

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

MWE INVESTMENTS, LLC,
HARBOR FREIGHT TOOLS USA, INC., and
GENERAC POWER SYSTEMS, INC.,
Petitioner,

v.

CHAMPION POWER EQUIPMENT, INC.,
Patent Owner.

IPR2025-01185
Patent 10,221,780

**PATENT OWNER CHAMPION POWER EQUIPMENT, INC.'S
PRELIMINARY RESPONSE**

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GLOSSARY

Abbreviation	Term
'780 Patent	U.S. Patent No. 10,221,780
Board	Patent Trial and Appeal Board
Challenged Claims	Claims 1-15 of the '780 Patent
Generac	Generac Power Systems, Inc.
Harbor Freight	Harbor Freight Tools USA, Inc.
MWE	MWE Investments, LLC
Patent Owner	Champion Power Equipment, Inc.
Petition	Petition for Inter Partes Review of U.S. Patent No. 10,221,780 (Paper 4)
Petitioner	Harbor Freight, Generac, and MWE, collectively
POSITA	Person of Ordinary Skill in the Art
USPTO	United States Patent & Trademark Office

Pursuant to 37 C.F.R. § 42.107, Patent Owner Champion Power Equipment, Inc. hereby submits its Preliminary Response to the Petition filed by MWE Investments, LLC, Harbor Freight Tools USA, Inc., and Generac Power Systems, Inc. (collectively, “Petitioner”), challenging Claims 1-15 of U.S. Patent No. 10,221,780.

I. INTRODUCTION

Petitioner’s proposed grounds are identified below:

Ground	Claims	Basis	Primary Reference	Secondary Reference(s)
1	1-4, 6, 7, 15	103	DuroMax	Elsdon
2A	1, 6, 7	102	Hallberg	-
2B	2, 15	103	Hallberg	-
3	8, 9, 11, 14	103	Rumao	(DuroMax, Elsdon) OR Hallberg
4	12, 13	103	Rumao	(DuroMax, Elsdon) OR (Hallberg, Parlatores)
5	5	103	DuroMax	Elsdon, Paraltore
6	10	103	Rumao	DuroMax, Elsdon

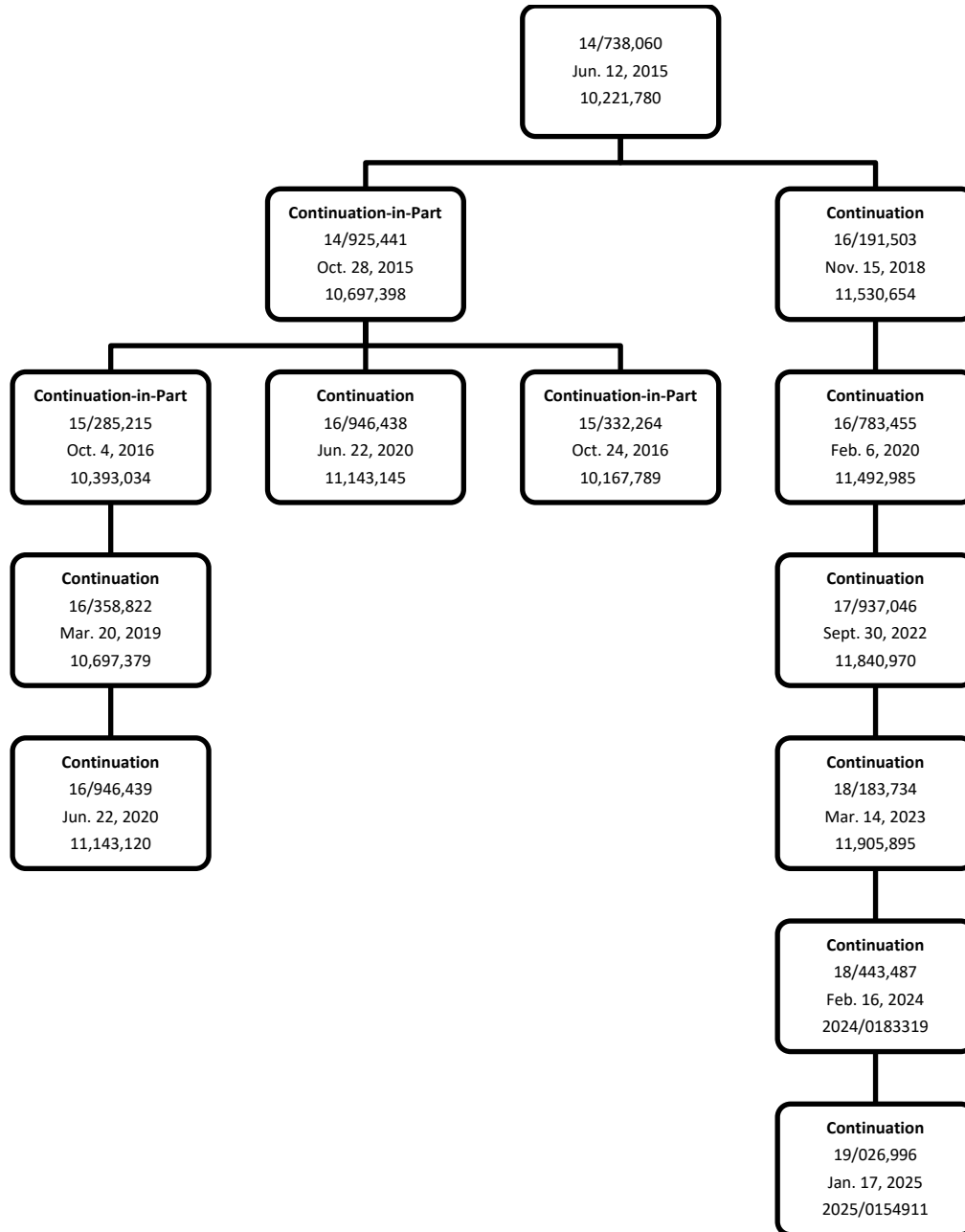
Discretionary denial pursuant to 35 U.S.C. § 314(a), 35 U.S.C. § 325(d), and the *Fintiv* and *Advanced Bionics* factors¹ is warranted for the reasons set forth in Patent Owner’s Brief in Support of its Request for Discretionary Denial of Institution (Paper 14).

