

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner,

v.

CHARGE FUSION TECHNOLOGIES, LLC,
Patent Owner.

Case IPR2025-00152
Patent 11,990,788

PATENT OWNER'S PRELIMINARY RESPONSE

TABLE OF CONTENTS

TABLE OF AUTHORITIES	iv
EXHIBIT LIST	vi
CLAIM LISTING	7
I. INTRODUCTION.....	12
II. SUMMARY OF THE ARGUMENT	12
III. RELATED PROCEEDINGS.....	13
IV. THE '788 PATENT PRESENTS A NOVEL SYSTEM AND METHOD FOR ELECTRIC VEHICLE CHARGING AND POWER MANAGEMENT	14
V. PETITIONER’S PROPOSED OBVIOUSNESS CHALLENGES	16
VI. OVERVIEW OF THE RELEVANT ALLEGED PRIOR ART	16
A. Donnelly (EX1006)	16
B. Letendre (EX1007)	17
C. Knockeart (EX1010)	18
D. Sutardja (EX1011).....	18
VII. LEVEL OF ORDINARY SKILL IN THE ART.....	19
VIII. CLAIM CONSTRUCTION	20
1. “unitary vehicle charge indicator” (Claims 1, 6, 11).....	20
2. “(i) a first portion indicative of an amount of charge residing in a battery of the electric vehicle; (ii) a second portion indicative of an uncharged capacity of the battery of the electric vehicle” (Claims 1, 6, 11).....	21
3. “determining...a charging schedule for the electric vehicle” (Claims 2, 7, 12).....	25
IX. LEGAL STANDARD	25
X. Grounds 1, 2, and 3: petitioner Failed TO identify the grounds of rejection with particularity and thus the petition is wholly deficient as to the Petitioner’s burden of proof.....	26

XI. GROUND 1: The Petition improperly incorporates by reference material from the Andrews Declaration	29
A. Petitioner’s “modified” Sutardja in combination with Donnelly and Letendre failed to teach or disclose element 1[b]iii, 6[b][iii] and 11[b][iii] which claims “adapted to display a unitary vehicle charge indicator comprising a combination of input and output GUI elements the GUI elements comprising: (i) a first portion indicative of an amount of charge residing in a battery of the electric vehicle; (ii) a second portion indicative of an uncharged capacity of the battery of the electric vehicle; and (iii) a third portion comprising a slider by which an amount of charge may be specified.”	29
B. Petitioner Has Not Shown that a POSITA Would Have Been Motivated to Combine Sutardja with the other cited references .37	
1. Petitioner uses the ‘788 Patent as a Roadmap to Combine Modified Sutardja, Donnelly, and Letendre	37
XII. GROUND 1, 2, AND 3: Petitioner Has Not Articulated Any Meaningful Motivation to Combine or a Reasonable Expectation of Success	44
A. Petitioner Has Not Shown a Reasonable Expectation of Success in Reconfiguring Sutardja, Donnelly, Letendre, Knockeart and Seelig	45
XIII. The petition’s reliance on the Andrews’ declaration violates the board’s rules against improper incorporation by reference and improperly circumvents the word limit for ipr petitions.	46
XIV. CONCLUSION	49

TABLE OF AUTHORITIES

	Page(s)
 <u>Cases</u>	
<i>Advanced Display Sys., Inc. v. Kent State University</i> , 212 F.3d 1272 (Fed. Cir. 2000)	43
<i>C R Bard Inc. v. AngioDynamics, Inc.</i> , 979 F.3d 1372, 1381 (Fed. Cir. 2020)	23
<i>Cheese Sys. v. Tetra Pak Cheese & Powder Sys.</i> , 725 F.3d 1341, 1352 (Fed. Cir. 2013)	44
<i>General Access Solutions, Ltd. v. Sprint Spectrum L.P.</i> , 811 F. App'x 654, 657 (Fed. Cir. 2020)	47
<i>Graham v. John Deere Co.</i> , 383 U.S. 1 (1966)	27
<i>Grain Processing Corp. v. Am.-Maize Prods. Co.</i> , 840 F.2d 902 (Fed. Cir. 1988)	45
<i>Harmonic Inc. v. Avid Tech., Inc.</i> , 815 F.3d 1356 (Fed. Cir. 2016)	28
<i>In re Gulack</i> , 703 F.2d 1381 (Fed. Cir. 1983), ...	24
<i>In re Magnum Oil Tools Int'l, Ltd.</i> , 829 F.3d 1364 (Fed. Cir. 2016)	27, 38
<i>In re NTP, Inc.</i> , 654 F.3d 1279 (Fed. Cir. 2011)	39
<i>In re NuVasive, Inc.</i> , 842 F.3d 1376 (Fed. Cir. 2016)	38
<i>Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.</i> , 821 F.3d 1359 (Fed. Cir. 2016)	28
<i>Interconnect Planning Corp. v. Feil</i> , 774 F.2d 1132 (Fed. Cir. 1985)	44
<i>Interconnect Planning Corp. v. Feil</i> , 774 F.2d 1132, 1138 (Fed. Cir. 1985)	42
<i>KSR Int'l Co. v. Teleflex Inc.</i> , 550 U.S. 398 (2007)	27
<i>Lindemann Maschinenfabrik GMBH v. Am. Hoist & Derrick Co.</i> , 730 F.2d 1452, 1458, 1459 (Fed. Cir. 1984)	45
<i>Metalcraft of Mayville, Inc. v. The Toro Co.</i> , 848 F.3d 1358, 1367 (Fed. Cir. 2017)	42
<i>Microsoft Corp. v. Biscotti, Inc.</i> , 878 F.3d 1052 (Fed. Cir. 2017)	45

<i>Orthopedic Equip. Co. v. United States</i> , 702 F.2d 1005, 1012 (Fed. Cir. 1983)	45
<i>Parus Holdings, Inc. v. Google LLC</i> , 70 F.4 th 1365 (Fed. Cir. 2023)	47
<i>Personal Web Techs., LLC v. Apple, Inc.</i> , 848 F.3d 987, 994 (Fed. Cir. 2017)	42
<i>Samsung Elecs. Co., Ltd. v. Elm 3DS Innovations, LLC</i> , 925 F.3d 1373 (Fed. Cir. 2019)	46
<i>SAS Inst., Inc. v. Iancu</i> , 584 U.S. 357, 363 (2018)	47
<i>Superguide Corp. v. DirecTV Enterprises, Inc.</i> , 358 F.3d 870, 875 (Fed. Cir. 2004).	22
<i>TriVascular, Inc. v Samuels</i> , 812 F.3d 1056 (Fed. Cir. 2016)	39
<i>Virtek Vision Int’l ULC v. Assembly Guidance Sys.</i> , 97 F.4 th 882, 888 (Fed. Cir. 2024)	41

Statutes

35 U.S.C. § 312(a)(3)	28, 29
35 U.S.C. § 314(a), ...	26
35 U.S.C. § 316(e)	27

P.T.A.B. Decisions

<i>Adaptics Limited v. Perfect Company</i> , IPR2018-01596, Paper 20 (P.T.A.B. March 6, 2019)	28
<i>Cisco Systems, Inc. v. C-Cation Technologies, LLC</i> , IPR2014-00454, Paper 12 (P.T.A.B. Aug. 29, 2014).	30, 49
<i>Ex parte Carlucci</i> , Appeal No. 2010-006603, 2012 WL 4718549 (P.T.A.B. Sept. 28, 2012)	43

Other Authorities

37 C.F.R. § 42.100(b)	21
37 C.F.R. § 42.104(b)	28
37 C.F.R. § 42.6(a)(3)	47

EXHIBIT LIST

Currently Filed – Patent Owner

Ex. No.	Description
2001	Declaration of Dr. Steven Goldberg
2002	Lexus 2009 Remote Touch Release
2003	U.S. Patent 10,998,753 Notice of Allowance
2004	U.S. Patent 11,631,987 Notice of Allowance
2005	U.S. Patent 11,631,987 Examiner Interview Summary
2006	U.S. Patent 11,990,788 Notice of Allowance
2007	US 2009/0189807 (“Scalisi”)

