

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

TESLA, INC.,
Petitioner,

v.

CHARGE FUSION TECHNOLOGIES, LLC,
Patent Owner.

Case IPR2025-00032
Patent 11,563,338

PATENT OWNER'S PRELIMINARY RESPONSE

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EXHIBIT LIST

Currently Filed – Patent Owner

Ex. No.	Description
2001	Declaration of Steven Goldberg

CLAIM LISTING

Independent Claim 1	
1[pre]	An electrical charging system, comprising:
1[a]	a vehicle sensor;
1[b]	a communication device;
1[c]	a processor in communication with the vehicle sensor and the communication device; and
1[d]	a memory in communication with the processor, the memory storing instructions that when executed by the processor cause the processor to:
1[e]	receive, from the vehicle sensor, information indicative of a presence of an electric vehicle in a parking space;
1[f]	receive, from the communication device, information indicative of one or more charging preferences corresponding to a desired charging of the electric vehicle, wherein the one or more charging preferences are defined by an operator of the electric vehicle;
1[g]	determine, based at least on the one or more charging preferences and at least one current value of a dynamic attribute of an electric charge provider, a charging schedule for the electric vehicle;
1[h]	wherein at least one of the one or more charging preferences is defined by user input received via a graphical user interface and adapted to display a vehicle charge indicator element comprising a first portion indicative of an amount of charge residing in a battery of the electric vehicle and a second portion indicative of an uncharged capacity of the battery of the electric vehicle and wherein the vehicle charge indicator element further comprises a slider by which an amount of charge may be specified;
1[i]	charge, in accordance with the charging schedule, the electric vehicle;
1[j]	receive a selection of a mode of operation of the electric vehicle that is defined by a stored temperature at which a temperature control system of the electric vehicle is to be set to maintain the interior temperature of the electric vehicle while the electric vehicle remains in a parked state;

1[k]	display via the graphical user interface an indication of a status of the selected mode of operation of the electric vehicle, wherein the selected mode of operation comprises maintaining the interior temperature of the electric vehicle suitable for a pet located within the electric vehicle;
1[l]	wherein the selected mode of operation comprises maintaining the interior temperature of the electric vehicle suitable for a pet located within the electric vehicle;
1[m]	operate the temperature control system of the electric vehicle in accordance with the selected mode of operation for a duration of time;
1[n]	determine that an amount of charge residing in a battery of the electric vehicle has reached a predefined threshold; and send an alert to an operator of the electric vehicle indicative of the charge residing in the battery having reached the predefined threshold.

Dependent Claim 2	
2[pre]	The electrical charging system of claim 1,
2[a]	wherein the graphical user interface is adapted to display a web page.
Dependent Claim 3	
3[pre]	The electrical charging system of claim 2,
3[a]	wherein the graphical user interface forms a part of the electric vehicle.
Dependent Claim 4	
4[pre]	The electrical charging system of claim 1,
4[a]	wherein the graphical user interface is adapted to receive a maintenance notification.
Dependent Claim 5	
5[pre]	The electrical charging system of claim 4,
5[a]	wherein the graphical user interface forms a part of a smartphone.
Dependent Claim 6	
6[pre]	The electrical charging system of claim 1,

6[a]	wherein the charging schedule for the electric vehicle is further based upon a factor of safety parameter and wherein the charging comprises transmitting a control signal to a parking space charge device that starts the charging.
6[b]	wherein the charging comprises transmitting a control signal to a parking space charge device that starts the charging.
Dependent Claim 7	
7[pre]	The electrical charging system of claim 6,
7[a]	wherein the one or more charging preferences comprise the factor of safety parameter.
Dependent Claim 8	
8[pre]	The electrical charging system of claim 1,
8[a]	wherein the alert is sent to a smartphone.
Dependent Claim 9	
9[pre]	The electrical charging system of claim 1,
9[a]	wherein the charging of the electric vehicle is conducted via a wireless charging device.

Independent Claim 10	
10[pre]	An electrical charging system, comprising:
10[a]	receiving, from a vehicle sensor, information indicative of a presence of an electric vehicle in a parking space;
10[b]	receiving, via a communication device, information indicative of one or more charging preferences corresponding to a desired charging of the electric vehicle, wherein the one or more charging preferences are defined by an operator of the electric vehicle;
10[c]	determining, by a processor and based at least on the one or more charging preferences and at least one current value of a dynamic attribute of an electric charge provider, a charging schedule for the electric vehicle;
10[d]	charging, by the processor and in accordance with the charging schedule, the electric vehicle;
10[e]	wherein at least one of the one or more charging preferences is defined by user input received via a graphical user interface and

	adapted to display a vehicle charge indicator element comprising a first portion indicative of an amount of charge residing in a battery of the electric vehicle and a second portion indicative of an uncharged capacity of the battery of the electric vehicle and wherein the vehicle charge indicator element further comprises a slider by which an amount of charge may be specified;
10[f]	receiving, via the graphical user interface, a selection of a mode of operation of the electric vehicle that is defined by a stored temperature at which a temperature control system of the electric vehicle is to be set to maintain the interior temperature of the electric vehicle while the vehicle remains in a parked state;
10[g]	displaying, via the graphical user interface, an indication of a status of the selected mode of operation of the electric vehicle, wherein the selected mode of operation comprises maintaining the interior temperature of the electric vehicle suitable for a pet located within the electric vehicle;
10[h]	operating, by the processor, the temperature control system of the electric vehicle in accordance with the selected mode of operation for a duration of time;
10[i]	determining, by the processor, that an amount of charge residing in a battery of the electric vehicle has reached a predefined threshold; and
10[j]	sending, via the communication device, an alert to an operator of the electric vehicle indicative of the charge residing in the battery having reached the predefined threshold.

Dependent Claim 11	
11[pre]	The electrical charging method of claim 10,
11[a]	wherein the graphical user interface is adapted to display a web page.
Dependent Claim 12	
12[pre]	The electrical charging method of claim 11,
12[a]	wherein the graphical user interface forms a part of the electric vehicle.
Dependent Claim 13	

13[pre]	The electrical charging method of claim 10,
13[a]	wherein the graphical user interface is adapted to receive a maintenance notification.
Dependent Claim 14	
14[pre]	The electrical charging method of claim 13,
14[a]	wherein the graphical user interface forms a part of a smartphone.
Dependent Claim 15	
15[pre]	The electrical charging method of claim 10,
15[a]	wherein the charging schedule for the electric vehicle is further based upon a factor of safety parameter and
15[b]	wherein the charging comprises transmitting a control signal to a parking space charge device that starts the charging.
Dependent Claim 16	
16[pre]	The electrical charging method of claim 15,
16[a]	wherein the one or more charging preferences comprise the factor of safety parameter.
Dependent Claim 17	
17[pre]	The electrical charging method of claim 10,
17[a]	wherein the alert is sent to a smartphone.
Dependent Claim 18	
18[pre]	The electrical charging method of claim 10,
18[a]	wherein the charging of the electric vehicle is conducted via a wireless charging device.

Independent Claim 19	
19[pre]	An electrical charging system, comprising:
19[a]	a vehicle sensor;
19[b]	a communication device;
19[c]	a processor in communication with the vehicle sensor and the communication device; and

19[d]	a memory in communication with the processor, the memory storing instructions that when executed by the processor cause the processor to:
19[e]	(a) receive, from the vehicle sensor, information indicative of a presence of a vehicle in a parking space;
19[f]	(b) receive, from the communication device, information indicative of one or more charging preferences corresponding to a desired charging of the vehicle, wherein the one or more charging preferences are defined by an operator of the vehicle;
19[g]	(c) determine a first value of a dynamic attribute of an electric charge provider;
19[h]	(d) determine, based at least on the one or more charging preferences and the first value of the dynamic attribute, a charging schedule for the vehicle;
19[i]	(e) charge the vehicle in accordance with the charging schedule;
19[j]	(f) retrieve a second value of the at least one dynamic attribute; and
19[k]	(g) repeat (d) and (e), utilizing the retrieved second value of the dynamic attribute as the first value of the dynamic attribute,
19[l]	wherein at least one of the one or more charging preferences is defined by user input received via a graphical user interface and adapted to display a vehicle charge indicator element comprising a first portion indicative of an amount of charge residing in a battery of the electric vehicle and a second portion indicative of an uncharged capacity of the battery of the electric vehicle and wherein the vehicle charge indicator element further comprises a slider by which an amount of charge may be specified;
19[m]	(h) receive a selection of a mode of operation of the vehicle that is defined by a stored temperature at which a temperature control system of the vehicle is to be set to maintain the interior temperature of the vehicle while the vehicle remains in a parked state;
19[n]	(i) display via the graphical user interface an indication of a status of the selected mode of operation of the vehicle,
19[o]	wherein the selected mode of operation comprises maintaining the interior temperature of the vehicle suitable for a pet located within the vehicle;

19[p]	(j) operate the temperature control system of the vehicle in accordance with the selected mode of operation for a duration of time;
19[q]	(k) determine that an amount of charge residing in a battery of the vehicle has reached a predefined threshold; and (l) send an alert to an operator of the electric vehicle indicative of the charge residing in the battery having reached the predefined threshold.

Dependent Claim 20	
20[pre]	The electrical charging system of claim 19,
20[a]	wherein the graphical user interface is adapted to display a web page.
Dependent Claim 21	
21[pre]	The electrical charging system of claim 20,
21[a]	wherein the graphical user interface forms a part of the vehicle.
Dependent Claim 22	
22[pre]	The electrical charging system of claim 19,
22[a]	wherein the graphical user interface is adapted to receive a maintenance notification.
Dependent Claim 23	
23[pre]	The electrical charging system of claim 22,
23[a]	wherein the graphical user interface forms a part of a smartphone.
Dependent Claim 24	
24[pre]	The electrical charging system of claim 19,
24[a]	wherein the charging schedule for the vehicle is further based upon a factor of safety parameter and
24[b]	wherein the charging comprises transmitting a control signal to a parking space charge device that starts the charging.
Dependent Claim 25	
25[pre]	The electrical charging system of claim 24,
25[a]	wherein the one or more charging preferences comprise the factor of safety parameter.