Moreover, denial is appropriate because each of Petitioner’s Grounds 1-3 (which address Independent Claims 1, 8, and 15) are deficient. Ground 1 is deficient at least because (1) Petitioner’s purported motivation to combine is improperly grounded in hindsight, (2) Petitioner’s analysis of Elements 1.3 and 15.3 lacks evidentiary support, and (3) the prior art does not disclose the claimed mechanical fuel lockout switch. Grounds 2A and 2B are deficient at least because (1) Petitioner improperly relies on “apparent” constructions of claim terms which it contends are incorrect, and (2) Hallberg does not disclose the claimed mechanical fuel valve. Ground 3 is deficient at least because (1) Petitioner incorporates flawed arguments from Grounds 1, 2A, and 2B, and (2) Rumao does not disclose Elements 8.2 or 8.3.

¹ *Apple Inc. v. Fintiv, Inc.*, IPR2020-00019, Paper 11 (P.T.A.B. Mar. 20, 2020) (precedential); *Advanced Bionics, LLC v. MED-EL Elektromedizinische Geräte GmbH*, IPR2019-01469, Paper 6 (P.T.A.B. Feb. 13, 2020) (precedential).

II. OVERVIEW OF THE '780 PATENT

The '780 Patent was filed as U.S. Patent Application No. 14/738,060 on June 12, 2015. EX1001, (21), (22). The '780 Patent is one of thirteen members of a patent family directed to multi-fuel engine technology, which are collectively referred to as the "2015 Family." The 2015 Family is depicted below:



A. The Specification of the '780 Patent

The '780 Patent, titled “Dual Fuel Lockout Switch for Generator Engine,” is directed to mechanical fuel lockout switch for a multi-fuel engine. *Id.*, Abstract. The

'780 Patent explains that problems with such dual fuel engines include overly rich air-fuel ratios, difficulties starting the engine, and unstable operating conditions when switching between liquid fuel and gaseous fuel:

[A] common problem with such configurations that couple two fuel sources to a single fuel inlet, such as a carburetor, of an engine is that during cross-over switching between the fuel sources the engine can experience overly rich air-fuel ratio. This is particularly problematic when switching from a liquid fuel to a gaseous fuel because carburetors have a fuel bowl containing fuel that is drawn into the engine even after the liquid fuel source is cut-off. Therefore, for a period of time, the engine is running on both liquid and gaseous fuels causing an overly rich fuel mixture. Further, such simultaneous delivery of fuel from the first fuel line and the second fuel line, even if for a brief time, may make the engine hard to start and lead to unstable operating conditions.

Id., 1:48-55.

To address these problems, the multi-fuel engine of the '780 Patent includes: a mechanical fuel lockout switch for a dual fuel engine [that] provides for the selection of a desired fuel to operate the engine. The mechanical fuel lockout switch includes a mechanical fuel valve and a fuel lockout apparatus. The mechanical fuel valve actuates between a first position and a second position to selectively control fuel flow to the dual fuel engine from a first fuel source through a first fuel line and a second fuel source through a second fuel line. The fuel lockout apparatus couples to the mechanical fuel valve ensuring individual communication of the

fuel sources to the engine. The mechanical fuel lockout switch communicates the first fuel source to the dual fuel engine and prevents communication between the second fuel source and the dual fuel engine when the mechanical fuel valve is in the first position, and communicates the second fuel source to the dual fuel engine and interrupts the first fuel source communication with the dual fuel engine when in the second position.

Id., 1:63-2:14.

As the '780 patent explains:

[A] dual fuel generator and fuel delivery system includes a dual fuel generator configured to operate on a liquid fuel supplied from a liquid fuel source through a liquid fuel line and a gaseous fuel supplied from a pressurized fuel source through a gaseous fuel line. The dual fuel generator and fuel delivery system also includes a fuel regulator system located off board the dual fuel generator to control the pressure of fuel from the pressurized fuel source and deliver the fuel at a desired pressure for operation of the generator. The fuel regulator system includes a primary pressure regulator coupled to a service valve of the pressurized fuel source and configured to regulate the fuel supplied from the pressurized fuel source to a reduced pressure. The fuel regulator system also includes a secondary pressure regulator coupled to the primary pressure regulator and configured to regulate the gaseous fuel supplied from the primary pressure regulator to a desired pressure for delivery through the gaseous fuel line to operate the dual fuel generator. The dual fuel generator and fuel delivery system further

includes a mechanical fuel valve actuateable between a first position and a second position to selectively control fuel flow to the dual fuel generator from the liquid fuel source through the liquid fuel line and the pressurized fuel source through the gaseous fuel line.

Id., 2:14-38.

Lastly, the '780 Patent discloses:

[A] method of assembling a mechanical fuel lockout switch for an internal combustion engine includes providing an internal combustion engine configured to operate on a fuel from a first fuel source and a different fuel from a second fuel source. The method also includes coupling a mechanical fuel valve to the internal combustion engine actuateable between a first position and a second position to selectively control fuel flow to the internal combustion engine from the first fuel source through a first fuel line and the second fuel source through a second fuel line. The method further includes coupling a fuel lockout apparatus to the mechanical fuel valve. When the mechanical fuel valve is in the first position, the fuel lockout apparatus communicates the first fuel source to the internal combustion engine and prevents the second fuel source from coupling to the internal combustion engine, and actuation of the mechanical fuel valve to the second position causes the fuel lockout apparatus to permit the second fuel source to couple to the internal combustion engine, and interrupts the first fuel source communication with the internal combustion engine.

Id., 2:39-59.

B. The Independent Claims of the '780 Patent

Claims 1, 8, and 15 are reproduced below:

1. Claim 1.

1. A mechanical fuel lockout switch for a dual fuel engine comprising:
 - a mechanical fuel valve actuateable between a first position and a second position to selectively control fuel flow to the dual fuel engine from a first fuel source through a first fuel line and a second fuel source through a second fuel line; and
 - a fuel lockout apparatus coupled to the mechanical fuel valve;wherein the mechanical fuel lockout switch:
 - communicates the first fuel source to the dual fuel engine and prevents communication between the second fuel source and the dual fuel engine when the mechanical fuel valve is in the first position, and
 - communicates the second fuel source to the dual fuel engine and interrupts the first fuel source communication with the dual fuel engine when in the second position; andwherein the fuel lockout apparatus is configured to:
 - prevent the second fuel source from coupling to the second fuel line while the mechanical fuel valve is in the first position;
 - and
 - permit the second fuel source to couple to the second fuel line while the mechanical fuel valve is in the second position.

