g., by controller 270) ***based on the type of*** battery pack or battery,” not by the user. Ex. 1006 ¶ [0107]; Ex. 2012 ¶ 93. The decision to alert at that point is a design choice made by the ***charger manufacturer***. Ex. 2012 ¶ 93 (citing Ex. 1006 ¶ [0111]). Indeed, in the co-pending ’844 IPR, Petitioner argues that only the alleged “threshold (of energy or charge level)” is “user-specified”—not the “substantial completion” alert threshold. *Tesla, Inc. v. ChargeLogic LLC*, IPR2026-00380, Paper 1 at 50.

The look-up table in Hobbs identifies the appropriate current-threshold cut-off ***based on battery type***; it is not a user-input threshold, as the claim requires. Ex. 2012 ¶ 94. Every charging parameter in Hobbs—starting power level (¶ [0080]), voltage lid (¶ [0098]), current lid (¶ [0102]), current threshold (¶ [0107])—comes from table 272, keyed to battery type. Nothing in the charging profile is user-defined. *Id.* Petitioner’s theory is therefore internally inconsistent: the very look-up value it relies on to supply the claimed threshold is, by Hobbs’s own terms, selected by the controller rather than received from the user. *Id.* That inconsistency is dispositive: the prosecution history confirms that user-supplied data controlling *when* a below-full-charge alert issues was a basis for the claims overcoming prior art disclosing a fixed, system-set completion alarm. Ex. 1002, 183-84, 199.

Petitioner’s annotations to Figure 2 of Hobbs (reproduced below) do not cure this fundamental flaw.



Pet., 15. As discussed above, Hobbs does not teach that the green line (i.e., the “substantially complete” indication) is based on a threshold level *set by the user*. It cannot be, because it reflects the charger’s observation of the battery’s behavior. Ex. 2012 ¶ 95 (citing Ex. 1006 ¶¶ [0013], [0109], [0110]). A POSITA would further understand that Hobbs’s disclosure of only a “substantial completion” notification—and no other notification thresholds (e.g., 25%, 50%) apart from “complete”—confirms that the threshold is a system setting rather than a user-defined one. *Id.* The only reason “substantial completion” matters is that Hobbs proceeds to lower-current “trickle” charging afterward, and because Hobbs is directed to a *public, pay-per-use, universal* battery charger where it makes sense to summon the user back to the charger—not a *home or work vehicle-specific* charger like Sutardja’s where the vehicle is expected to remain on-site for charging for so long that the utility company

takes overcharged energy back from the battery. *Id.* Moreover, in Hobbs, the current threshold is dictated by battery safety and general battery principles. *Id.* ¶ 96.

Thus, even if Hobbs could be combined with Sutardja, the result would be an *automated, system-issued* “substantial completion” alert as the battery neared the charge level the user entered in Sutardja. *Id.* ¶ 97. The alert threshold would remain a value the *controller* automatically selects—while the claim requires that the data defining the threshold “by which the controller sends an alert” be “receive[d], via a *user-manipulatable control.*” *Id.*

4. Claim 1[e][iii]: “the battery charger controller configured to ... compare, during charging of the battery with the battery charger, a level of charge of the battery to the predetermined threshold level of charge, and”

a) The Combination Was Not Obvious.

Petitioner fails to demonstrate that there would have been any motivation to combine Hobbs’ current-threshold based system for a *public external universal* charger with Sutardja’s *residential/work vehicle-specific* charger-based system or that there would have been a reasonable expectation of success in doing so. *Supra* Section IV.A.3.a; Ex. 2012 ¶ 98.

b) The Combination Does Not Possess All Claim Limitations.

Even if Sutardja-Hobbs could be combined, Petitioner fails to demonstrate that the combination satisfies all claim elements.

First, as discussed above with respect to Claim 1[d], Petitioner fails to explain how the “charge exchange module 106” constitutes part of the claimed “controller,” especially given that Sutardja explicitly identifies element 112 as the “control module.” *Supra* Section IV.A.2. Petitioner relies exclusively on Sutardja’s “charge exchange module 106,” as modified by Hobbs, for this limitation. Pet. 17-18. But even if the charge exchange module 106 were modified as proposed, that would not cure Petitioner’s failure to explain how the charge exchange module 106 qualifies as being part of the claimed “controller.”

Second, Petitioner offers the technically incoherent position that a “POSITA would have appreciated [that] once the user inputs Sutardja’s desired charge amount (predetermined levels of charge), Hobbs would look up the associated **current** threshold in Hobbs’s look-up table *to Sutardja’s charge amount*.” Pet., 19. However, Hobbs teaches that “[l]ook-up table 272 may be used to store information on various types of batteries that may be charged by charger 100,” and that it “may be part of a battery classifier or system configured to identify the **type** of battery pack or battery...being charged” including “the nominal or open-circuit **voltage**, the maximum or optimal **charging voltage**, the threshold **current or current at which** charging should be stopped.” Ex. 1006 ¶ [0052]. Hobbs further teaches that “[t]his current threshold may be stored in look-up table 272 *for the particular type battery pack or battery* (e.g., battery 152, as identified in step 310). In other words, the

threshold may be selected (e.g., by controller 270) *based on the type of* battery pack or battery (e.g., battery 152) or based on the open-circuit voltage (e.g., measured in step 308).” *Id.* ¶ [0107]. The look-up table is thus specifically for identifying the current threshold associated with battery type and controlling current accordingly—it makes no sense that the look-up table correlates in any way to Sutardja’s purported “charge amount.” Ex. 2012 ¶ 101. And even if it did, Petitioner provides no explanation as to how Hobbs’ complex current-threshold system designed for a *public, pay-per-use, external, universal* battery charger could have reasonably been expected to be incorporated into Sutardja’s *residential/work on-board vehicle* battery charger. *Supra* Section IV.A.3.b.

5. Claim 1[f]-[g]: “[f] a portable controller remote from the vehicle and battery charger, the portable controller configured to wirelessly communicate with the controller of the battery charger via the transmitter; [g] wherein the portable controller generates a notification to a user indicating the predetermined threshold level of charge of the battery following and as the result of receiving the at least one signal indicative of the predetermined threshold level of charge of the battery.”

