

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

LIBERTY ENERGY, INC. AND LIBERTY OILFIELD SERVICES LLC,
Petitioners,

v.

U.S. WELL SERVICES, LLC,
Patent Owner.

IPR2025-01424
U.S. Patent No. 11,211,801 B2

PATENT OWNER'S PRELIMINARY RESPONSE

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PATENT OWNER'S EXHIBIT LIST

Exhibit No.	Description
2001	Declaration of Richard H. Quarles ISO PHV Admission
2002	Civil Action No. 2:24-cv-00884-JRG-RSP – Defendants' Amended Answer and Counterclaims (Adding Patent Infringement Counterclaims) to Plaintiff's Complaint
2003	Case No. 2:24-cv-00884-JRG-RSP – Order to Sever Counterclaims
2004	Case No. 2:25-cv-00522-JRG-RSP – Scheduling Order
2005	Case No. 2:25-cv-00522-JRG-RSP – Liberty's Invalidity Contentions
2006	Federal Court Management Statistics-Profiles, <i>available at</i> https://www.uscourts.gov/data-news/reports/statistical-reports/federal-court-management-statistics/federal-court-management-statistics-june-2025 (last visited Nov. 5, 2025)
2007	USPTO Rescission of Memorandum Addressing Discretionary Denial Procedures
2008	Case No. 4:24-CV-00839-KPE – Liberty Motion to Stay
2009	Case No. 2:25-cv-00522-JRG-RSP – Joint (Agreed) Motion for Entry of Docket Control Number
2010	U.S. Pat. Pub. No. 2019/0211661, Udo Reckels et al., "Electric Hydraulic Fracturing System" ("Reckels661"), PCT application filed Oct. 13, 2017, published July 11, 2019
2011	Improving Safety and Productivity in Oil and Gas Operations
2012	IEEE Xplore: 141-1993 – IEEE Recommended Practice for Electric Power Distribution for Industrial Plants

I. INTRODUCTION

Patent Owner U.S. Well Services LLC respectfully submits this Preliminary Response in accordance with 35 U.S.C. § 313 and 37 C.F.R. § 42.107, responding to the Petition for *inter partes* review (the “Petition”) filed by Liberty Energy Inc. and Liberty Energy Services LLC (“Petitioners”) challenging claims 1–20 (the “Challenged Claims”) of U.S. Patent No. 11,211,801 (the “801 Patent”). Petitioners assert Grounds 1–4 (the “Asserted Grounds”) using combinations of International Publication Number WO 2018/071738 to Reckels (“Reckels”), ANSI/IEEE Std 141-1986 (“IEEE Red Book”), U.S. Patent Publication No. 2017/0030178 to Oehring and Hinderliter (“Oehring178”), a selection guide for industrial gas turbine products manufactured by Solar® Turbines (a Caterpillar company) (“Solar Turbines”), U.S. Patent Application Publication No. 2012/0255734 to Coli (“Coli”), and “Harmonics in Offshore Electrical Power System” by B. Kumar et al. (“Kumar”) (collectively the “Asserted References”).

Every ground in Liberty’s Petition lacks merit. First, all Asserted Grounds rely on IEEE Red Book, which (1) is non-analogous art and (2) was obsolete (i.e., not recommended for use by its publishers) as of the time of invention of the 801 Patent. A POSITA would thus not have consulted or relied upon IEEE Red Book, much less have been motivated to combine it with any or all Asserted References.

Second, and consistent with the fundamental problem raised by reliance on IEEE Red Book, the prior art in Ground 1 fails to anticipate or render obvious a “*bus bar*” as required by all claims.¹ Petitioners rely on Reckels’s Figure 3 configuration and IEEE Red Book to render obvious (Ground 1) a “*bus bar*.” But Reckels’s Figure 3 configuration does not include a bus bar, so Petitioners conjure up—without proper support—an imaginary Figure 3 configuration of Reckels having two bus bars. Petitioners allege that support for this imaginary Figure 3 is found in IEEE Red Book, but because IEEE Red Book both is non-analogous art and was obsolete as of the time of invention of the 801 Patent, Petitioners’ alleged motivation to combine IEEE Red Book with Reckels lacks any support. Because all claims require—either directly or based on dependence from claim 1 or claim 12—the claimed “*bus bar*,” Petitioners fail to show a reasonable likelihood of success that Reckels, IEEE Red Book, or any combination thereof discloses or renders obvious the Challenged Claims.

¹ Independent claim 12 similarly recites “*at least one switch gear to be associated with at least one transformer and with an interconnect and a bus bar.*”

All claims require—either directly or based on dependence from claim 1 or claim 12—the claimed “*bus bar*.”

Accordingly, Petitioner has not shown a reasonable likelihood of prevailing as to at least one claim, and thus trial should not be instituted.

II. CHALLENGED U.S. PATENT NO. 11,211,801

A. Overview of 801 Patent

The effective filing date for 801 Patent was June 15, 2018, which Petitioners do not dispute.

The 801 Patent is directed to hydraulic fracturing (fracking) in oil and gas wells by pumping fluid into underground formations at high pressure using an electric-powered pump (i.e., pumping system). EX-1001, Abstract, 1:16–19. The 801 Patent is further directed to a mobile grid assembly used to power the electric pumping system for use in limited space environments. *Id.* Fracking operations typically involve pressurizing fracturing fluid slurry using high-pressure pumps, which are powered by mobile power sources. *Id.*, 1:27–32. Such mobile power sources have large volume and mass, and heavy-duty trailers, trucks, or skids may be used for transporting these components to remote sites for fracturing oilfield operations. *Id.*, 1:32–38. Power sources are electrically connected to power the fracturing components, but such electrical connections are typically complex, unsafe, unreliable, and may involve multiple configurations that require space and

time to resolve, both of which are at a premium in the harsh oilfield environment.

Id., 1:43–50.

To overcome these problems, the 801 Patent teaches a novel system of a singular platform comprising at least one mobile power unit (MPU) (502a-c) involving one or more switchgears (512) and a common bus bar (514a-b) as shown in Figure 5 and reproduced below. *Id.*, 10:23–39, Fig. 5.