2. Claim 8.

8. A method of assembling a mechanical fuel lockout switch for an internal combustion engine comprising:
- providing an internal combustion engine configured to operate on a fuel from a first fuel source and a different fuel from a second fuel source;
 - coupling a mechanical fuel valve to the internal combustion engine actuateable between a first position and a second position to selectively control fuel flow to the internal combustion engine from the first fuel source through a first fuel line and the second fuel source through a second fuel line; and
 - coupling a fuel lockout apparatus to the mechanical fuel valve;
- wherein when the mechanical fuel valve is in the first position, the fuel lockout apparatus communicates the first fuel source to the internal combustion engine and prevents the second fuel source from coupling to the internal combustion engine, and actuation of the mechanical fuel valve to the second position causes the fuel lockout apparatus to permit the second fuel source to couple to the internal combustion engine, and interrupts the first fuel source communication with the internal combustion engine; and
- wherein the fuel lockout apparatus prevents actuation of the mechanical fuel valve to the first position when the second fuel source is coupled to the internal combustion engine.

3. Claim 15.

15. A mechanical fuel lockout switch for a dual fuel engine comprising:

a mechanical fuel valve actuateable between a first position and a second position to selectively control fuel flow to the dual fuel engine from a first fuel source through a first fuel line and a second fuel source through a second fuel line; and
a fuel lockout apparatus coupled to the mechanical fuel valve;
wherein the mechanical fuel lockout switch:
communicates the first fuel source to the dual fuel engine and prevents communication between the second fuel source and the dual fuel engine when the mechanical fuel valve is in the first position, and
communicates the second fuel source to the dual fuel engine and interrupts the first fuel source communication with the dual fuel engine when in the second position; and
wherein the fuel lockout apparatus prevents actuation of the mechanical fuel valve to the first position when the second fuel source communicates with the dual fuel engine.

C. The Prosecution History of the '780 Patent

The '780 Patent was filed as U.S. Patent Application No. 14/738,060 on June 12, 2015. EX1001, (21), (22). On August 3, 2017, the examiner issued a non-final rejection, alleging that pending claims 1-3, 7-10, 14-20, and 22-26 were anticipated by "Champion Power (2014, Dec. & Jan.)." EX1002, 206-209. The examiner also explained that claims 4-6 and 11-13 were "objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims."

EX1002, 211. On November 3, 2017, Patent Owner successfully argued that the “Champion Power (2014, Dec. & Jan.)” reference did not anticipate each of then-pending independent claims 1, 9, and 19. EX1002, 192-198.

On February 22, 2018, the examiner issued new grounds of rejection, asserting that (1) Claims 1 and 7 were anticipated by Sugimoto (U.S. Patent Pub. No. 2007/0137591), (2) Claims 1, 7, 8, 19, 22, and 26 were anticipated by Pursifull (U.S. Patent Pub. No. 2011/0168133), and (3) certain additional claims were obvious over the combination of Sugimoto and Pursifull. EX1002, 149-160. The examiner also explained that Claims 2-6, 10-13, 20, and 21 “would be allowable if rewritten in independent form.” EX1002, 160.

On May 15, 2018, Patent Owner made certain arguments in favor of patentability (EX1002, 127-134), which the examiner “fully considered” but found “not persuasive.” EX1002, 53. The examiner’s rejection was made final on September 5, 2018. EX1002, 45. On November 5, 2018 Patent Owner incorporated allowable subject matter into the then-pending claims. EX1002, 38-40. A Notice of Allowance issued on December 11, 2018. EX1002, 12.

III. LEVEL OF ORDINARY SKILL IN THE ART

A POSITA pertinent to the Challenged Claims would have a four-year degree in mechanical engineering or a closely related field and at least one year of experience designing, developing, servicing, or operating fuel-powered machinery.

Additional education could substitute for professional experience and significant work experience—such as working with, servicing, or operating such machinery in the field—could substitute for formal education.

Petitioner alleged that a POSITA:

[W]ould have at least a Bachelor of Science degree in mechanical engineering, physics, or related fields, and three years of work experience in combustion engines. Additional higher graduate education could substitute for work experience, and additional work experience/technical training could substitute for formal education.

Petition, 15 (citing EX. 1003, ¶28). Petitioner’s proposed definition is deficient. Specifically, Petitioner has failed to support its contention that an undergraduate physics degree is pertinent to the Challenged Claims, or that three years of work experience in combustion engines is necessary. Regardless, the arguments advanced herein are not impacted based on which definition is applied.

IV. CLAIM CONSTRUCTION

Claim terms are to be construed in accordance with the standard set forth in *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (*en banc*). But “[o]nly terms which are in controversy need to be construed, and then only to the extent necessary to resolve the controversy and material to the decision.” *Facebook, Inc. v. Sound View Innovations, LLC*, IPR2017-01005, Paper No. 13 at 6 (P.T.A.B. Sept. 1, 2017) (citing *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed.

Cir. 1999)). For purposes of the arguments set forth in this Preliminary Response, Patent Owner applies the plain and ordinary meaning of each claim limitation which is addressed.

Petitioner, meanwhile, spends *nine pages* of its 97-page Petition arguing for specific constructions of the terms “fuel lockout apparatus,” “prevent ... coupling” and “permit ... to couple.” Pet., 16-24. Petitioner’s proposed constructions (1) mirror the constructions applied by Petitioner in district court (EX2095, 13-14), and (2) are applied for Petitioner’s Ground 1 and portions of Ground 3. Pet., 16-24.² Patent Owner reserves the right to address the substance of Petitioner’s arguments regarding claim construction if this Petition is instituted.

After spending vast swathes of its Petition detailing what Petitioner deems the correct construction of “fuel lockout apparatus,” “prevent ... coupling” and “permit ... to couple,” Petitioner spends a single paragraph purportedly identifying alternative “apparent” constructions (Pet., 25) that allegedly control Grounds 2A, 2B, and portions of Grounds 3.

² Patent Owner’s Preliminary Responses focuses only on those Grounds which address one or more *independent* claims, with the understanding that for purposes of institution, Grounds addressing dependent claims necessarily fall with the corresponding independent claim.

Despite relying on several “alternative” claim construction positions before the Board, Generac, previously argued in the co-pending parallel litigation that the following terms are indefinite, not enabled, and/or not supported by the written description.