Dependent Claim 26	
26[pre]	The electrical charging system of claim 19,
26[a]	wherein the alert is sent to a smartphone.
Dependent Claim 27	
27[pre]	The electrical charging system of claim 19,
27[a]	wherein the charging of the vehicle is conducted via a wireless charging device.

Independent Claim 28	
28[pre]	An electrical charging system, comprising:
28[a]	a communication device;
28[b]	a processor in communication with the communication device; and
28[c]	a memory in communication with the processor, the memory storing instructions that when executed by the processor cause the processor to:
28[d]	receive, from the communication device, information indicative of at least two charging preferences comprising a time by which an electric vehicle is to be charged to a predetermined amount and an indication that charging of the electric vehicle be based, at least in part, on a cost of providing electrical charge to the electric vehicle,
28[e]	wherein the at least two charging preferences are defined by an operator of the electric vehicle, and wherein at least the predetermined amount of charge is defined by user input received via a graphical user interface and adapted to display a vehicle charge indicator element comprising a first portion indicative of an amount of charge residing in a battery of the electric vehicle and a second portion indicative of an uncharged capacity of the battery of the electric vehicle and wherein the vehicle charge indicator element further comprises a slider by which the predetermined amount of charge may be specified;
28[f]	determine, based at least on the at least two charging preferences, that the electric vehicle cannot be charged in accordance with the at least two charging preferences;
28[g]	issue an alert that charging the electric vehicle in accordance with the at least two charging preferences is not possible;

28[h]	receive an updated value for at least one of the at least two charging preferences in response to the issuance of the alert;
28[i]	determine, based at least on the updated value for the at least one of the at least two charging preferences, that the electric vehicle can now be charged in accordance with the at least two charging preferences; and
28[j]	charge the electric vehicle in accordance with the at least two charging preferences.

Dependent Claim 29	
29[pre]	The electrical charging system of claim 28,
29[a]	wherein the charging of the electric vehicle in accordance with the at least two charging preferences is conducted utilizing a wireless charging device.

I. INTRODUCTION

Charge Fusion Technologies, LLC, the owner of U.S. Patent No. 11,563,338 (“’338 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 1-29 the ’338 Patent (“Challenged Claims”).¹

II. SUMMARY OF THE ARGUMENT

The Board should determine that all Challenged Claims are not unpatentable based on the merits and because the Petition has improperly attempted to circumvent the IPR word count limit. In particular, Patent Owner has failed to provide, with particularity, reasoning for combining six asserted references (Ferro in view of Oyobe, Donnelly, Letendre, Zeigler, and Galvez-Ramos). Upon careful review of these references, it is clear that the person of ordinary skill in the art would not modify Ferro in the many convoluted ways as alleged in the Petition.

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 incorporating the analysis from that other claim element by reference. In multiple instances, the referenced limitation doesn’t even include the same subject matter. Moreover, the Petition fails to cite

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

or even reference dozens (over 41) additional exhibits relied on by the 238-page Expert Declaration, instead improperly incorporating the declaration and analysis therein by reference into the Petition to avoid going beyond the word count.

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

III. RELATED PROCEEDINGS

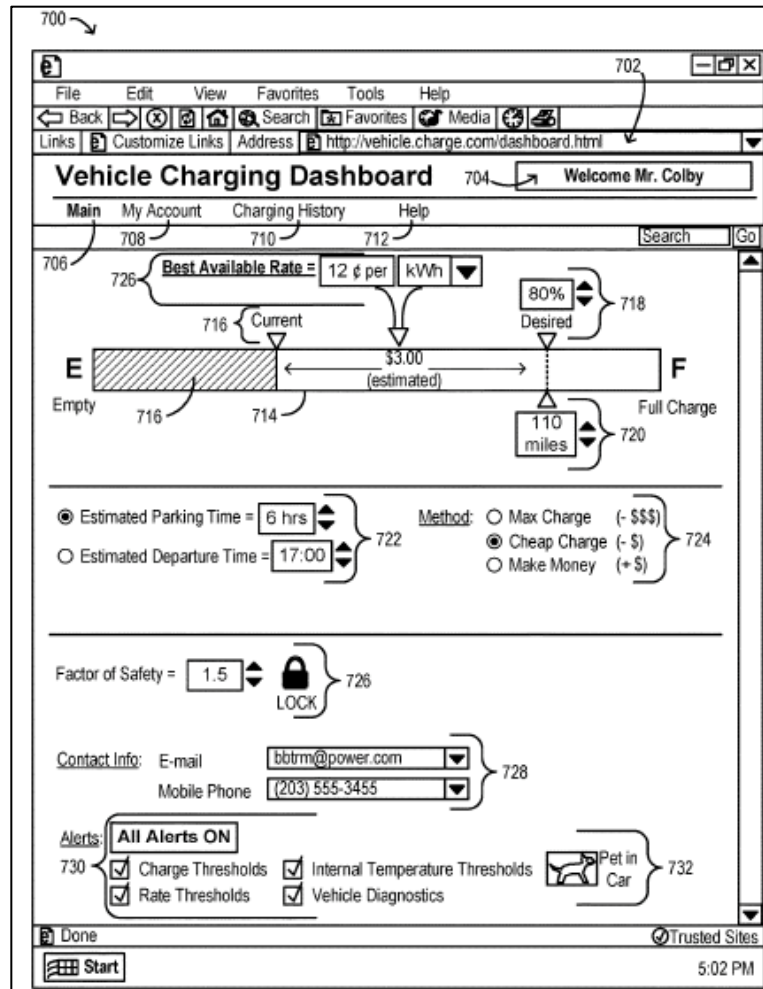
The '338 Patent is involved in *Charge Fusion Technologies, LLC v. Tesla, Inc.*, 1:22-cv-00488 (W.D. Tex.) (“Texas Litigation”).

IV. THE '338 PATENT PRESENTS A NOVEL SYSTEM AND METHOD FOR ELECTRIC VEHICLE CHARGING AND POWER MANAGEMENT

The '338 Patent, entitled “Systems and Methods for Electric Vehicle Charging and Power Management,” was filed on June 1, 2022, issued on January 24, 2023, and claims priority to Provisional Application No. 61/134,646, which was filed on July 11, 2008. EX1001, 2. According to the '338 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 ‘338 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 ‘338 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 ‘338 Patent teaches a system 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, 6-7, 9-13, 15-16, 18-22, 24-25, and 27	§ 103	Ferro ³ in view of Oyobe, ⁴ Donnelly, ⁵ Letendre, ⁶ Zeigler, ⁷ and Galvez-Ramos ⁸
2	5, 8, 14, 17, 23, and 26	§ 103	Ferro in view of Oyobe, Donnelly, Letendre, Zeigler, Galvez-Ramos, and Knockeart ⁹
3	28-29	§ 103	Ferro in view of Donnelly, Letendre, and Sutardja ¹⁰

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

³ U.S. Patent Pub. No. 2009/0313034 A1 (EX1004).

⁴ European Patent No. 1,920,968 (EX1005).

⁵ U.S. Patent No. 7,124,691 (EX1006).

⁶ *The V2G Concept, A New Model for Power* (EX1007).

⁷ U.S. Patent No. 6,889,762 (EX1009).

⁸ U.S. Patent Pub. No. 2009/031965 A1 (EX1008).

⁹ U.S. Patent No. 6,622,083 (EX1010).

¹⁰ U.S. Patent Pub. No. 2008/0136371 (EX1011).

VI. OVERVIEW OF THE RELEVANT ALLEGED PRIOR ART

A. Ferro (EX1004)

Ferro discloses “[a] computer implemented method, apparatus, and computer program product for generating a dynamic energy transaction plan to manage an electric vehicle charging transaction.” EX1004, Abstract.

The dynamic energy transaction plan “comprises an identification of the electric vehicle, an identification of a principal in the set of principals to pay for the charging transaction, an identification of at least one utility associated with the charging transaction, an owner of the charging station, and a first set of terms of the charging transaction.” *Id.*, [0008]. The “process for generating dynamic energy transaction plan 424 begins when electric vehicle 400 arrives at charging station 403 and indicates an intention to charge, de-charge, or store electric energy on electric vehicle 400.” *Id.*, [0109]. An “initial portion of the charging transaction is controlled in accordance with the first set of terms of the dynamic energy transaction plan.” *Id.* If updated charging information is received “during execution of the charging transaction,” the “dynamic energy transaction plan” is updated based on the updated charging information “to form an updated dynamic energy transaction plan.” *Id.* “A second portion of the charging transaction is implemented in accordance with the second set of terms in the updated dynamic energy transaction plan.” *Id.*

Figure 1 “depicts a pictorial representation of a network of data processing system in which illustrative embodiments may be implemented”:

