

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

DELTRAN USA LLC,
Petitioner

v.

THE NOCO COMPANY,
Patent Owner.

Case IPR2024-01219
U.S. Patent No. 11,667,203

PATENT OWNER'S SUR-REPLY

TABLE OF CONTENTS

EXHIBIT LIST	iii
I. INTRODUCTION	1
II. PETITIONER DELTRAN MISREPRESENTS THE PRIOR ART, WHICH FAILS TO TEACH THE CONTROLLED CONNECTION OF A POWER SWITCH BASED ON A VEHICLE BATTERY ISOLATION SENSOR PRIOR TO INITIATING JUMPSTARTING (CLAIM 1).....	2
A. Richardson’s System Does Not Teach Battery Presence Detection Prior To Jump Starter Activation.....	2
1. Richardson’s Step 252 Operates The Same Whether In Manual Mode Or Auto-Mode	3
2. Richardson’s Manual Mode Is Not Described As Being Optional In The Embodiment Relied On In The Petition.....	7
3. Petitioner’s Statements Regarding Richardson’s Ability To Provide An Enabling Disclosure Confirm The Deficiencies In The Petition’s Grounds.....	9
B. Yu’s System Does Not Teach Using Battery Presence Detection To Control The Power Switch.....	12
III. THE PRIOR ART FAILS TO TEACH CLAIM 5, WHICH PLACES AN ADDITIONAL TEMPORAL RESTRICTION ON THE VEHICLE BATTERY ISOLATION SENSOR.....	15
IV. A PHOSITA WOULD NOT HAVE COMBINED RICHARDSON AND YU WITH JUMPSTARTER TECHNOLOGY	17
V. THE BASIS OF GROUNDS 2 AND 5 IMPROPERLY INCLUDES APPLICANT ADMITTED PRIOR ART	22
VI. COLLATERAL ESTOPPEL DOES NOT APPLY	24
VII. NOCO HAS NOT WAIVED ITS PRIOR ARGUMENTS, WHICH WERE INCLUDED AND EXPANDED UPON IN THE PATENT OWNER RESPONSE.....	25
VIII. CONCLUSION.....	27
CERTIFICATE OF WORD COUNT	28
CERTIFICATE OF SERVICE	29

EXHIBIT LIST

Exhibit No.	Description
Ex. 2001	Expert Declaration of Dr. Ayman Fayed
Ex. 2002	<i>Curriculum Vitae</i> for Dr. Ayman Fayed
Ex. 2003	Expert Declaration of Dr. Ayman Fayed In Support Of Patent Owner Response
Ex. 2004	Updated <i>Curriculum Vitae</i> for Dr. Ayman Fayed
Ex. 2005	Deposition Transcript of the deposition of C. Arthur MacCarley, taken on May 13, 2025
Ex. 2006	Declaration of John Graves in support of Exhibits 2007 and 2008
Ex. 2007	Website Image of Homepage of car-ku.com, accessed on June 10, 2025 via https://www.car-ku.com/
Ex. 2008	Collin Morgan, “Tested: Best Portable Jump Starters for 2025,” Car And Driver (May 29, 2025), accessed via https://www.caranddriver.com/car-accessories/g42569313/best-jump-starters-tested/
Ex. 2009	U.S. Patent No. 9,954,207
Ex. 2010	Deposition Transcript of the deposition of C. Arthur MacCarley, taken on October 3, 2025

I. INTRODUCTION

The burden remains on Petitioner to prove unpatentability of the challenged claims of the '203 Patent based on the Grounds presented in the Petition. Petitioner has failed to meet its burden because it has relied on prior art that does not actually teach or suggest all of the limitations of the challenged claims.

In its Reply, Petitioner resorts to mudslinging, accusing Patent Owner of being an “unreliable narrator,” presenting “strawman” and “red herring” arguments, and presenting “truncated quotations and willful ignorance of known facts.” This unfounded vilification is merely a sideshow, intended to distract from the simple fact that Petitioner’s chosen prior art does not actually disclose the claim limitations that Petitioner thought it did. Now backed into a corner and recognizing its mistake, Petitioner has chosen to fabricate teachings within the prior art in an attempt to remedy the deficiencies of the Petition. In particular, Petitioner now points to ambiguous language to support the inaccurate claim that Richardson’s Step 252 and Yu’s microprocessor teach the vehicle battery isolation sensor limitation of claim 1. But neither reference discloses the claimed functionality, and pointing to alleged ambiguity is not sufficient for Petitioner to meet its burden.

II. PETITIONER DELTRAN MISREPRESENTS THE PRIOR ART, WHICH FAILS TO TEACH THE CONTROLLED CONNECTION OF A POWER SWITCH BASED ON A VEHICLE BATTERY ISOLATION SENSOR PRIOR TO INITIATING JUMPSTARTING (CLAIM 1)

Patent Owner previously detailed how claim 1 of the '203 Patent requires that the vehicle battery isolation sensor control the connection of the power switch prior to the power supply being connected to the vehicle battery. POR, pp. 16-18; *see* Ex. 1001, 8:43-60. While the Petition relied on either Richardson (Ex. 1005) or Yu (Ex. 1008) to teach this claim limitation in all grounds, neither reference contains such a teaching. In its attempt to cure this mistake on reply, Petitioner has manufactured teachings that are neither expressly nor inherently disclosed in Richardson or Yu.