Term	Independent Claims	Generac’s §112 Arguments
“A mechanical fuel valve actuatable between a first position and a second position to selectively control fuel flow to the dual fuel engine from a first fuel source through a first fuel line and a second fuel source through a second fuel line”	1, 15	• Not Enabled • Lacks Written Description Support
“Coupling a mechanical fuel valve to the internal combustion engine actuatable between a first position and a second position to selectively control fuel flow to the internal combustion engine from the first fuel source through a first fuel line and the second fuel source through a second fuel line”	8	• Indefinite • Not Enabled • Lacks Written Description Support
“Fuel lockout apparatus”	1, 8, 15	• Not Enabled • Lacks Written Description Support

Term	Independent Claims	Generac's §112 Arguments
“Wherein the mechanical fuel lockout switch communicates the first fuel source to the dual fuel engine and prevents communication between the second fuel source and the dual fuel engine when the mechanical fuel valve is in the first position, and communicates the second fuel source to the dual fuel engine and interrupts the first fuel source communication with the dual fuel engine when in the second position”	1, 15	• Not Enabled • Lacks Written Description Support
“Wherein when the mechanical fuel valve is in the first position, the fuel lockout apparatus communicates the first fuel source to the internal combustion engine and prevents the second fuel source from coupling to the internal combustion engine”	8	• Not Enabled • Lacks Written Description Support

Although Patent Owner disputes that the identified terms are indefinite, not enabled, and/or not supported by written description, Petitioner did not address this discrepancy in the Petition. *See* Pet., 15-25. For example, Petitioner failed to explain how the term “selectively control fuel flow” when “read in light of the specification delineating the patent, and the prosecution history” is both (1) sufficiently definite so as to inform Petitioner’s invalidity challenges raised in the Petition and (2) “fail[s]

to inform, with reasonable certainty, those skilled in the art about the scope of the invention.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014).

The Petition should be denied on this basis alone. *See, e.g., Cambridge Mobile Telematics, Inc. v. Sfara, Inc.*, IPR2024-00952, Paper 12 (P.T.A.B. Dec. 13, 2024) (informative) (declining to institute where Petitioner (1) alleged certain terms were indefinite in parallel district court litigation, and (2) failed to “explain[] why the plain and ordinary meaning of the [challenged] terms should apply in this proceeding (why the inconsistent positions are warranted) or set forth an alternative claim construction”) (citing Consolidated Trial Practice Guide at 45); *see also Microchip Tech. Inc. v. Aptive Technologies AG*, IPR2024-00494, Paper 12 at 10 (P.T.A.B. October 7, 2024); *Revvo Techs., Inc. v. Cerebrum Sensor Techs., Inc.*, IPR2025-00632, Paper 20 at 3-5 (P.T.A.B. November 3, 2025) (“[W]hen a petitioner takes alternative positions before the Board and a district court, that petitioner should, at a minimum, explain why alternative positions are warranted... Simply noting that the petitioner is adopting a patent owner’s claim construction proposals from district court, however, is not a sufficient reason for advancing different positions in the two forums.”) (precedential).

V. THE PRIOR ART

The Petition asserts invalidity over seven different grounds—including numerous alternative arguments based on Petitioner’s vague and confusing claim

construction positions—which include multiple combinations of five different prior art references. Of relevance to Patent Owner’s Preliminary Response, Petitioner alleges that (1) Independent Claims 1 and 15 are invalid over (a) DuroMax and Elsdon or (b) Hallberg, and (2) Independent Claim 8 is invalid over (a) DuroMax and Elsdon, in view of Rumao or (b) Hallberg in view of Rumao. As explained in Section VI, the Petition can be summarily denied in light of deficiencies in Petitioner’s proposed combinations of the Duromax, Elsdon, Rumao, and Hallberg references. Each reference is discussed in turn, below:

A. DuroMax Dual Fuel Hybrid Elite XP4400EX (“DuroMax”) (EX1004)

DuroMax discloses a dual fuel generator separately operable on liquified petroleum gas (“LPG”) and gasoline. EX1004, 002. The DuroMax generator includes a manual gasoline fuel valve for controlling gasoline fuel flow. *Id.*, 011. However, it *does not* include any component for controlling the flow of LPG. Instead, DuroMax relies solely on the user to turn off the gasoline fuel valve before operating the engine on LPG. *Id.*, 012.

B. U.S. Patent No. 5,718,265 to Elsdon (“Elsdon”) (EX1005)

Petitioner alleges that Elsdon discloses an assembly with cap 16 and shield 14, wherein cap 16 “is hingedly connected to shield 14 and is readily movable between an open position ... and a closed position ... in which cap 16 in positioned

over the coupler 12 to prevent coupling with a fuel hose.” Pet., 27-28 (citing EX1005, 1:10-13, 3:4-11, Fig. 9).

C. U.S. Patent No. 4,492,207 to Hallberg (“Hallberg”) (EX1006)

Hallberg discloses “A dual fuel system for use with internal combustion engines comprising a manually actuated dual fluid valve which alternatively supplies gasoline to the engine's carburetor or engine intake manifold vacuum to a single-stage liquified gas to gaseous fuel converter.” EX1006, Abstract. A more fulsome description of Hallberg’s dual fuel system is contained in §VI.B.2, *infra*.

D. U.S. Patent No. 10,337,399 to Rumao (“Rumao”) (EX1007)

Rumao discloses “[a] customizable portable generator system and methods for assembling the same.” EX1007, Abstract. Specifically, Rumao discloses a “generator system [which] generally includes a universal frame including a plurality of mounting interfaces configured for detachably attaching of a plurality of different engines and a plurality of wheel assemblies and/or support legs.” *Id.*

Rumao discloses that its universal frame:

[M]ay generally include a plurality of interconnected corner members 320 and connector plates 340 that collectively form an open space frame designated herein as generator frame 301. The generator frame 301 is configured for mounting various components of a power generator, appurtenances, and accessories. In one configuration, generator frame 301 may support a permanent fuel tank 360, a removable portable fuel tank 380, engine 311, handles 318 for lifting

and maneuvering the generator, control panel 400, and others appurtenances and accessories (e.g. tool holders, fire extinguisher holders, power cord wrapping poles, etc.) for forming a fully functional generator. Any suitable type of engine and fuel source may be used, including for example without limitation liquid fuels or gaseous fuels such as propane.

EX1007, 18:28-43 (emphasis added).

VI. ARGUMENT

The Petition does not demonstrate a reasonable likelihood that at least one challenged claim is unpatentable.