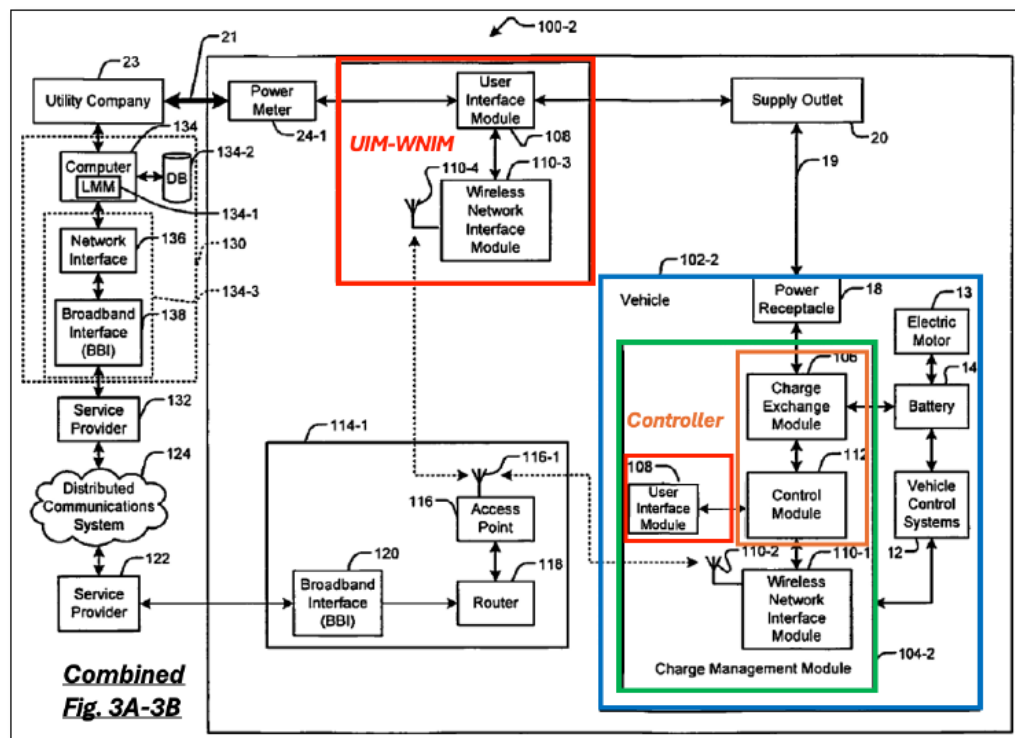
Petitioner acknowledges that Sutardja-Hobbs does not teach a “portable controller remote from the vehicle and battery charger” as claimed. Pet., 29-32. To reach this limitation, Petitioner first proposes combining the Figure 3A and Figure 3B embodiments of Sutardja into a single embodiment (with features added via Hobbs), and then further modifying that embodiment to incorporate a “portable

controller” based on Kelty-078. *Id.* This multi-layer combination lacks merit and is premised on improper hindsight.

a) The Combination Was Not Obvious.

i. The Rationales for Combining Figures 3A and 3B are Illogical.

Petitioner proposes combining Figures 3A and 3B of Sutardja to create a hypothetical embodiment (shown below):

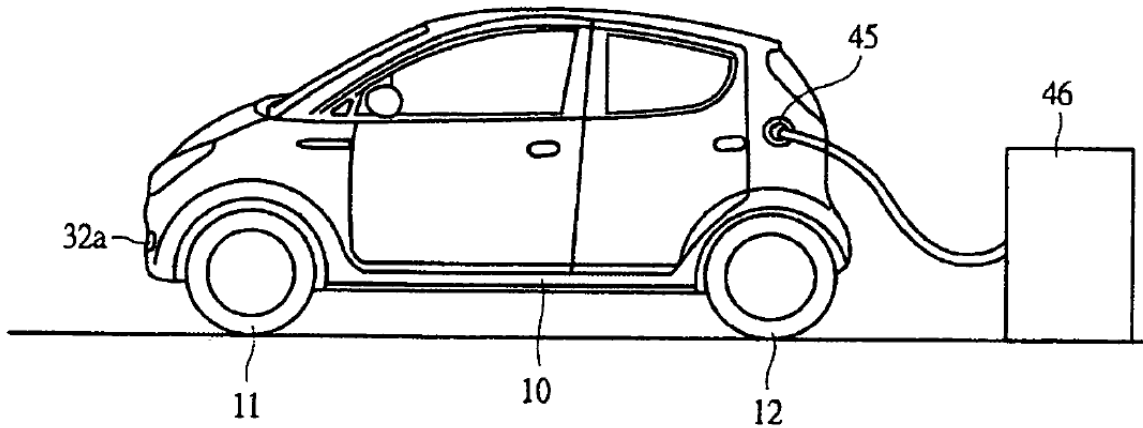


Pet., 27-29. Petitioner contends that a “POSITA would have recognized the UIM 108 of Fig. 3A (providing a local display/input interface coupled to the charger) and the user interface outside of the vehicle configuration of Fig. 3B are complementary, and combining them *would allow both local and remote interaction* with the same charging system.....” *Id.*, 29. This is a hindsight-driven motivation lacking any

rational underpinning. It is proposed solely to create an excuse to further modify Sutardja based on Kelty-078 to reach the claimed invention.

Sutardja is directed to a *home or work* battery charging system. *Supra* Section IV.A.3.a. Sutardja teaches that the user interface module 108 may be in the vehicle (FIG. 3A) or, *alternatively*, outside the vehicle (FIG. 3B), because there is no purpose in having an identical user interface module 108 in two locations *within feet of one another*. Ex. 2012 ¶¶ 104-106 (citing Ex. 1004 ¶¶ [0234] (“The user interface modules may be arranged inside vehicles as shown in FIGS. 3A, 4A, and 5A or outside vehicles as shown in FIGS. 3B, 4B, and 5B.”), [0241], [0247])). A POSITA would understand that vehicles park *adjacent* to the charger power supply because charging cables and their vehicle connectors are thick, would present a tripping hazard, and would risk being damaged if extended any meaningful distance. *Id.* at ¶ 104. Figure 4(B) of U.S. Patent No. 8,427,103 exemplifies this—it shows a vehicle charger 46 within feet of the vehicle 10 being charged via a thick cable:

(B)



Ex. 2013; *see also* Ex. 2014, Fig. 2 (showing thick cable 70 connecting charging station 62 to electric vehicle 12). Indeed, Petitioner's own website shows that the power supply resides adjacent to the vehicle being charged and that the wall-charger does *not* have a user interface for inputting charge levels:





Ex. 2015.

A POSITA would understand that this is why Sutardja presents FIGS. 3A and 3B as *alternatives*—it does not teach or suggest a system having the user interface module 108 in both places (i.e., feet apart). Ex. 2012 ¶ 106 (citing Ex. 1004 ¶¶ [0234], [0241], [0247]). A POSITA would find it illogical to include the user interface module 108 both in the vehicle and feet away from the vehicle. *Id.*

Petitioner’s own admissions undermine the combination. Petitioner admits that “Sutardja explains *other than the placement* of the UIM and WNIM, the embodiments in Fig. 3A and 3B are ‘substantially similar’” and “[b]oth *embodiments perform the same underlying functions.*” Pet., 29. Because both embodiments “perform the same underlying functions” and the only difference is the “placement” of the user interfaces either in the vehicle or *within feet* of the

vehicle, there is no legitimate reason to combine them. Ex. 2012 ¶ 107. A POSITA would find no shortcoming in Sutardja that the combined Figure 3A/3B embodiment solves. *Id.*

Recognizing this, Petitioner mischaracterizes the hypothetical embodiment as “allow[ing] both local and **remote** interaction with the same charging system.” Pet., 29. Yet both interfaces in the hypothetical embodiment are local—just as the “local area network” is local. Sutardja explicitly teaches that the user interface module 108 of Figure 3B is “outside a vehicle 102-2” and depicts it adjacent to both the supply outlet 20 and the vehicle 102-2. Ex. 1004 ¶ [0247]. It is thus incorrect to characterize the external interface 108 as “remote.” Ex. 2012 ¶ 108. Indeed, having *only* the internal interface 108 or *only* the external interface 108 allows “local control by the user” and remote coordination with the utility—having **both** does not “improve system flexibility” at all. *Id.* Indeed, Petitioner later contradicts its own “remote” characterization when it argues that having both interfaces “would improve system flexibility by enabling both **local control by the user** and remote coordination with utility systems.” Pet., 30.