A. Richardson's System Does Not Teach Battery Presence Detection Prior To Jump Starter Activation

Patent Owner previously explained how Step 252 of Richardson does not involve controlling the power supply connection based on an indication of whether a vehicle battery is present. POR, pp. 22-30. Instead, Richardson permits low voltage readings (*e.g.*, a battery at a low voltage or even disconnected) to proceed past Step 252 and, therefore, battery presence detection is not occurring at this step. *See id.*

In a late attempt to teach this battery presence detection limitation, Petitioner now claims that “the Petition and Dr. MacCarley both focus on Richardson’s auto-

mode.” Rep., p. 5. In actuality, the Petition and Dr. MacCarley’s original declaration never even used the term “auto-mode.” *See generally* Paper 1 (Pet.); Ex. 1003 (MacCarley Decl.).

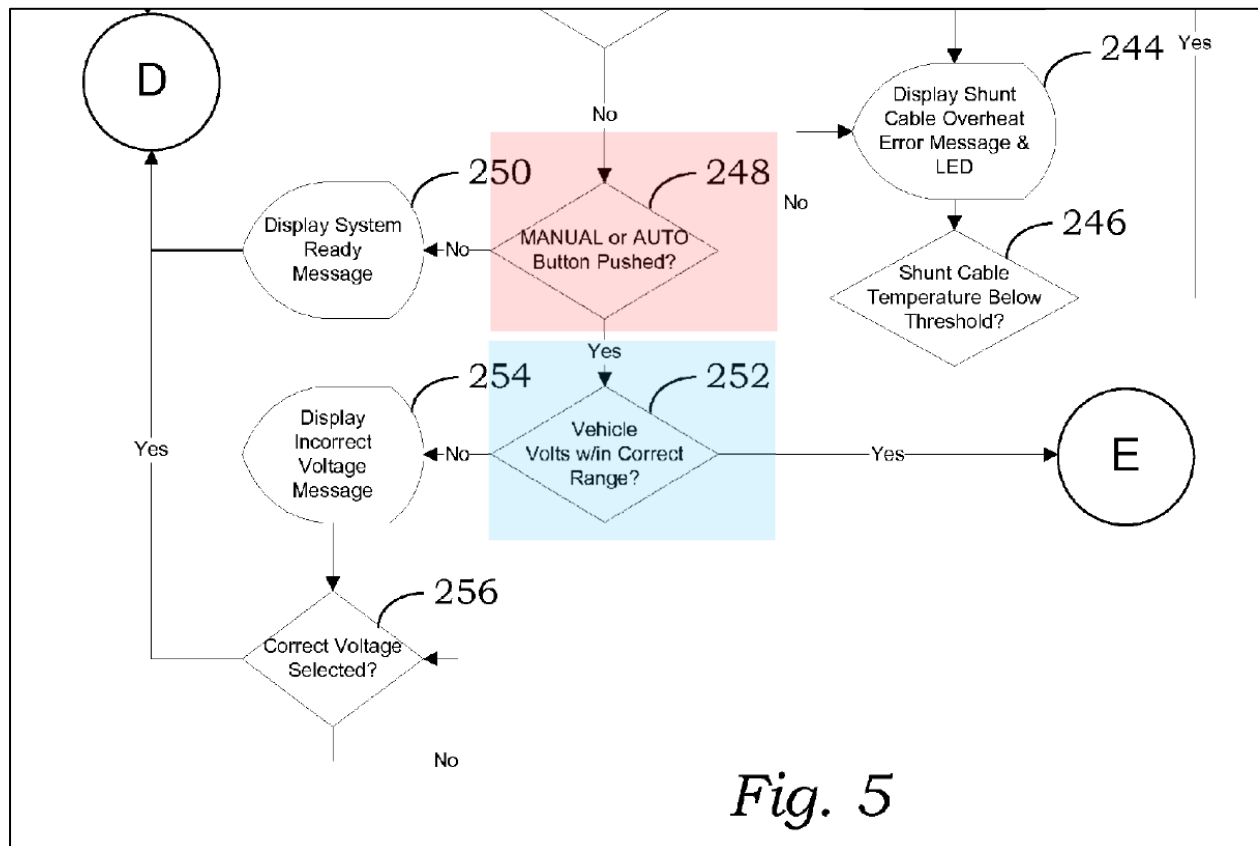
But even ignoring the belated nature of this position, Petitioner’s new argument lacks evidentiary support. Petitioner claims that “when operating in auto-mode, Richardson’s Step 252 only returns a ‘yes’ if an appropriate battery is present—as opposed to manual mode may be used if a battery is not present or if a battery voltage is under 10 volts (*e.g.*, a dead battery).” Rep., p. 4. In other words, Petitioner is claiming that the voltage check of Step 252 somehow operates differently depending on the mode (*i.e.*, auto vs. manual) that the user selects, performing a battery presence detection when in auto-mode, but performing no such presence detection when in manual mode. In reality, Richardson never suggests anything of the sort, nor is there sufficient evidence that this functionality is an inherent teaching of Richardson.