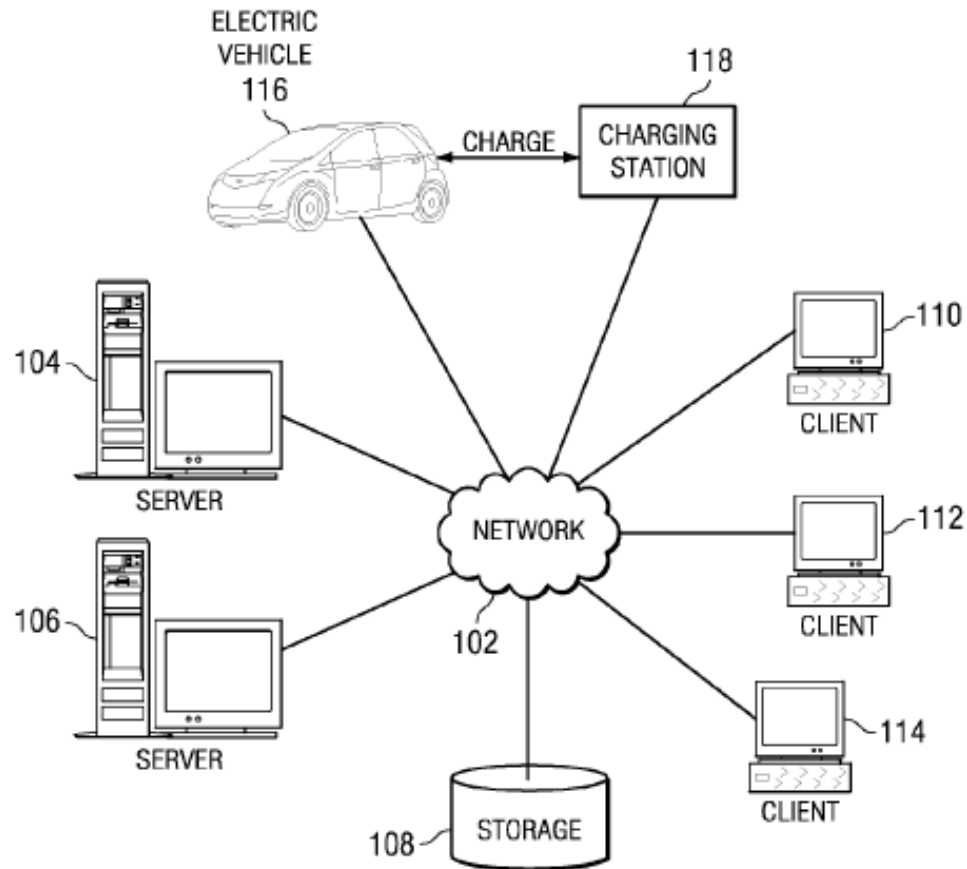


FIG. 1

Id., Fig. 1, [0032]. The electric vehicle 116 and charging station 118 send and receive data associated with the charging of electric vehicle, including “the capabilities of electric vehicle, the capabilities of charging station 118, the current charge stored in electric vehicle, the rate of charging electric vehicle, the price of electricity received from a power grid, identity of the owner and/or operator of electric vehicle 116 and/or any other data relevant to charging or de-charging electric vehicle 116 over network 102.” *Id.*, [0037].

Figure 4 is a block diagram of a dynamic energy transaction planner on-board an electric vehicle 400, “an electric vehicle that relies in whole or in part on electricity to drive the vehicle, such as, without limitation, electric vehicle 116 in FIG. 1”:

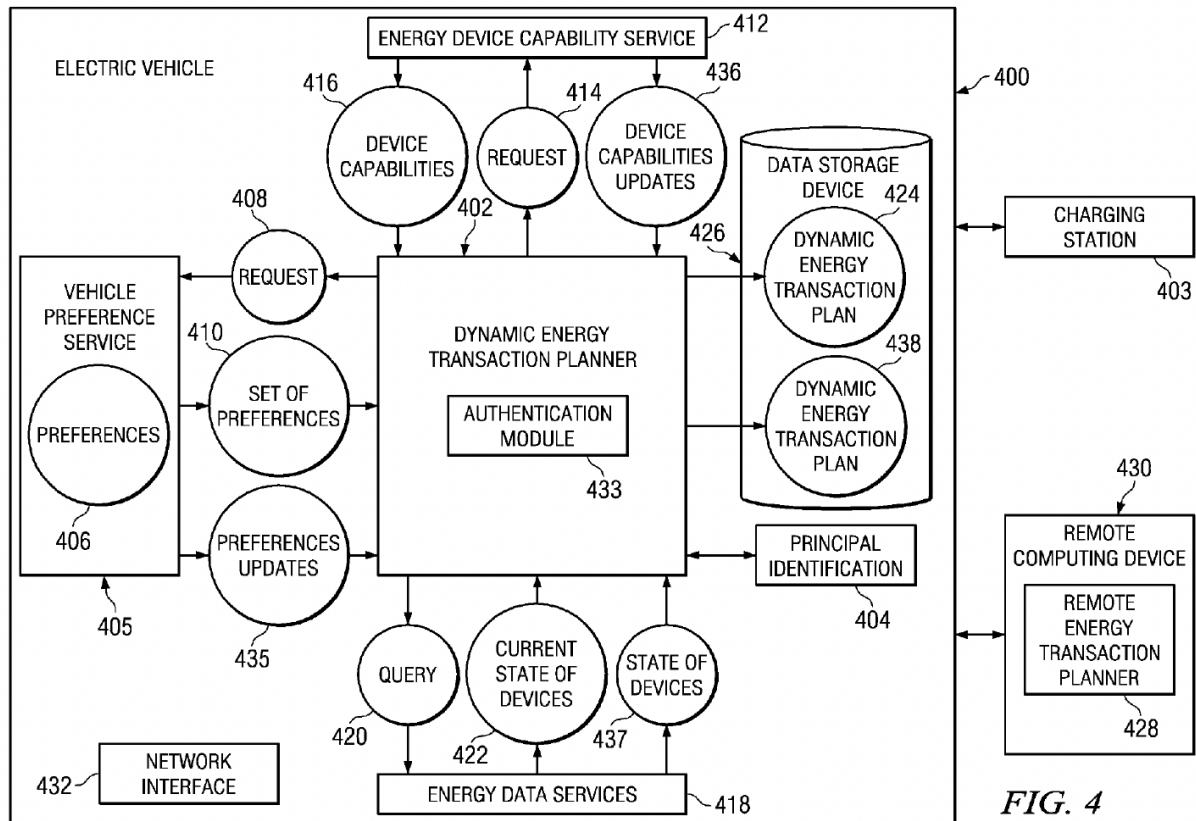


FIG. 4

Id., Fig. 4, [0076]. Dynamic energy transaction planner 402 “is a software component that creates a transaction plan for controlling a charging transaction for electric vehicle 400 coupled to charging station 403, such as dynamic energy transaction planner 310 in FIG. 3.” *Id.*, [0076].

Vehicle preference service 405 “is a software component for creating, managing, storing, requesting, updating, and/or retrieving preferences 406 for electric vehicle 400” that

“is included within or bolted on electric vehicle 400.” *Id.*, [0082]. Principals may also “utilize an energy preference service that is located on a computing device that is remote from electric vehicle 400 to create and/or manage preferences for the given principal.” *Id.*, [0083]. When the energy preference service is located remotely, a set of preferences may be sent to dynamic energy transaction planner 402 by the remote energy preference service using a wired or wireless network connection. *Id.*, [0091]. Ferro discloses that the dynamic energy transaction planner requests preferences from an energy preference service, which it uses to generate terms for a dynamic energy transaction plan. *Id.*, [0143].

B. Oyobe (EX1005)

Oyobe is directed to “an electric-powered vehicle that can effectively inform a user about lowering of the SOC of a battery.” EX1005, [0006]. To inform the user about lowering of the SOC of a battery, as shown in Figure 16, reproduced below, Oyobe’s vehicle 100 includes “informing apparatus 102 ... provided at the exterior of the vehicle for informing the vehicle user outside the vehicle about the necessity of charging main battery.” *Id.*, [0040]. By placing the informing apparatus 102 outside of the vehicle, Oyobe addresses a specific issue – “the vehicle user can more surely be prevented from forgetting to charge the

electric power storage apparatus despite the lowered SOC of the electric power storage apparatus.” *Id.*, [0012].

FIG.2

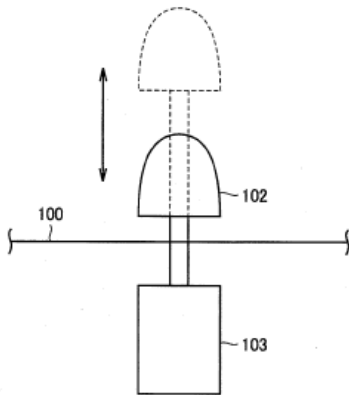


FIG.3

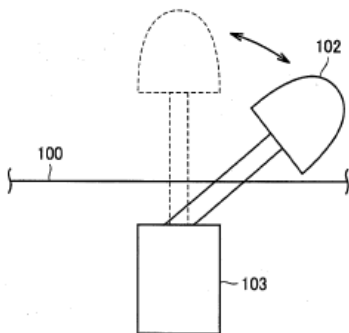
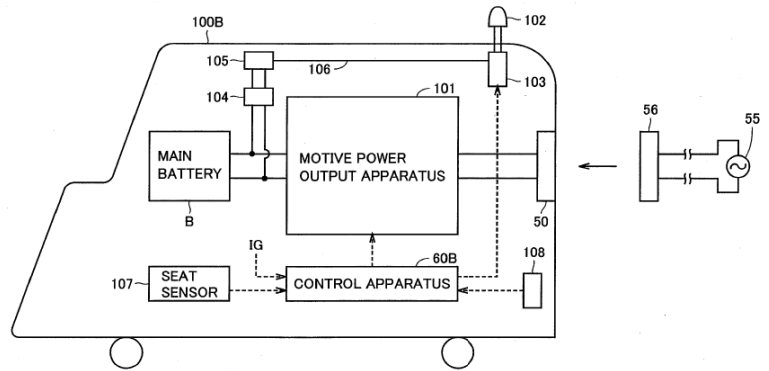


FIG.16



As shown in Oyobe’s Figures 2 and 3, reproduced to the left, Oyobe’s informing apparatus 102 may mechanically change positions “so as to attract the vehicle user’s attention” when the battery power is low. *Id.*, [0047]. This mechanical change includes altering “projection amount” (*Id.*); “the angle of informing apparatus 102 relative to the external surface of the vehicle” (*Id.*, [0047]); by changing the “tilt amount” (*Id.*, [0048]); by changing an information pattern, such as vibrating the informing apparatus 102 (*Id.*, [0128]); or by using “a light emitting apparatus” or “sound source”. *Id.*, [0152].

Trigger conditions for actuating the informing apparatus 102 include:

1. determining “whether or not the ignition key has been turned to the OFF position” *Id.*, Figs. 1-12, [0051], [0122];

2. “whether or not the SOC of main battery B is smaller than a reference value.”
Id., Figs. 1-12, [0046], [0124];
3. determining “whether or not the driver is seated in the driver’s seat” thereby indicating “the driver has exited from the vehicle” using a seat sensor 107. *Id.*, Fig. 14, [0132]-[0133];
4. detection of “whether or not hybrid vehicle 100B is parked at the location where charging equipment is installed” *Id.*, Fig. 16, [0141]-[0145].