CLAIM LISTING

Claim Designation	Claim Language
Claim 1[Pre]	An electrical charging system, comprising:
Claim 1[a]	one or more processing devices; and
Claim 1[b]	a non-transitory memory device in communication with the one or more processing devices, the non-transitory memory storing instructions that when executed by the one or more processing devices, result in:
Claim 1[c]	receiving information indicative of a desired charge level of a battery of an electric vehicle wherein the desired charge level is defined by a user of the electric vehicle via a Graphical User Interface (GUI) forming a part of the electric vehicle and adapted to display a unitary vehicle charge indicator comprising a combination of input and output GUI elements the GUI elements comprising:
Claim 1[d]	(i) a first portion indicative of an amount of charge residing in a battery of the electric vehicle;
Claim 1[e]	(ii) a second portion indicative of an uncharged capacity of the battery of the electric vehicle; and
Claim 1[f]	(iii) a third portion comprising a slider by which an amount of charge may be specified;
Claim 1[g]	displaying a charging status of the electric vehicle via the GUI; and
Claim 1[h]	increasing, in accordance with the desired charge level, a level of charge of the battery of the electric vehicle;
Claim 1[i]	wherein the desired charge level of the battery represents a specific amount of charge desired to reside in the battery after increasing the level of charge.
Claim 2[Pre]	The electrical charging system of claim 1, wherein executing the instructions by the one or more processing devices further results in:

Claim Designation	Claim Language
Claim 2[a]	determining, based at least on the desired charge level, a charging schedule for the electric vehicle.
Claim 3	The electrical charging system of claim 2, wherein the increasing of the level of charge is performed in accordance with the charging schedule.
Claim 4	The electrical charging system of claim 1, wherein the first portion operates to output the amount of charge residing in the battery, the second portion operates to output the uncharged capacity of the battery and the third portion is an input GUI element.
Claim 5[Pre]	The electrical charging system of claim 1, wherein the increasing of the level of charge of the battery of the electric vehicle, comprises:
Claim 5[a]	transmitting a control signal to a parking space charge device that starts a charging, in accordance with the charging schedule, of the electric vehicle.
Claim 6[Pre]	An electrical charging system, comprising:
Claim 6[a]	one or more processing devices; and
Claim 6[b]	a non-transitory memory device in communication with the one or more processing devices, the non-transitory memory storing instructions that when executed by the one or more processing devices, result in:
Claim 6[c]	receiving information indicative of a desired charge level of a battery of an electric vehicle wherein the desired charge level is defined by a user of the electric vehicle via a Graphical User Interface (GUI) forming a part of the electric vehicle and adapted to display a unitary vehicle charge indicator comprising:
Claim 6[d]	(i) a first portion indicative of an amount of charge residing in a battery of the electric vehicle;

Claim 6[e]	(ii) a second portion indicative of an uncharged capacity of the battery of the electric vehicle; and
Claim 6[f]	(iii) a third portion comprising a slider by which an amount of charge may be specified;
Claim 6[g]	displaying a charging status of the electric vehicle via the GUI; and
Claim 6[h]	increasing, in accordance with the desired charge level, a level of charge of the battery of the electric vehicle;
Claim 6[i]	wherein the desired charge level of the battery represents a specific amount of charge desired to reside in the battery after increasing the level of charge.
Claim 7[Pre]	The electrical charging system of claim 6, wherein executing the instructions by the one or more processing devices further results in:
Claim 7[a]	determining, based at least on desired charge level, a charging schedule for the electric vehicle.
Claim 8	The electrical charging system of claim 7, wherein the increasing of the level of charge is performed in accordance with the charging schedule.
Claim 9	The electrical charging system of claim 6, wherein the first portion is an output GUI element, the second portion is an output GUI element and the third portion is an input GUI element.
Claim 10[Pre]	The electrical charging system of claim 6, wherein the increasing of the level of charge of the battery of the electric vehicle, comprises:
Claim 10[a]	transmitting a control signal to a parking space charge device that starts a charging, in accordance with the charging schedule, of the electric vehicle.
Claim Designation	Claim Language
Claim 11[Pre]	An electrical charging system, comprising:

Claim 11[a]	one or more processing devices; and
Claim 11[b]	a non-transitory memory device in communication with the one or more processing devices, the non-transitory memory storing instructions that when executed by the one or more processing devices, result in:
Claim 11[c]	receiving information indicative of a desired charge level of a battery of an electric vehicle wherein the desired charge level is defined by a user of the electric vehicle via a Graphical User Interface (GUI) adapted to display a unitary vehicle charge indicator comprising a combination of input and output GUI elements the GUI elements comprising:
Claim 11[d]	(i) a first portion indicative of an amount of charge residing in a battery of the electric vehicle;
Claim 11[e]	(ii) a second portion indicative of an uncharged capacity of the battery of the electric vehicle; and
Claim 11[f]	(iii) a third portion comprising a slider by which an amount of charge may be specified;
Claim 11[g]	displaying a charging status of the electric vehicle via the GUI; and
Claim 11[h]	increasing, in accordance with the desired charge level, a level of charge of the battery of the electric vehicle;
Claim 11[i]	wherein the desired charge level of the battery represents a specific amount of charge desired to reside in the battery after increasing the level of charge.
Claim 12[Pre]	The electrical charging system of claim 11, wherein executing the instructions by the one or more processing devices further results in:
Claim 12[a]	determining, based at least on the desired charge level, a charging schedule for the electric vehicle.
Claim 13	The electrical charging system of claim 12, wherein the increasing of the level of charge is performed in accordance with the charging schedule.

Claim 14	The electrical charging system of claim 11, wherein the first portion operates to output the amount of charge residing in the battery, the second portion operates to output the uncharged capacity of the battery and the third portion is an input GUI element.
Claim 15[Pre]	The electrical charging system of claim 11, wherein the increasing of the level of charge of the battery of the electric vehicle, comprises:
Claim 15[a]	transmitting a control signal to a parking space charge device that starts a charging, in accordance with the charging schedule, of the electric vehicle.
Claim 16	The electrical charging system of claim 11, wherein the GUI is forms a part of a mobile display device.
Claim 17	The electrical charging system of claim 16, wherein the mobile display device is a smartphone.

I. INTRODUCTION

Charge Fusion Technologies, LLC, the owner of U.S. Patent No. 11,990,788 (“’788 Patent”), submits this Patent Owner’s Preliminary Response (“Response”) to the Board’s institution decision based on Tesla, Inc.’s (“Tesla” or “Petitioner”) petition for *inter partes* review (“Petition”) of claims 1-17 the ’788 Patent (“Challenged Claims”).¹

II. SUMMARY OF THE ARGUMENT

The Board should determine that all Challenged Claims are not unpatentable based on the merits. The Petition cobbles together numerous references whose combinations (even if legitimate) fail to teach the claimed invention and more importantly – amount to nothing more than using the Challenged Claims as a roadmap.

Further, because the Petition has improperly attempted to circumvent the IPR word count limit. In particular, Petitioner has failed to provide, with particularity, reasoning for combining three asserted references (Sutardja, Donnelly and Letendre for Ground 1). Upon careful review of these references, it is clear that the person of ordinary skill in the art would not modify Sutardja in the many convoluted ways as alleged in the Petition.

¹ Claims 1, 10, 19, and 28 are independent claims.

Were the Petition to provide adequate reasoning, the Petition would be well-beyond the IPR word count. For example, for numerous claim limitations, there is no analysis whatsoever, but instead a listing of another claim element without even the most basic incorporation of the analysis from that other claim element by reference. In multiple instances, the referenced limitation simply doesn't include the same subject matter. Moreover, the Petition fails to cite or even reference dozens (over 41) additional exhibits relied on by the 238-page Expert Declaration, instead it improperly incorporates the declaration and analysis therein by reference into the Petition to circumvent the word count requirement.

Further, Petitioner presents meritless claim construction arguments, that when properly construed, illustrate the deficiencies in Petitioner's substantive arguments. Moreover, Petitioner presents the same arguments that were previously considered and rejected during prosecution at the United States Patent and Trademark Office.

In short, the Petition is inadequate and should be wholly denied as the deficiencies in the proffered evidence and substantive content of both the Petition and the cited evidence prove fatal to the Petition. As such, the Challenged Claims should be upheld.