1. Richardson’s Step 252 Operates The Same Whether In Manual Mode Or Auto-Mode

Nowhere does Richardson expressly disclose applying two different operations at Step 252. Indeed, Petitioner’s expert Dr. MacCarley admitted that he was “not aware of any section within Richardson in which he specifically says one range for manual, one range for auto.” Ex. 2010, 40:4-6. Nor has Petitioner

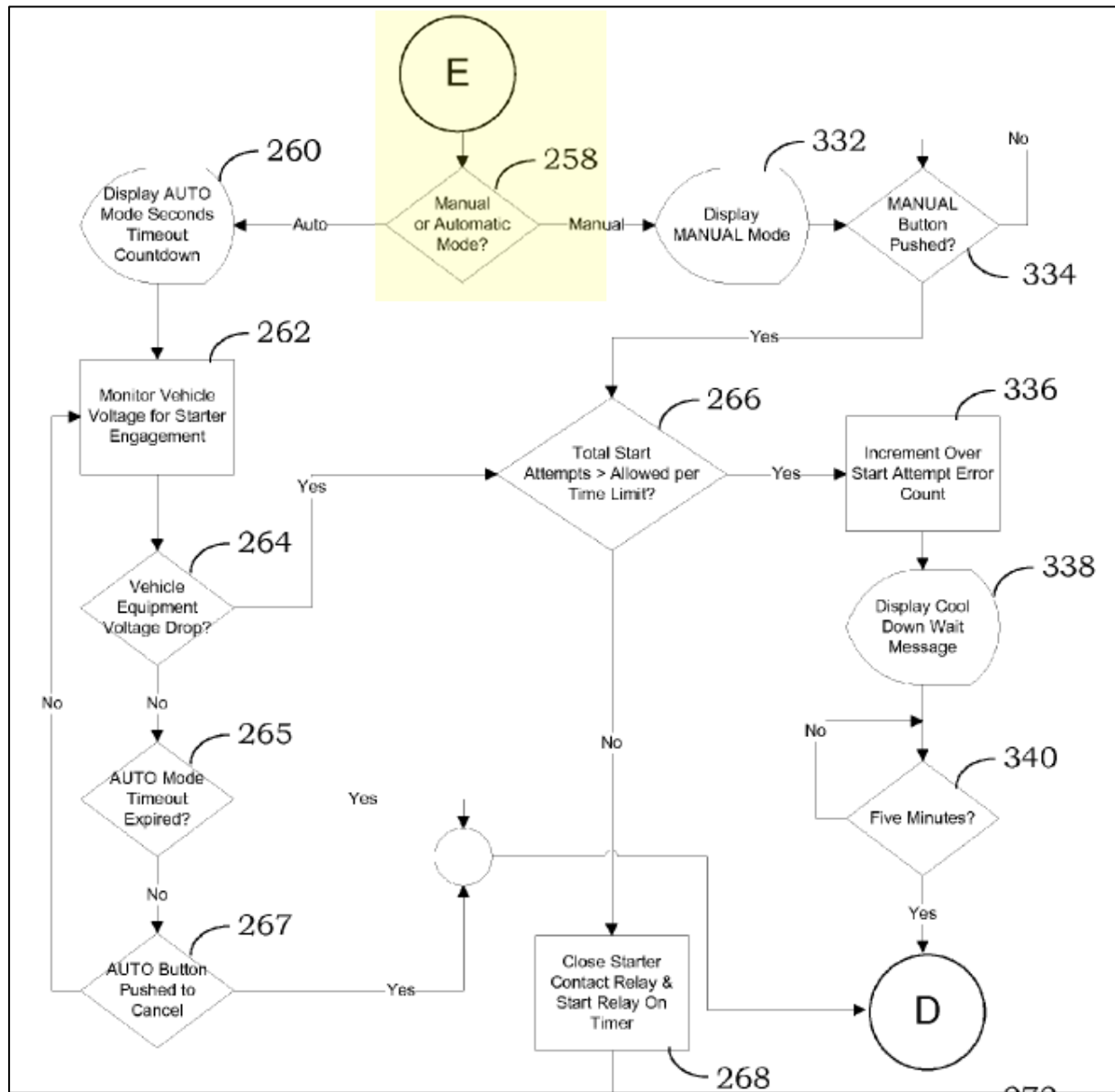
identified any evidence in Richardson that even suggests that Step 252 operates differently depending on the selected mode. Rather, Richardson's drawings and description make clear that Step 252 operates in the same manner in both automatic and manual modes.

Petitioner is correct that the step of the manual or auto button being pushed (Step 248, red) automatically triggers the subsequent process steps in Richardson, and therefore occurs prior to the vehicle voltage check (Step 252, blue):



Ex. 1005, Fig. 5 (color annotations added). But this does not mean that Step 252 functions differently depending on the user selection. In fact, following item E of

the flowchart into Figure 6 reveals that the very next step *after* Step 252 involves making a determination of whether the system is in “Manual or Automatic Mode” (Step 258, yellow):



Ex. 1005, Fig. 6 (color annotation added). As can be seen, it is only after Richardson’s system determines which mode was selected at Step 258 that the

flowchart pathways for the auto and manual modes diverge. *See* Ex. 2010, 42:13-20. Prior to Step 258, there is no indication that Richardson's system applies different checks for the manual and automatic modes, or even that it recognizes which mode has been selected.

The specification of Richardson further confirms that Step 252 operates in the same manner, regardless of mode. When describing Step 252, Richardson only describes evaluating whether the measured voltage is within a single "predetermined range," not multiple different ranges:

If the difference between the voltage selected and the voltage measured is not within *a predetermined range* and tolerance 252, a "Wrong Selector Volts" message is displayed 254 on the LCD 46 and further operation is prohibited until the correct voltage is selected 256 at which point processing returns to the main processing loop 210.

Richardson, ¶ [0034] (emphasis added). Richardson's specification also confirms that whether automatic or manual mode has been selected is not even determined by the system until after Step 252 has already occurred:

If the selected voltage is within the correct range 252, *then* the system determines which button was selected 258.

Richardson, ¶ [0035] (emphasis added).