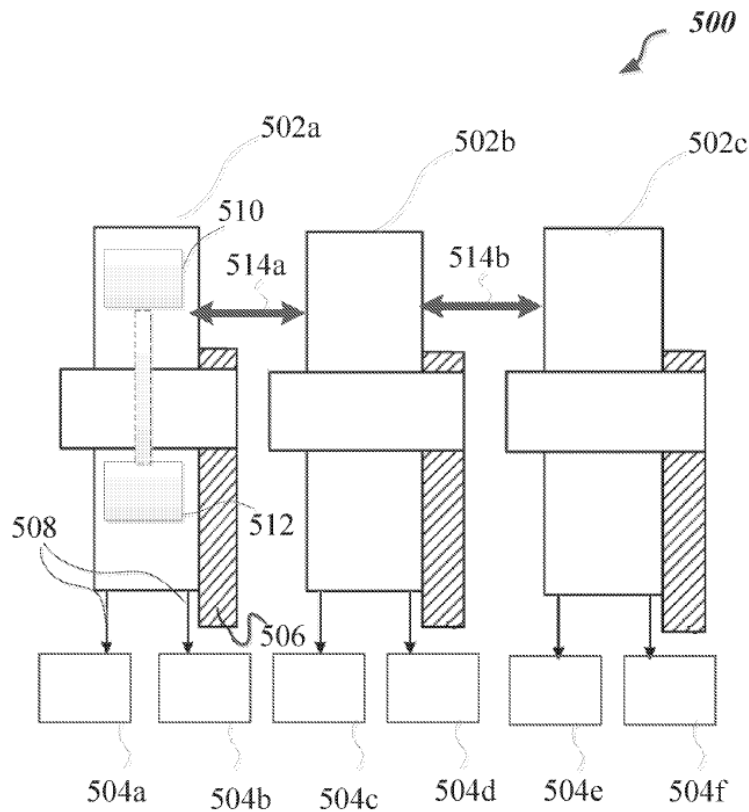


Fig. 5

The system in Figure 5 also includes turbine generator (510) integrated with switchgear to respective fracturing pump trailers (FPs) (504a-f), and power cable connections (508). *Id.*, 31. The MPU(s) may be configured to generate voltage that matches the load requirements of an electrical bus (i.e., bus bar) of the switchgear(s) to meet specific voltage and current requirements of the fracturing equipment. *Id.*, 2:5–9. The combined electrical current generated is provided through the electrical bus (i.e., bus bar) to the components of the hydraulic fracturing system. *Id.* The electrical bus is sized to match the MPU's capabilities and meet the fracturing operation load requirements. *Id.*, 2:7–9.

B. The Examiner Agreed with Applicant That a Claim Limitation Amendment Overcame All Cited Prior Art During Prosecution

The Examiner allowed the challenged claims over the prior art of record because the Examiner found Applicant's arguments persuasive that the prior art of record did not disclose or suggest the claims as modified in the Applicant's July 30, 2021 office action response. *See* EX-1002, 52, 85–95. In doing so, the Examiner effectively determined the claims were distinguished from the prior art—including the same disclosures from Reckels (EX-1004) described below in Sections II.B and VII—including the following claim features added in the July 30, 2021 amendment: “*at least one switch gear to be associated with at least one transformer, an interconnect, and a bus bar*” with “*the at least one switchgear, the*

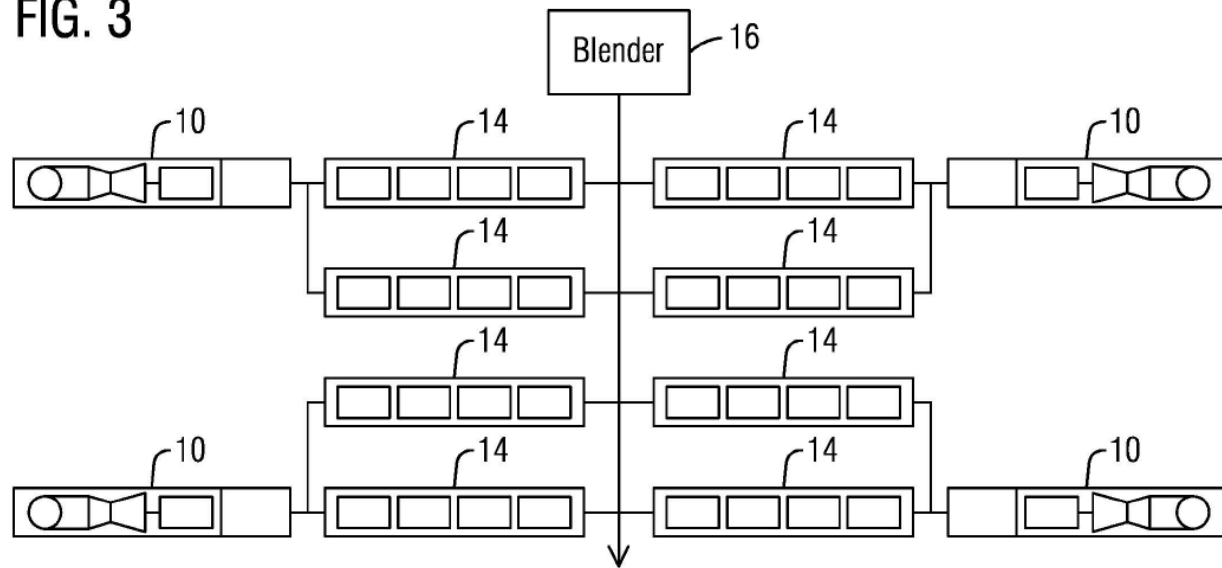
electrical buses, the interconnect, and the bus bar sized to support voltage and current requirements of the loads and to support voltage and current outputs of the at least one transformer with the at least one first generator in a load sharing arrangement with a second generator of a second mobile unit.” *Id.*, 86 (July 30, 2021 amendment additions underlined, deletions omitted). As further explained below, none of the prior art identified in the Petition, alone or in combination, discloses or renders obvious the challenged claims as the Examiner previously found.

III. ASSERTED REFERENCES

A. Reckels (EX-1004)

Reckels is directed to a hydraulic fracturing system including blender (16) power generation trailers 10, and hydraulic fracturing pump trailers 14 as shown in Figure 3 and reproduced below. EX-1004, ¶ 19, Fig. 3.

FIG. 3



Id., Fig. 3.