III. RELATED PROCEEDINGS

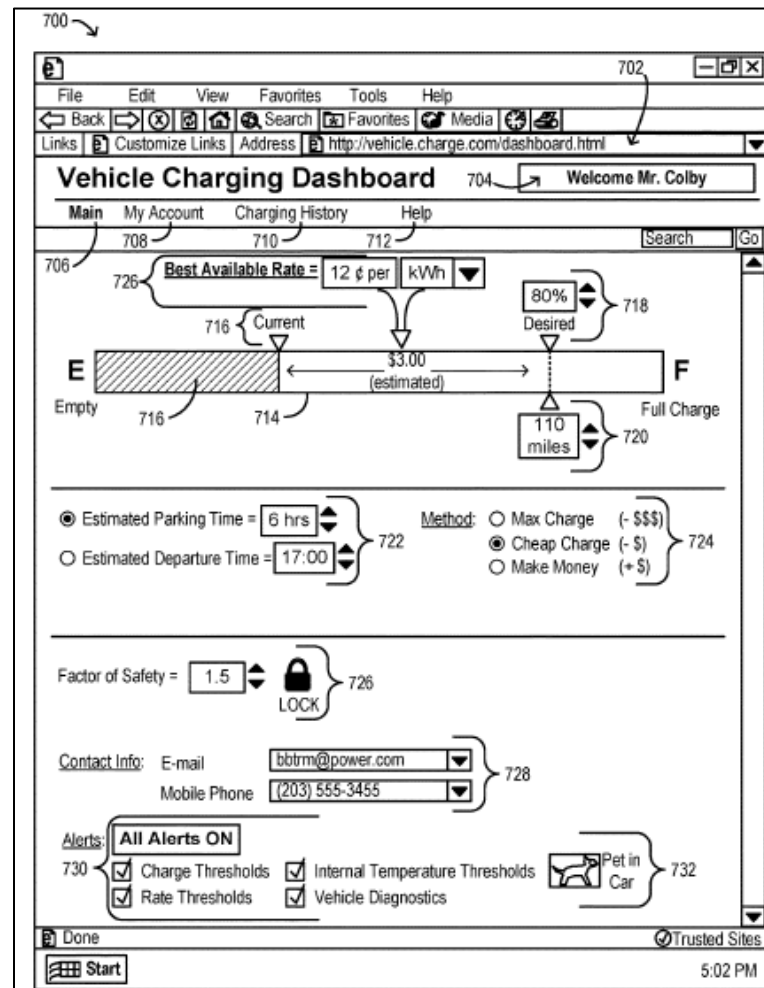
The '788 Patent is involved in *Charge Fusion Technologies, LLC v. Tesla, Inc.*, 1:22-cv-00488 (W.D. Tex.) ("Texas Litigation").

IV. THE '788 PATENT PRESENTS A NOVEL SYSTEM AND METHOD FOR ELECTRIC VEHICLE CHARGING AND POWER MANAGEMENT

The '788 Patent, entitled “Systems and Methods for Electric Vehicle Charging and Power Management,” was filed on June 23, 2023, issued on May 21, 2024, and claims priority to Provisional Application No. 61/134,646, which was filed on July 11, 2008. EX1001, 2. According to the '788 Patent, improvements in battery technology provided the potential for “economically viable” electric-powered modes of transportation. *Id.*, 1:37-50. However, electric vehicles needed to be plugged in regularly to replenish their electrical charge, which “likely require[d] more time than is typically required to fill up an automobile with a petroleum based product.” *Id.*, 1:40-45. Because of this, “the owner of an electrical automobile must oftentimes adhere to a schedule of charging that renders the automobile unusable for protracted stretches of time,” and there was “a resistance to performing the act of plugging in an automobile and subsequently unplugging the vehicle in order to maintain a charged vehicle.” *Id.*, 1:45-50. The applicants thus recognized that it would be advantageous to intelligently charge vehicles by creating a charging schedule. *Id.*, 2:16-27. Moreover, the applicants recognized the desire for a user to select the desired charge percent level via a slider on a graphical user interface. *Id.*, 14:62-67; Fig. 7.

Figure 7 is a block diagram which illustrates a graphical user interface slider

allowing a user to select the desired charge (720).



EX1001, Fig 4; 14:56-67. According to the ‘788 Patent, a user may view and/or change the desired charge range level and thus determine a desired distance to travel and accordingly set the desired charge range to match the desired distance. *Id.*

Further, the ‘788 Patent discloses that the operator of a vehicle may define settings to establish alerts, such as when a pet is in the vehicle. EX1001, 14:11-32. The ‘788 Patent teaches a system in which a user may define situations where a pet

is in the vehicle and set operating conditions and interior conditions based on a pet being located inside the vehicle during charging. EX1001, 13:46-67. With this innovation, a user may safely leave a pet in a parked vehicle with established parameters to maintain a vehicle temperature suitable for said pet. EX1001, 15:62-16:5.

V. PETITIONER’S PROPOSED OBVIOUSNESS CHALLENGES

Ground	Challenged Claims	35 U.S.C. ²	Reference(s)/Basis
1	1-4, 6-9, and 11-14	§ 103	Sutardja ³ in view of Donnelly, ⁴ and Letendre ⁵
2	5, 10, and 15	§ 103	Sutardja in view of Donnelly, Letendre and Seelig
3	16-17	§ 103	Sutardja in view of Donnelly, Letendre and Knockeart

VI. OVERVIEW OF THE RELEVANT ALLEGED PRIOR ART

A. Donnelly (EX1006)

Donnelly is directed to railroad, or train locomotives and the use of energy storage batteries and a method for monitoring, controlling and optimizing electrically powered locomotives. EX1006, 1:24-35; 2:1-6. Specifically, Donnelly

² The pre-AIA version of 35 U.S.C. § 103 applies.

³ U.S. Patent Pub. No. 2008/0136371 (EX1011).

⁴ U.S. Patent No. 7,124,691 (EX1006).

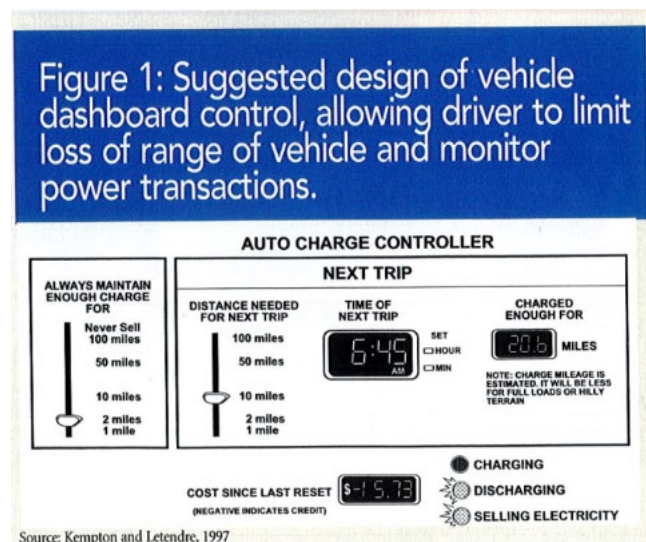
⁵ *The V2G Concept, A New Model for Power* (EX1007).

teaches a controller unit and system of sensors to monitor, synchronize and optimize the operation of the locomotive drive train as well as the individual axles during acceleration and braking. *Id.* at 3:42-50.

Donnelly is not directed at electric cars. Although it does appear to disclose a touch screen (*Id.* at 21:47-58), the screen is not directed at a GUI slider mechanism as presented in the challenged claims, nor relates to any ability for a user to select an amount of charge for the railroad locomotive disclosed.

B. Letendre (EX1007)

Letendre is directed towards electric vehicles and the concept of vehicle to grid power or “V2G.” EX1007, 7. Petitioner cites Letender for its GUI element, reproduced below:



EX1007, 8. However, nothing within Letendre discloses a GUI slider that allows a user to select an amount of charge related to the total amount of battery

capacity. Further, Letendre does not disclose a GUI slider, but instead appears to disclose a physical slider. Nothing within Letendre teaches, suggests or discloses a GUI slider directed to selecting the amount of charge related to the capacity of the battery within the electric vehicle.

C. Knockeart (EX1010)

Knockeart is directed to “a driver information system [that] provides route planning and guidance (“navigation”) services to the operators of multiple vehicles 100.” EX1010, 4:19-21. Knockeart’s “[i]n-vehicle system 105 is configured to use a removable personal device 160 to provide certain functionality of the in-vehicle System”. *Id.*, 4:32-34.

The Petition alleges that Knockeart’s phone “provide[s] a vehicle’s GUI.” *Pet.*, 8. However, this overextends the actual disclosure of Knockeart. Knockeart is focused on using the removable portable device 160 to expand the capabilities of the guidance services of the in-vehicle driver information system, not a full vehicle GUI. Knockeart describes: “removable personal device 160 includes a graphical display and that display is used to provide visual information to the operator of the vehicle during the route planning and guidance phases of navigation.” EX1010, 4:54-57.