Thus, Richardson's disclosure confirms that Step 252 operates in the same manner in both automatic and manual modes. And this makes sense, given that Step

252 is only intended to prohibit operation “until the correct [jump starter battery] voltage is selected,” which is a safety check that would not need to differentiate between auto-mode and manual mode. Ex. 1005, ¶ [0034].

Accordingly, because Richardson expressly states that “manual mode,” which only occurs after Step 252, must be able to “be used when the battery voltage of the vehicle is below 10 volts, *or if the vehicle’s battery is not connected*,” then Step 252 cannot teach the presence detection limitation of claim 1. Ex. 1005, ¶ [0047] (emphasis added); *see* POR, pp. 22-30. Because Richardson’s Step 252 does not differentiate between modes, even if a user selects auto-mode, a disconnected battery will not prevent Richardson’s system from proceeding past Step 252.

2. Richardson’s Manual Mode Is Not Described As Being Optional In The Embodiment Relied On In The Petition

Petitioner tries to inject ambiguity into Richardson’s actual teachings by arguing that “manual mode is an optional feature in Richardson” and therefore Richardson teaches “at least one embodiment where auto mode is included but manual mode is not.” Rep., p. 6 (citing Ex. 1058, 51:16-52:4 (Dr. Fayed’s testimony)). But Petitioner has taken Dr. Fayed’s comments out of context. Dr. Fayed did not discuss Richardson’s manual mode as being an optional feature that may be excluded from Richardson’s device; rather, Dr. Fayed recognized the

functionality of manual mode as a user-selected option (with the auto-mode being the other option):

Q. The first sentence states, “If in manual mode, the jump starter 10 may be used when the battery voltage of the vehicle is below 10 volts, or if the vehicle’s battery is not connected,” correct?

A. Correct.

Q. So if you’re not in manual mode, the jump starter cannot be used when the vehicle battery is below 10 volts and cannot be used if the vehicle battery is not connected, correct?

MR. SAUER: Objection. Form.

THE WITNESS: Well, that statement by itself, it says that you may be able to use the device if you are in manual mode, if the vehicle is below 10, or if the vehicle battery is not connected. So that’s an option or a feature that exists in it. I think your question is drawing a conclusion out of that, that in auto mode it cannot do these things. But it doesn’t actually say that. It just tells you that in manual mode you could use it for that.

Ex. 1058, 51:4-52:4.

Moreover, Patent Owner notes that Petitioner has not identified or cited to any other embodiment in Richardson that discusses operating without a manual mode. That no such embodiment is identified is unsurprising, given the value of having a manual bypass mode in these devices. *See* POR, p. 51; Ex. 2003, ¶¶ 174-175. But, more importantly, the embodiment depicted in Figure 5 discussing Step 252 is what

was relied on in the Petition to allegedly teach this limitation, and Petitioner is therefore confined to its selected embodiment.

3. Petitioner’s Statements Regarding Richardson’s Ability To Provide An Enabling Disclosure Confirm The Deficiencies In The Petition’s Grounds

As Patent Owner previously explained, if Petitioner’s interpretation of Richardson were somehow correct—that Step 252 would prevent jumpstarting when no vehicle battery is present—then Richardson would be inoperative and therefore would not provide an enabling disclosure, because Richardson’s system could never reach the step where manual mode can be used. *See* POR, pp. 25-26; Ex. 2003, ¶ 160. In an attempt to show that Richardson would be operative and enabling under its interpretation of Step 252, Petitioner has improperly fabricated a hypothetical way of operating Richardson’s device that is in no way disclosed or suggested by the specification or drawings: namely, how Step 252 could function in a manner where it would prevent jumpstarting in auto-mode when no vehicle battery is present, but still allow for manual mode to operate in such a situation.

Specifically, Petitioner argues that “[a] POSITA would understand that at Step 252 Richardson *could* simply use two different ‘predetermined ranges’—one for manual mode and another for auto-mode.” Rep., p. 6 (emphasis added). Indeed, during deposition, Petitioner’s expert Dr. MacCarley confirmed that it is only a “possibility” that Step 252 of Richardson could function with two distinct ranges,

and Dr. MacCarley would not rule out the possibility that Richardson applies the same predetermined range at Step 252, regardless of mode:

Q: Okay. So the predetermined voltage range for auto mode is different from the predetermined voltage range for manual mode; is that your position?

A: *It could be. I'm not saying it is, but it is allowing that possibility.*

Q: But it's also possible that they might be the same predetermined range?

MR. CHANDRA: Objection. Vague.

THE WITNESS: Within -- within the latitude of the word "possible," yes, *it could be the same*. It could be two. It could be more than that. I'm simply clarifying what the sentence says.

BY MR. GRAVES:

Q: But based on your understanding of Richardson as a whole, not just a sentence, *is it possible that step 252 could be applying the same predetermined range for both manual mode and auto mode?*

MR. CHANDRA: Objection. Misstates his testimony.

THE WITNESS: Frankly, I feel like I'm kind of repeating myself now, but *yes, that is a possibility*.

Ex. 2010, 37:13-38:11 (emphases added).

Whether Richardson "could" function in this manner is not what was argued in the Petition, and this speculative possibility is unsupported by Richardson's

disclosure and insufficient to meet Petitioner’s burden of demonstrating that the battery presence detection limitation is inherently taught by Step 252 of Richardson. *See Par Pharm., Inc. v. TWi Pharms., Inc.*, 773 F.3d 1186, 1195 (Fed. Cir. 2014) (“Inherency, however, may not be established by probabilities or possibilities.”) (quoting *In re Oelrich*, 666 F.2d 578, 581 (C.C.P.A. 1981)). Again, the Petition relies on Step 252 of an embodiment of Richardson in which manual mode is presented as an integral feature, and Richardson’s disclosure actually confirms that Step 252 operates identically for both auto-mode and manual mode in that specific embodiment. Petitioner’s hypothesis that Richardson *could* use different “predetermined ranges” for manual mode and auto-mode only confirms that Petitioner has failed to demonstrate that Richardson *does* operate in this manner.