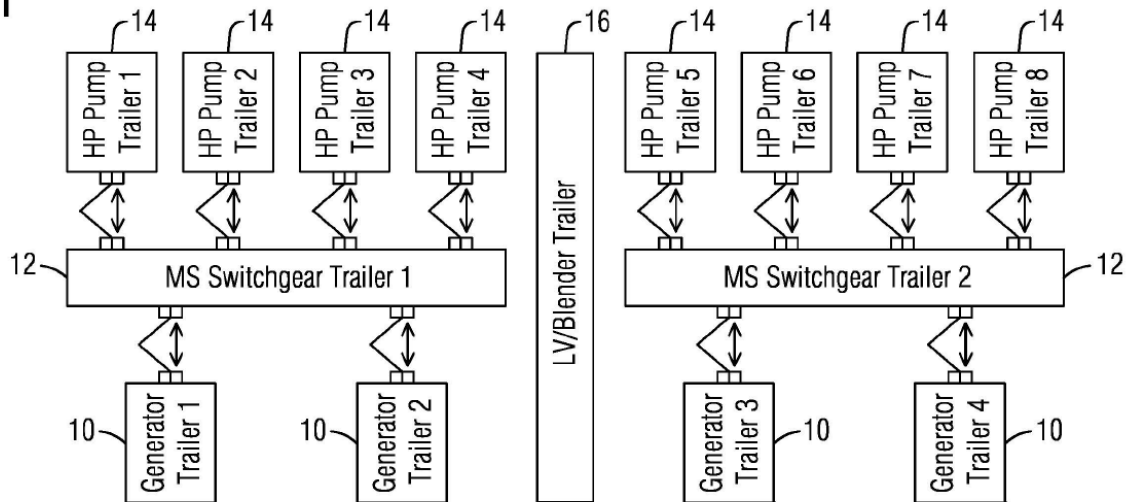
Reckels explains that power generation trailers may include a gas turbine that drives a generator to create electrical power for associated hydraulic pump trailers, where an electric motor drives a hydraulic pump that drives a hydraulic fracturing fluid pump. *Id.*, ¶ 19. Reckels further explains that a switchgear may be eliminated or included in an electric room mounted with the gas turbine generator equipment. *Id.*, ¶ 20. For the above system in Figure 3, each power generation trailer may be electrically connected to two hydraulic fracturing pump trailers, but the system does not include any bus bar or load-sharing arrangement between or among any generators. *Id.*, ¶ 19, Fig. 3.

Reckels also explains that the Figure 3 embodiment offers a “substantial footprint savings over conventional diesel and electric powered fracturing pump systems,” while citing as an example “the fracturing pump system[] illustrated in

figure 1 [Figure 1 Embodiment] [described in ¶¶15–17]” and reproduced below.

Id., ¶ 20.

FIG. 1



Id., Fig. 1.

Reckels asserts that the Figure 3 Embodiment “eliminates an entire semi-trailer of equipment” compared to the Figure 1 Embodiment. *Id.*, ¶ 20.

B. IEEE Red Book (EX-1005)

IEEE Red Book is directed to the design, construction, operation, and maintenance of electric power systems in industrial plants. Ex-1005, 6. IEEE Red Book is approved by the IEEE Standards Board specifically for industrial plant applications in industrial facilities. *Id.*

IEEE Red Book explains that electrical engineers use standards (e.g., Std 141-1986) in designing, installing, operating, and maintaining electric systems for industrial plants, and that if a standard is older than five years, the standard may

be obsolete. *Id.*, 36–37. IEEE Red Book advises that for a standard older than five years, “the publisher should be consulted to see if a more recent edition exists and, if so, a copy should be obtained.” *Id.*, 37.

IV. SKILL LEVEL OF A POSITA

For purposes of this preliminary response only, Patent Owner applies the same skill level proposed by Petitioners. *See* Pet., 15–16.

V. CLAIM CONSTRUCTION

Petitioners have not proposed any construction for the terms of the 801 Patent. Pet., at 16. Patent Owner addresses claim construction positions, if any, in the body of its arguments below. Patent Owner reserves the right to propose constructions for any claim terms if the Board institutes a proceeding.

VI. DURING PROSECUTION, THE EXAMINER CORRECTLY DETERMINED THAT RECKELS DOES NOT DISCLOSE OR RENDER OBVIOUS THE CHALLENGED CLAIMS, AND PETITIONERS FAIL TO DEMONSTRATE THAT THE EXAMINER MATERIALLY ERRED IN MAKING THAT DETERMINATION

The same Reckels disclosures were disclosed to the Patent Office during examination of the application resulting in the 801 Patent. The Examiner ultimately and correctly determined that the Reckels disclosures did not disclose or render obvious the Challenged Claims. And Petitioners have failed to demonstrate that the Examiner committed any material error in that analysis. *Advanced Bionics, LLC v.*

MED-EL Elektromedizinische Geräte GmbH, IPR2019-01469, Paper 6 (PTAB Feb. 13, 2020).

During examination, Patent Owner disclosed another Reckels reference (U.S. Pat. Pub. No. 2019/0211661 (EX-2010)) (“Reckels661”) that has the same disclosures as Reckels (EX-1004) relied on by Petitioners in Ground 1. EX-1002, 330, 346, 417; *see also* EX-1001, 5 (References Cited). Specifically, Reckels (EX-1004) is a publication of International Application No. PCT/US2017/056449 filed on October 13, 2017. Reckels661 is the U.S. publication of the *same* application.² A comparison of the references shows Reckels and Reckels661 are substantively identical, with both having 25 numbered paragraphs and six figures. *Compare* EX-1004, *with* EX-2010. Thus, the Examiner was aware during prosecution of the *same* Reckels disclosures that Petitioner relies on in Ground 1.

During prosecution, the Examiner ultimately found that the prior art references of record (e.g., Reckels661) failed to disclose or render obvious the challenged claims. Despite this fact, and as explained herein, Petitioners rely on the same disclosures of Reckels as allegedly disclosing the Challenged Claims. As explained below, the Examiner correctly determined that the Reckels disclosures

² The corresponding U.S. application is 16/333,363. *See* EX-2010, cover page.

(EX-1004), alone or in combination with any other prior art of record, do not disclose or render obvious the Challenged Claims.

VII. ALL GROUNDS ARE PREDICATED ON IEEE RED BOOK, WHICH IS NON-ANALOGOUS ART AND WAS OBSOLETE AT THE TIME OF INVENTION OF THE 801 PATENT

All Grounds in the Petition rely on IEEE Red Book (EX-1005), which is not analogous art to the 801 Patent and was obsolete at the time of invention of the 801 Patent. These deficiencies doom the Petition.