D. Sutardja (EX1011)

Sutardja is directed to “systems and methods for charging batteries in vehicles.” EX1011, [0002]. Sutardja charges based on “charging parameters”. *Id.*

[0235]. Sutardja utilized a charge management system, or CMS, having a vehicle that is charged at a location such as home or work. *Id.* [0239], Figure 3A.

E. Seelig (EX1078)

Seelig is directed to “a process for contactless energy transmission in charging the battery of a vehicle.” EX1078, Abstract. Seelig teaches a “primary element 1 of an inductive transmitter is brought into an approach position with respect to the secondary element 2 of the transmitter, which is located on the underside of an electric car 3”. EX1078, 2:20-23. In response to primary element and secondary element coupling, a “signal ‘coupling achieved’ KER received on the vehicle ... switches on the charging initiation signal generator LAG via the setting input S. ... The charging initiation signal LA transmitted to the charging apparatus on the same path as the orientation signal OS now switches on the charging operation memory LBS and thus switches on the inverter.” EX1078, Fig. 6, 6:21-32.

VII. LEVEL OF ORDINARY SKILL IN THE ART

Petitioner defines a person of ordinary skill in the art (“POSITA”) as an individual that “would have had at least a bachelor’s degree in electrical or mechanical engineering (or an equivalent field) and at least two years of work experience involving automotive systems, including electric vehicle power management. Additional industry experience or technical training may offset less formal education, while advanced degrees or additional formal education may offset

lesser levels of industry experience” *Pet.* 2 (internal citations omitted). Because it does not affect the ultimate analysis, Patent Owner takes no position with respect to Petitioner’s proposed level of ordinary skill in the art but reserves the right to take a position if instituted.

VIII. CLAIM CONSTRUCTION

In an *inter partes* review filed on or after November 13, 2018, claim terms are construed based on their ordinary and customary meaning. *See* 37 C.F.R. § 42.100(b). For purposes of this Paper, for all claim terms, Patent Owner requests that the Board adopt the ordinary and customary meaning of the claim terms as understood by one of ordinary skill in the art. Patent Owner provides its response to Petitioner’s proposed claim construction below:

1. “unitary vehicle charge indicator” (Claims 1, 6, 11)

Petitioner’s apparent construction admits importing limitations from the specification, such as the “bar graph” from the ‘788 Patent’s Figure 7, yet provides no argument as to why the “unitary vehicle charge indicator” would be limited to a bar graph representation. The ‘788 Patent explicitly states, “other configurations of systems and devices may also or alternatively be utilized to perform the methods described herein without deviating from the scope of some embodiments.” EX1001, 16:32-35. Further, the ‘788 Patent recites that different types, layouts, quantities, and configurations of systems described herein may be utilized without deviating from

the scope of some embodiments.” EX1001, 6:24-29. A POSITA would recognize that the unitary vehicle charge indicator is not limited to a bar graph representation. EX2001, ¶¶28-29.

Moreover, Petitioner provides no arguments or reasoning as to why it chooses to import this limitation, yet for prior IPRs that involved a vehicle charge indicator, Petitioner took the position that no construction beyond plain and ordinary meaning was warranted. *See* IPR2022-01217, Paper 2 at 10; IPR2023-00063, Paper 3 at 10. The Petitioner even cited the same figure which it appears to try to import into the claims now. *See* IPR2023-00063, Paper 3 at 3-5.

Petitioner provides no reasoning or argument as to why the Board should construe “unitary vehicle charge indicator” to be required to include a bar graph aside from the fact that an illustrative bar graph is included within FIG. 7. Pet. at 5. Such a construction would wrongly import embodiments from the specification, and Petitioner’s proposed construction should be rejected. *Superguide Corp. v. DirecTV Enterprises, Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004).

2. “(i) a first portion indicative of an amount of charge residing in a battery of the electric vehicle; (ii) a second portion indicative of an uncharged capacity of the battery of the electric vehicle” (Claims 1, 6, 11)

Each of the Challenged claims require (1) a unitary vehicle charge indicator comprising a combination of input and output GUI elements the GUI elements comprising: (i) a first portion indicative of an amount of charge residing in a battery

of the electric vehicle; (ii) a second portion indicative of an uncharged capacity of the battery of the electric vehicle; and (iii) a third portion comprising a slider by which an amount of charge may be specified.” Contrary to Petitioner’s allegations, the alleged printed matter (amount of current charge and amount of current capacity to charge) does not merely inform people of the claimed invention but interacts with the user’s ability to select an amount of charge via the slider mechanism. A POSITA would recognize that the unitary vehicle charge indicator includes three portions that interact with each other, and that each portion of the indicator provides functionality. EX2001, ¶¶30-31.

The Petition requests that the first and second portion of the unitary vehicle charge indicator (which Petitioner has also imposed improper limitations to) be essentially written out of the claim and provided no patentable weight. Petition at 5. The printed matter doctrine “prohibits patenting ... printed matter unless it is ‘functionally related’ to its ‘substrate,’ which encompasses the structural elements of the claimed invention.” *C R Bard Inc. v. AngioDynamics, Inc.*, 979 F.3d 1372, 1381 (Fed. Cir. 2020). “In evaluating the existence of a functional relationship, [the Federal Circuit has] considered whether the printed matter merely informs people of the claimed information, or whether it instead interacts with the other elements of the claim to create a new functionality in a claimed device or to cause a specific

action in a claimed process.” *Id.* On the latter question, “[o]nly if the answer is ‘no’ is the printed matter owed no patentable weight.”

In *In re Gulack*, 703 F.2d 1381 (Fed. Cir. 1983), the Federal Circuit held that, while a sequence of digits printed on a wrist band constituted printed matter, the sequence deserved patentable weight because the content of the sequence was functionally related to the endless-band physical structure of the substrate. The Court stated that the “digits are related to the band in two ways: (1) the band supports the digits; and (2) there is an endless sequence of digits—each digit residing in a unique position with respect to every other digit in an endless loop. Thus, the digits exploit the endless nature of the band.” 703 F.2d at 1386-87.

Just as in *Gulack*, the first and second portions of the charge indicator, which represent the current amount the electric vehicle is charged and the amount of uncharged capacity in the vehicle, impact the functionality of the slider. For example, if the battery is currently charged at 40% as displayed by the first portion of the unitary vehicle indicator and the uncharged capacity is the remaining 60% represented by the second portion of the unitary vehicle indicator, then a user then a user is guided by the first and second portions in selecting a desired charge level.

As claimed, it is clear the first and second portion do not merely inform people of information but instead define the scope of the charge indicator and the amount of charge that may be logically selected by the user via the slider, as the user will

not select an amount of charge that is less than the current state of charge. Further, the first and second portion operate as dynamic outputs of information that constantly change based upon the amount of charge within the battery of the electric vehicle, while the third portion interacts to allow the input of dynamic data that allows a user to select a desired amount of charge.

Previously, Petitioner has taken the opposite position, stating that a battery charge indicator provides “additional functionality.” *See* IPR2023-00063, Paper 3 at 30 (“In summary, it combines prior art elements (Eberhard’s slider and the Roadster Manual’s battery charge indicator) to yield predictable results by providing the system with the ***additional functionality of displaying the charge capacity of the battery*** alongside the slider...” (emphasis added)). Petitioner provides no reasoning as to why displaying the charge capacity of the battery in one petition adds functionality, yet nearly the same limitations now should be afforded no patentable weight.

Moreover, in the current Petition, the Petitioner all but admits functionality in its motivation to combine, stating: “A POSITA would have recognized providing combined, “unitary” GUI elements would have desirably improved display space utilization, concisely *provided a user with all relevant battery information at a single glance, and improved the user’s ability to discern the difference between the battery’s current amount of charge and the user-entered desired amount of charge.*”

Pet. at 52. The first and second portion, by Tesla’s admission, *interact with* the slider as the claimed third portion of the indicator element. Under Petitioner’s assertions, no display feature would be afforded printable weight, which runs in contrast to established precedent in *Gulack* and *C R Bard Inc.*

**3. “determining...a charging schedule for the electric vehicle”
(Claims 2, 7, 12)**

Petitioner submits that the “determining... a charging schedule for the electric vehicle” should not be construed under §112(6). Patent Owner agrees that nothing in the claim invokes section 112(6) and that “determining...a charging schedule for the electric vehicle” has an understood meaning and is generally viewed by one skilled in the art to connote a particular structure. To the extent the Board determines that the claim falls under §112(6) (given that Petitioner provided an alternative construction), Patent Owner submits that Petitioner failed to identify any structure or function within the asserted prior art, which would confirm Petitioner failed to meet its burden for claims 2, 7 and 12.