Petitioner also makes the confusing point that the existence of a commercial embodiment of Richardson somehow proves that its reference provides an enabling disclosure. In general, the fact that a commercial embodiment exists and corresponds to a given publication is irrelevant to the sufficiency of that publication to enable a skilled artisan to make and use the disclosed invention. A document that includes only a surface-level description of an invention may correspond to a commercial embodiment, but its disclosure may still lack sufficient explanation for one to make and use the disclosed invention, as is the case with Richardson.

* * *

Therefore, Petitioner has failed to meet its burden to demonstrate that Richardson, in any operational mode, teaches the vehicle battery isolation sensor limitation of claim 1.

B. Yu's System Does Not Teach Using Battery Presence Detection To Control The Power Switch

Patent Owner previously detailed how Yu fails to teach the vehicle battery isolation sensor limitations of claim 1 because Yu instead relies on a user evaluating a displayed voltage and making a manual safety decision. *See* POR, pp. 41-46; Ex. 2003, ¶ 168. Similar to its fabricated teachings of Richardson, Petitioner similarly manufactures teachings with respect to how the microprocessor of Yu operates, claiming that the “microprocessor will not close the relay” if the battery voltage is not within a normal range. But Petitioner’s understanding of Yu’s microprocessor is not supported by its disclosure.

In its Reply, Petitioner first points out that it is the microprocessor of Yu that controls the relay switch circuit and the relay switch in Yu’s disclosure. *See* Rep., pp. 9-10 (depicting Figure 1). While this is true, it in no way shows that the microprocessor is performing an automatic safety check based on the measured external battery voltage, as opposed to simply receiving an instruction from an input button and then controlling the relay switch in response to that user input. In other

words, under both Petitioner's and Patent Owner's interpretations, the microprocessor controls the relay switch.

Petitioner then points to the use of the word "can" in Yu's statement that "*the JUMP button of the input buttons 6 can be pressed to close the relay 2*" as indicating that pressing the JUMP button will have no effect if the microprocessor of Yu does not determine that the external battery voltage is in a normal range. Rep., p. 11 (emphasis in original). But Petitioner's selected paragraph can also be understood to mean that a user will evaluate the displayed voltage and then, once the user has determined that the voltage is within the normal range, the user can press the JUMP button.

Patent Owner's understanding of how the external battery voltage signal is used is consistent with the rest of Yu's disclosure. See POR, p. 48 (collecting citations from Yu). Yu includes express statements that confirm that the external battery voltage is to be analyzed by the user for safety purposes, not by the microprocessor. See Ex. 1008, ¶ [0027] ("A signal is provided to the microprocessor 42 through the external battery voltage detection circuit 45, *so the external battery voltage can be displayed on the display module 5 to facilitate understanding of the external battery condition.*" (emphasis added)). Conversely, Petitioner has not identified any statements in Yu that affirmatively discuss the microprocessor evaluating the detected external battery voltage and using that evaluation to control

the relay switch. Accordingly, Petitioner has failed to meet its burden to demonstrate, not just potential ambiguity in how Yu operates, but that Yu definitively teaches the limitations that the Petition has relied on its disclosure to teach. Additionally, Petitioner has chosen to abandon the Petition's argument that general knowledge of a PHOSITA could potentially cure deficiencies of Yu with respect to this limitation. *See Rep.*, p. 12.

Beyond lacking support in Yu, Petitioner's interpretation also does not make sense from a functional standpoint. If Yu's microprocessor were already checking that the external battery voltage is within a normal range, as Petitioner claims, then it would not be necessary to also display the voltage on "display module 5 to facilitate understanding of the external battery condition." Ex. 1008, ¶ [0027]. Moreover, as Patent Owner previously explained, if Yu's microprocessor were configured to simply prevent jumpstarting when a vehicle battery voltage is undetected, then Yu's system would not be able to jumpstart vehicles when the battery voltage is so low that automatic detection is not possible. *See Ex. 2010*, 56:3-10. In other words, Yu would be rendered worthless in many actual jump-starting applications if Petitioner's interpretation were correct, because a user would be prevented from intentionally closing the contact relay when the battery voltage is outside of the normal range. And because Yu does not have a manual override, its system would be partially inoperable. Ex. 2003, ¶¶ 174-175.

In light of these deficiencies, and similar to Richardson, Yu fails to teach the vehicle battery isolation sensor limitation.