Petitioners have the burden to show that all prior art used in a combination is analogous prior art. 35 U.S.C. § 316(e); *see Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1379 (Fed. Cir. 2015) (“[Petitioner] had the burden of persuasion to prove unpatentability by a preponderance of the evidence, and this burden never shifted.”). To do so, the Petition must show that the prior art satisfies one of two tests:

(1) whether the art is from the same field of endeavor, regardless of the problem addressed and, (2) if the reference is not within the field of the inventor's endeavor, whether the reference still is reasonably pertinent to the particular problem with which the inventor is involved.

In re Bigio, 381 F. 3d 1320, 1325 (Fed. Cir. 2004). The Petition provides no such analysis for IEEE Red Book. This is not surprising because IEEE Red Book is non-analogous art.

First, IEEE Red Book is not in the field of art of the 801 Patent—mobile grid assembly for powering an electric hydraulic fracturing pump in *hydraulic fracturing oilfield operations*. See EX-1001, 1:16–19, 6:46–49; see also Pet., 2 (stating the 801 Patent generally relates to the same). Rather, IEEE Red Book is in the field of electric power distribution for *industrial plants*. See EX-1005, 36. Further, Petitioners admit the applicability of IEEE Red Book is limited to “industrial facilities.” Pet., 23 (“[IEEE Red Book] provides a recommended practice for the electrical design of *industrial facilities*.”) (emphasis added) (internal quotations omitted). Indeed, IEEE Red Book explains that “[i]t has been approved by the IEEE Standards Board as an IEEE standards document to provide current information and recommended practices for the design, construction, operation, and maintenance of electric power systems in *industrial plants*” (EX-1005, 6 (emphasis added)), which are vastly different facilities with much more easily controlled environments than remote, harsh oilfield environments. EX-2011, 3 (“As large oil reserves are becoming depleted and the discovery of new large reserves is few and far between, oil and gas companies are trying to compensate by exploring for deposits in *remote, harsh locations such as the Arctic, offshore*

deep under the ocean, hot deserts and fields in which High-Pressure High-Temperature (HPHT) wells are developed.”) (emphasis added). Further, IEEE Red Book does not discuss or mention hydraulic fracturing oilfield operations—let alone is it approved by the IEEE Standards Board for such applications—which is not surprising given the vast and distinct challenges of hydraulic fracturing oilfield operations compared to more environmentally controlled industrial plant applications. Consequently, IEEE Red Book is not in the same field of endeavor as the 801 Patent.

Petitioners erroneously attempt to recharacterize and broaden the approved scope of IEEE Red Book to “electrical power supply and distribution in *industrial systems*” (Pet., 12 (emphasis added)), but the IEEE Standards Board explicitly specifies IEEE Red Book is only approved for the narrower “electric power systems in *industrial plants*.” EX-1005, 6 (emphasis added). IEEE Red Book is thus inapplicable to and not approved for the 801 Patent’s field of endeavor—mobile grid assembly for powering an electric hydraulic fracturing pump in *hydraulic fracturing oilfield operations*. EX-1001, 1:16–19, 6:46–49.

The Petition also fails to explain or reconcile the vast differences in harsh hydraulic fracturing oilfield environments compared with the controlled industrial facility environments. Pet., 16–26; *see also* EX-2011, 3 (describing oilfield environments as “remote and challenging locations” that include “the Arctic,

offshore deep under the ocean, hot deserts, and fields in which High-Pressure High-Temperature (HPHT) wells are developed”). And the only “potential problem” mentioned in the Petition concerning the 801 Patent is “using an isolation transformer ‘for filtering out harmonics between the power source (generators) and the load (*fracturing equipment* in FP 704a,b) with or without changing the voltage.’” Pet., 15 (emphasis added). This alleged problem is identified in the context of discussing Kumar, not IEEE Red Book. *Id.* Regardless, IEEE Red Book has nothing to do with fracturing equipment—indeed, IEEE Red Book never mentions fracturing equipment.

IEEE Red Book cannot be reasonably relied upon to address the unique problems facing the 801 Patent inventors because IEEE Red Book never mentions hydraulic fracturing environments, nor is it approved for hydraulic fracturing environments. *See* EX-1005, 6 (“[IEEE Red Book] has been approved by the IEEE Standards Board ... for the design, construction, operation, and maintenance of electric power systems in *industrial plants*.”) (emphasis added). Without IEEE Red Book being approved for hydraulic oilfield fracking operations, an inventor considering any problem addressed in the 801 Patent would not be motivated to turn to IEEE Red Book at the time of the invention, especially given that it is directed to industrial plant applications within controlled *industrial facility environments* and it was not specifically approved by the IEEE Standards Board

for use in hydraulic fracturing oilfield environments. *See generally id.* Therefore, IEEE Red Book also would not have logically commended itself to the attention of the 801 Patent's inventor. *In re Clay*, 966 F.2d 656, 659 (Fed Cir. 1992).

Second, IEEE Red Book was obsolete at the time of invention of the 801 Patent, and a POSITA would thus not have been motivated to combine it with Reckels. As discussed above (*see supra* Section III.B), IEEE Red Book cautions that if a standard is older than five years, the standard may be obsolete. EX-1005, 36–37 (“If [a standard] is older than five years, the standard may be obsolete.”). IEEE Red Book further explains that if the standard is older than five years, “the publisher should be consulted to see if a more recent edition exists and, if so, a copy should be obtained.” *Id.*, 37. Stated differently, the older standard should not be consulted “if a more recent edition exists.” *Id.* Petitioners admit that IEEE Red Book is “ANSI/IEEE Std 141-1986” and that it was “publicly accessible and indexed at the library, and accordingly would have been searchable and obtainable by the public by at least July 30, 1987.” Pet., 11. But ***IEEE Red Book was superseded*** by IEEE Std 141-1993 on April 29, 1994. EX-2012, 1. By the June 15, 2018 time of invention of the 801 Patent—which Petitioners do not dispute (Pet., 5)—IEEE Red Book was “older than five years” and superseded by at least IEEE Std 141-1993. *Id.* A POSITA would have known—either before or after reading IEEE Red Book’s “Recommended Practices”—not to further consult IEEE Red

Book at least because it was obsolete and superseded by IEEE Std 141-1993. A POSITA would thus not have consulted IEEE Red Book, much less been motivated to combine it with Reckels or any other Asserted References. Consequently, Petitioner has not demonstrated a reasonable likelihood of prevailing in demonstrating that the challenged claims would have been obvious over any combination of prior art relying on IEEE Red Book. *The Chamberlain Grp., LLC, v. Overhead Door Corp.*, IPR2022-00842, Paper 9 at 37 (PTAB Oct. 25, 2022) (denying institution because one of the two grounds relied on non-analogous prior art); *In re Nat. Alternatives, LLC*, 659 F. App'x 608, 614 (Fed. Cir. 2016).