Regarding trigger condition 4, above, Oyobe only detects when the vehicle is at an unspecified general “location where charging equipment is installed.” There is no discussion in Oyobe about what “location” means. E.g., is being at a store with a vehicle charging station somewhere on the premises the same as detecting “location where charging equipment is installed”? Oyobe never discusses detecting that a vehicle is at the specific place needed to initiate charging of the vehicle, but instead just discusses general and unspecified “location” based on “a car navigation apparatus” or “based on the communication with a radio apparatus (not shown) provided at the location where the charging equipment is installed.” *Id.*, [0142].

Oyobe uses these trigger conditions such that “unnecessary power consumption can be prevented” by not activating informing apparatus 102 in situations where the driver doesn’t need indication to charge the vehicle battery. *Id.*, [0020], [0022], [0030], [0145].

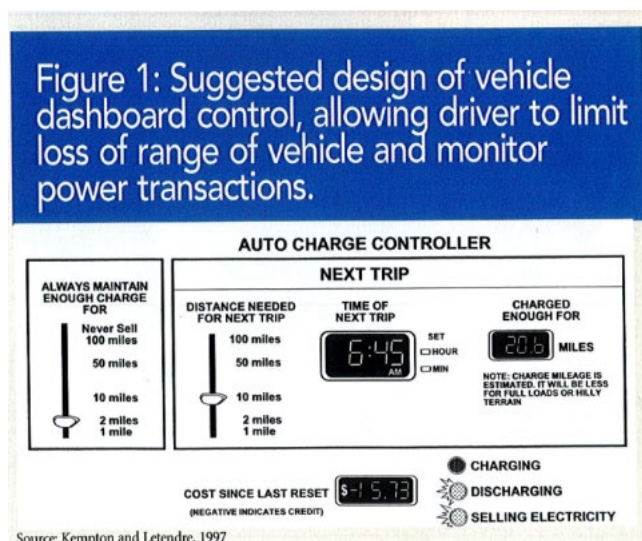
C. Donnelly (EX1006)

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 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.

D. 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.

E. Galvez-Ramos (EX1008)

Galvez-Ramos is directed to “a string of *dedicated batteries*, that will be provide the energy for a fan blower, which can be used during the summer time to blow the cooler outside air inside the vehicle, or during winter time to run the fan blower plus a heater resistor filament that will heat up the air inside the vehicle.” EX1008, Fig. 1, [0010]; *see also* [0014]-[0015]. Galvez-Ramos’ system is expressly described as separate and distinct from “the standard A/C system or the automobile forced air ventilation system.” *Id.*, [0039], [0046]. Galvez-Ramos expressly teaches away from using the “automobile’s air conditioner or heater, which would require the presence of the driver, to start the vehicle and for the car to be located in an open area to avoid the fumes which can cause harm.” *Id.*, [0009].

Galvez-Ramos requires a manual button “that the driver before exiting the car pushes” as one of three conditions *required* in order to activate the Galvez-Ramos system. *Id.*, [0039].

F. Zeigler (EX1009)

Zeigler, which is titled “Vehicle Air Conditioning And Heating System Providing Engine On and Off Operation” is directed to an heating, ventilation and air conditioning

(“HVAC”) system for on road or off-road vehicles that allows the air conditioning unit to be functional irrespective of the operational condition of the engine. EX1009, Abstract. Zeigler’s HVAC system is designed to be operational independent of the state of the engine within the vehicle. EX1009, 2:24-29. The vehicle in Zeigler is not electric, but the vehicle may contain a separate battery to operate the HVAC system. EX1009, 3:11-26. Zeigler’s HVAC system contains a controller, which operates the HVAC system based upon the available source of power. EX1009, 2:53-56. The HVAC system will automatically turn off in order to preserve battery to be able to start the vehicle disclosed within Zeigler. EX1009, 2:53-65. Zeigler notably does not contemplate maintaining a temperature suitable for a pet or the ability to control the temperature of a vehicle from a remote location.

G. Knockart (EX1010)

Knockart 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. Knockart’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 Knockart’s phone “provide[s] a vehicle’s GUI.” *Pet.*, 8. However, this overextends the actual disclosure of Knockart. Knockart 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. Knockart 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.

H. Sutardja (EX1011)

Sutardja is directed to “systems and methods for charging batteries in vehicles.” EX1011, [0002]. Sutardja charges based on “charging parameters”. *Id.* [0235].

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. 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. If trial

is instituted, however, and to the extent deemed necessary to resolve any dispute, Patent Owner reserves the right to propose more specific construction of one or more claim terms.

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. 35 U.S.C. § 316(e); .

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 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))).

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 limitation 10[a] in Ground 1 is “2. 10[a] Claims 1[a], 1[e].” *Pet.*, 65. There is no analysis of how limitations 1[a], 1[e] map to limitation 10[a]. There is not even a statement of incorporation by reference of the analysis of limitations 1[a], 1[e] into the analysis of

limitation 10[a]. 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). Similar statements devoid of *any* analysis, mapping, or incorporation by reference are provided for each of: limitations 10[c], 10[d], 10[e], 10[g], 10[h], 10i, 10[j], claim 11 (e.g., “I. Claim 11” followed only by “Claim 2”; *Pet.*, 65), Claims 12, 13, 15, 16, 18, limitations 19[pre]-[f], 19[h], 19[i], 19[l]-19[q], claims 20, 21, 22, 24, 25, 27, of Ground 1; and limitations 28[Pre]-[c], and claim 29 of Ground 3. *Pet.*, 65-68, 71-74, 82. 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. For example, in Addressing limitation 28[e], the Petition states: “[t]he mappings and motivations provided for Claim 1[h] are incorporated herein.” *Pet.*, 75-76. However, no such analysis is provided for many limitations as listed above.

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.

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 Petitioner's deficiency as the Petition is only 104 words short of the Petition word limit. *See Pet.*, 101. 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: PETITIONER FAILED TO ESTABLISH THAT FERRO IN VIEW OF OYOBE, DONNELLY, LETENDRE, ZEIGLER, AND GALVEZ-RAMOS RENDERS OBVIOUS CLAIMS 1-4, 6-7, 9-13, 15-16, 18-22, 24-25, AND 27

Petitioner has failed to show that Ferro in view of Oyobe, Donnelly, Letendre, Zeigler, and Galvez-Ramos renders obvious independent Claims 1, 10, and 19 (and dependent claims 2-4, 5-7, 9, 11-13, 15-16, 18, 20-22, 24-25 and 27) and has not articulated any meaningful motivation to combine or a reasonable expectation of success. For the reasons stated below, Ground 1 fails, and institution should be denied.

A. Ferro in view of Oyobe, Donnelly, Letendre, Zeigler, and Galvez-Ramos fails to render obvious limitations 1[e], 10[b], or 19[e] of claims 1, 10, and 19, respectively.

Claims 1, 19 and respective dependent claims require a “vehicle sensor” and “receive, from the vehicle sensor, information indicative of a presence of an electric vehicle in a parking space” in limitation 1[e] of Claim 1 and limitation 19[a] and 19[e] of claim 19; and claim 10 and respective dependent claims requires “a vehicle sensor ... receiving, from a vehicle sensor, information indicative of a presence of an electric vehicle in a parking space” in limitation 10[a] of Claim 10, and (hereinafter collectively referred to as the “vehicle sensor limitations”). *See* EX2001, ¶¶54-64.

1. One of ordinary skill in the art would not be motivated to combine Ferro with Oyobe, nor does the Petition provide adequate reasoning for why Ferro would be combined with Oyobe.

One of skill in the art would not combine Ferro with Oyobe to render obvious the vehicle sensor limitations, which require “a vehicle sensor” and “receive, from the vehicle sensor, information indicative of a presence of an electric vehicle in a parking space”, respectively.

First, regarding limitation 1[e], the Petition does not provide any motivation to combine, nor does it refer to previous motivation to combine Ferro with Oyobe by incorporation. Therefore, the Petition has not shown with particularity why one of ordinary skill in the art would combine Ferro with Oyobe to read on limitation 1[e].

Furthermore, addressing the “vehicle sensor” limitation 1[a], the Petition states:

A POSITA would have found it obvious and been motivated to incorporate Oyobe's detecting apparatus 108 into Ferro's electric vehicle 116/400 to detect when the vehicle is parked at a charging station, per Oyobe. *Dec.*, 150. ... Providing Oyobe's wireless detecting to detect the vehicle parked at the charging station advantageously allows a user to instruct charging without exiting the vehicle and physically interacting with a charging station. *Dec.*, 151-152.

Petitioner's proposed motivation to add Oyobe to Ferro to "detect a vehicle parked *at the charging station*" is misguided. Oyobe, although directed towards an electric powered vehicle, does not teach or suggest any charging station. EX1005, [0006]. Instead, Oyobe is directed towards alerting the user when battery is low. *Id.* at [0047] Oyobe is silent to a charging station or a charging location. *Id.* at [0047]. Accordingly, as explained in further detail below, there would be no motivation to add Oyobe's vehicle sensor as it does not detect a vehicle at a specific location, not to mention detecting a vehicle parked at a charging station.

Careful inspection of Ferro and Oyobe establishes that one of skill in the art would not combine Ferro with Oyobe. In analyzing motivation to combine, one must look at "the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." *In re Kahn*, 441 F.3d 977, 987-988, (Fed. Cir. 2006). Analysis of Ferro and

Oyobe as a whole, and the nature of the problem each reference is solving, evidences that Ferro would not be combined with Oyobe.