Claims 1, 8 and 15 of the '780 Patent are independent claims. If Petitioner is unable to show a reasonable likelihood that it will prevail with respect to any of the independent claims, institution should be denied. *See, e.g., Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1576 n. 36 (Fed. Cir. 1987) (“Because [independent] claim 1 is not invalid, the presence of all its limitations in [dependent] claim 6 preserves the latter’s validity.”). Of relevance to Patent Owner’s Preliminary Response, the Petition alleges the following grounds of invalidity:

- **Ground 1** alleges that Independent Claims 1 and 15 are obvious over DuroMax in view of Elsdon. Pet., 9.
- **Ground 2A** alleges that Independent Claim 1 is anticipated by Hallberg. *Id.*

- **Ground 2B** alleges that Independent Claim 15 is obvious over Hallberg. *Id.*
- **Ground 3** alleges that Independent Claim 8 is (1) obvious over Rumao, DuroMax and Elsdon, or (2) alternatively obvious over Rumao and Hallberg. *Id.*
- **Grounds 4-6** relate solely to dependent claims. *Id.*

Patent Owner's Preliminary Response asserts that denial is proper because Petitioner does not demonstrate a reasonable likelihood that any claims are unpatentable. First, Petitioner's Ground 1 is deficient at least because (1) Petitioner's purported motivation to combine is improperly grounded in hindsight, (2) Petitioner's analysis of Elements 1.3 and 15.3 lacks evidentiary support, and (3) the prior art does not disclose the claimed mechanical fuel lockout switch. Each argument provides an independent basis for denial of institution, and is discussed in §VI.A, below. Second, Grounds 2A and 2B improperly rely on "apparent" constructions of certain claim terms which Petitioner contends are incorrect. Moreover, Hallberg does not disclose the claimed mechanical fuel valve. Again, each argument provides an independent basis for denial, and is discussed in §VI.B, below. Finally, Ground 3 incorporates flawed arguments from Grounds 1, 2A, and 2B, and thus necessarily falls for the same reasons. Additionally, Rumao (alone or

in combination) does not disclose Elements 8.2 or 8.3. Patent Owner's arguments regarding Ground 3 are discussed in §VI.C, below.

A. Ground 1 does not demonstrate a reasonable likelihood that any claims are unpatentable.

Petitioner alleges that the Challenged Claims are invalid over the combination of DuroMax and Elsdon. Pet., 36-54. Petitioner's challenge fails for three independent reasons. *First*, Petitioner's proposed motivation to combine DuroMax and Elsdon is improperly grounded in hindsight. *Second*, Petitioner fails to identify "in writing and 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). Specifically, Petitioner's analysis of Elements 1.3 and 15.3 is deficient for failing to identify the relevant evidence with particularity. *Third*, neither DuroMax nor Elsdon (alone or in combination) disclose the claimed mechanical fuel lockout switch. Each argument is discussed in turn, below, and is independently fatal to Petitioner's Ground 1.

1. Petitioner's alleged motivation to combine DuroMax and Elsdon is improperly grounded in hindsight.

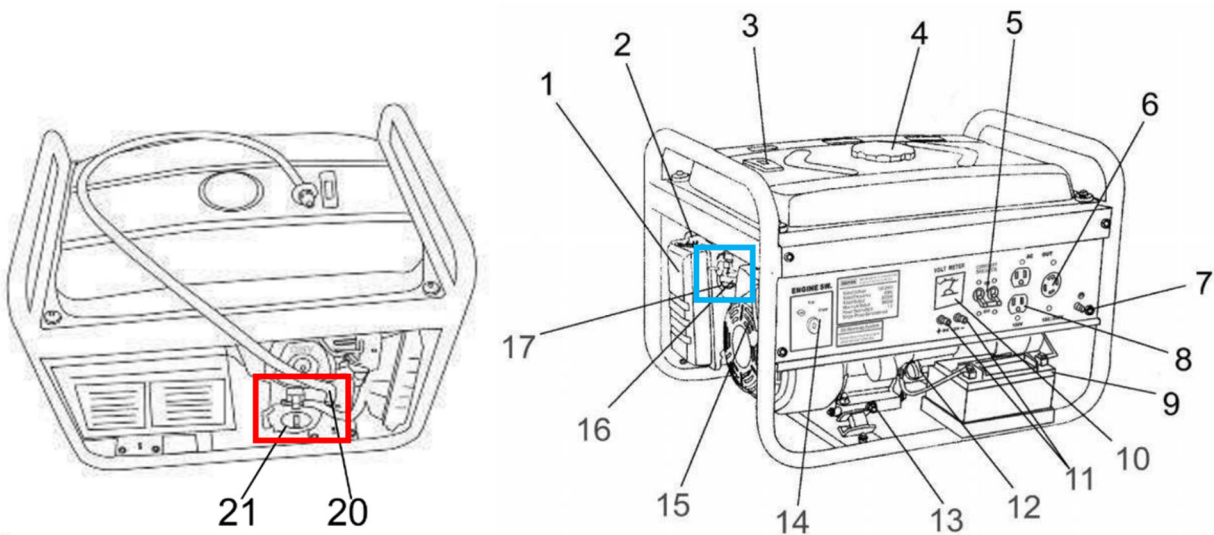
Petitioner alleges that a POSITA "would have understood it to be obvious to combine the Elsdon fuel conduit coupler cap with the mechanical fuel valve of DuroMax to provide a mechanical fuel lockout switch and prevent unsafe operating conditions, such as where both fuels are simultaneously delivered to the generator

engine.” Pet., 37. Specifically, Petitioner posits that a POSITA “would have been motivated to connect the Elsdon fuel conduit coupler cap to the mechanical fuel valve of DuroMax to restrict access to the LPG hose connector interface of DuroMax when the DuroMax generator is running gasoline fuel.” *Id.*, 41.

Petitioner’s analysis focuses on alleged deficiencies in systems which allow for simultaneous use of LPG and gasoline fuel sources. *See, e.g., id.*, 40 (“prior art dual fuel engines can experience overly rich air-fuel ratio when both fuels are simultaneously engaged which can make the engine hard to start or lead to unstable operating conditions”) (internal citations and quotation omitted). Various solutions to this problem exist. For example, the ’780 Patent discloses mechanical fuel lockout switches which prevent the “unstable operating conditions” identified by Petitioner.

As another example, Petitioner points to a warning label on the DuroMax generator, which states “When using gasoline, LPG must be shut off! When using LPG, gasoline must be shut off!” Pet., 40 (citing EX1004, p. 11). However, Petitioner does not identify any evidence that DuroMax’s warning label is ineffective, or that end users of the DuroMax generator experience problems caused by simultaneous use of both gasoline and LPG fuel. Thus, while “unstable operating conditions” may be a problem among certain dual-fuel systems, Petitioner has failed to identify any evidence that the DuroMax generator experiences these problems.

Moreover, while explaining its proposed combination, Petitioner largely ignores the fact that merely installing the Elsdon fuel conduit coupler cap on the DuroMax fuel valve would have absolutely no impact on the alleged problem. DuroMax's fuel valve 17 (blue) and hose connector 20 (red) are depicted in the annotated figures below:



EX1006, 007-008. DuroMax describes each component as follows:

- **17. Fuel valve** - Allows fuel to enter engine.
- **20. Hose connector** - Connect liquid propane gas to generator.

EX1006, 008. Importantly, these structures are located on different sides of the generator. As such, Elsdon's cap 16 (even if installed on DuroMax's fuel valve, as proposed by Petitioner) would have no impact on DuroMax's LPG hose connector.