IX. LEGAL STANDARD

Under 35 U.S.C. § 314(a), Petitioner carries the burden of showing a reasonable likelihood that it would prevail with respect to at least one of the claims challenged in the Petition. Petitioner must prove unpatentability by a preponderance of the evidence. *See* 35 U.S.C. § 316(e); *In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364 (Fed. Cir. 2016).

A patent claim is unpatentable for obviousness if the differences between the claimed subject matter and the prior art are such that the subject matter, as a whole, would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). In *Graham v. John Deere Co.*, 383 U.S. 1 (1966), the Supreme Court set out a framework for assessing obviousness that requires consideration of four factors: (1) the “level of ordinary skill in the pertinent art,” (2) the “scope and content of the prior art,” (3) the “differences between the prior art and the claims at issue,” and (4) “secondary considerations” of nonobviousness such as “commercial success, long felt but unsolved needs, failure of others, etc.” 383 U.S. at 17–18; *KSR*, 550 U.S. at 407.

X. GROUNDS 1, 2, AND 3: PETITIONER FAILED TO IDENTIFY THE GROUNDS OF REJECTION WITH PARTICULARITY AND THUS THE PETITION IS WHOLLY DEFICIENT AS TO THE PETITIONER’S BURDEN OF PROOF

The Petition does not identify the grounds on which the claims are challenged with particularity. A petition for *inter partes* review (“IPR”) must identify “*with particularity*, each claim challenged, the grounds on which the challenge to each claim is based, and the evidence that supports the grounds for the challenge to each claim.” 35 U.S.C. § 312(a)(3); *emphasis added*; *see also* 37 C.F.R. § 42.104(b) (specifying necessary elements of a petition). As the Federal Circuit has explained,

“[i]n an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (emphasis added) (citing 35 U.S.C. § 312(a)(3)); *see also Intelligent Bio-Sys., Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1369 (Fed. Cir. 2016) (“It is of the utmost importance that petitioners in the IPR proceedings adhere to the requirement that the initial petition identify ‘with particularity’ the ‘evidence that supports the grounds for the challenge to each claim.’” (quoting 35 U.S.C. § 312(a)(3))).

The Board made precedential that “[t]he statutory requirement for particularity in a petition for IPR takes on heightened importance when considered in conjunction with *SAS*’s “all-or-nothing” approach. Because the Board’s practice, in light of *SAS*, is to institute on all grounds asserted in a petition, the Board may consider whether a lack of particularly as to one or more of the asserted grounds justifies denial of an entire petition.” *Adaptics Limited v. Perfect Company*, IPR2018-01596, Paper 20 at 17 (P.T.A.B. March 6, 2019). The Board should exercise this discretion and deny the entire petition for numerous instances of failure to provide analysis with particularity.

Throughout the Petition, including in each of Grounds 1, 2, and 3, the Petition does not provide analysis with particularity. For example, the *entire* analysis provided for Claim 4 is “see claim 1[b][iii]. Similarly, for the entirety of claims, 6-

9, 11-14, Petitioner does not provide any analysis but appears to just incorporate its prior arguments without explanation. The Petition's lack of any substantive analysis is fundamentally the opposite of an analysis provided *with particularity* as required by 35 U.S.C. § 312(a)(3) and instead forces Patent Owner improperly to look through the Petition as a maze. Ground 2 suffers from similar lack of particularity due to dependency on Ground 1.

The Petitioner, however, clearly understands that, to provide a full analysis *with particularity*, Petitioner should incorporate analysis from another section and explain how it applies. However, no such analysis is provided for many limitations as listed above.

The Petitioner's deficient analysis is fatal to the Petition and cause for denial of the Petition as a whole. Review of the word count exacerbates the Petition's deficiency as the Petition is only 673 words short of the Petition word limit. *See Pet.*, 80. Were the Petition to provide the required analysis with particularity, the Petition would be well beyond the 14,000-word limit.

Accordingly, denial of the Petition is respectfully requested because the Petitioner has failed to satisfy its burden of providing analysis of the Grounds challenged with particularity.

XI. GROUND 1: THE PETITION IMPROPERLY INCORPORATES BY REFERENCE MATERIAL FROM THE ANDREWS DECLARATION

The Board has held the “practice of citing the Declaration to support conclusory statements that are not otherwise supported in the Petition also amounts to incorporation by reference.” *Cisco Systems, Inc. v. C-Cation Technologies, LLC*, IPR2014-00454, Paper 12, 9 (P.T.A.B. Aug. 29, 2014). For example, for the purported motivation to combine Sutardja with Donnelly, Petitioner states that a POSITA would have been motivated to add Donnelly’s GUI displayed on a touchscreen to receive user inputs “to yield the predictable results of allowing the user to efficiently enter their desired charging parameters in a familiar and user-friendly manner” Pet. at 30. Here, Petitioner cites three paragraphs spanning over 800 words from its declarant. For reasonable expectation of success, Petitioner provides no explanation and instead just says given the ubiquity of GUIs, there would be a reasonable expectation of success reconfiguring Sutardja. Pet. at 30. However, Petitioner cites paragraph 145 of Dr. Andrews’ declaration, which goes on for more than 145 words regarding this short sentence provided by Petitioner.

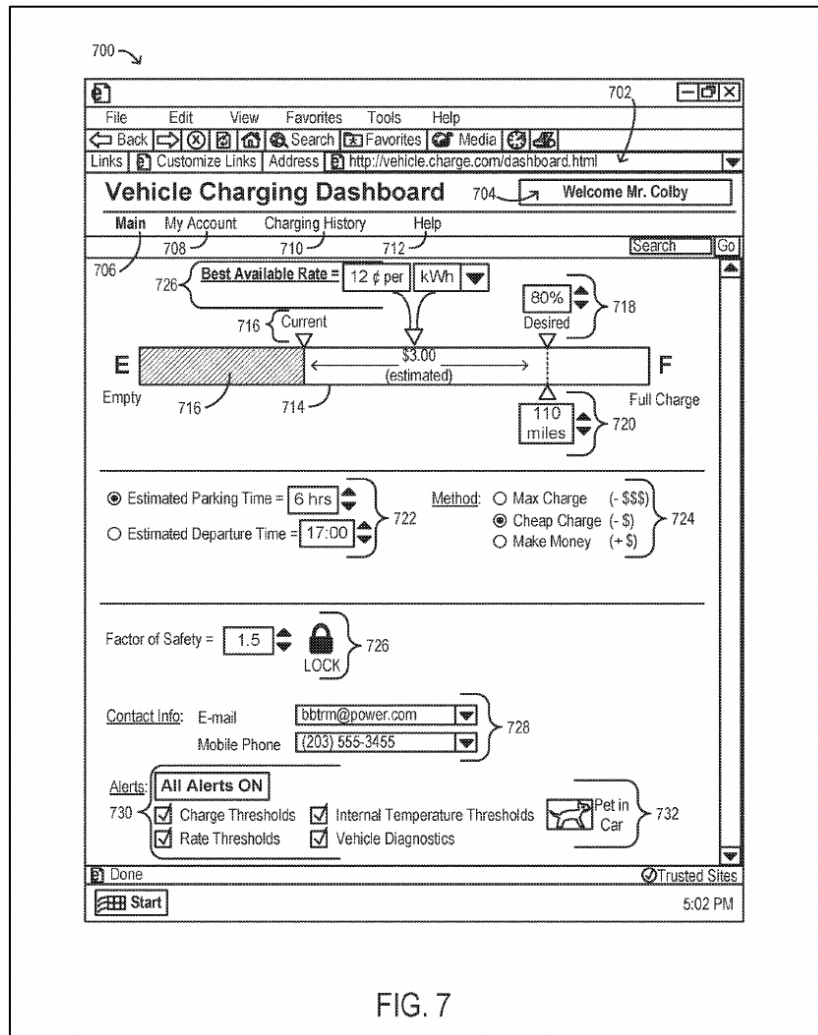
- A. Petitioner’s “modified” Sutardja in combination with Donnelly and Letendre failed to teach or disclose element 1[b]iii, 6[b]iii and 11[b]iii which claims “*adapted to display a unitary vehicle charge indicator comprising a combination of input and output GUI elements the GUI elements comprising: (i) a first portion indicative of an amount of charge residing in a battery of the electric vehicle; (ii) a second portion indicative of an uncharged capacity of the***

battery of the electric vehicle; and (iii) a third portion comprising a slider by which an amount of charge may be specified.”