Ferro discloses “[a] computer implemented method, apparatus, and computer program product for generating a dynamic energy transaction plan to manage an electric vehicle charging transaction.” EX1004, Abstract. The Petition paraphrases, *incorrectly*, a key portion of the Ferro reference by alleging Ferro combined with Oyobe “combines prior art elements (wireless interrogation, EV charging stations) according to known methods to yield predictable results of enabling “an intention to charge” without an operator leaving the vehicle.” *Pet.*, at 12. This paraphrase is telling of the flaw in the Petition’s analysis. See EX2001, ¶62. As illustrated below, Ferro actually teaches that

the process for generating dynamic energy transaction plan 424 begins *when electric vehicle 400 arrives at charging station 403 and indicates an intention to charge, de-charge, or store electric energy on electric vehicle 400*. Electric vehicle 400 may indicate an intention to begin a charging transaction by plugging into an electric outlet for charging/discharging electric power, selecting an option for charging/discharging electric power at an input/output device associated with charging station 403, informing an operator or attendant of charging station 403, or otherwise indicating a desire to begin a charging transaction.

EX1004, [0109]; emphasis added. Therefore, reading Ferro, the POSITA would understand that the nature of the problem solved by Ferro is creating a dynamic energy transaction plane that is initiated when (i) the vehicle is actually at a charging station 403, and (ii) the operator

has “an intention to charge, de-charge, or store electric energy on electric vehicle 400.” *Id.*, ¶ 57.

As mentioned above, Oyobe describes that Oyobe’s vehicle is at an unspecified general “location where charging equipment is installed.” EX1005, [0145]. Oyobe’s disclosure does not identify if the Oyobe vehicle is in position where Oyobe’s charging equipment can actually charge the Oyobe vehicle. *Id.*, ¶ 56. In fact, Oyobe’s informing apparatus 102 would not be activated if the Oyobe driver was actually ready to charge the vehicle. *Id.*, ¶ 59. The nature of the problem solved by Oyobe addresses “if the driver forgets to charge the battery in the first place when he exits the vehicle despite the lowered SOC of the battery, the charging work itself will not be performed.” *Id.*, [0005]. The solution provided by Oyobe allows “the vehicle user can more surely ***be prevented from forgetting to charge the electric power storage apparatus*** despite the lowered SOC of the electric power storage apparatus.” *Id.*, [0012]; emphasis added; *see also* EX2001, ¶58.

The Petition (paraphrasing Oyobe yet again) incorrectly alleges “A POSITA would have found it obvious and been motivated to incorporate *Oyobe’s* detecting apparatus 108 into Ferro’s electric vehicle 116/400 to detect when the vehicle is parked at a charging station, per *Oyobe. Dec.*, 150.” *Pet.*, 11. Review of the problem solved by Oyobe establishes the Petition is mischaracterizing Oyobe in this allegation. *See* EX2001, ¶54. If the Oyobe driver is expressly pulling into a space dedicated for charging the vehicle, the driver would

not be “forgetting to charge the vehicle” as described as a problem by Oyobe, but instead would be actively charging the vehicle. *id.*

Indeed, the problem solved by the Oyobe disclosure (e.g., a driver forgetting to charge) is informative to the capability of Oyobe’s “vehicle position detecting apparatus 108” and to the fact that the data generated by Oyobe’s device is not even useable by Ferro’s system. *Id.*, ¶58. Oyobe reminds the driver of potential desire to charge the vehicle by triggering “an operation command of informing apparatus 102 to actuator 103”. *EX1005*, [0144]; *EX2001*, ¶59. Thus, the informing apparatus 102 signals to the driver that a charge is needed. Were the Oyobe vehicle in the parking space next to a charging station, the Oyobe operator would need no reminder because that parking space is dedicated to a vehicle using the charging station and the driver is intentionally pulling into said parking space to charge the vehicle. Oyobe’s desire to “not unnecessarily operate” (*see EX1005*, [0020], [0022], [0030], [0145]) indicates that Oyobe would not desire to inform the driver of need to charge (and thus output a signal from detecting apparatus 108 to operate informing apparatus 102) when the Oyobe “vehicle is parked at a charging station” as incorrectly stated by the Petition (*Pet.*, 11). *See EX2001*, ¶59.

Accordingly, because Oyobe’s detecting apparatus 108 is not relevant to detecting whether a vehicle is parked at a position where it can initiate charge with a charging station, the signal output from Oyobe’s detecting apparatus 108 ***is unusable in Ferro’s system***. The output from Oyobe cannot satisfy the necessary information needed by Ferro – namely an

express indication of “an intention to charge, de-charge, or store electric energy on electric vehicle 400” so that the generation of the Ferro dynamic energy transaction plan can be initiated. EX1004, [0109]. As such a POSITA would not be led, after reading Oyobe and Ferro, to include the output of Oyobe’s detecting apparatus, or any other portion of Oyobe, in Ferro’s system. *Id.*, ¶61.

Furthermore, the paraphrasing of the Petition alleges that the Ferro-Oyobe combination would “yield predictable results of enabling ‘an intention to charge’ *without an operator leaving a vehicle.*” *Pet.*, 12. However, nothing in Ferro discusses “without an operator leaving a vehicle.” Moreover, the only use of *Oyobe*’s detecting apparatus is as “disposed at a location where it can easily be seen by the driver ***when the driver has exited from the vehicle.***” EX1005, Fig. 14, [0132]-[0133]; emphasis added. Therefore, the Petition mischaracterizes both Ferro and Oyobe, and presents a factually incorrect and conclusory motivation to combine statement. *See* EX2001, ¶62.

In sum Oyobe’s system indicates that (i) Oyobe’s vehicle is an unspecified general location with respect to charging equipment and (ii) Oyobe’s device will not unnecessarily operate when there is no desire to inform the Oyobe operator of a need to charge. Ferro, on the other hand, only initiates Ferro’s dynamic transaction planner when the when the vehicle is actually at a charging station 403, and the operator has “an intention to charge, de-charge, or store electric energy on electric vehicle 400.” EX1004, [0109]. Oyobe’s output from detecting apparatus 108 does not actually specify that the Oyobe vehicle is located at

charging equipment in a position where there is an intention to charge, but instead only informs to prevent to the Oyobe operator from forgetting to charge the vehicle because of being at an unspecified location with respect to charging equipment. The Oyobe output from Oyobe's detecting apparatus 108 *is unusable* in Ferro's system because it cannot, and does not, provide the necessary information to initiate generation of Ferro's dynamic energy transaction plan. A POSITA would not, after reading Oyobe and Ferro, include the output of Oyobe's detecting apparatus, or any other portion of Oyobe, in Ferro's system. *Id.*, 54-64.

Notably, there is zero discussion in the Petition of how the express or implicit disclosure of Ferro and Oyobe individually changes when the references are combined. Thus, the lack of motivation to combine Ferro with Oyobe as discussed above is itself fatal to Ground 1, including when Ferro and Oyobe (and Letendre, Zeigler, and Galvez-Ramos), are combined. Therefore, denial of institution on Ground 1 is respectfully requested for at least these reasons.

2. 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). Regarding the limitation 1[e], the Petition cites to paragraphs 178-181 of the Andrews Declaration. *Pet.*, p. 19-20. Not only do paragraphs 178-181 of the

Andrews Declaration use 344 more words than the Petition (575 in the Andrews Declaration versus 241 in the Petition) regarding limitation 1[e], but these paragraphs also rely on four additional references which are *never* cited in the Petition: Fukuda (Ex. 1057) and Taylor-Haw (Ex. 1053) cited in paragraph 180 of the Andrews Declaration, and Ambrosio (Ex. 1059) and Kressner (Ex. 1018) cited in paragraph 181 of the Andrews Declaration. As such, the Petition is conclusory, and/or otherwise improperly incorporates by reference at least the analysis of the Andrews Declaration associated with limitation 1[e].

3. The improperly incorporated-by-reference material does not remedy the deficiency of Ferro-Oyobe combination

Even if the Andrews Declaration's reliance on non-Petition-cited material was proper, which Patent Owner does not concede, these four references do not remedy the deficiencies of Ferro-Oyobe combination discussed above. Fukuda is relied on by the Andrews Declaration as allegedly teaching "'battery chargers' as being at 'EV parking stations'". *Ex 1003*, ¶ 180. Taylor-Haw is relied on by the Andrews Declaration as allegedly teaching "'charging stations will typically be placed beside a parking space..." *Id.* Ambrosio is relied on by the Andrews Declaration as allegedly teaching "a 'charging station' charging an electric vehicle if the vehicle is 'parked at the charging station'" *Id.*, ¶ 181. Lastly, Kressner is relied on by the Andrews Declaration as allegedly teaching "a 'plug in' hybrid (PIH) vehicle being pulled not a 'recharging space in a parking lot'" *Id.*

The knowledge that parking spaces are located next to EV charging stations (allegedly according to Fukuda and Taylor-Haw per EX1003, ¶ 180), or that vehicles park next to an EV charging station to charge (allegedly according to Ambrosio and Kressner per EX1003, ¶ 181) is does not change the fact that the data output from Oyobe’s detecting apparatus 108 is not useable in Ferro’s system to initiate the Ferro dynamic charge transaction plan.

Accordingly, denial of institution on Ground 1 is respectfully requested for at least these additional reasons.

- B. Petitioner’s “modified” Ferro in combination with Donnelly and Letendre failed to teach or disclose element 1[h], 10[e], or 19[l] “wherein at least one of the one or more charging preferences is defined by user input received via a graphical user interface and adapted to display a vehicle charge indicator element comprising a first portion indicative of an amount of charge residing in a battery of the electric vehicle and a second portion indicative of an uncharged capacity of the battery of the electric vehicle and wherein the vehicle charge indicator element further comprises a slider by which an amount of charge may be specified” of claims 1, 10, and 19, respectively.**

Petitioner’s attempt to cobble together three disparate references to arrive at the claimed invention is misguided, fails to disclose all of the elements, and is undermined by hindsight bias. Even assuming that a POSITA would be motivated to combine Ferro (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 Ferro, Donnelly, and Letendre the user still does not know a desired amount of charge because the user is unable to specify it.