Recognizing this, Petitioner includes a single sentence, stating that a POSITA “would have further understood that the fuel valve and LPG fuel conduit coupler of DuroMax could easily be moved to different positions on the generator such that the two components are located immediately next to each other.” Pet., 43-44. In support of this statement, Petitioner’s expert reiterates this statement verbatim, but provides no analysis that a POSITA would have been motivated to rearrange numerous components on the DuroMax generator to create Petitioner’s proposed combination. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (P.T.A.B. August 24, 2022) (precedential) (expert testimony which “merely repeats, *verbatim*, the conclusory assertion for which it is offered to support ... is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”). Simply put, “[t]he mere fact that a combination is possible does not establish that a skilled artisan would be motivated to pursue it.” *Motorola Mobility LLC v. Largan Precision Co.*, No. 2024-1414, 2025 U.S. App. LEXIS 23724, at *7 (Fed. Cir. Sep. 15, 2025) (citing *Adidas AG v. Nike, Inc.*, 963 F.3d 1355, 1359 (Fed. Cir. 2020) (“The obviousness inquiry does not merely ask whether a skilled artisan could combine the references, but instead asks whether ‘they would have been motivated to do so.’”)).

In short, Petitioners have not identified *any evidence* of a deficiency in the DuroMax generator. Relying on generic references to dual-fuel technology and

conclusory expert testimony, Petitioner’s propose restructuring the DuroMax generator, and cobbling together portions of the Elsdon system, in order to create a structure which resembles the claimed invention. Petitioner’s approach “risks allowing the challenger to use the challenged patent as a roadmap to reconstruct the claimed invention using disparate elements from the prior art—i.e., the impermissible *ex post* reasoning and hindsight bias that *KSR* warned against.” *TQ Delta, LLC v. Cisco Sys.*, 942 F.3d 1352, 1361 (Fed. Cir. 2019).

2. Petitioner’s analysis of Elements 1.3 and 15.3 is deficient.

Petitioner’s Elements 1.3 and 15.3 each recite:

wherein the mechanical fuel lockout switch:

communicates the first fuel source to the dual fuel engine and prevents communication between the second fuel source and the dual fuel engine when the mechanical fuel valve is in the first position, and

communicates the second fuel source to the dual fuel engine and interrupts the first fuel source communication with the dual fuel engine when in the second position

Pet., 5, 8; *see also id.*, 47, 54.³

³ Petitioner’s treatment of Element 15.3 incorporates its analysis of Element 1.3 without further analysis. Pet., 54. As such, Patent Owner’s argument applies with

Petitioner, however, does not directly cite *any evidence* in its discussion of Element 1.3, including but not limited to (1) any citations to DuroMax and/or Elsdon, or (2) any citations to expert testimony. Instead, Petitioner merely cites back to its purported motivation to combine and reasonable expectation of success analysis, in support of its conclusory argument that a POSITA would have been motivated to combine Elsdon and DuroMax to arrive at the limitations disclosed by Elements 1.3 and 15.3. Pet., 47 (citing §§VII.A.1.a.1-2).⁴

Petitioner’s generalized references to its purported motivation to combine analysis do not identify “in writing and 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). “Petitioner’s arguments instead amount to an invitation for [the Board] to cobble together arguments, search for pertinent facts, and inject [its] own reasoning. That is not [the Board’s] role.” *LifeScan Global Corp. v. PHC Holdings Corp.*, IPR2019-01127, Paper 9 at 30 (P.T.A.B. November 18, 2019) (citing *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (requiring

equal force to both.

⁴ Similar deficiencies are present in Petitioner’s treatment of Element 1.4. Pet., 47-48.

inter partes review petitions to identify “with particularly . . . the evidence that supports the grounds for the challenge to each claim”); *DeSilva v. DiLeonardi*, 181 F.3d 865, 866-67 (7th Cir. 1999) (“A brief must make all arguments accessible to the judges, rather than ask them to play archeologist with the record.”)). Simply put, “[i]t is Petitioner’s burden to set forth its challenge *with particularity*” and Petitioner has failed to do so here. *Elmos Semiconductor SE v. Texas Instruments Inc.*, IPR2024-00802, Paper 9 at 23 (P.T.A.B. November 5, 2024) (citing *Parus Holdings, Inc. v. Google LLC*, 70 F.4th 1365, 1371-72 (Fed. Cir. 2023) (“Judges are not like pigs, hunting for truffles....”)).⁵

3. DuroMax in view of Elsdon does not disclose the claimed mechanical fuel lockout switch.

Each of the Challenged Claims recite a “mechanical fuel lockout switch.” However, neither DuroMax nor Elsdon (alone or in combination) disclose *any* fuel switch, let alone a mechanical fuel lockout switch. DuroMax relies on the operator

⁵ Petitioner’s treatment of Elements 1.3 and 15.3 underscores Patent Owner’s hindsight argument. *See* §VI.A.1, *supra*. Petitioner’s conclusory allegations that it “would have been obvious to connect these components” to arrive at the claimed invention is the very definition of hindsight. *Pet.*, 47. *Graham v. John Deere Co.*, 383 U.S. 1, 36 (1966)

to ensure that both fuels are not flowing at the same time (EX1004, 11), but does not disclose any device or structure such as a switch or safety valve. Instead, DuroMax merely discloses a manual gasoline fuel valve. As taught by DuroMax, it is entirely possible to operate the gasoline and LPG fuel sources simultaneously, and DuroMax does not disclose a mechanical “lockout switch.” Similarly, Elsdon does not disclose any kind of fuel switching device. Instead, Elsdon is simply a fuel cap for an inlet that may articulate about a hinge to open and close.

Moreover, the Petition does not identify any structure in its proposed combination of DuroMax and Elsdon that allegedly constitutes the claimed “mechanical fuel lockout switch.” Petitioner’s analysis of Element 1.0 is conclusory, and merely asserts that a POSITA “would have understood it to be obvious to combine the Elsdon fuel conduit coupler cap with the mechanical fuel valve of DuroMax to provide a mechanical fuel lockout switch.” Pet., 37. However, the Petition does not identify which feature(s) from DuroMax and/or Elsdon combine to create the alleged “mechanical fuel lockout switch.” Simply put, no portion of Petitioner’s proposed combination constitutes the claimed “switch.”

Element 1.3 also references the claimed “mechanical fuel lockout switch.” However, Petitioner’s treatment of Element 1.3 does not identify any structure or combination of structures that are the claimed “switch.” Pet., 47. Petitioner’s analysis of Claim 15 merely incorporates its analysis of Claim 1.