Each of the independent claims require a unitary vehicle charge indicator element comprising: (i) a first portion indicative of an amount of charge residing in a battery of the electric vehicle; (ii) a second portion indicative of an uncharged capacity of the battery of the electric vehicle; and (iii) a third portion comprising a slider by which an amount of charge may be specified.” For the purposes of this Preliminary Response, the analysis provided herein applies to all Challenged claims.

Despite the many granted patents from Patent Owner with similar limitations, including but not limited to the patents Tesla previously challenged in the ‘135 and ‘753 Patents, Petitioner again fails to find any anticipatory art and instead is forced to implement hindsight bias to create an attempt to challenge the validity of the ‘788 Patent. Even combining three disparate references, Petitioner’s grounds each fail to disclose all of the elements. Even assuming that a POSITA would be motivated to combine Sutardja (as modified by Petitioner), Donnelly, and Letendre, which they wouldn’t, the combination still does not teach or suggest all of the elements of the claim. And Petitioner fails to describe how the system would achieve the claimed system with reasonable success. Even with the impracticable combination of modified Sutardja, Donnelly, and Letendre the user still does not know a desired amount of charge because the user is unable to specify it.

All independent and respective dependent claims require a user interface that contains a unitary vehicle charge indicator element comprising: (1) a first portion indicating the amount of charge left in the battery of an electric vehicle, (2) a second portion indicating the uncharged capacity of the battery of the electric vehicle, and (3) a slider element which allows a user to select, via the graphical user interface, the amount of charge for a particular single charge amount for the electric vehicle. As shown in the figure below, the Vehicle Charging Dashboard of the '788 Patent discloses where a user can select the desired amount of charge for a single charge amount:



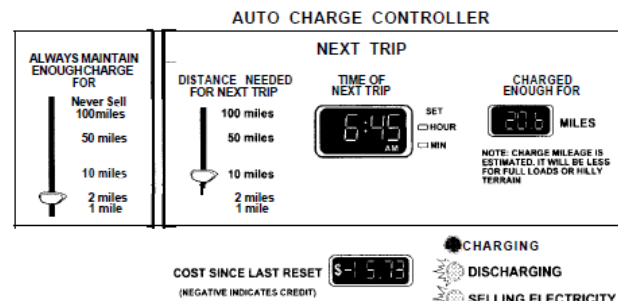
EX1001, Figure 7.

A POSITA would recognize after reading the claims and specification that the challenged claims require “a vehicle charge indicator element” that allows a user to select, via a graphical user interface, the desired amount of charge for the current charge event. EX1001, 14:43-47, EX2001, ¶¶44-50. As the patent discloses, a user may select, via the vehicle charge indicator element, a “desired charge percent level.” EX1001, 14:40-51. The patent further teaches that the user interface displays

a “current charge level” further disclosing to a POSITA that the desired charge selected via the touch screen slider is to select an amount of charge to change the current charge level. EX2001, ¶¶45. As the ‘788 Patent further discloses, the desired charge level is selected based on a single charge amount, and the vehicle provides an estimate of how far the vehicle can travel based on the amount of charge selected by the user. EX1001, 14:51-62. A POSITA would further understand the claims requiring a single charge amount. EX2001, ¶¶66.

The claimed invention provides the novel ability to display the battery charge level together with the slider that can indicate the amount of charge needed. Putting together the input and output mechanisms is an express claim element of the claims of the ‘788 patent. Petitioner’s case ignores these specifics of the vehicle charge indicator element and instead relies upon a combination of Sutardja (as modified by Petitioner), Donnelly, and Letendre for allegedly teaching only the individual portions of this limitation. Pet. at 33-41. With respect to the “amount of charge that can be specified” portion of the “vehicle charge indicator element”, Petitioner solely relies upon Letendre. Pet. at 39-40. Letendre’s disclosure is insufficient. *See* EX2001, ¶46.

Figure 1: Suggested design of vehicle dashboard control, allowing driver to limit loss of range of vehicle and monitor power transactions.



Source: Kempton and Letendre, 1997

When first describing the teachings of Letendre (Pet. at 11), Tesla describes the teachings of Letendre stating “Letendre teaches a user interface comprising a slider by which a user specifies parameters managing the charge of an electric vehicle’s battery.” Pet. at 13. As shown herein, Letendre teaches away from a user specifying an amount of charge. It is precisely because the user does not know a desired amount of charge that the user is unable to specify it, but instead only a distance needed for next trip and minimum mileage to maintain. Any specified amount of charge is specified *by the system* in the background in response to a desired driving condition specified by the user. EX2001, ¶¶46-48. In fact, the desired amount of charge is never presented to the Letendre user; only a desired distance travelled is shown to the user. *Id.*

Letendre operates to take a user specified mileage condition and then *estimate* a corresponding charge amount that will likely meet the condition. Were the user to actually wish to specify a charge amount, the GUI interface of Letendre *would*

actually prevent the user from doing so. For example, nothing in Letendre allows a user to specify a 70% charge amount. As such, Letendre does not teach “a slider by which an amount of charge may be specified” as required by the unitary vehicle charge indicator element of claims 1, 6, and 11. Rather, Letendre explicitly teaches parameters measured in units (e.g., desired mileage) that cannot inform a user as to the *amount of charge*. *Id.*

Describing the above figure, Letendre clearly states:

An example control panel is shown in Figure 1. Whether the control is physical, on the dash, or on a Web page, the idea is basically the same. The driver has two parameters to set—the length of the expected next trip (in the case shown in Figure 1, 10 miles at 6:45 the next morning), and the minimum range that must always be maintained, e.g. for an emergency room trip, two miles.

(EX1007, 19-20).

As Letendre makes clear, the two parameters to be set. i.e., “specified,” are length (measured in miles) and minimum range (again, measured in miles). EX2001, ¶49. Letendre’s figure 1 used by Petitioner and reproduced above makes clear that “Charge mileage is estimated. It may well be less for full loads or hilly terrain.” *Id.* Because the distance one can travel on a given charge is highly variable based, for example, on loads, terrain characteristics, age of battery, battery cycles, temperature, etc., it is not possible to specifically equate an expected charge range with an amount of charge. *Id.* Petitioner’s logic is flawed by stating that setting a “length”,

comprising “10 miles”, is adequate to disclose specifying an *amount of charge*. And Petitioner offers no explanation as to how a POSITA would derive this information.

As a result, the user can specify a parameter/condition to be met, such as miles to travel, and let the system try to approximate a charge amount that will meet the condition. *Id.*, ¶71. But this is inapposite to specifying an amount of charge. The system may be accurate or not in attempting to charge to a level meeting the user conditions, hence, “Charge mileage is estimated.” *Id.*, ¶ 71.

In short, Letendre teaches the diametric opposite of specifying a charge amount. It is precisely because the user does not know how much charge he needs to meet his requirements that he cannot specify the amount of charge and, as a result, uses a slider to specify the conditions to be met by an amount of charge he is incapable of specifying.

It is therefore inaccurate when Tesla asserts:

Letendre teaches *a slider by which an amount of charge may be specified*, namely an “auto charge controller” “control panel” including a movable slider to “set [] the length of the expected next trip” (here, 10 miles) (the specified *amount of charge*). (Pet., 39).

It is precisely because the user of Letendre’s interface is fundamentally incapable of knowing what charge amount they need that Letendre’s interface exists and operates to allow the user to specify something other than a charge amount. And Tesla fails to explain how specifying the number of miles equates to specifying an

amount of charge, or how to reconcile the two scales (battery charge level vs. non-linear mileage).

As a result, the combination of modified Sutardja, Donnelly and Letendre fails to teach the element of *a slider by which an amount of charge may be specified*.

B. Petitioner Has Not Shown that a POSITA Would Have Been Motivated to Combine Sutardja with the other cited references

To satisfy its burden of proving obviousness, a petitioner must articulate specific reasoning why a person of ordinary skill in the art would have combined or modified prior art references. *In re NuVasive, Inc.*, 842 F.3d 1376, 1382 (Fed. Cir. 2016); *In re Magnum Oil Tools Int'l, Ltd.*, 829 F.3d 1364, 1380 (Fed. Cir. 2016) Petitioner provides only general declarations that a POSITA would be motivated to combine the references.