Petitioner also relies on Mr. Andrews for the proposition that the combination “would have been consistent with well-known EV charging system design practices prior to the priority date of the ’107 Patent.” Ex. 1003 ¶ 143 (cited by Pet., 29). The only evidence cited by Mr. Andrews is Hobbs’ teaching of “both a battery charger

side user interface... and a user interface outside the vehicle... (Hobbs’ diagnostic device 130).” *Id.* But as he himself acknowledges, Hobbs is directed toward a **public universal battery** charger, and the “user interface outside the vehicle” is **a diagnostic device of the company operating the charger**. *Id.* There may be a legitimate reason to have a “remote” diagnostic device interface in Hobbs’ context (e.g., to allow the charger company to diagnose problems with the charger remotely), but no such reason exists for an additional user interface 108 in the context of Sutardja. Ex. 2012 ¶ 109. Unlike the hypothetical embodiment where the internal and external user interfaces 108 “perform the same underlying function” (as admitted by Petitioner), the diagnostic device 130 of Hobbs performs a much different function than the user interface of Hobbs’ charger and is *not* even a device of the “user” of the charger. *Id.*

Because Hobbs lends no support, Mr. Andrews also argues that “it was well known that the user may be charging a vehicle away from home and would wish to sit in their vehicle while it charges...[,] greatly benefit[ing] from a user interface inside the vehicle.” Ex. 1003 ¶ 144. Mr. Andrews provides no evidence that people would “sit in their vehicle” while it charges **at home or at work**—an individual would simply wait inside the home or office (i.e., Sutardja’s context). Ex. 2012 ¶ 110. There would be no “great benefit” to a nearby user, and even if there were, there would be no need for user interface 108 to **also** be outside the vehicle. *Id.* Petitioner cannot have it both ways.

Petitioner next argues that having two user interface modules 108 adjacent to one another “would improve system flexibility by enabling both local control by the user and remote coordination with utility systems....” Pet., 30. That is a non sequitur, because “local control by the user” and “remote coordination with utility systems” is accomplished by *a single* user interface module 108—whether located in the vehicle or outside it. Ex. 2012 ¶ 111. Neither Petitioner nor Mr. Andrews explains how having two interfaces 108 within feet of one another would actually improve system flexibility. While Mr. Andrews cites Sutardja and Kelty-218, he cites them only for the general proposition that charging can be scheduled based on energy costs (Ex. 1003 ¶ 145)—which has nothing to do with whether a POSITA would have had a reason to install two user interface modules 108 feet apart. Ex. 2012 ¶ 111.

Petitioner also argues that the combined embodiment “would facilitate more efficient implementation of user-defined charging preferences....” Pet., 30. But just as with the “second” reason immediately above, Petitioner does not actually explain how having two user interfaces 108 as shown in combined Figure 3 would “facilitate more efficient implementation.”

In short, nothing supports that it would have been obvious to implement the user interface 108 of the home/work charger of Sutardja both inside and within feet outside the vehicle. Ex. 2012 ¶ 113. Indeed, Petitioner’s own commercial EV battery

charger does *not* have an interface on the wall-mounted charger because the vehicle itself has the necessary interface. *See* Ex. 2015, 2, 4. This obviousness rationale is premised entirely on hindsight. Moreover, the increased cost and complexity associated with adding an additional user interface 108 would have discouraged a POSITA from doing so. Ex. 2012 ¶ 113.

ii. The Rationales for Kelty-078’s Mobile Phone Alerts Are Premised on Improper Hindsight-Bias

Even if Petitioner’s hypothetical Figure 3A/3B embodiment would have been obvious, Petitioner’s further modification of that embodiment to incorporate mobile-phone alerts as taught by Kelty-078 fails for several independent reasons.

First, a POSITA would have had no reason to add remote mobile-phone notification and control functionality to a charging system that Sutardja expressly situates at the user’s home or work location, where the user is present with or near the vehicle for the entire extended charging session. Ex. 2012 ¶ 115.

Sutardja is unambiguous about the physical setting of the Figure 3A and 3B embodiments. Sutardja states that “[i]n FIG. 3A, a CMS 100-1 is shown. A vehicle 102-1 is charged at a location such as a *home or work location*.” Ex. 1004 ¶ [0239]. Figure 3B is the same system with the user interface module 108 relocated to a position “outside a vehicle 102-2” and adjacent to the power meter and supply outlet 20. *Id.* ¶ [0247]. Petitioner’s hypothetical combined embodiment is therefore, on

Petitioner’s own account, a fixed home or workplace charging installation with the vehicle parked at the outlet and a user interface within feet of the vehicle. Ex. 2012 ¶ 116.

Sutardja likewise describes charging sessions of extended duration while the user is at that location. Sutardja’s paradigm is the user who “plugs the vehicle 102 into the supply outlet 20 at the end of the day” and “request[s] a full charge daily between 9 pm and 6 am,” after which “[t]he utility company 23 may charge the battery 14...*without interacting with the user.*” Ex. 1004 ¶ [0262]; *see also id.* ¶¶ [0231], [0263]-[0264] (staggered overnight charging windows managed by the utility). The user sets default parameters once, and the utility executes them. *Id.* ¶¶ [0235]-[0236], [0262]-[0263]. A POSITA would understand that Sutardja’s system is directed toward allowing the *utility company* to avoid overloading the power grid with the added benefit of allowing the user to take advantage of *lower utility cost* charging periods—this requires the vehicle to remain plugged in for very extended periods. Ex. 2012 ¶ 117.

In this context, a POSITA would have perceived no problem for Kelty-078’s remote functionality to solve. *Id.* ¶ 118. The asserted benefit is illusory: the notification would be delivered to a user who is *already present*, and the remote control would duplicate a local control that Petitioner’s own hypothetical embodiment places in two locations within feet of one another where the user already

resides. *Supra* Section IV.A.5.a.i.

Petitioner's own articulation of the motivation highlights its flaws. Petitioner asserts that a POSITA would have implemented "Kelty-078's known text messaging alert functionality" so that "the driver of the vehicle advantageously would be notified when the charge was nearing completion *so the user would return to their car,*" and that "[s]uch modification would *eliminate the need for the user to remain with the vehicle during charging.*" Pet., 23-24. This rationale presupposes a user who has left the vehicle at a charger and must be summoned back. That is the paradigm of Hobbs's *public*, pay-per-use universal charger, where the user may walk to a shop/restaurant while waiting. Ex. 2012 ¶ 119. It is not the paradigm of Sutardja, where the user is home for the night or at work for the day and the utility charges the vehicle "without interacting with the user." Ex. 1004 ¶ [0262]. Petitioner thus imports a rationale from one reference's use context and applies it to a wholly different, inapplicable context. Ex. 2012 ¶ 119.