As shown above, a POSITA would not have consulted or relied upon IEEE Red Book, much less been motivated to combine it with any or all Asserted References. Because all grounds rely on IEEE Red Book, the Petition fails to demonstrate a reasonable likelihood of invalidating any of the claims.

VIII. GROUND 1 OF THE PETITION IMPROPERLY MIXES AND MATCHES DIFFERENT EMBODIMENTS FROM RECKELS DESPITE RECKELS'S DISPARAGEMENT OF ONE OF THE EMBODIMENTS AND NO MOTIVATION FOR A POSITA TO COMBINE SUCH DISPARATE EMBODIMENTS

Challenged independent claim 1 has, *inter alia*, the following different requirements:

- “*a first mobile unit*”;
- “*at least one switch gear*”;

- “*at least one transformer*”;
- “*an interconnect*”;
- “*a bus bar*”;
- “*at least one first generator coupled to the at least one switchgear and located on the first mobile unit with the at least one switch gear*”; and
- “*the at least one switchgear, the electrical buses, the interconnect, and the bus bar sized to support voltage and current requirements of the loads and to support voltage and current outputs of the at least one transformer with the at least one first generator in a load sharing arrangement with a second generator of a second mobile unit.*”

See EX-1001, claim 1 (emphases added).

Challenged independent claim 12 has materially identical requirements:

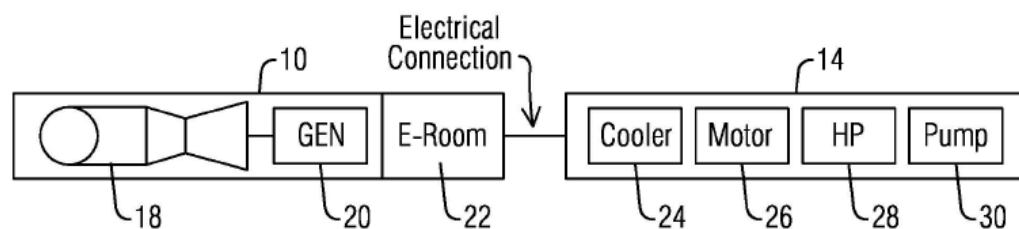
- “*providing a first mobile unit with at least one first generator and at least one switchgear located together in the first mobile unit*”;
- “*the at least one first generator coupled to the at least one switch gear on the first mobile unit*”;
- “*the at least one switch gear to be associated with at least one transformer and with an interconnect and a bus bar*”; and

- “the at least one switchgear, the interconnect, the bus bar, and the electrical buses **sized to support** voltage and current requirements of the loads and to support voltage and current outputs of the at least one transformer with the at least one first generator in a load sharing arrangement with a second generator of a second mobile unit.”

Id., claim 12 (emphases added).

As shown above, the challenged independent claims all require at least one generator and at least one switchgear located on the **same** mobile unit **and** a bus bar for each of these claim limitations. Despite this requirement, Petitioners map different embodiments in Reckels to allegedly satisfy the above limitations. Specifically, Petitioners map the claimed “generator coupled to the at least one switchgear and located on the first mobile unit with the at least one switch gear” to Reckels’s embodiment shown in Figure 2 (the “Figure 2 Embodiment”) and reproduced below. Pet., 32.

FIG. 2



EX-1004, Fig. 2.

Petitioners allege that the Figure 2 Embodiment teaches a “power generation trailer 10” that comprises “generator 20” that is “connected to an electric room 22”

that includes “transformers and switchgear.” Pet., 32 (internal quotations omitted).

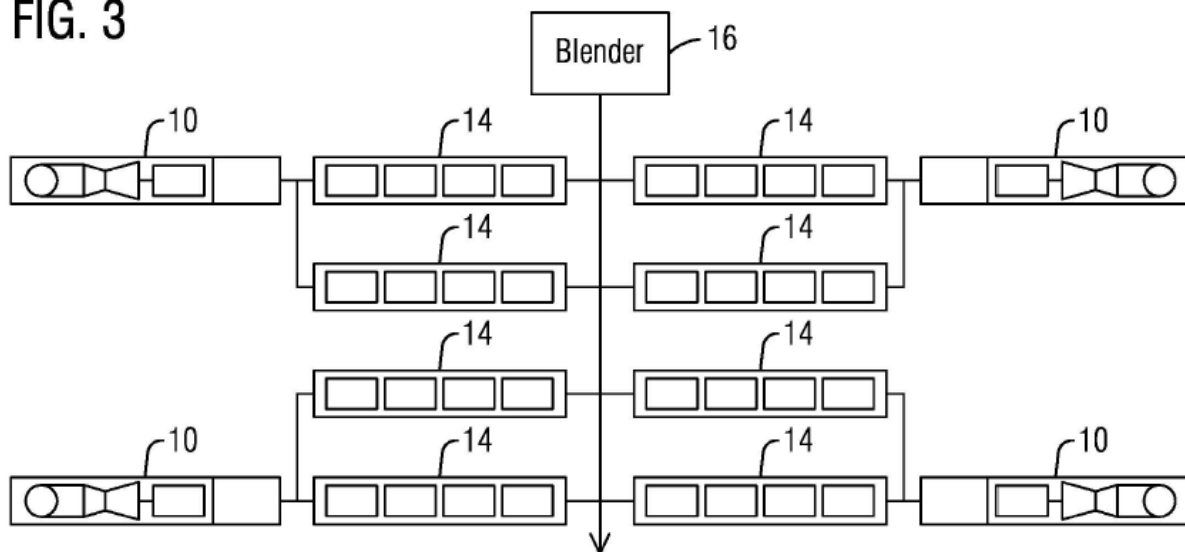
Notably, Petitioners do not claim—nor could they credibly do so—that the

Figure 2 Embodiment teaches a bus bar. *See id.*, 28–32. Indeed, the Figure 2

Embodiment does not mention or suggest the claimed bus bar.