Claims 1, 10, 19 and respective dependent claims require a user interface (e.g. touchscreen) that contains a 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 (e.g. touchscreen), 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 '338 Patent disclose where a user can select the desired amount of charge for a single charge amount:

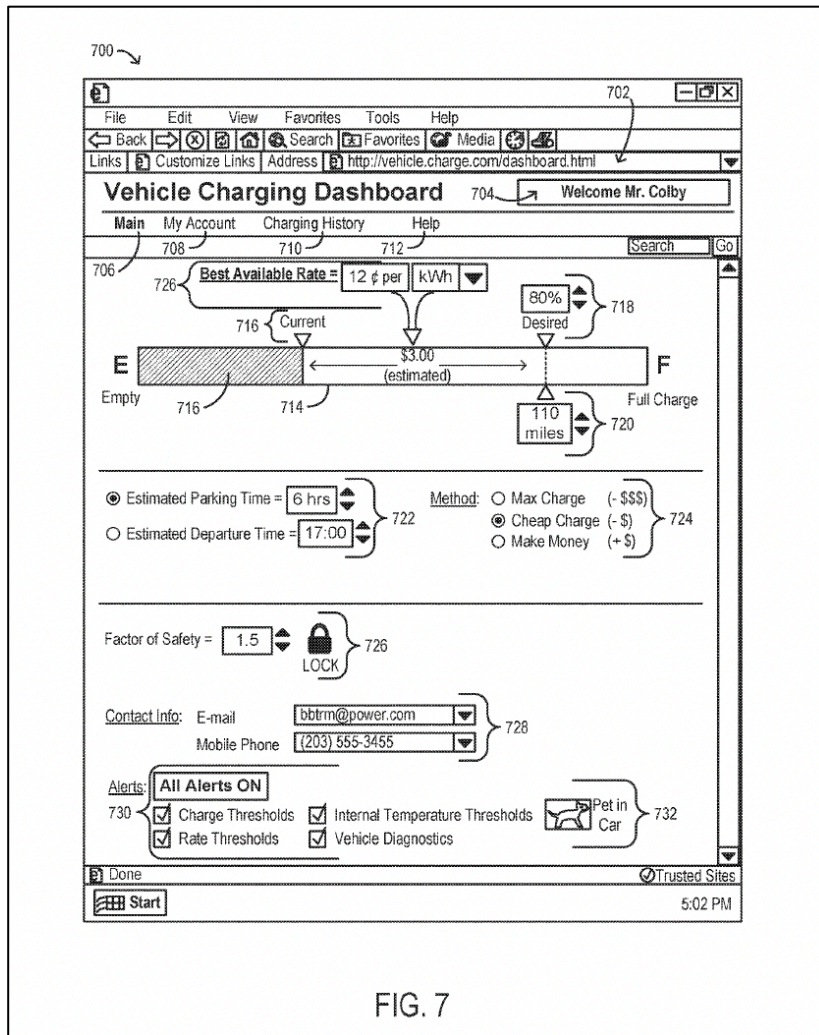


FIG. 7

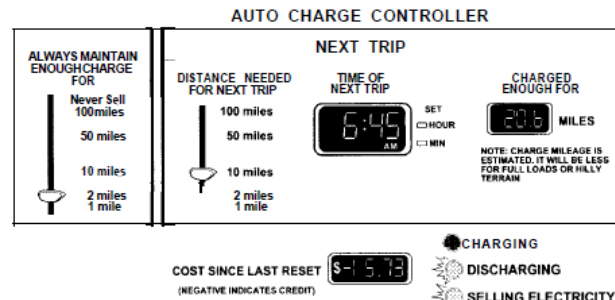
EX1001, Figure 7.

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. 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, ¶¶66. As the ‘338 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 important feature of the ‘338 patent. Petitioner’s case as set forth ignores these specifics of the vehicle charge indicator element and instead relies upon a combination of Ferro (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, ¶67.

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 (page 6 of IPR), 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.” 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, ¶68.

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, a user of *Letendre* would be unable to specify a 70% charge amount. As such, Letendre does not teach specifying an amount of charge, but,

rather, explicitly teaches parameters measured in units 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, ¶70.

Letendre’s figure used by Petitioner 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 vs. non-linear mileage).

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

C. Petitioner Has Not Shown that a POSITA Would Have Been Motivated to Combine Ferro 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. There is no Motivation to Combine Ferro with Oyobe

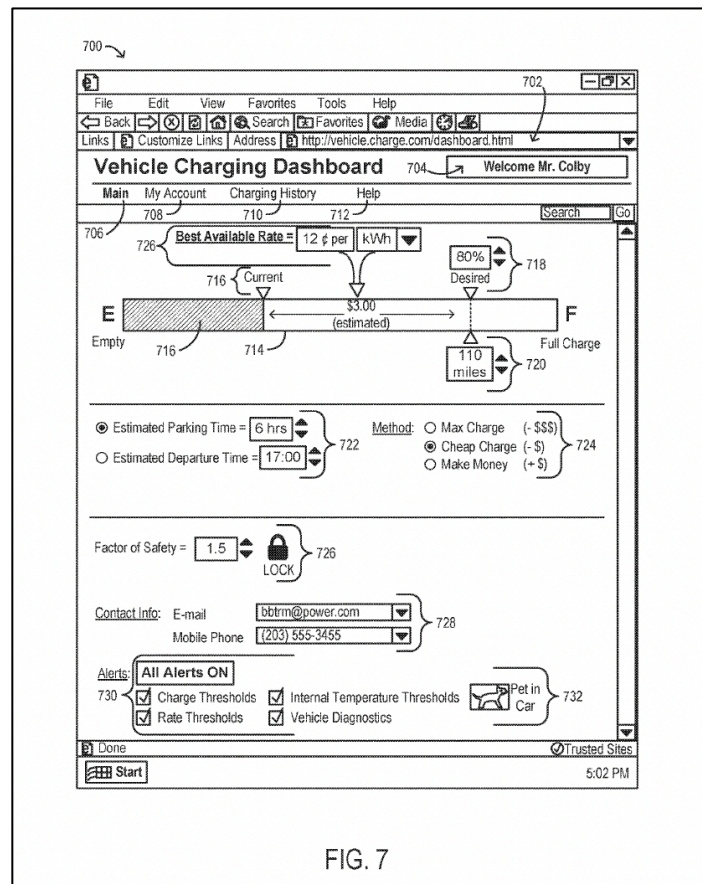
Patent Owner repeats and incorporates by reference the discussion in section XI.A as it applies here.

2. There is no Motivation to Combine Ferro with Donnelly, and Letendre

A POSITA would not have been motivated to combine modified Ferro (Ferro-Oyobe) with Donnelly and Letendre. As explained above, Letendre teaches away from combining its slider for specifying a desired distance to travel with any art, such as Donnelly's picture of a battery, that is measured in units of charge. Therefore, a POSITA would not be motivated to combine these references. In *Chemours Company FC, LLC v. Daikin Industries, Ltd.*, the Federal Circuit reversed an obviousness determination by the PTAB ("Board"), holding that the Board improperly found motivation to modify a prior art reference, where the "inventive concept" of the prior art reference taught away from that modification. 4 F.4th 1370 (Fed. Cir. 2021). *see* EX2001, ¶¶72-74.

The claimed GUI element provides the same scale, i.e. charge, for the two visual output elements showing charge and unused charge capacity are the same scale for specifying a desired battery charge. In both instances, the scale is a ratio or percent of

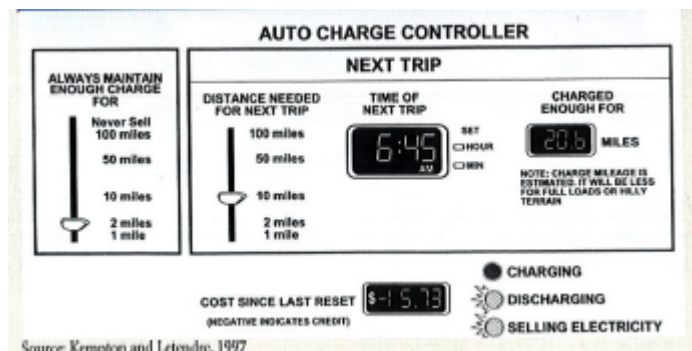
charge. In other words, the first two portions/elements show a percentage of charge in a battery while the slider allows one to set a desired charge level as a percentage of the battery capacity. It is therefore helpful to have the same scale utilized to show (1) a present battery charge and (2) desired future battery charge.



In contrast, Letendre teaches allowing the user to specify a desired condition to be met precisely because the user does not know the relationship between battery charge and desired distance to be able to drive. EX2001, ¶72. If the user knew the desired charge, a slider would be provided to specify such a charge. As a result, in the disclosure of Letendre knowing the present battery charge status is of no use to a user when selecting an

amount of miles desired to travel. *Id.* As a result, combining Letendre's slider for specifying a desired distance to travel with any art, such as Donnelly's picture of a battery, that is measured in units of charge is an unusable modification. *Id.*

Furthermore, as the scales are different, i.e., ratio of battery charge (Donnelly) vs. desired miles of travel (Letendre), presents an incompatibility of the combination to use a single scale to output/input data having the same units. *See* EX2001, ¶¶74-75. This incompatibility is further exacerbated as Donnelly requires units of charge while Letendre requires units of distance. *Id.* Furthermore, Letendre's scale of miles is non-linear (e.g., the 50 mile indicator is well over the halfway mark between 0 and 100 miles), as shown below, while the picture of the battery in Donnelly uses a linear scale (e.g., if half the battery is shaded, the battery is 50% charged). EX1006, Fig. 28.



EX1007, 9.

As a result, Letendre teaches away from the proffered combination of Donnelly and Letendre and, regardless, such a combination fails to teach the fundamental recited element of a slider by which an amount of charge may be specified.

3. Petitioner uses the ‘338 Patent as a Roadmap to Combine Modified Ferro, Donnelly, and Letendre

Petitioner’s stated motivations to combine use the claims as a roadmap without establishing how or why the POSITA would actually combine these references. A POSITA would not look to combine Donnelly, a locomotive invention, with Ferro’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 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.

Letendre’s logarithmic scale in it’s dashboard illustrates that the user has selected the need to travel 10 miles. Note, however, that the text field to the right makes clear, that there

is charge to go 20.6 miles. 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.”).