Kelty-078 itself underscores the point. The remote-control features Petitioner seeks to import are directed to remote coordination between the user, the vehicle, and a *utility company*. Ex. 1005, 5:40-52, 6:12-16. Sutardja *already* performs that coordination natively via the user interfaces 108 and the negotiation of charging and charge-return parameters. Adding Kelty-078's parallel mechanism would add cost, hardware, and failure modes while duplicating existing functionality. Ex. 2012 ¶

120.

Obviousness must be assessed from a POSITA's vantage point *at the time of the invention*. The practical realities of 2008 further demonstrate the absence of motivation. Petitioner does not identify a single *home* or *workplace* charging system of that era that delivered charge-state text alerts to the user. Nor does Petitioner account for the cost, carrier dependency, and handset limitations a POSITA would have weighed before adding cellular messaging to a residential charge management module. *Id.* ¶ 121. In 2008, users could not download smartphone applications; the App Store launched only in July 2008. *Id.* (citing Ex. 2022; Ex. 2023). Adding remote charger-control functionality *in 2008* would have required purpose-built handset software and charger firmware—a significant undertaking. *Id.* That expense would have far outweighed the nonexistent benefit. Where a modification imposes real cost and complexity with no corresponding benefit, a POSITA would have been discouraged from making it. *Id.*

In short, Petitioner begins with Sutardja's load-management system whose stated object is balancing utility demand across many vehicles charging overnight at *homes and workplaces*; fabricates a combined Figure 3A/3B embodiment that Sutardja presents in the disjunctive (Ex. 1004 ¶ [0234]); layers on a threshold-alert feature drawn from Hobbs's public, universal, pay-per-use charger (Ex. 1006 ¶¶ [0036], [0111]); and then layers on Kelty-078's mobile-phone messaging and remote

start/stop controls (Ex. 1005, 4:53-5:1, 5:40-52). That is hindsight bias, not a POSITA's design process. A POSITA in 2008 confronting Sutardja's home and workplace charge management system would have had no reason to reach for Kelty-078. Ex. 2012 ¶ 122.

B. Ground 2

- 1. Claim 6[a]: “establishing wireless communication between a controller of the vehicular battery charger and a portable controller of a user remote from the vehicle and the vehicular battery charger;”**

Petitioner incorporates the same motivation-to-combine arguments relied on with respect to Claim 1[f], including combining the embodiments of Figures 3A and 3B into a single embodiment. Pet., 42. Petitioner fails to demonstrate obviousness for the same reasons discussed with respect to Claim 1[f]-[g]. *Supra* Section IV.A.5; Ex. 2012 ¶ 124.

- 2. Claim 6[b]: “receiving, via a user-manipulatable control, data indicative of a predetermined threshold level of charge by which the controller sends an alert, the predetermined threshold level of charge being less than a full charge of the battery;”**

Petitioner fails to demonstrate obviousness of this limitation for the same reasons discussed with respect to Claim 1[e][i]-[ii] above. *Supra* Section IV.A.3; Ex. 2012 ¶ 125.

3. Claim 6[d]: “comparing, during charging of the battery with the vehicular battery charger, a level of charge of the battery to the predetermined threshold level of charge; and”

Petitioner fails to demonstrate obviousness of this limitation for the same reasons discussed with respect to Claim 1[e][iii]. *Supra* Section IV.A.4; Ex. 2012 ¶ 126.

4. Claim 6[e]: “generating and wirelessly transmitting, during the charging of the battery and before the charging of the battery is complete, a signal to the portable controller responsive to detecting the level of charge of the battery reaching the predetermined level of charge of the battery.”

Petitioner fails to demonstrate obviousness of this limitation for the same reasons discussed with respect to Claim 1[f]-[g]. *Supra* Section IV.A.5; Ex. 2012 ¶ 127.

C. Ground 3

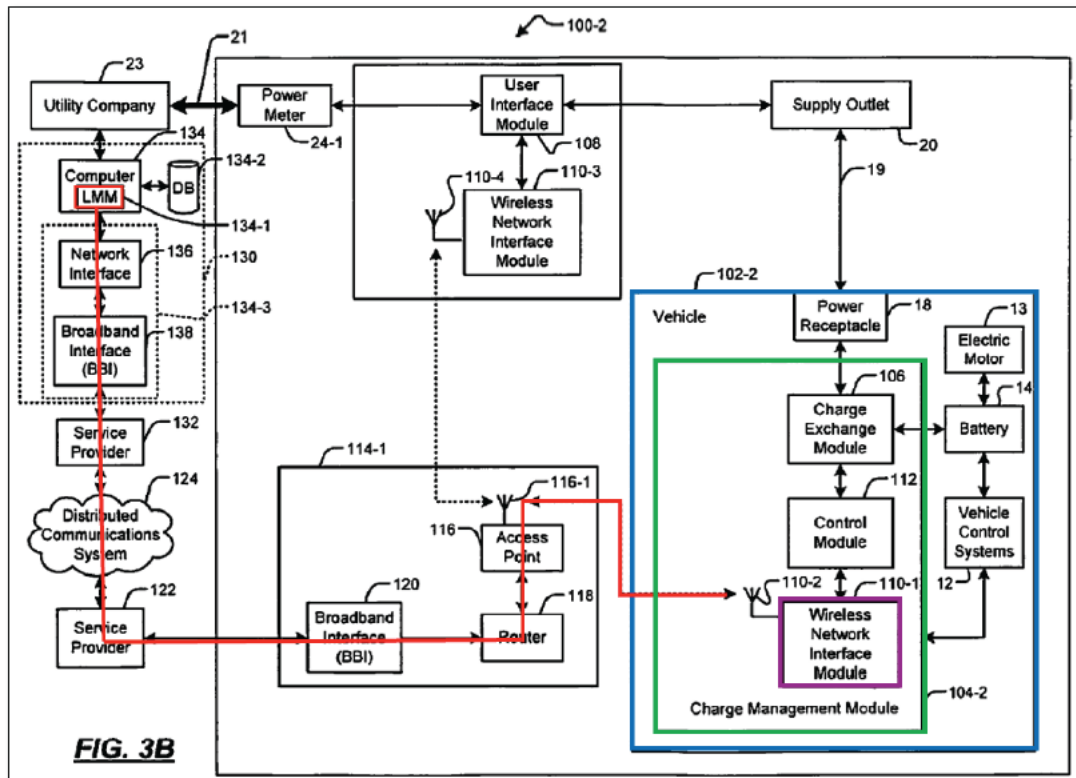
1. Claims 1[a]-[e][iii]

Although Petitioner contends that these limitations are taught by its alternative Sutardja-Hobbs-Hunt-Kelty-433 mapping (Ground 3), Petitioner relies on the same Sutardja-Hobbs analysis set forth with respect to Claims 1[Pre]-1[e][iii]. Pet., 51. Ground 3 therefore fails for the same reasons. *Supra* Sections IV.A.1-A.4; Ex. 2012 ¶ 129.