1. Petitioner uses the '788 Patent as a Roadmap to Combine Modified Sutardja, Donnelly, and Letendre

Petitioner's stated motivations to combine so many references is compelling evidence that Petitioner did nothing more than use the claims as a roadmap without establishing how or why the POSITA would want to combine these references. A POSITA would not look to combine Donnelly, a locomotive invention, with Sutardja's computer implemented method, apparatus, and computer program product for generating a dynamic energy transaction plan to manage an electric vehicle charging transaction which is modified by Petitioner to include a

touchscreen, and then further combine it with Letendre, a public utilities article that describes vehicle to grid parameters. This smattering of so many prior art references is a classic example of impermissible “hindsight reconstruction,” using “the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.” *TriVascular, Inc. v Samuels*, 812 F.3d 1056, 1066 (Fed. Cir. 2016); *see also In re NTP, Inc.*, 654 F.3d 1279, 1299 (Fed. Cir. 2011). Petitioner’s explanation that, “Letendre expressly motivates the combination, stating “it is essential that the driver be able to limit any draw down so travel is not affected.” EX1007, 19. Letendre discusses “a control the driver sets according to driving needs” and provides the exemplary slider display discussed above” is insufficient and fails to explain how this would be accomplished. *Pet.*, 40.

First, Petitioner’s primary reference, Sutardja, fails to contemplate a partial charge, nevertheless parameters that allow a user to select a desired amount of charge. For example, Sutardja states “In another feature, the load management module generates the schedule based on the charge levels and ***requested charge completion times***.” EX1011, ¶122. Further, Sutardja recites “in another feature, one or more to the N first sets of charging parameters include ***requested charge completion times***...” *Id.*, ¶123. Sutardja fails to teach an ability for a user to select a desired amount of charge and instead allows a user to select ***when*** a full charge of the battery may occur.

Sutardja discloses that a user may request a full charge “daily between 9PM and 6AM.” *Id.* at ¶262. Sutardja further states that a “charge monitoring module may inform the control module when the battery is charged to a predetermined level (e.g. full charge) that may be indicated in the charging parameters.” *Id.* at ¶270. The only mention of charging less than 100% is in the context of “returning” the charge from the vehicle to the utility company, where a user can seek credit for returning charge from its battery (e.g. selecting the amount of charge exiting the battery), rather than select the amount of charge that would go into the battery. *Id.* at ¶237. Nowhere does Petitioner illustrate how a user in Sutardja would select a specific amount of charge and instead appears to insinuate that a full charge is a specific amount of charge. However, even that full charge is not a result of a selection from the user but instead is a condition in Sutardja. *Id.* at ¶243 (showing the charge parameters include a full charge and requested charge completion time).

Further, Sutardja includes only a single reference to a display, stating that a user interface module may comprise a keypad, a microphone, and/or a speaker. *Id.* at ¶243. Nothing within Sutardja’s disclosure relates to the ability to display dynamic charge information to the user, such as current charge levels.

With respect to Petitioner’s first “motivation.” it appears that Petitioner is stating that since GUIs were well known, a POSITA would be motivated to combine Sutardja’s user interface with Donnelly’s display. Pet. at 30. This is merely an

assertion that components such as displays were well known and not a proper motivation to combine. *Virtek Vision Int’l ULC v. Assembly Guidance Sys.*, 97 F.4th 882, 888 (Fed. Cir. 2024) (reversing obviousness finding where the prior art disclosed the claimed limitations, explaining that “[i]t does not suffice to simply be known. A reason for combining must exist”).

Further, Petitioner states that it would have been obvious to add Donnelly’s GUI to Sutardja because it would have been “less dangerous” to read while driving. Pet. at 35. Patent Owner does not disagree that a visual aid may be easier to comprehend while driving, but under Petitioner’s logic, any visual aid would be superior to text and looking at the radio station on a car display is dangerous. Under this theory, one would be motivated to combine Sutardja with a mechanism that stops the vehicle as not driving would be “less dangerous.” Petitioner provides no basis to depart from Sutardja’s teachings by reconfiguring the interface already present with Sutardja, as Petitioner admits a user interface module is already present within Sutardja. Pet. at 29.

Accordingly, on the present record, Petitioner has failed to establish a *prima facie* basis for why a person of ordinary skill in the art would be motivated to modify Sutardja by duplicating an interface module based on Donnelly. Such an argument can only be based on impermissible hindsight. As set forth by the Federal Circuit, “[t]he invention must be viewed not with the blueprint drawn by the inventor, but in

the state of the art that existed at the time.” *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138 (Fed. Cir. 1985). Petitioner must put forward some “explanation as to how or why the references would be combined to arrive at the claimed invention...[otherwise] hindsight bias [becomes] the thread that stitches together prior art patches into something that is the claimed invention.” *Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017) (citation omitted). Petitioner’s decision to completely reconfigure Sutardja on the basis of being “less dangerous” is hindsight-based reconstruction, as there is no reason Petitioner provides to depart from Sutardja’s teachings besides that a user may prefer a visual aid as opposed to text. Petitioner’s motivation to combine Sutardja with Donnelly is plainly not sufficient motivation to reconfigure Sutardja to add Donnelly’s display.

Additionally, Petitioner wants to further modify Sutardja with Letendre. Pet. at 39-41. First, Petitioner admits that all Grounds require Sutardja to first be modified with Donnelly and then further modified with Letendre. Despite this, Petitioner provides no motivation to combine Letendre’s purported slider with Donnelly’s purported bar graph. As a matter of law, the petition must articulate “why a POSITA would modify the teachings of the references to arrive at the claimed invention.” *Personal Web Techs., LLC v. Apple, Inc.*, 848 F.3d 987, 994 (Fed. Cir. 2017). Here, the Petition relies on modifying “Sutardja-Donnelly to include Letendre,” yet provides

no analysis as to why a POSITA would combine Letendre with Donnelly. Pet. at 40. This alone should warrant denial of institution.

However, even assuming Petitioner's proposed motivations for adding Letendre to Sutardja equally apply to Donnelly, they remain deficient. First, Petitioner wants to take Letendre's physical slider and apparently implement this technology in graphical form. Pet. at 39-40. As discussed above, Letendre fails to teach the claimed invention, as it teaches at best an unclaimed embodiment of the '788 Patent directed to distance as opposed to selecting desired amount of charge. Letendre's logarithmic scale in its dashboard illustrates that the user has selected the need to travel 10 miles. It should be noted that however, that the text field to the right makes clear that there is enough charge to go 20.6 miles. EX1007, 9. This seeming inconsistency results from the fact that the "distance needed for next trip" is not indicative of the present "charged for [blank] miles" value while neither of the two values are enhanced by knowing the percentage of the battery that is charged.

Therefore, adding Letendre's "slider" to Donnelly's battery status screen doesn't make sense and demonstrates Petitioner's cherry-picking strategy from various disclosures. *See Advanced Display Sys., Inc. v. Kent State University*, 212 F.3d 1272, 1280 (Fed. Cir. 2000); *see also Ex parte Carlucci*, Appeal No. 2010-006603, 2012 WL 4718549, at *2-3 (P.T.A.B. Sept. 28, 2012).

Further, there is no possible use to have the battery charge, possessing a linear scale of charge, displayed in combination with a desired distance selector having a nonlinear scale of miles as neither the scales nor the attendant units align, and as discussed above, displaying a current battery charge level is meaningless to a user who desires to select a distance of travel. Moreover, Petitioner does not explain why such combination would be used. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1143 (Fed. Cir. 1985) ("[T]here must be some reason for the combination other than the hindsight gleaned from the invention itself."). A POSITA would recognize that these references are applied to different concepts and there would not be motivation to combine Letendre with Donnelly and Sutardja. EX2001, ¶¶51-54.

Petitioner's "motivations" take multiple references and rely on motivations such as safety for creating a graphical user display. In short, Petitioner's analysis is driven exclusively by hindsight reasoning based on the roadmap provided by the claimed invention. *See Cheese Sys. v. Tetra Pak Cheese & Powder Sys.*, 725 F.3d 1341, 1352 (Fed. Cir. 2013) (Among the difficult challenges of applying the doctrine of obviousness is avoidance of even a hint of hindsight. Obviousness cannot be based on the hindsight combination of components selectively culled from the prior art to fit the parameters of the patented invention.") (internal quotation marks omitted).