4. There is no Motivation to Combine Ferro with Zeigler or the other cited references.

Additionally, Petitioner’s use of five references in addition to Ferro for one claim constitutes an apparent major reconfiguration of Ferro for Ground 1. Despite this major

reconfiguration, Petitioner fails to show how the Ferro-Oyobe-Donnelly-Letendre vehicle would incorporate, for example, Zeigler’s off-state HVAC system along with duration of time as described by Galvez-Ramos, or why a POSITA would be motivated to perform such a major reconfiguration. *See Pet.*, 53. At the petition stage, Petitioner has the “burden to demonstrate both that a skilled artisan would have been motivated to combine the teachings of the prior art references to achieve the claimed invention, and that the skilled artisan would have had a reasonable expectation of success in doing so.” *Magnum Oil Tools.*, 829 F.3d at 1381 (internal citation and quotation omitted). Petitioner cannot satisfy its burden through “mere conclusory statements,” but “must instead articulate specific reasoning, based on evidence of record” in order to support an obviousness determination. *Id.* at 1380.

Accordingly, denial of Ground 1 is respectfully requested for at least this additional reason.

D. Petitioner doesn’t address limitations 10[h]-[i], or 19[h].

The Petitioner fails to provide any analysis of claim limitation 10[h], which requires “operating, by the processor, the temperature control system of the electric vehicle in accordance with the selected mode of operation for a duration of time.” The only words regarding limitation 10[h] in the Petition is “Claims 1[h], 1[l].” *Pet.*, 66. Nothing else. Not only is this failure to provide reasoning with particularity, as discussed in detail above in section X, but limitations 1[h] and 1[l] don’t discuss “duration of time” at all and instead

relate to the slider and pet limitations. Thus, the Petition doesn't analyze the language of limitation 10[h] at all.

Limitation 10[i] states "determining, by the processor, that an amount of charge residing in a battery of the electric vehicle has reached a predefined threshold." Regarding limitation 10[i], the Petition only states "Claims 1[c]-1[d], 1[m]." *Id.* None of limitations 1[c]-[d] or 1[m] discuss "an amount of charge residing in a battery of the electric vehicle has reached a predefined threshold" and as such the Petition doesn't analyze the limitation 10[i].

Limitation 19[h] states "(d) determine, based at least on the one or more charging preferences and the first value of the dynamic attribute, a charging schedule for the vehicle." Regarding limitation 19[h], the Petition only states "Claim 1[g]." *Pet.*, 68. However, claim 1[g] doesn't recite the same language as limitation 19[h], instead referencing "a current value of the dynamic attribute" instead of "a first value of the dynamic attribute" as required by limitation 19[h]. As such, the Petition doesn't the language of limitation 19[h].

Denial of Ground 1 is respectfully requested for at least this additional reason.

XII. GROUND 2: PETITIONER FAILED TO ESTABLISH THAT CLAIMS 5, 8, 14, 17, 23, AND 26 ARE UNPATENTABLE AS OBVIOUS OVER FERRO IN VIEW OF OYOBE, DONNELLY, LETENDRE, ZEIGLER, GALVEZ-RAMOS, AND KNOCKEART

A. Ground 2 should be denied for similar reasons presented for Ground 1.

As stated in sections XI.A - XI.D above, which are incorporated by reference here in their entirety, Petitioner has failed to show that Ferro in view of Oyobe, Donnelly, Letendre,

Zeigler, Galvez-Ramos, and Knockeart renders obvious at least limitations 1[e], 1[h], 10[b], 10[e], 19[e], or 19[l] of claims 1, 10, and 19. For the same reasons, and because claims 5, 8, 14, 17, 23, and 26 depend, directly or indirectly, from one of claims 1, 10, and 19, Petitioner has also not shown that renders any of claims 5, 8, 14, 17, 23, and 26 unpatentable as obvious over Ferro in view of Oyobe, Donnelly, Letendre, Zeigler, Galvez-Ramos, and Knockeart. Accordingly, denial of institution of Ground 2 by the Board is respectfully requested for at least this reason.

B. Petitioner has not established a motivation to combine Knockeart with the other cited references for Ground 2.

For Ground 2, Petitioner adds Knockeart's removable personal device to the six references already listed in Ground 1 without describing how a POSITA could be motivated to configure this additional piece in addition to the other five references used to alter the Ferro vehicle. *See Pet.*, 72-73. Petitioner only notes that "[a] POSITA would have appreciated displaying the GUI on a removable device would allow the user to view charging information when they are away from the vehicle," while again relying on their expert to carry Petitioner's burden.

This recitation of the limitation in the claim as a problem to be solved is a hindsight motivation. *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 139 F.3d 877, 881 (Fed. Cir. 1998). "Defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to obviousness." *Id.* Additionally, Petitioner only relies on

the fact that Knockart describes a PDA and does not specify how a POSITA would utilize Knockart's PDA to monitor or input selected modes of operation as claimed in the '338 Patent. Knockart's PDA does not control any mode of operation of the vehicle remotely. Thus, Petitioner has not met its burden in establishing a motivation to combine. *See KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007) (“[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.”).

Accordingly, denial of institution of Ground 2 by the Board is respectfully requested for at least this additional reason.

XIII. GROUND 3: PETITIONER FAILED TO ESTABLISH THAT CLAIMS 28 AND 29 ARE UNPATENTABLE AS OBVIOUS OVER FERRO IN VIEW OF, DONNELLY, LETENDRE, AND SUTARDJA

A. Petitioner's “modified” Ferro in combination with Donnelly and Letendre failed to teach or disclose element 28[e]

Limitation 28[e] of Claim 28, and thus claim 29 dependent therefrom, requires “wherein at least the predetermined amount of charge is defined by user input received via a graphical user interface and adapted to display a vehicle charge indicator element comprising a first portion indicative of an amount of charge residing in a battery of the electric vehicle and a second portion indicative of an uncharged capacity of the battery of the electric vehicle and wherein the vehicle charge indicator element further comprises a slider by which the predetermined amount of charge may be specified.” Addressing claim

28[e], the Petition relies on the discussion of limitation 1[h]: “The mappings and motivations provided for Claim 1[h] are incorporated herein.” *Pet.* 75-76. Ferro, Donnelly, and Letendre do not render obvious the subject matter of limitation 28[e] for similar reasons discussed above in sections XI.B-XI.D, which are incorporated by reference here. The inclusion of Sutardja does not change or alter the analysis presented in sections XI.B-XI.D, and thus Sutardja does not remedy the deficiencies of Ferro, Donnelly, and Letendre with respect to limitation 28[e]. Accordingly, denial of institution of Ground 3 is respectfully requested for at least this reason.

B. Petitioner has not established a motivation to combine the Sutardja with the other cited references of Ground 3.

With respect to Ground 3, Petitioner again uses four separate references – Ferro, Donnelly, Letendre and Sutardja. Petitioner dedicates only a single paragraph on motivation to combine without providing *any* particularity as to why a POSITA would actually combine these references. Instead, Petitioner merely states generic statements such as the modification would yield predictable results and the only motivation that is mentioned is that a POSITA would have recognized a user would “want to know ASAP that charging preferences were unacceptable.” *Pet.*, 81-82. Again, this recitation of the limitation in the claim as a problem to be solved is a hindsight motivation. *Monarch Knitting Mach. Corp. v. Sulzer Morat GmbH*, 139 F.3d 877, 881 (Fed. Cir. 1998). “Defining the problem in terms of its solution reveals improper hindsight in the selection of the prior art relevant to

obviousness.” *Id.* Petitioner provides no motivation within the Petition other than improper conclusory hindsight.

Accordingly, denial of institution of Ground 3 is respectfully requested for at least this additional reason.

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

Moreover, the fact that Petitioner asserts several references for each Ground demonstrates that Petitioner is improperly relying on hindsight, further confirming 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 Ferro in view of Oyobe, Donnelly, Letendre, Zeigler, and Galvez-Ramos

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).

XV. 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 improperly 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 103 pages (including required certifications) and certifies that it uses 13,896 words, a mere 104 words short of the 14,000-word limit. *Pet.*, at 101. The Andrews’ Declaration, excluding the Andrews Curriculum Vitae, is over twice as long as the Petition at 278 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” at page 278 uses an incredible **42,329 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 **42,329 words** of 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 six (6) references (Ferro, Oyobe, Donnelly, Letendre, Zeigler and Galvez-Ramos), the Andrews Declaration, and two additional references (EX1038 and EX1073). However, for Ground 1, the Andrews Declaration cites to ***forty-three*** (43) additional references in addition to Ferro, Oyobe, Donnelly, Letendre, Zeigler and Galvez-Ramos. These forty-three references cited by the Andrews Declaration include: Exhibits 1014-1015, 1019-1020, 1036-1038, 1041-1042, 1045-1046, 1050-1066, 1068-1079, and 1082-1084. Only *two* of the forty-three references are cited in the Petition: “*citing Jansen* (Ex. 1038)” and “*citing Kempton* (Ex. 1073)”. *Pet.* at 32, 39.

This improper incorporation by reference 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 in section X.

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.

XVI. THE BOARD SHOULD EXERCISE ITS DISCRETION TO DENY THE PETITION UNDER 35 U.S.C. § 325(D)

Both parts of § 325(d)’s two-part framework support denying institution of the Petition. In particular, Petitioner has asserted the same or substantially the same art and arguments that was presented to the Office and has failed to demonstrate that the

Office erred in any manner. Denial of institution is thus warranted under § 325(d).

A. The Same or Substantially the Same Prior Art was Previously Presented to the Office

In the first part of the Advanced Bionics framework, the Board may consider the relevant Becton Dickinson factors: (a) the similarities of the asserted art and the art previously considered; (b) the cumulative nature of the asserted art and the art previously considered; and (d) the extent of overlap between arguments made during examination and the petitioner’s arguments. *Id.* at 9-10 (citing *Becton, Dickinson and Co. v. B. Braun Melsungen AG*, IPR2017-01586, Paper 8, 17–18 (PTAB Dec. 15, 2017) (informative)). Petitioner has asserted various grounds of invalidity, all which include the main reference which has been reviewed during the present prosecution, but also the prosecution of many other patents in the same family.