2. Claims 1[f]-[g]

Petitioner argues that “[t]o the extent it is argued the *notification* is itself a text

generated by the *portable controller*,” the load management module (LMM) in computer 134 of Sutardja can be mapped to the “portable controller” recited in Claim 1[f]-[g]. Pet., 50-60. As shown below, Petitioner identifies the alleged “controller” 134 of utility company 23 in red below.



Pet., 55. Petitioner then argues that it would have been obvious to make that controller portable based on Kelty-433 “so battery charge monitoring operations would be performed using portable devices capable of wirelessly communicating with vehicle-charging systems,” positing that “[u]tility company *technicians* might carry portable controllers to install, monitor, and diagnose battery charger installations.” *Id.* at 56-57.

Petitioner’s alternative mapping for Claims 1[f]-[g]—in which the “portable controller” is a handheld device of the *utility company* implementing the LMM in computer 134 of utility company 23—fails for four independent reasons.

First, even setting aside the conclusory nature of this motivation, and accepting *arguendo* that the substitution would have been obvious, the resulting combination does not satisfy Claim 1[g]. That limitation requires that the portable controller “generate[] a notification *to a user* indicating the predetermined threshold level of charge of the battery.” The “user” is a person who supplied the “data indicative of a predetermined threshold level of charge” “via a *user-manipulatable control*” under Claim 1[e][i]—in Sutardja, the vehicle owner who enters charging parameters at user interface module 108. Ex. 1004 ¶ [0235]. Sutardja itself confirms the distinction, consistently treating “the user” and “the utility company 23” as separate actors that *negotiate* with one another over charging parameters. *Id.* ¶¶ [0233], [0238], [0251]. The utility company 23 is not the user, and a notification generated by and displayed on the *utility’s* own handheld device is not a notification “to a user.” Ex. 2012 ¶ 132.

Petitioner cannot avoid this by pointing to the ’107 Patent’s statement that the “other controller can be ... **one or more processors of a server or other computer associated with a power utility** providing power to the vehicle charging cord 22.” Pet., 54 (quoting Ex. 1001, 8:65-9:12). That sentence describes where a controller

may *reside*; it does not displace Claim 1[g]’s requirement that the notification be generated *to a user*. The specification makes the point expressly: even in the power-utility embodiment, the utility’s controller 50 “automatically generat[es] a text message or e-mail from the controller 50 of the power utility 48 *to a computer, phone, PDA, or other device of the user*.” Ex. 1001, 22:37-50. The utility-side controller is thus an intermediary; the notification still reaches the user. Petitioner’s combination incorrectly treats the utility company as the “user.” Ex. 2012 ¶ 133.

Second, Petitioner fails to explain why the utility company 23 would have any reason to receive an alert *before* an individual charging session is complete, which is how Petitioner expressly applies the claim under its unsubstantiated construction of “predetermined threshold level of charge.” Sutardja’s LMM 134-1 exists to “analyze the load on the distribution system based on the requested charging parameters from *multiple customers*” and to “determine a schedule for charging batteries in multiple vehicles.” Ex. 1004 ¶ [0253]. Nothing in Sutardja suggests that aggregate load management depends on—or would benefit from—a per-vehicle alert issued at an individual customer’s self-selected charge threshold short of completion. Ex. 2012 ¶ 134. To the contrary, Sutardja’s paradigm is that the utility charges the battery overnight “*without interacting with the user*.” *Id.* (quoting Ex. 1004 ¶ [0262]). Petitioner identifies no problem that this type of alert would solve for the utility. *Id.*

Third, Petitioner’s own rationale for adding Hunt exposes the implausibility of the combination. Petitioner argues that adding Hunt would “*improve consumer awareness and inform users* when a desired charge threshold was reached, enabling timely charging and vehicle-use decisions without continuously monitoring the charger.” Pet., 59. But in the “Sutardja-Hobbs-Kelty-433 system,” the “portable controller” is the *utility company’s* handheld device 130. *Id.*, 56-57. A notification generated on and displayed by that device provides no “*consumer* awareness” and informs the consumer of nothing—the technician, not the consumer, receives it. Ex. 2012 ¶ 135.

Hunt confirms the mismatch. Hunt’s “display/data collector unit 125” is a *consumer-premises* device: it is “user-installable,” is “located in the consumer’s building(s),” and receives alerts *from* the utility’s data center 195 so that “the consumer” may “view” them. Ex. 1008 ¶¶ [0031]-[0032]. Hunt’s entire stated purpose is to give the *consumer* visibility that the consumer otherwise lacks. *Id.* ¶¶ [0006]-[0007]. Petitioner therefore takes a display that Hunt places *at the consumer* and relocates it *at the utility*, then illogically invokes Hunt’s consumer-facing benefit to justify the result. Ex. 2012 ¶ 136. Indeed, immediately after invoking “consumer awareness,” Petitioner returns to arguing that the notification is generated at the remote LMM 134—*owned and operated by the utility company 23*. Pet., 60. But the utility company 23 is obviously not the “user” or “consumer.”

Fourth, Petitioner’s “simple substitution” argument does not withstand scrutiny. Pet., 57. Sutardja’s LMM 134-1 is not a personal monitoring tool; it is the utility’s load-management engine, which receives charging parameters from “multiple vehicles,” analyzes distribution-system load, determines charging schedules across many customers, and writes to database 134-2. Ex. 1004 ¶¶ [0252]-[0253]. Petitioner offers no explanation of how a handheld device carried by a roving technician would perform grid-scale load management. Ex. 2012 ¶ 137.

Kelty-433 supplies none either: its “central controller 280” is not an electric-vehicle charging controller at all, but the utility-side counterpart to a stationary consumer “reliability box” installed in a basement or garage for backup power and peak shifting, and Kelty-433 lists “hand-held” only within a laundry list that also includes “a PC, server, ... multiprocessor system, ... mainframe computer, [and] distributed computing environment.” Ex. 1009 ¶¶ [0018]-[0022]. A reference that recites “hand-held” as one item in a boilerplate list of computing platforms does not teach a POSITA to reimplement a utility’s multi-vehicle load-management computer as a *user* handheld. Ex. 2012 ¶ 138.

Petitioner’s rationale is also internally inconsistent: Mr. Andrews justifies the substitution on the premise that a *technician* would carry the device to “install, monitor, and diagnose battery charger installations” (Ex. 1003 ¶ 211), yet justifies the Hunt modification on the premise that the same device improves *consumer*

awareness (*id.* ¶ 219). Both cannot be true, and Petitioner never reconciles them.

D. Ground 4

Dependent claim 4 is necessarily patentable because it depends from claim 1 which is patentable for the reasons discussed above.

E. Ground 5

- 1. 10[d]: “the battery charger controller configured to: wirelessly communicate with the controller of the phone by sending signals via the transmitter”**

a) The Combination Does Not Possess All Claim Limitations.