In sum, neither DuroMax nor Elsdon disclose *any* switch (much less the claimed “mechanical fuel lockout switch”). And, the Petition does not identify any structure(s) within the proposed combination of DuroMax and Elsdon that are allegedly the claimed switch. Because the Petition does not disclose the claimed mechanical fuel lockout switch, institution should be denied.

B. Grounds 2A and 2B do not demonstrate a reasonable likelihood that any claims are unpatentable.

The Hallberg-based grounds (Grounds 2A and 2B) rely on “Patent Owner’s apparent construction” of “fuel lockout apparatus,” “prevent ... coupling” and “permit ... to couple.” Petitioner’s reliance on “apparent” constructions is legally improper and should be rejected outright.

1. Petitioner’s reliance on “apparent” constructions is legally improper and should be rejected outright.

“Inter partes review shall not be instituted unless the Board decides that the information presented in the petition demonstrates that there is a reasonable likelihood that at least one of the claims challenged in the petition is unpatentable.” 37 C.F.R. § 42.108. Specifically, the petition must “[p]rovide a statement of the precise relief requested for each claim challenged. The statement must identify the following:

- 1) The claim;

- 2) The specific statutory grounds under 35 U.S.C. 102 or 103 on which the challenge to the claim is based and the patents or printed publications relied upon for each ground; [and]
 - 3) How the challenged claim is to be construed. . . .”
- 37 C.F.R. § 42.104(b).

Importantly, the petition must identify “in writing and 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).

The Board’s Decision Denying Institution of *Inter Partes* Review in *Vicor Corp. v. Delta Elecs., Inc.* is instructive. IPR2024-00704, Paper 11 (P.T.A.B. October 2, 2024). There, the patent at issue “describe[d] a DC-DC conversion system that include[d] a buck converter and a resonant converter.” *Id.*, 3. Petitioner’s Ground 1 did “not purport to correctly construe the ‘over-current’ limitations” but rather applied what Petitioner deemed “Patent Owner’s Apparent Construction” or “Patent Owner’s Assumed Construction.” *Id.*, 7. The “apparent” constructions were purportedly based on the “specific arrangement” of certain accused products in parallel district court litigation. *Id.*, 7 n.6.

However, “Petitioner [did] not establish that such interpretations [were] appropriate,” which the Board found “[f]atal to Petitioner’s Ground 1.” *Id.*, 8. Fundamental to the Board’s finding was that “Petitioner acknowledges that its

Ground 1 does not apply a ‘proper’ claim construction.” *Id.* The Board found “Petitioner has not supported the claim interpretations on which its Ground 1 relies, and Petitioner therefore has not shown a reasonable likelihood that it would prevail in its challenge asserted as Ground 1.” *Id.*, 9; *see also Microchip Tech. Inc. v. Aptive Technologies AG*, IPR2024-00494, Paper 12 at 10 (P.T.A.B. October 7, 2024) (denying institution where “the proposed construction on which the Petition is based is contingent upon adopting a claim construction that Petitioner opposes in the district court litigation and that Petitioner believes is incorrect”); *Cambridge Mobile Telematics, Inc. v. Sfara, Inc.*, IPR2024-00952, Paper 12 (P.T.A.B. Dec. 13, 2024) (informative); *Revvo Techs., Inc. v. Cerebrum Sensor Techs., Inc.*, IPR2025-00632, Paper 20 at 3-5 (P.T.A.B. November 3, 2025) (“[W]hen a petitioner takes alternative positions before the Board and a district court, that petitioner should, at a minimum, explain why alternative positions are warranted... Simply noting that the petitioner is adopting a patent owner’s claim construction proposals from district court, however, is not a sufficient reason for advancing different positions in the two forums.”) (precedential).

a. The Petition does not support the Petitioner’s “apparent” constructions.

After spending vast swathes of its Petition detailing and debating the purported construction of “fuel lockout apparatus,” “prevent ... coupling” and

“permit ... to couple” (Pet., 16-24), Petitioner spends a single paragraph discussing alternative “apparent” constructions (*id.*, 25) which allegedly control Grounds 2A, 2B, and portions of Ground 3. *Id.*, 25.⁶ The purported “apparent constructions” are allegedly based on positions taken by Patent Owner in parallel litigation. *Id.* However, Petitioner does not identify—much less with particularity—the “apparent construction” of each term. Rather, Petitioner’s *entire analysis* consists of a single sentence:

Patent Owner appears to adopt a claim construction wherein (1) the “fuel lockout apparatus” can be any apparatus that prevents selection of more than one fuel source; (2) “prevent ... coupling” can be any means to prevent fuel flow without necessarily preventing physical attachment of a fuel source to a fuel line; and (3) “permit ... to couple” can be any means to permit fuel flow without necessarily permitting physical attachment of a fuel source to a fuel line.”

Id. Notably, Petitioner does not include *any analysis* explaining how it arrived at its proposed “apparent constructions” or any evidence asserting that these constructions

⁶ This analysis focuses on Grounds 2A and 2B. Petitioner also relies on “apparent constructions” for portions of Ground 3. However, as discussed in section VI.C.1.b, below, the relevant portions of Petitioner’s Ground 3 analysis merely refer back to Grounds 2A and 2B. As such, the same analysis applies.

are in fact correct. Moreover, Petitioner does not provide any authority that (1) listing proposed “apparent constructions” and (2) citing Patent Owner’s district court claim construction brief (which merely advocated for the plain and ordinary meaning of each term), constitutes identifying “in writing and with particularity” “how the challenged claim is to be construed.” 35 U.S.C. § 312(a)(3); 37 C.F.R. § 42.104(b).

Based on these disparate statements, Petitioner “include[s] invalidity Grounds 2A/B and also alternatives in Ground[] 3” which allegedly show invalidity “under Patent Owner’s apparent construction.” Pet., 25. Petitioner emphatically concludes that it does “not admit or concede that Patent Owner’s apparent constructions are correct.” *Id.* In fact, Petitioner explicitly asserts that “Patent Owner’s apparent constructions are wrong.” *Id.*

b. Petitioner’s allegation that the Challenged Claims are invalid is deficient because Petitioner’s reliance on Patent Owner’s “apparent” construction of “fuel lockout apparatus,” “prevent ... coupling” and “permit ... to couple” is improper.

The term “fuel lockout apparatus” is present in each of the Challenged Claims. The terms “prevent ... coupling” and “permit ... to couple” are present in each of Claims 1-14. Petitioner relies on Patent Owner’s “apparent” constructions in Grounds 2A, 2B. Pet., 25. However, Petitioner explicitly acknowledges that (in its view) “Patent Owner’s apparent constructions are wrong.” *Id.* Moreover, Petitioner

does not define or support the purported “apparent” constructions that it is relying on as the basis of Grounds 2A and 2B. §VI.B.1.a, *supra*.