III. THE PRIOR ART FAILS TO TEACH CLAIM 5, WHICH PLACES AN ADDITIONAL TEMPORAL RESTRICTION ON THE VEHICLE BATTERY ISOLATION SENSOR

Patent Owner previously explained that dependent claim 5 further requires that the presence detection automatically occur when “the jump starter apparatus becomes operational.” Ex. 1001, 9:8-14; *see* POR, pp. 38-41. Patent Owner also demonstrated how the claim term “operational” was referring to when the device is powered on. *See id.* So, while claim 1 requires that the vehicle battery isolation sensor perform its safety check sometime prior to the power supply being connected to the vehicle battery, claim 5 goes even further and requires this safety check when the “jump starter apparatus becomes operational.” Patent Owner then detailed how the Petition fails to properly demonstrate that claim 5, as properly construed, is taught by the prior art. *See id.*

In its Reply, Petitioner argues that “claim 5 is directed to the time when the red/black clamps are connected to the vehicle battery” and points to an earlier clause within claim 5. Patent Owner agrees with Petitioner’s understanding, which does not conflict with Patent Owner’s own interpretation. Claim 5 requires action when both (1) “the vehicle battery is electrically connected to the jump starter apparatus” and (2) “the jump starter apparatus becomes operational,” where becoming

operational means the timepoint when the device is powered on. In other words, claim 5 requires specific action at the time when, for example, a user has hooked up the power cables to the vehicle battery and has pressed a button to power on the jump starter.

While Petitioner appears to share patent owner's understanding of claim 5, Petitioner misunderstands Richardson's ability to teach this limitation, particularly with respect to requiring presence detection when the apparatus "becomes operational." Petitioner erroneously claims that Step 252 teaches presence detection (as explained above, it does not) at the required timepoint because "the jump starter is turned on" when Step 252 occurs. Rep., p. 26. But claim 5 requires presence detection when the "jump starter apparatus *becomes* operational," not when it *is* operational (*i.e.*, turned on). If Petitioner's understanding were correct, and claim 5 only required that the device be "on" when the presence detection occurs, then this dependent claim would provide no further narrowing of the temporal requirement in claim 1. *See AK Steel Corp. v. Sollac & Ugine*, 344 F.3d 1234, 1242 (Fed. Cir. 2003) ("Under the doctrine of claim differentiation, dependent claims are presumed to be of narrower scope than the independent claims from which they depend.").

As Patent Owner previously explained (*see* POR, pp. 45-46), Step 252 of Richardson occurs well after the device has already been powered on and become

operational (and after the power cables are connected), and therefore it cannot teach the temporal limitation of claim 5.

IV. A PHOSITA WOULD NOT HAVE COMBINED RICHARDSON AND YU WITH JUMPSTARTER TECHNOLOGY

While the above arguments regarding the failure of Richardson and Yu are alone adequate to demonstrate that all Grounds are defective, for the sake of completeness, NOCO will also address the motivation to combine issue. NOCO recognizes that Final Written Decisions have recently issued for related U.S. Patents 11,447,023 and 11,584,243 finding sufficient motivation to combine Richardson with Zhao and Yu with Paparrizos. *ADC Sols. Auto, LLC v. The NOCO Company*, IPR2024-00577, Paper 25 (P.T.A.B. Oct. 26, 2025); *ADC Sols. Auto, LLC v. The NOCO Company*, IPR2024-00671, Paper 24 (P.T.A.B. Oct. 26, 2025). While NOCO maintains that a skilled artisan would not have actually made the proposed prior art combinations, NOCO recognizes the impact of these related decisions and will only briefly discuss Petitioner's new arguments and evidence on this issue.

Petitioner first points out that "NOCO does not argue that USB would fail to charge either device given a sufficient amount of time." Reply, pp. 13-14. While this is true, it serves only as a red herring. Whether USB technically could charge a given device, and whether a PHOSITA would actually consider a charger suitable for a device, are two different questions. Indeed, almost any charger can charge

almost any battery—if its voltage is boosted to a sufficient level—but that in no way means that every charger will be considered suitable for every battery.

Petitioner then claims that Patent Owner and Dr. Fayed have “intentionally ignore[d] prior art evidence of USB-Charged Jump Starters.” Rep., p. 14; *see id.*, pp. 14-17. Despite including no mention in the Petition of prior art jump starters with USB charging, Petitioner now points to the Carku Epower-10 disclosure of Exhibit 1053 as supposed evidence that USB charging of jump starter devices was previously known. Rep., pp. 14-15. Exhibit 1053 was briefly cited in the Petition, not to show that USB charging of jump starters was already known, but rather to show that “the ’203 patent inventor, Jonathan Nook, requested that Carku produce a battery powered jump starter that included USB charging.” Pet., p. 34 (citing Ex. 1053, p. 159).

The prior art status of the Carku Epower-10 device was disputed in the related ITC proceeding (*see* Ex. 1060, pp. 287-294), where Patent Owner explained that there was “no coherent or consistent proof that shows the features of any version of the alleged Epower-10 device as it was offered for sale, sold, or used.” *Id.* at 289. Similarly here, Petitioner has not met its burden to provide adequate evidence regarding the sale or use of the Epower-10 device. Nor is this the proper forum to resolve these factual disputes. Patent Owner maintains that there is insufficient evidence surrounding the Epower-10 device’s ability to demonstrate that USB

charging of a jump starter was previously known in the art, and any ITC holding that suggests otherwise is not binding in this proceeding. *See Tandon Corp. v. U.S.I.T.C.*, 831 F.2d 1017, 1019 (Fed. Cir. 1987).

Moreover, in the final written decision of U.S. Patent No. 9,007,015, that board declined to use or rely on evidence relating to the Epower-10 device since “no documentation about the Epower-10 product [was] the basis of any alleged ground of unpatentability.” Ex. 1034, p. 103. Similarly here, because Petitioner has not relied on the description of the Epower-10 device in Exhibit 1053 in any of the Grounds in the Petition, this evidence should not be relied upon.