Petitioner’s mapping of Claim 10[d] depends entirely on the premise that Hobbs’s “diagnostic device 130” is the claimed “phone.” *See* Pet., 62-65 (mapping “Hobbs’s phone (diagnostic device 130)” to the controller with which battery charger 100 wirelessly communicates), 75-76 (referring back to 10[pre] mapping). That premise is unsupported. Hobbs never uses the word “phone” to describe “digital diagnostic device” 130, and the overwhelming objective evidence and understanding of a POSITA confirm that it is not a phone. Ex. 2012 ¶ 141.

A phone is, by definition, a device with voice communication capability. Ex. 2016 (defining “phone” and “telephone”); Ex. 2012 ¶ 142. Hobbs’s diagnostic device 130 does not have this capability—regardless of whether it relies on the cellular telephone network to transmit *data*. Ex. 2012 ¶ 142. Nor would there be any reason in Hobbs for diagnostic device 130 to have that capability; it is designed to

diagnose problems with the **charger**, not to enable communication between people. Ex. 1006 ¶ [0037] (explaining that diagnostic device 130 is “configured to communicate **with charger 100**”). Hobbs makes clear that diagnostic device 130 is intended “to be used by **a technician having more knowledge than a typical user** of charger 100”—not by the vehicle owner. *Id.* It is “configured to **diagnose faults within charger 100, program charger 100**, provide additional charging information, etc.” *Id.* Diagnostic device 130 is depicted as a basic keypad-and-screen unit tethered to the charger enclosure—it has no disclosed voice capability nor would it need such functionality. *Id.*, Fig. 1. A modern-day tablet computer illustrates the distinction: it may permit texting over Wi-Fi or a cellular network, but nobody would call it a “phone.” Ex. 2012 ¶ 142.

Petitioner’s own asserted art forecloses the equivalence Petitioner needs. Kelty-078 expressly enumerates “a **cell phone, PDA**” as the devices from which a user may communicate with the vehicle. Ex. 1005, 4:58-63. Kelty-078 thus treats a “cell phone” and a “PDA” as **separate and distinct** categories of devices, listed disjunctively. Had a POSITA regarded a PDA as simply a species of phone, Kelty-078’s drafters would have had no reason to recite both. Ex. 2012 ¶ 143.

Similarly, the ’107 Patent itself states that the “other controller can be one or more processors of a personal computer, **phone, PDA**, or other processor-based device associated with a user....” Ex. 1001, 8:67-9:13. The ’107 Patent thus treats a

“phone” as distinct from a “PDA.” Ex. 2012 ¶ 144. Petitioner fails to account for this distinction and instead tries to gloss over it by arguing that all PDAs with “cellular telephony” capabilities qualify as phones—a false proposition.

Hobbs itself does not call diagnostic device 130 a phone. Hobbs states only that it “may be a personal digital assistant (PDA).” Ex. 1006 ¶ [0037]. And Hobbs refers to “phones” elsewhere, demonstrating that Hobbs knew how to identify a phone. *Id.* ¶ [0003]. Petitioner relies entirely on Hobbs’s teaching that the diagnostic device 130 uses “cellular telephony.” But Hobbs teaches that the “cellular telephony” is used for the diagnostic device 130 to “communicate *with charger 100.*” *Id.* ¶ [0037]. The reference to “cellular telephony” therefore means only that the cellular telephone network carries the device-to-charger communication; it says nothing about the diagnostic device 130 being used for voice communication. Ex. 2012 ¶ 145.

While Petitioner relies on the diagnostic device having a “keypad” (Pet., 63), a POSITA would understand that keypad to be for performing diagnostics on, and exchanging data with, the battery charger 100. Ex. 2012 ¶ 146. Hobbs teaches in the same breath that “cellular telephony, infrared serial link, or wireless local area network” may be used even though “infrared serial link” and a “wireless local area network” are plainly not phone features—they are data-exchange links, because device 130 exists to perform diagnostics. Ex. 1006 ¶ [0037]. The claims recite a

phone so that an everyday *end-user* device delivers notifications to the user, not so that a specialized diagnostic device conveys them to *the company that owns the charger*. The only reason diagnostic device 130 uses cellular telephony is to exchange diagnostic *data*, not to perform *voice* functions. Ex. 2012 ¶ 146.

Petitioner attempts to gloss over its mis-mapping by arguing that “Hobbs’s PDA performs the *fundamental* function of a cellular telephone” and “a PDA with cellular telephony and user interface capabilities is a phone.” Pet., 63. Petitioner thus alleges that all PDAs with cellular telephony capabilities are necessarily “phones,” and therefore Hobbs’ digital diagnostic device 130 is a “phone.” However, this is plainly false—the “fundamental function” of a cellular telephone is voice communication. Ex. 2012 ¶ 147.

Petitioner also relies on Mr. Andrews, who points to the Palm Treo line of PDA-phones to argue that all PDAs with cellular telephony capability would have been understood to be phones. Ex. 1003 ¶ 231. However, the Treo devices had *voice* communication functionality, which is what qualified them as phones. Ex. 2012 ¶ 148. Cellular telephony can be used for non-voice data transmission (e.g., the diagnostic data taught by Hobbs), for voice data transmission, or for *both*. The Palm Treo supported both and was therefore a “smart*phone*” (Ex. 1030, 7, 16), whereas Hobbs’s diagnostic device 130 has no disclosed voice capability and no need for that capability. Even if some people used “PDA” *loosely* to refer to smartphones, the

objective evidence of record establishes that a PDA with telephony capabilities is not a phone unless it permits voice communication. Ex. 2016; Ex. 2018 (defining “PDA” without mentioning voice); Ex. 2019 (same); Ex. 2012 ¶ 148. Indeed, Petitioner cites Ex. 1033 as describing the Treo as “a combination PDA/*telephone* device,” which actually undermines Petitioner’s position that a “PDA” necessarily is a phone. Pet., 65.

Hobbs, moreover, has no need for a phone, because the communication is between diagnostic device 130 and *the charger*—not between people. Ex. 2012 ¶ 148. The sole purpose of diagnostic device 130 is to “diagnose faults within charger 100, program charger 100, provide additional charging information, etc.” Ex. 1006 ¶ [0037].

Taken together, these disclosures establish that Hobbs’s diagnostic device 130 is structurally and functionally distinct from a phone. Ex. 2012 ¶ 149. Structurally, it is an accessory unit supplied with the charger, bearing its own keypad and screen and a service interface to controller 270. Ex. 1006 ¶ [0037], Fig. 1. Functionally, it exists to diagnose charger faults, program the charger, and manually control charging—capabilities directed to a trained technician, not to a driver monitoring a charging session. *Id.* Hobbs expressly contemplates that diagnostics and manual control may be provided by “*two separate accessory devices*” or by charger 100 itself “via screen 107 and key pad 104”—alternatives that confirm device 130 is an

adjunct of the charger rather than a user's personal mobile phone. *Id.*

Because Claim 10 requires “wireless communication with a **phone** having a controller” and requires the battery charger controller to “wirelessly communicate with the controller **of the phone**,” Petitioner’s failure to establish that Hobbs discloses a phone is dispositive of every limitation Petitioner maps through “Hobbs’s phone,” including Claims 10[Pre], 10[b], 10[d], and 10[h], as well as dependent Claims 11, 12, and 14. Moreover, Petitioner is bound by the theory advanced in the Petition and may not propose a different obviousness theory on reply. *Koninklijke Philips*, 948 F.3d at 1336 (concluding that “the Board erred when it instituted *inter partes* review based on a combination of prior art references Google did not advance in its petition”). Thus, even if it would have been obvious to substitute Hobbs’ diagnostic device 130 with a phone (it would not), Petitioner has not proposed doing so.