XII. GROUND 1, 2, AND 3: PETITIONER HAS NOT ARTICULATED ANY MEANINGFUL MOTIVATION TO COMBINE OR A REASONABLE EXPECTATION OF SUCCESS

Moreover, Petitioner's cobbling together of several references for each Ground demonstrates that Petitioner is relying on hindsight to try to piece together the claimed invention further confirms that Petitioner has not met its burden. *See Grain Processing Corp. v. Am.-Maize Prods. Co.*, 840 F.2d 902, 907 (Fed. Cir. 1988) ("Care must be taken to avoid hindsight reconstruction by using 'the patent in suit as a guide through the maze of prior art references, combining the right references in the right way so as to achieve the result of the claims in suit.'" (quoting *Orthopedic Equip. Co. v. United States*, 702 F.2d 1005, 1012 (Fed. Cir. 1983))). The Federal Circuit has established that "claims cannot be 'treated ... as mere catalogs of separate parts, in disregard of the part-to-part relationships set forth in the claims and that give the claims their meaning'" *Microsoft Corp. v. Biscotti, Inc.*, 878 F.3d 1052 (Fed. Cir. 2017) (citing *Lindemann Maschinenfabrik GMBH v. Am. Hoist & Derrick Co.*, 730 F.2d 1452, 1458, 1459 (Fed. Cir. 1984)). For reasons established above, each of Grounds 1, 2, and 3 are wrought with conclusory statements on motivation to combine without actual support and rely on incorporating by reference whole portions of the Andrews Declaration. The alleged motivations to combine are simply using the claims as a roadmap without establishing how or why the POSITA would actually combine these references.

A. Petitioner Has Not Shown a Reasonable Expectation of Success in Reconfiguring Sutardja, Donnelly, Letendre, Knockeart and Seelig

As the Federal Circuit and the Board have repeatedly confirmed, to assert obviousness by combining prior art references, a petitioner must prove that: (1) a motivation to combine the references exists; and (2) a POSITA would have had a reasonable expectation of success in combining the references. *See, e.g., Samsung Elecs. Co., Ltd. v. Elm 3DS Innovations, LLC*, 925 F.3d 1373, 1380–81 (Fed. Cir. 2019) (upholding Board’s finding of nonobviousness when Petitioner failed to present reasonable expectation of success). The requirement for proving reasonable expectation of success refers to achieving what is claimed in the patent-at-issue. *Intelligent Bio-Systems, Inc. v. Illumina Cambridge Ltd.*, 821 F.3d 1359, 1367 (Fed. Cir. 2016).

Here, the entirety of Petitioner’s reasonable expectation of success in reconfiguring Sutardja is dependent upon the “ubiquity of GUIs and touchscreens in vehicles.” Pet. at 30. No other time does Petitioner refer to a reasonable expectation of success with respect to combining references. First, Petitioner appears to forget that the priority date for the ‘788 Patent was 2009, and provides no evidence that all cars at this time had touch screens. At this time, it was not “ubiquitous” as many cars were just delving into GUIs that were controlled remotely with a “mouse.” EX2002.

Petitioner and its expert Mr. Andrews simply fail to provide any reasoning why such reconfigurations were to be successful beyond conclusory statements that it was well known, not to mention any assertion as to why combining any two “well known” elements is automatically successful. Petitioner fails to provide a reasonable expectation of success and institution should be denied on this basis.

XIII. THE PETITION’S RELIANCE ON THE ANDREWS’ DECLARATION VIOLATES THE BOARD’S RULES AGAINST IMPROPER INCORPORATION BY REFERENCE AND IMPROPERLY CIRCUMVENTS THE WORD LIMIT FOR IPR PETITIONS.

The Petition is deficient because it utilizes the Declaration of Scott Andrews to improperly incorporate by reference analysis and improperly circumvent the word limit for IPR Petitions. The Board’s rules provide that “[a]rguments must not be incorporated by reference from one document into another document.” 37 C.F.R. § 42.6(a)(3). The Federal Circuit has held that “the ‘prohibition against incorporation of arguments from other documents serves various policy goals, including to ‘minimize the chance that an argument may be overlooked’ and to ‘eliminate[] abuses that arise from incorporation and combination.’” *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1372 (Fed. Cir. 2023) (citing *General Access Solutions, Ltd. v. Sprint Spectrum L.P.*, 811 F. App’x 654, 657 (Fed. Cir. 2020)). Importantly, as the Supreme Court has noted, “the petitioner is master of its complaint.” *SAS Inst., Inc. v. Iancu*, 584 U.S. 357, 363 (2018). It is neither the Patent Owner’s nor the

Board's responsibility to weave together the Petitioner's evidence into a cohesive case.

The Petition repeatedly cites to the Andrews Declaration in lieu of including substantive analysis within the Petition itself, resulting in a clear attempt to bypass the Petition word limit. The Petition is 91 pages (including required certifications) and certifies that it uses 13,327 words, a mere 673 words short of the 14,000-word limit. *Pet.*, at 80. The Andrews Declaration, excluding the Andrews Curriculum Vitae, is over 140 pages. As to the word count, even considering only the substantive portion of the Andrews Declaration, starting at page 79 from the section headered "VII. SUMMARY OF THE PRIOR ART REFERENCES", through and excluding the "CONCLUSION" uses well in the multiples of the allotted 14000 words. Given the conclusory analysis in the Petition, as discussed herein, the only way to potentially understand the Petitioner's proposed unpatentability challenges is to wade through the extraneous pages cited within the Andrews Declaration.

Not only is the word count telling of the amount of improper incorporation by reference, but so are the exhibits relied on in the Andrews Declaration that *are not even cited or referenced in the Petition*, even when the Petition is citing the paragraphs of the Andrews Declaration that rely on additional evidence for support. For example, regarding Ground 1 alone, the Petition cites three (3) references (Sutardja, Donnelly, Letendre,) and the Andrews Declaration. However, for Ground

1, the Andrews Declaration cites to *many* additional references in addition to references actually “relied upon” by Petitioner. For example, Dr. Andrews relies on Kempton, Pollack (EX1020), Sims (EX1022), Sandeep (EX1014) just for the background – all not cited by Petitioner in its actual Grounds. With respect to the motivation to combine that Petitioner relies upon, Dr. Andrews refers to his Overview of the Technology and references not cited by the Petitioner. *See e.g.* EX1003, ¶¶140-145 (citing at least seven additional references not relied upon in the Petition).

This incorporation by reference tactic is tantamount to the “practice of citing the Declaration to support conclusory statements that are not otherwise supported in the Petition” which “amounts to incorporation by reference.” *Cisco Systems, Inc. v. C-Cation Technologies, LLC*, IPR2014-00454, Paper 12, 9 (P.T.A.B. Aug. 29, 2014). The petition in *C-Cation* relied on a 250-page expert declaration to present its arguments, which the Board found “amount[ed] to a self-help increase in the length of the brief and [was] a pointless imposition on the court’s time.” *Id.* at 10.

The Federal Circuit recently affirmed the Board’s decision to reject evidence presented only in an expert declaration and incorporated by reference into a brief “in violation of Rule 42.6(a)(3).” *Parus*, 70 F.4th at 1369. The Federal Circuit explained that “[t]he burden of production cannot be met simply by throwing mountains of evidence at the Board without explanation or identification of the relevant portions

of that evidence.” *Id.* at 1371. This the exact path the Petitioner has followed – to bury the record with numerous Exhibits that are not actually relied on in the Petition but instead incorporated by reference via citations to the Petitioner’s Expert Declaration. The improper incorporation by reference exacerbates and further evidences the Petition’s failure to provide an analysis with particularity as discussed above.

To the extent Petitioner is attempting to rely on substantive explanations found in the cited portions of Andrews Declaration to fill the holes in the Petition, such an approach is a violation of Rule 42.6(a)(3) regarding incorporation by reference and improperly avoids the 14,000-word limit for IPR petitions. Accordingly, the Board should deny institution for this reason even without analysis of the merits of the presented Grounds of Rejection.

XIV. CONCLUSION

For the reasons stated above, Patent Owner respectfully asks the Board to deny institution of the Petition.

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Respectfully submitted,

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

I, the undersigned, do hereby certify that the foregoing Patent Owner Preliminary Response, including footnotes, contains no more than 14,000 words, as measured by the Word Count function of Microsoft Word as specified by 37 C.F.R. § 42.24(b)(1).

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CERTIFICATE OF SERVICE

I hereby certify that on April 15, 2025, a true and correct copy of the foregoing PATENT OWNER'S PRELIMINARY RESPONSE was served by electronic mail upon the following counsel of record for Petitioners:

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