Petitioner also introduces new evidence in the form of Ex. 1061, which describes the V39 device. According to Petitioner, “the V39 product can be charged ‘using the USB Power Cable’ and lists a 5-6V, 2000 mA power input.” Rep., p. 16. For starters, the V39 device is not a jump starter device, and therefore would not have the same consumer expectations regarding charging. The V39 device also has no input USB charging port:



Ex. 1061, p. 1 (depicting the two USB output ports (left, middle) and the barrel charger input port (right)). This evidence immediately begs the question as to why, in an argument to supposedly demonstrate that USB would have been used to charge a high-capacity battery, Petitioner was forced to rely on a device that instead used a barrel charging port. Petitioner appears still unable to come up with any prior art examples of “a **USB port** configured to receive power from an external power source” that charges any large capacity battery, much less a jump starter battery, as claimed. Ex. 1001, 8:36-37 (emphasis added).

Petitioner’s introduction of Ex. 1062 to try to demonstrate that “a 72-hour charging time is a [sic] reasonable/practical/typical/useful for a portable jump starter” is even more problematic. Rep., pp. 18-19. On its face, Petitioner’s claim—that a three-day charging time for an electronics device is typical—should feel wrong. Indeed, the PSX3 device is only listing this charging time for the “initial charge” of the battery. Ex. 1062, p. 10. Moreover, the PSX3 is a large tire inflator

and jump starter combination device, which would have different commercial expectations among consumers relative to a jump starter.

Petitioner then uses the PSX3 “reasonable” charging time and compares it to calculated values that allegedly represent charging times of the V39 device. *See* Ex. 1057, ¶¶ 49-57. But an easy way to confirm that Dr. MacCarley’s calculated values are incorrect is to compare them the actual listed charging time values for the V39 device. Dr. MacCarley claims that a charging power of 10W would take only 3.9 hours to charge. *See* Ex. 1057, pp. 40-41. But the V39 device is described as taking “10 hours” to fully charge from “8 Watts” of charging power. Ex. 1061, p. 1; *see* Ex. 2010, 57:18-23. Dr. MacCarley provides no explanation for why a 20% reduction in charging power would produce a 150% increase in charging time. Indeed, if one were to plug 8W into the equation used by Dr. MacCarley (*i.e.*, $T_{\text{chrg}}=39\text{Wh}/8\text{W}$), the charging time would be 4.875 hours; but again, the listed charging time was 10 hours at 8W. *See* Ex. 1061, p. 1. Thus, Dr. MacCarley’s alleged charging times conflict with Petitioner’s own evidence.

Petitioner also points to a prior statement from the related ITC trial in which Dr. Fayed stated that USB is “only useful *maybe* as an optional/secondary method of charging.” EX1059, 991:5-19 (emphasis added). But Dr. Fayed’s ITC testimony, although taken out of context and not definitive, actually confirms that USB

charging would not be considered to “charge the device at a reasonable rate.”
Ex. 1059, 991:17-18.

V. THE BASIS OF GROUNDS 2 AND 5 IMPROPERLY INCLUDES APPLICANT ADMITTED PRIOR ART

Petitioner argues that the “Petition does not present any grounds where AAPA is the primary reference.” Rep., p. 26. But AAPA evidence does not have to be the “primary” reference for a ground to be deficient under 35 U.S.C. § 311(b). A “secondary” reference may still serve as part of the basis of a ground. *See Qualcomm Inc. v. Apple Inc.*, 134 F.4th 1355, 1366-67 (Fed. Cir. 2025) (finding both Majcherczak and AAPA to be included in the basis of Ground 2a based on the express language of the petition).

Shockwave is distinguishable because the petition in that case did not characterize AAPA as part of the basis of its grounds. *Shockwave Med., Inc. v. Cardiovascular Sys.*, 142 F.4th 1371, 1379 (Fed. Cir. 2025) (“This case is quite different from *Qualcomm II*, where the petitioner expressly labeled AAPA as the ‘basis’ for its challenge.”). As previously explained by Patent Owner, the problem with the inclusion of AAPA in the Petition was how it was presented—as part of the basis of Grounds 2 and 5. *See* POR, pp. 62-64. Similar to the *Qualcomm* court, the Board can determine that the Petition’s language alone violated Section 311(b), and

“need not consider whether, in substance, Ground 2 included AAPA in its basis.”
Qualcomm, 134 F.4th at 1368.

Petitioner also points out that the AAPA in this instance involves a discussion of U.S. Patent No. 5,793,185, which was attached as Exhibit 1036 but never substantively cited in the Petition. *See Rep.*, p. 26. But the fact that Petitioner could have presented proper grounds (*i.e.*, grounds that included Exhibit 1036 as part of the combination instead of AAPA), in no way changes that Grounds 2 and 5 violate Section 311(b) as written. *See Qualcomm*, 134 F.4th at 1386 (“We see no support for the position that an IPR petitioner should not be held to its express inclusion of AAPA in the basis of a ground.”).

Petitioner’s last attempt to avoid its mistaken reliance on non-311(b) evidence is to point to the use of “and/or” in Grounds 2 and 5. *See Rep.*, pp. 26-27. But Petitioner cannot retroactively revise which prior art constitutes the basis of each ground based on conditional language. These unpatentability challenges were presented as a single ground (*i.e.*, “Ground 2” and “Ground 5”), with AAPA presented as part of their bases. *See POR*, pp. 62-64. Just like how Petitioner could have relied on Exhibit 1036 instead of AAPA, Petitioner could also have broken Grounds 2 and 5 into four separate grounds, two based on AAPA and two based on the Epower-20/Epower-21 evidence. But, as master of its Petition, ADC is bound to the flawed grounds it chose to present.