Although Petitioner does rely on Kelty-078, it is not for the “phone” limitation but instead for a “processor.” Pet., 64 (“To the extent that it is argued Hobbs does not teach a **processor**, a POSITA would be motivated to look to Kelty-078....”). Indeed, Petitioner provides no obviousness rationale explaining *why* a POSITA would have been motivated to impart voice capabilities to Hobbs’ PDA with cellular telephony, and thus Petitioner offers no rationales to justify modifying the diagnostic device 130 to be a *phone*. Furthermore, Patent Owner acknowledges that Hobbs’

diagnostic device 130 in the form of a PDA would necessarily have a “processor,” and thus there is no motivation at all to further look toward Kelty-078.

Moreover, a POSITA as of the August 2008 priority date would have understood that the diagnostic functions Hobbs describes required specialized hardware that a consumer cellular telephone or general-purpose PDA did not possess. Ex. 2012 ¶ 152. Hobbs’s diagnostic device 130 is not a passive display; it is “configured to *diagnose faults within charger 100, program charger 100*, provide additional charging information, etc.,” and it “may also (or instead) allow ... *programming of charger 100*.” Ex. 1006 ¶ [0037]. A POSITA would not have expected an off-the-shelf handset to perform such functions in 2008, nor could such functionality have been added by downloading a phone “app,” because downloadable phone apps were essentially nonexistent in 2008. Ex. 2012 ¶ 152.

The commercial realities reinforce this understanding. Petitioner’s expert asserts only that “[i]t was well known that PDA phone devices such as the Palm Treo received texts.” Ex. 1003 ¶¶ 272-273. Whether a Treo could receive a text message says nothing about whether it could diagnose faults in, or manually control the output of, a high-power industrial battery charger. Ex. 2012 ¶ 153. Petitioner identifies no handset of any era capable of performing the functions Hobbs assigns to diagnostic device 130.

Because Hobbs’ diagnostic device 130 is not a phone and Petitioner fails to

present any evidence that it would have been obvious to replace the diagnostic device 130 with a phone, Petitioner fails to demonstrate a reasonable likelihood of prevailing on Claim 10 or the claims depending from it.

2. 10[f]: “receive, via a user-manipulatable control, data indicative of a predetermined threshold level of charge by which the battery charger controller sends an alert, the predetermined threshold level of charge being less than a full charge of the battery;”

Petitioner relies on the same Hobbs disclosures for this limitation that it relied on for Claim 1[e][i-ii]. Pet., 76-77. As explained above, Hobbs does not teach that *the user* provides a level of charge, and does not teach that any user-provided input *triggers* the “substantially complete” alert. *Supra* Section IV.A.3. The “substantially complete” alert is *automatically* set by the *system*, triggering when the charging current falls below a *system-selected* current threshold drawn from look-up table 272 based on battery type. *Id.*; Ex. 2012 ¶ 155.

While Petitioner also combines Sutardja with Hobbs for this limitation, it does so solely to argue that it would have been obvious for “the user [to] input[] a predetermined charge level *in terms of charge percentages* for the vehicle battery.” Pet., 77. But regardless of whether the purported user input is expressed as a “level of charge” or as “a particular amount of energy,” the “substantial completion” alert threshold of Hobbs is not one provided by the user. *Supra* Section IV.A.3. Changing the *units* of a user’s charging input does not convert a system-selected alert threshold

into a user-selected one. Ex. 2012 ¶ 156.

Petitioner’s effort to bridge that gap is self-defeating. Petitioner contends that “once the user inputs Sutardja’s desired charge amount (predetermined levels of charge), Hobbs would look up the associated current threshold to that charge amount” in look-up table 272. Pet., 78. But look-up table 272 is the very feature that makes the threshold a *system* selection: Hobbs states that the current threshold “may be stored in look-up table 272 for the particular type battery pack or battery,” and that “*the threshold may be selected (e.g., by controller 270) based on the type of battery pack or battery ... or based on the open-circuit voltage.*” Ex. 1006 ¶ [0107]; Every charging parameter in Hobbs—starting power level (Ex. 1006 ¶ [0080]), voltage lid (¶ [0098]), current lid (¶ [0102]), current threshold (¶ [0107])—comes from table 272, keyed to battery type. Ex. 2012 ¶ 157. Nothing in the charging profile is user-defined. Petitioner thus relies on a controller-selected value to supply the threshold the claim requires be received “via a *user-manipulatable control.*”

Nor does look-up table 272 provide what Petitioner needs. Hobbs teaches that table 272 “may be used to store information on various types of batteries that may be charged by charger 100” and “may be part of a battery classifier or system configured to identify the *type* of battery pack or battery ... being charged.” Ex. 1006 ¶ [0052]. It is indexed by *battery type*, not by user-entered charge percentages, and Hobbs discloses no entry, field, or lookup path mapping a user’s selected percentage

to a corresponding current value. Ex. 2012 ¶ 158. Petitioner’s “would look up the associated current threshold” step is therefore an assumed capability rather than a disclosed one, and neither Petitioner nor Mr. Andrews explains how Hobbs’s charger would derive it.

Moreover, Petitioner never explains why a POSITA would deliver charge-level alerts to diagnostic device 130. The device exists to “diagnose faults within charger 100, program charger 100, provide additional charging information, etc.,” and is intended “to be used *by a technician* having more knowledge than a typical user of charger 100.” Ex. 1006 ¶ [0037]. A service technician has no need to be alerted that an individual customer’s battery has reached a particular charge level. Ex. 2012 ¶ 159. Petitioner’s theory thus requires the Board to assume both that a technician’s service tool is a consumer’s phone and that the charger would be redesigned to send notifications it has no use for. That is hindsight, not obviousness.

3. 10[g]: “compare, during charging of the battery with the vehicular battery charger, a level of charge of the battery to the predetermined threshold level of charge; and”

Petitioner relies on the same annotated version of Hobbs’ Figure 3 relied on for Claim 1[e][i-ii]. *Compare* Pet., 79 *with* Pet., 15. That figure does not establish that Hobbs’s “substantial completion” threshold is based on a user-input parameter, and therefore Petitioner fails to demonstrate that the combination teaches this limitation. *Supra* Section IV.A.3.b; Ex. 2012 ¶ 160.

4. 10[h]: “responsive to detection of the level of charge of the battery reaching the predetermined threshold level of charge during the charging session and before charging of the battery is complete, send a signal indicative of the level of charge being reached via the transmitter to the controller of the phone as the alert”

For this limitation Petitioner argues:

A POSITA would have been motivated and found it obvious to implement Kelty-078’s known text messaging cell phone alert functionality to transmit Hobbs’s alert as a signal to Hobbs’s phone so that the driver of the vehicle would be notified when the charge was nearing completion. EX1003-Dec, ¶¶272-273.