Petitioners therefore additionally map the claimed “*generator coupled to the at least one switchgear and located on the first mobile unit with the at least one switch gear*” to Figure 3 in Reckels (the “Figure 3 Embodiment”) (reproduced below).

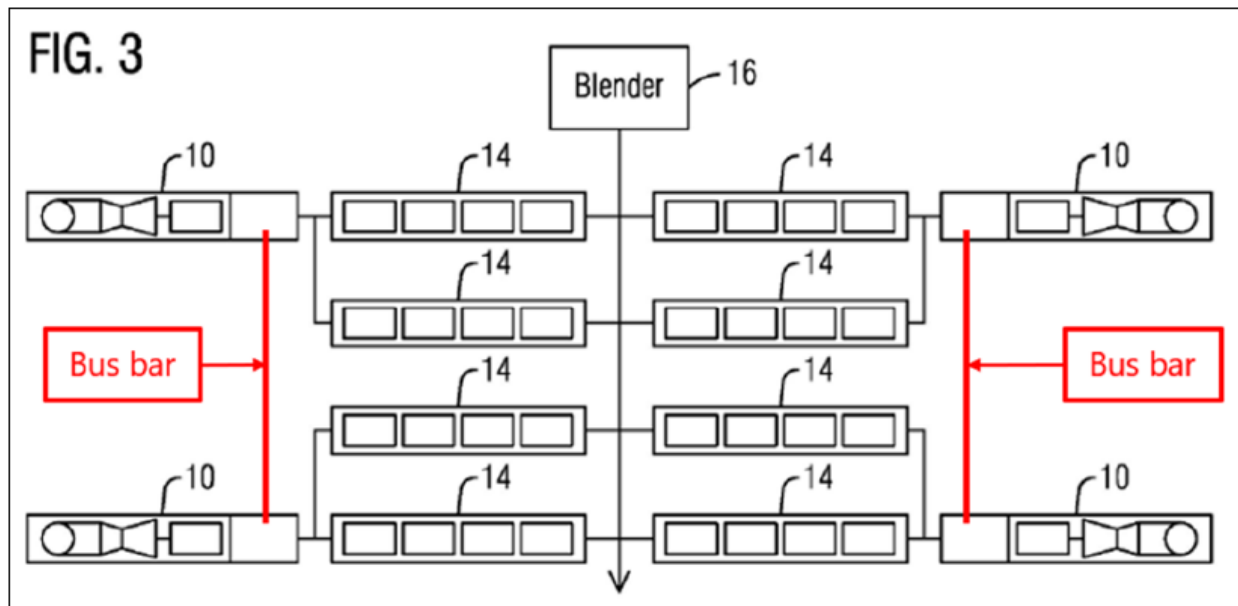
FIG. 3



EX-1004, Fig. 3.

But the Figure 3 Embodiment—like the Figure 2 Embodiment—does not include a bus bar.

Apparently recognizing this deficiency, Petitioners then conjure out of whole cloth a modified version of Figure 3 (the “Conjectured Figure 3 Embodiment”) drawing in conjectured bus bars (the “Conjectured Bus Bars) (reproduced below).

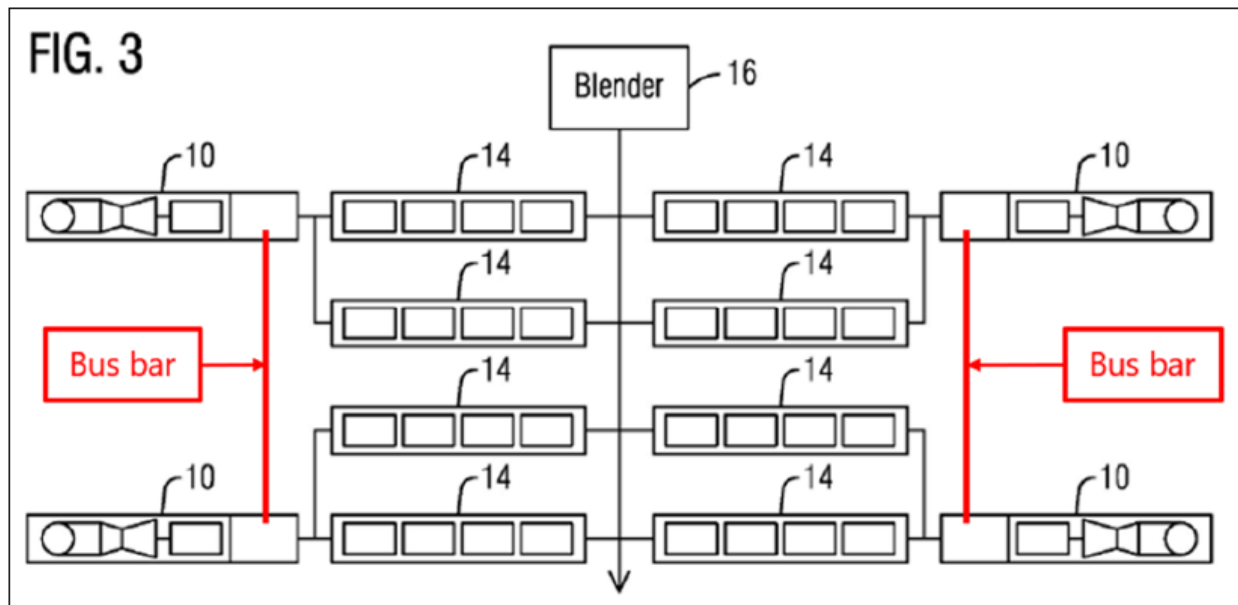


Pet., 30 (Conjectured Figure 3 Embodiment with Conjectured Bus Bars in red). But Petitioners' Conjectured Figure 3 Embodiment fails for at least the reasons discussed below.