A finding that Grounds 2 and 5 impermissibly relied on AAPA would also be consistent with recently issued Director Guidance, which now mandates that “applicant admitted prior art (AAPA) . . . may not be used to supply a missing claim limitation” in new petitions. PTO Memorandum, “Enforcement And Non-Waiver Of 37 C.F.R. § 42.104(b)(4) And Permissible Uses Of General Knowledge In *Inter Partes* Reviews,” Jul. 31, 2025 (“Guidance Memorandum”). In this instance, Petitioner directly uses AAPA to teach a missing limitation. *See* Pet., pp. 54, 76. Therefore, while Grounds 2 and 5 are already improper under *Qualcomm* because they present AAPA as a basis of the Grounds, Petitioner’s actual usage of AAPA would also be improper under the new Guidance Memorandum.

VI. COLLATERAL ESTOPPEL DOES NOT APPLY

Petitioner has all but conceded the collateral estoppel issue. Patent Owner previously detailed how collateral estoppel does not apply to findings from the ’015-FWD with respect to Richardson’s ability to teach various limitations in challenged Claim 1. *See* POR, pp. 32-42. In particular, Patent Owner explained how the issues were not identical because the claims contain several differences that materially alter the question of invalidity compared to the canceled claims of the prior ’015 Patent, and how the findings that Petitioner relies on were not necessary to the Final Written Decision for the ’015 Patent, because that decision rested on multiple independent grounds of unpatentability. *See id.*

In its Reply, Petitioner makes no attempt to argue that the challenged claims do not materially alter the question of invalidity compared to the canceled claims of the prior '015 Patent. Nor does Petitioner dispute that the prior findings were not necessary to the Final Written Decision for the '015 Patent. Instead, Petitioner simply states that the Board's prior findings with respect to the '015 Patent claims are "persuasive evidence regardless of collateral estoppel." Reply, p. 27. But the Board in the prior proceeding involving the '015 Patent was not presented with similar arguments involving Richardson's ability to teach the vehicle battery isolation sensor of challenged claim 1, and therefore the prior findings with respect to the '015 Patent are not particularly useful in this instance.

VII. NOCO HAS NOT WAIVED ITS PRIOR ARGUMENTS, WHICH WERE INCLUDED AND EXPANDED UPON IN THE PATENT OWNER RESPONSE

Petitioner makes a half-hearted argument that NOCO has somehow waived arguments first presented in the Patent Owner Preliminary Response. *See* Rep., pp. 27-28 (citing *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1373 (Fed. Cir. 2023)). *Parus Holdings* is distinguishable because that case involved a situation where a patent owner "rais[ed] an argument in its Preliminary Response, but not its Response." 70 F.4th at 1373. Here, Patent Owner has not abandoned the motivation to combine arguments presented in the Preliminary Response; rather, the Patent Owner Response included 10 whole pages of arguments (*see* POR pp. 52-61) related

to the motivation to combine issue. While these arguments include and cite to many of the same points included in the Preliminary Response, they also go further, addressing issues identified in the Decision on Institution and also explaining the inherent problems associated with the proposed combinations. Accordingly, Patent Owner has in no way “waived” its arguments with respect to why a PHOSITA would not have made the proposed combination.

VIII. CONCLUSION

For the reasons set forth above, the challenged claims of the '203 Patent have not been shown to be unpatentable.

Respectfully submitted,

Dated: October 15, 2025

/Joseph M. Sauer/

Joseph M. Sauer, Reg. No. 47,919
JONES DAY
901 Lakeside Avenue
Cleveland, Ohio 44114
(216) 586-7506
jmsauer@jonesday.com

David B. Cochran, Reg. No. 39,142
JONES DAY
901 Lakeside Avenue
Cleveland, Ohio 44114
(216) 586-7029
dcochran@jonesday.com

Matthew W. Johnson, Reg. No. 59,108
JONES DAY
500 Grant Street, Suite 4500
Pittsburgh, PA 15219
(412) 394-9524
mwjohnson@jonesday.com

John M. Graves, Reg. No. 77,147
JONES DAY
90 South Seventh Street, Suite 4950
Minneapolis, MN 55402
(612) 217-8800
jgraves@jonesday.com

Attorneys for The NOCO Company

CERTIFICATE OF WORD COUNT

Pursuant to Rule 37 C.F.R. 42.24(c)(4), the undersigned hereby certifies that, based upon the word count of the word-processing system used to prepare this response, the number of words in this Patent Owner Response is 5,596.

Respectfully submitted,

Dated: October 15, 2025

/Joseph M. Sauer/

Joseph M. Sauer

Reg. No. 47,919

JONES DAY

North Point, 901 Lakeside Avenue

Cleveland, Ohio 44114

(216) 586-7506

CERTIFICATE OF SERVICE

Pursuant to 37 C.F.R. § 42.6(e), the undersigned certifies that on October 15, 2025, complete and entire copies of the **PATENT OWNER'S SUR-REPLY** and supporting exhibits have been served in their entirety by e-mail on the following counsel of record for Petitioner:

Ryan N. Miller
Fox Rothschild LLP
rmiller@foxrothschild.com

Anthony J. Noonan
Fox Rothschild LLP
anoonan@foxrothschild.com

Chetan Chandra
Fox Rothschild LLP
cchandra@foxrothschild.com

Nicholas Almerini
Fox Rothschild LLP
nalmerini@foxrothschild.com

Jonathan R. Lagarenne
Fox Rothschild LLP
jlagarenne@foxrothschild.com

Dated: October 15, 2025

/Joseph M. Sauer/
Counsel for Patent Owner