Ground	References	Basis	Challenged Claims
1	<i>Ferro</i> , Oyobe, Donnelly, Letendre, Zeigler, and Galvez-Ramos	§103	1-4,6-7,9-13,15-16, 18-22, 24-25, and 27
2	<i>Ferro</i> , Oyobe, Donnelly, Letendre, Zeigler, Galvez-Ramos and Knockeart	§103	5, 8, 14, 17, 23 and 26
3	<i>Ferro</i> , Donnelly, Letender and Sutardja	§103	28-29

As illustrated above, in all presented Grounds, Petitioner relies on Ferro as its primary reference. And as admitted by Petitioner, Ferro is listed on the face of the ‘338 Patent as a cited Reference. *Pet.*, 82.

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Related U.S. Application Data			
No. 17/012,325, filed on Sep. 4, 2020, now Pat. No. 10,998,753, which is a continuation of application No. 15/848,017, filed on Dec. 20, 2017, now Pat. No. 10,819,135, which is a continuation of application No. 12/502,041, filed on Jul. 13, 2009, now Pat. No. 9,853,488.	8,198,856 B2 8,531,162 B2 2003/0152088 A1 2004/0010358 A1 2008/0039989 A1 2008/0040223 A1 2008/0162305 A1 2008/0243331 A1 2008/0275848 A1 2008/0312782 A1 2009/0001927 A1 2009/0021385 A1*	6/2012 Koide 9/2013 Hafner 8/2003 Kominami 1/2004 Oesterling 2/2008 Pollack 2/2008 Bridges 7/2008 Rouso 10/2008 Kato 11/2008 Allen 12/2008 Berdichevsky 1/2009 Stamos 1/2009 Kelty	B60L 53/305 340/660
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G06Q 30/02 (2012.01)		2009/0189807 A1*	7/2009 Scalisi B60L 53/62 705/80
G06Q 30/04 (2012.01)		2009/0313034 A1	12/2009 Ferro B60L 53/62 705/80
G06Q 50/06 (2012.01)		2009/0313174 A1*	12/2009 Hafner B60L 53/62 705/80
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B60L 53/14 (2019.01)		2011/0148356 A1	6/2011 Lowenthal
B60L 53/65 (2019.01)			
B60L 53/66 (2019.01)			
B60L 55/00 (2019.01)			
B60L 53/30 (2019.01)			
B60L 53/126 (2019.01)			
(52) U.S. Cl.			

FOREIGN PATENT DOCUMENTS

EX1001, 2. *See Fellowes, Inc. v. Treefrog Devs., Inc.*, IPR2020-01509, Paper 11 at 7-9, 17-18 (PTAB Feb. 22, 2021) (denying institution based on § 325(d) because prior art reference was considered by examiner, as it was cited in IDS and listed on the face of the patent). Further, Galvez-Ramoz was also considered during prosecution by the examiner. *Id.*

Moreover, Petitioner largely ignores that Hafner, which is in the same family as the Ferro reference, was also considered by the examiner. *Pet.*, 82. Petitioner states that the main difference is that Hafner is silent to the “dynamic” nature of the planner.

Id. However, Petitioner ignores that Ferro is nearly identical to Hafner for purposes of the Petition, and as discussed below. For example, Petitioner relies on Ferro’s Figure 1 (seen below on the left) to meet claim 1[pre]’s recitation of “an electrical charging

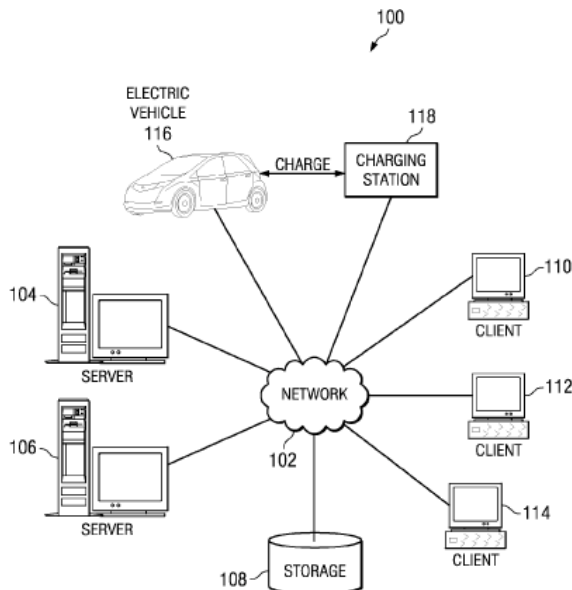


FIG. 1

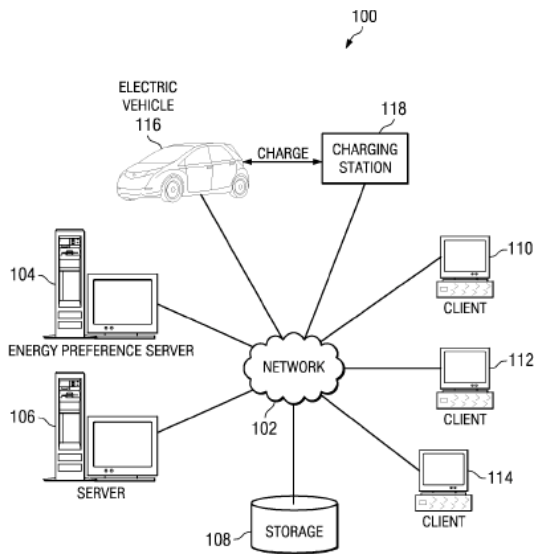


FIG. 1

system.” *Pet.*, 9-10. Hafner’s Figure 1 (seen above on the right) is identical to Ferro:

compare EX1006, Fig. 1, *with* EX1024, Fig. 1.

For purposes of the Petition, the parallel disclosures in Ferro upon which Petitioner relies cannot be meaningfully distinguished from Hafner—nor has Petitioner even attempted to do so. *See* Pet. at 83 (stating only Ferro discloses “dynamic energy transaction plans” that are not disclosed in Hafner). Ferro is thus “the same or substantially the same art previously was presented to the Office.” *Advanced Bionics v. GmbH*, No. IPR2019-01469, 2020 WL 740292, at *8 (P.T.A.B. Feb. 13, 2020).

Because Petitioner has not shown that Ferro is materially different than Hafner, or that materially different arguments previously were presented to the Office, the first part of the *Advanced Bionics* framework is satisfied. *Advanced Bionics*, IPR2019-01469, 2020 WL 740292, at *8; *Biocon*, 2021 WL 608300, at *4 n.4; *see also Conopco, Inc. v. Procter & Gamble Co.*, No. IPR2014-00506, 2014 WL 12580244, at *2 (P.T.A.B. Dec. 10, 2014) (recognizing Board’s authority to “reject [a] petition” that raises “the same or substantially the same prior art or argument previously [] presented to the Office”).

B. Petitioner Has Not Established That the Examiner Erred or the Board Materially Erred in Denying Institution of the Unified Petition

Petitioner provides no evidence or meaningful arguments warranting reconsideration of the same reference *see also Splunk Inc. v. Sable Networks, Inc.*,

No. IPR2022-00003, 2022 WL 1151410, at *5 (P.T.A.B. Apr. 14, 2022) (exercising discretion to deny institution where petitioner presented no arguments regarding the second part of the *Advanced Bionics* framework). Petitioner only states that (1) Ferro wasn't in an Office Action, (2) Galvez-Ramos was not discussed as in depth as the Petition does during prosecution, that this constitutes material error by the Office. *Pet.*, 84. Petitioner failed to meet its burden in establishing *how* examiner materially erred. *Fitesa Simpsonville, Inc. v. The Procter & Gamble Co.*, IPR2023-01451, Paper 11, 19 (PTAB Mar. 20, 2024).

Petitioner's contention that the Board did not have the benefit of Dr. Andrews' expert testimony (*Pet.* at 84) does not negate the foregoing, nor does it establish that the Office materially erred in allowing the Challenged Claims. *See Biocon Pharma Ltd. v. Novartis Pharms. Corp.*, No. IPR2020-01263, 2021 WL 608300, at *8 (P.T.A.B. Feb. 16, 2021) (stating fact that "the Examiner did not have the benefit of expert declaration of Dr. Lam explaining the art from the perspective of a [person having ordinary skill in the art]" does not "outweigh Petitioner's failure in this proceeding to show material error in the Examiner's consideration of the Webb Declaration, as *Advanced Bionics* requires"). Accordingly, the Board should exercise its discretion and deny the Petition under § 325(d).

XVII. CONCLUSION

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

Dated: February 20, 2025

Respectfully submitted,

/Bradley D. Liddle/

Bradley D. Liddle

Bradley D. Liddle, Esq. (Reg. No. 71,106)

bliddle@cozen.com

Douglas W. Link (Reg. No. 68,949)

dlink@cozen.com

Michael C. Pomeroy (Reg. No 76,010)

mpomeroy@cozen.com

COZEN O'CONNOR

1717 Main Street, Suite 3100

Dallas, TX 75201

(214) 462-3139

Frederick A. Tecce (Reg. No. 32,065)

fred.tecce@altimaadvisors.com

ALTIMA ADVISORS/ATTORNEYS,
LLC

One Liberty Place – 55th Floor

1650 Market Street

Philadelphia, PA 19103

(215) 268-7525

COUNSEL FOR PATENT OWNER
CHARGE FUSION TECHNOLOGIES,
LLC

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).

/Bradley D. Liddle/
Bradley D. Liddle

CERTIFICATE OF SERVICE

I hereby certify that on February 20, 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:

Jennifer C. Bailey (Reg. No. 52,583)
Jennifer.bailey@eriseip.com

Virginia A. Brown (Reg. No. 80,538)
virginia.brown@eriseip.com

Callie A. Pendergrass (Reg. No. 63,949)
callie.pendergrass@eriseip.com

Adam M. Sandwell (Reg. No. 72,484)
adam.sandwell@eriseip.com

Justin N. Grimes (Reg. No. 81,059)
justin.grimes@eriseip.com

/Bradley D. Liddle/
Bradley D. Liddle