First, and as an initial matter, the Figure 3 Embodiment is a different embodiment from the Figure 2 Embodiment, at least because it includes “two quadrants” of pumps instead of the single pump configuration of the Figure 2 Embodiment. But even assuming—without conceding—that the Figure 3 Embodiment includes at least one first generator coupled to the at least one switchgear and located on the first mobile unit with the at least one switchgear,

Reckels does not identify or suggest a bus bar in the paragraphs describing the Figure 3 Embodiment. *See* EX-1004, ¶¶ 19–20. The Figure 3 Embodiment thus fails to disclose or render obvious the claimed “bus bar.” *Id.* Instead, Figure 3 explicitly illustrates only three types of components—blender 16, power generation trailers 10, and hydraulic fracturing pump trailers 14, none of which are the claimed “bus bar.” *Id.*, Fig. 3. Indeed, Reckels explains that “[e]ach power generation trailer 10 may be electrically connected to two of the hydraulic fracturing pump trailers 14,” in contrast to a bus bar configuration wherein at least one hydraulic fracturing pump trailer would be connected to two or more power generation trailers. *Id.*, ¶ 19. The Figure 3 Embodiment thus does not disclose or render obvious the claimed “bus bar”.

Second, Reckels teaches against Petitioners’ Conjectured Figure 3 Embodiment. As an initial matter, Petitioners apparently recognize the flaw in the Figure 3 Embodiment, as demonstrated by their unsupported attempt to draw in bus bars between power generation trailers of both quadrants as illustrated below.

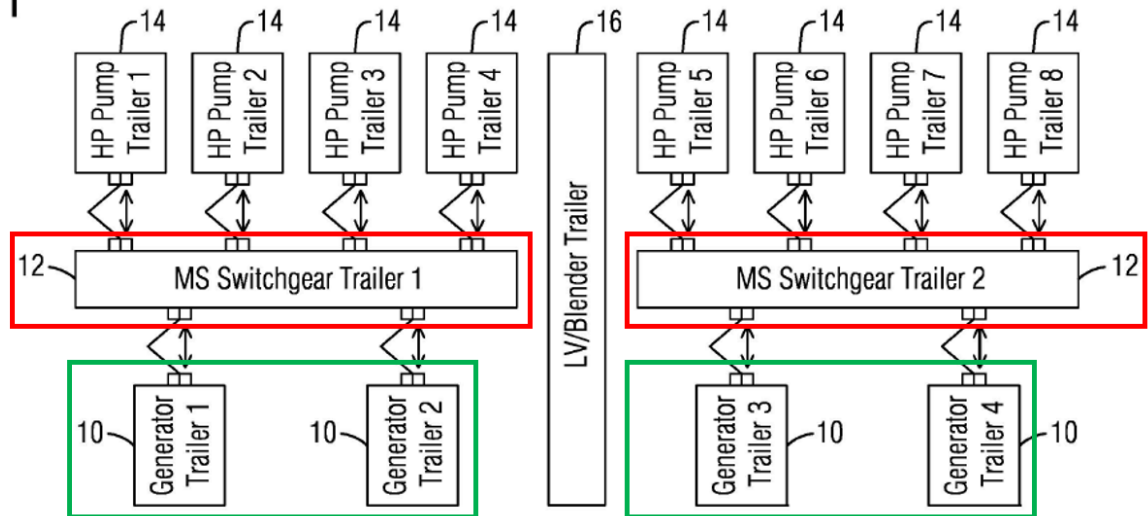


Pet., 30 (Conjectured Figure 3 Embodiment with Conjectured Bus Bars in red).

Petitioners allege that Reckels paragraph 15 supports their hypothetical bus bars.³ *Id.*, 29. But Reckels paragraph 15 describes an altogether *different* embodiment (the “Figure 1 Embodiment”) (reproduced below), which *Reckels teaches against* as discussed below and which is vastly different from the Figure 2 Embodiment and the Figure 3 Embodiment.

³ Patent Owner notes that paragraph 15 is the only place Reckels mentions a bus bar, and any associated teachings are limited to the Figure 1 Embodiment, at least because Reckels teaches against the Figure 1 Embodiment as discussed below.

FIG. 1



EX-1004, Fig. 1.

For example, the Figure 1 Embodiment includes two dedicated MS Switchgear Trailers 12 (red box), with each Switchgear Trailer 12 connected to two separate Generator Trailers 10 (green box). The Figure 1 Embodiment thus does not disclose or render obvious the claimed “*generator coupled to the at least one switchgear and located on the first mobile unit with the at least one switch gear,*” at least because each generator is on a *separate* trailer from each switchgear. *Id.*, Fig. 3.

Further, *Reckels teaches against the Figure 1 Embodiment* because it requires additional trailers that substantially impact the footprint of the fracturing pump system in a negative way. *Id.*, ¶ 20 (“Figure 3 illustrates a **substantial footprint savings** over conventional diesel and electric powered fracturing pump systems, as various trailers are eliminated from the configuration. For example,

when comparing the hydraulic fracturing pump system illustrated in figure 3 to the electric fracturing pump systems illustrated in figure 1, each quadrant of the system in ***figure 3 eliminates an entire semi-trailer of equipment***, i.e., the switchgear equipment.”) (emphases added). Reckels further discards the Figure 1 Embodiment in favor of the Figure 3 Embodiment because the Figure 3 Embodiment “saves the footprint of an entire semi-trailer over the ... electrically driven pump configuration of figure 1.” *Id.* Petitioners’ reliance on the teachings of Figure 1 to support their alleged obvious modification to Figure 3 has no support in the facts or the law. *Virtek Vision Int’l ULC v. Assembly Guidance Sys., Inc.*, 97 F.4th 882, 886 (Fed. Cir. 2024) (“It does not suffice to meet the motivation to combine requirement to recognize that two alternative arrangements ... were both known in the art.”).

Further, paragraph 15—which only pertains to the Figure 1 Embodiment—is the only place Reckels mentions a bus bar.⁴ *See generally* EX-1004. No other

⁴ Patent Owner notes that Petitioners erroneously cite paragraph 18 in attempted support of a sentence ending “in order to electrically incorporate Reckels’s teachings of a ‘common bus bar,’” but paragraph 18 does not mention—much less teach or disclose—a “common bus bar.” Pet., 18.

paragraph in Reckels mentions a bus bar or provides any motivation that would prompt a POSITA to incorporate a bus bar—or any of the Figure 1 Embodiment, given that Reckels teaches against the Figure 1 Embodiment as discussed above.