Pet., 81.

First, Hobbs’ diagnostic device 130 is not a “phone,” as explained with respect to Claim 10[d]. *Supra* Section IV.E.1; Ex. 2012 ¶ 162.

Second, even if diagnostic device 130 did qualify as a phone, Petitioner’s rationale makes no sense. Petitioner argues that it would have been obvious to send a text-message “alert” to diagnostic device 130 “so that the ***driver of the vehicle*** would be notified when the charge was nearing completion.” But diagnostic device 130 belongs ***to the technician***, not to the driver. Ex. 1006 ¶ [0037]. It is illogical to assume the driver would possess it. And Petitioner offers no explanation of why a ***technician*** would need to know whether a ***particular driver’s*** vehicle has reached a particular charge threshold. Ex. 2012 ¶ 163.

The implausibility of this rationale is emblematic of a pervasive problem with

the Petition: it is constructed backward from the claims rather than forward from the prior art. Petitioner asks the Board to treat a technician's service tool as the vehicle owner's phone, and to assume a POSITA would have routed consumer charge-level alerts to it, solely because Claim 10 recites a phone that receives such an alert. That is the hallmark of hindsight.

F. Ground 6

Dependent claim 13 is necessarily patentable because it depends from claim 10, which is patentable for the reasons set forth above.

V. PETITIONER'S VOLUMINOUS, REPETITIVE AND CONCLUSORY "MTC" AND "REOS" ARGUMENTS WARRANT DENIAL

"[W]here a petition contains voluminous or excessive grounds, Office guidance indicates '[t]he panel will evaluate the challenges and determine whether...the entire petition should be denied....'" *Adaptics Ltd. v. Perfect Co.*, IPR2018-01596, Paper 20 at 17-18 (PTAB Mar. 6, 2019) (informative). The *Trial Practice Guide* advises petitioners to "focus on concise, well-organized, **easy-to-follow** arguments...." *Id.* at 16.

Petitioner proposes six grounds and **eighteen** different alleged "motivations to combine," each with a "reasonable expectation of success," which Petitioner refers to as "MTCs" and "REOS" to skirt the word-count limitations. Pet., ii-vi (Table of Contents). These "MTCs" duplicate essentially the same high-level

rationale in all eighteen instances and are spaced sporadically throughout the Petition, making Petitioner's theories anything but "easy-to-follow." Petitioner's scattershot approach significantly prejudices Patent Owner, which cannot fully respond to *eighteen "MTCs"* within the word-count limitations.

VI. PETITIONER'S OBVIOUSNESS THEORIES IMPROPERLY FOCUS ON INDIVIDUAL CLAIM ELEMENTS RATHER THAN THE INVENTION AS A WHOLE

Petitioner's combinations and analyses entail combining various references on an element-by-element basis, supported by a separate analysis for each individual element. This type of analysis has been explicitly rejected because it does not analyze the invention as a whole. Petitioner also isolates various components from the asserted references, ignoring their overall teachings. This is exemplified by the proposed combination of complex current-threshold functionality from Hobbs' external, bulky, universal battery charger with Sutardja's on-board vehicle-specific home/work charger. *Supra* Section IV.A.3.

"[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." *KSR*, 550 U.S. at 418-19. Petitioner must instead show why a POSITA would combine the references "in the way *the claimed new invention* does." *Id.* The Federal Circuit further explained that an approach utilizing a motivation to combine each element of the claim "unduly dissects prior art references into collections of

individual elements,” and that both “[t]he claimed invention and an invention in the prior art must both be analyzed **as a whole** for the same reason: an invention is more than the sum of its individual elements.” *GE v. Raytheon Techs. Corp.*, 983 F.3d 1334, 1352 (Fed. Cir. 2020). Petitioner violates this prohibition by improperly providing independent “MTC” and “REOS” arguments (based on *out-of-context teachings* from the prior art) directed at *individual elements* rather than the invention as a whole.

VII. PETITIONER’S DECLARANT IS ENTITLED TO LITTLE OR NO WEIGHT

Mr. Andrews largely “offers only a *verbatim* restatement of the assertion[s] being supported, without any support[.]....” *Xerox Corp.*, IPR2022-00624, Paper 9 at 16; *compare, e.g.*, Pet., 4-41 with Ex. 1003 ¶¶ 92-169 (Ground 1); Pet., 50-60 with Ex. 1003 ¶¶ 194-221 (Ground 3); Pet., 62-87 with Ex. 1003 ¶¶ 228-294 (Ground 5). In some instances he parrots facially illogical positions, such as arguing that Hobbs’ diagnostic device 130 is a “phone” and that receiving charge alerts on that device would provide “consumer awareness.” *Supra* Section IV.E.1, E.4. His testimony should be accorded no weight.

VIII. PETITIONER FAILS TO PRESENT A SUFFICIENT NUMBER OF GROUNDS THAT MEET THE INSTITUTION THRESHOLD

Given the weakness of the Petition as a whole, it would be an inefficient use of the Board's time and resources to institute even if Petitioner had met its burden on some claims (it has not). *Chevron Oronite Co. LLC v. Infineum USA L.P.*, IPR2018-00923, Paper 9 at 10-11 (PTAB Nov. 7, 2018) (informative).

IX. PETITIONER VIOLATES THE WORD COUNT REQUIREMENTS

Petitioner's Certificate of Word Count states that the Petition "contains 13,995 words according." Pet., 101. However, Petitioner improperly skirts the word-count system to undercount by at least 510 words by improperly omitting spaces, such as "EX1003-Dec, ¶¶33-35." *See, e.g.*, Pet., 3. This constitutes an improper "effort to circumvent [the Board's] word count limits." *See Life Spine, Inc. v. Globus Medical, Inc.*, IPR2022-01434, Paper 12 at 2 n.1 (PTAB Mar. 2023). Petitioner similarly resorts to an excessive and bizarre abbreviating ("MTC," "REOS") to artificially reduce the word count. Moreover, the fact that Petitioner is incapable of demonstrating alleged invalidity using 14,000 words for only 14 claims is further evidence of the weakness of the validity challenge.

X. CONCLUSION

For the reasons above, Patent Owner respectfully requests that the Board deny institution.

Dated: September 23, 2026

Respectfully submitted,

/Stephen D. Zinda/

Stephen D. Zinda

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Counsel for ChargeLogic

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. §§ 42.6(e)(4), the undersigned certifies that on September 23, 2026, a copy of the foregoing document (*Patent Owner's Preliminary Response*, including all Exhibits), was served via electronic mail on the following attorneys of record at the indicated e-mail address(es):

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CERTIFICATE OF COMPLIANCE

The undersigned certifies that this document complies with the type-volume limitations set forth in 37 C.F.R. § 42.24 *et seq.* This document, excluding those portions excluded pursuant to § 42.24(a)(1), contains 13,999 words as calculated by the “Word Count” feature of Microsoft Word for Office 365, the program used in creating it.

/Stephen D. Zinda/
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