Third, Ground 1 relies solely on IEEE Red Book for the sizing portion of “*the at least one switchgear, the electrical buses, the interconnect, and the bus bar sized to support voltage and current requirements of the loads and to support voltage and current outputs of the at least one transformer*” (the “Sizing Limitation”). Pet., 36–40. Indeed, Petitioners do not claim—nor could they credibly allege otherwise—that Reckels discloses or renders obvious the Sizing Limitation, other than by claiming a POSITA would have found it obvious given the IEEE Red Book disclosures. *Id.* But Petitioners’ logic is flawed as explained above (*see supra* Section VII) because IEEE Red Book (1) is non-analogous art; (2) was superseded and obsolete as of the date of invention of the 801 Patent; and (3) specifies within its Recommend Practices section for a POSITA not to use standards—such as itself—that have been superseded.

Ground 1 thus fails to disclose or render obvious the Challenged Claims. And because Ground 1 is the only ground addressing the two independent claims (1 and 12), Petitioners have failed to meet their burden of proof of showing a reasonable likelihood of succeeding on at least one claim.

IX. DR. DURHAM'S DECLARATION SUFFERS FROM THE SAME FLAWS AS THE PETITION

The Petition relies on limited, conclusory expert testimony to support how Reckels in view of IEEE Red Book allegedly discloses the “*bus bar*” limitation. Pet., 16 (citing EX-1003, ¶¶ 114–128). Instead of providing additional explanation, the cited expert testimony merely parrots the Petition in arguing that Petitioners’ Conjectured Bus Bars satisfy the requirement of the claimed “bus bar.” *Compare* Pet., 16–26, with EX-1003, ¶¶ 114–128; *see Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 12 (on Director Review) at 5 (PTAB Feb. 10, 2023) (precedential) (“[T]he Board was correct in giving little weight to Petitioner’s expert because the expert declaration merely offered conclusory assertions without underlying factual support and repeated, *verbatim*, Petitioner’s conclusory arguments.... The declaration does not provide any technical detail, explanation, or statements supporting *why* the expert determines that the feature in question was required or would have been obvious based on the prior art disclosure.”); *InfoBionic, Inc. v. Braemer Mfg., LLC*, IPR2015-01704, Paper 11, at 6, 13 (PTAB Feb. 16, 2016) (finding expert testimony that “merely repeats the Petitioner’s conclusory argument, adding the phrase ‘[i]n my opinion,’” is not “persuasive or helpful as it ... offers little or no elaboration”). By doing so, Petitioner’s expert testimony provides little to no probative value beyond Petitioners’ attorney

argument. *See Kinetic Techs., Inc. v. Skyworks Sols., Inc.*, IPR2014-00529, Paper 8, at 15 (PTAB Sep. 23, 2014) (“Merely repeating an argument from the Petition in the declaration of a proposed expert does not give that argument enhanced probative value.”).

Dr. Durham's opinions also largely parrot the Petition and cite IEEE Red Book excerpts without adequately explaining why a POSITA would look to IEEE Redbook, given IEEE Red Book is non-analogous art that was obsolete and superseded at the time of invention of the 801 Patent. *See* EX-1003, ¶¶ 114–128; *InfoBionic, Inc.*, IPR2015-01704, Paper 11, at 6, 13 (holding that expert testimony that “merely repeats the Petitioner's conclusory argument, adding the phrase ‘[i]n my opinion,’” is not “persuasive or helpful as it ... offers little or no elaboration”).

As such, Petitioners have not provided adequate expert testimony to support the Grounds.

X. CONCLUSION

For the above reasons, the Director should decline to institute *inter partes* review.

Dated: December 10, 2025

Respectfully submitted,

/s/ Brian E. Ferguson
Brian E. Ferguson (lead counsel)
Winston & Strawn LLP
Reg. No. 36,801
Scott M. Border (backup counsel)
Reg. No. 77,744
1901 L Street, NW
Washington, D.C. 20036
Tel.: 202-282-5100
beferguson@winston.com
sborder@winston.com
IPR-Profrac-USWell@winston.com

Lead Counsel for Patent Owner

Richard H. Quarles (*pro hac vice* pending)
(backup counsel)
Winston & Strawn LLP
300 South Tryon Street, 16th Floor
Charlotte, NC 28202
Tel.: 704-350-7700
rquarles@winston.com

CERTIFICATE OF COMPLIANCE

The undersigned certifies that this response complies with the word-count limitations of 37 C.F.R. § 42.24(b)(1). This response contains 4,943 words as calculated by the word-count feature of Microsoft Word, the word-processing program used to create it.

The undersigned further certifies that this Petition complies with the typeface requirements of 37 C.F.R. § 42.6(a)(2)(ii) and typestyle requirements of 37 C.F.R. § 42.6(a)(2)(iii). This petition has been prepared in a proportionally spaced typeface using Microsoft Word in Times New Roman 14-point font.

Dated: December 10, 2025

Respectfully submitted,

/s/ Brian E. Ferguson

Brian E. Ferguson (lead counsel)

Winston & Strawn LLP

Reg. No. 36,801

Scott M. Border (backup counsel)

Reg. No. 77,744

1901 L Street, NW

Washington, D.C. 20036

Tel.: 202-282-5100

beferguson@winston.com

sborder@winston.com

IPR-Profrac-USWell@winston.com

Lead Counsel for Patent Owner

Richard H. Quarles (*pro hac vice* pending)
(backup counsel)

Winston & Strawn LLP

300 South Tryon Street, 16th Floor

IPR2025-01424
Patent 11,211,801 B2

Patent Owner's Preliminary Response

Charlotte, NC 28202
Tel.: 704-350-7700
rquarles@winston.com

CERTIFICATE OF SERVICE

I hereby certify that on this 10th day of December, 2025, I caused to be served a true and correct copy of the foregoing "Patent Owner's Preliminary Response" and accompanying exhibits by electronic mail on the following:

Chad C. Walters (chad.walters@bakerbotts.com)
Jacob McDonald (jacob.mcdonald@bakerbotts.com)
Melissa L. Muenks (melissa.muenks@bakerbotts.com)

Dated: December 10, 2025

Respectfully Submitted,

/s/ Brian E. Ferguson
Brian E. Ferguson (lead counsel)
Reg. No. 36,801
Winston & Strawn LLP
1901 L Street, NW
Washington, D.C. 20036
Tel.: 202-282-5100
beferguson@winston.com
IPR-Profrac-USWell@winston.com