Like in *Vicor Corporation*, institution is improper because Petitioner’s Grounds 2A and 2B “do[] not purport to correctly construe the [disputed] limitations” but rather applied what Petitioner deemed Patent Owner’s “apparent” construction. *Vicor Corp.*, Paper 11 at 7. And, like in *Vicor Corporation*, “Petitioner [did] not establish that such interpretations [were] appropriate,” which is “fatal” to Grounds 2A and 2B. *Id.* at 8; *see also* §VI.B.1.a, *supra*. “Petitioner acknowledges that its [Grounds 2A and 2B do] not apply a ‘proper’ claim construction.” *Id.* at 8. As such, like the Board concluded in *Vicor Corporation*, “Petitioner has not supported the claim interpretations on which its [Grounds 2A and 2B rely], and Petitioner therefore has not shown a reasonable likelihood that it would prevail in its challenge.” *Id.* at 9.

Petitioner’s gamesmanship is clear. Petitioner advanced narrow constructions of “fuel lockout apparatus,” “prevent ... coupling” and “permit ... to couple” in parallel district court litigation to manufacture non-infringement positions. EX2095, 13-14. Further, in related proceedings, Petitioner has indicated its intent to move to stay the district court litigation if institution is granted. IPR2025-00805, Paper 14 at 7-10. In stark contrast, Petitioner now attempts to rely on broad and amorphous “apparent” constructions of those same terms—without actually defining or

supporting the constructions—in the hopes of convincing the Board to institute. Petitioner has advanced broad constructions before the Board, while maintaining narrower district court constructions—and corresponding non-infringement positions—if its IPR challenge proves unsuccessful. Institution should be denied.

2. Hallberg does not disclose “a mechanical fuel valve ... to selectively control fuel flow to the dual fuel engine from ... a second fuel source through a second fuel line.”

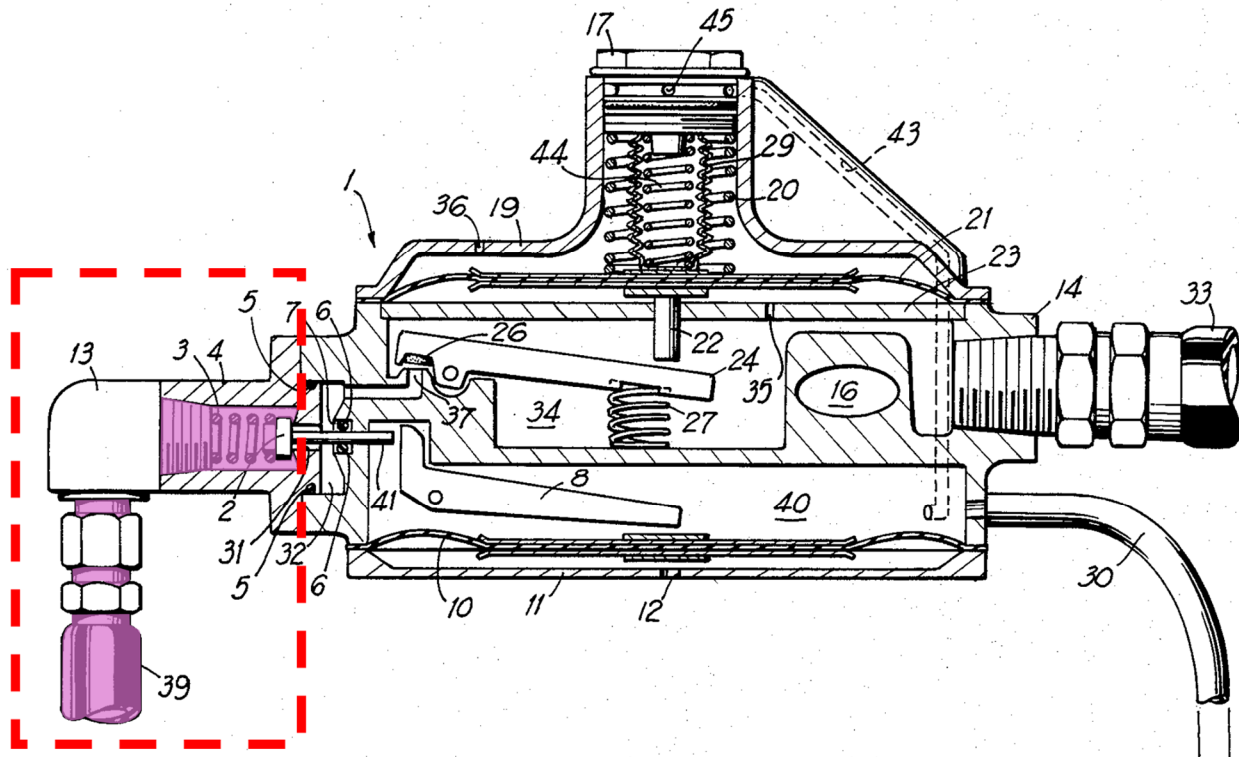
Independent Claims 1 (Ground 2A) and 15 (Ground 2B) of the '780 Patent each recite “a mechanical fuel valve actuatable between a first position and a second position to selectively control fuel flow to the dual fuel engine from ... a second fuel source through a second fuel line.” Petitioner asserts that “second position” is “propane.” Pet., 60. Thus, in order to anticipate Claim 1 (Ground 2A) or otherwise render Claim 15 obvious (Claim 2B), Petitioner must show that Hallberg discloses a mechanical fuel valve which (when actuated to the “propane” position) selectively controls fuel flow from a source, through a fuel line, to the dual fuel engine. As evidenced by Petitioner’s fundamental misunderstanding of Hallberg, the claimed features are not disclosed.

a. Dual valve structure 300 does not selectively control fuel flow from a fuel source to the dual fuel engine when in the “propane” position.

Petitioner identifies numeral 300 (Fig. 8) as the alleged “mechanical fuel valve.” Pet., 57 (“[i]n the figures...300 is the fluid dual valve structure”). Dual valve

structure 300 does not control fuel flow from a fuel source to the dual fuel engine when in the “propane” position.

Hallberg discloses that numeral 39 is the “supply” of “pressurized propane.” EX1006, 7:58-59. And Petitioner concedes that when Hallberg’s system is in “gasoline” mode, the supply of propane is impeded by liquid inlet valve 2. Pet., 60. This state is depicted in annotated Figure 1, below.

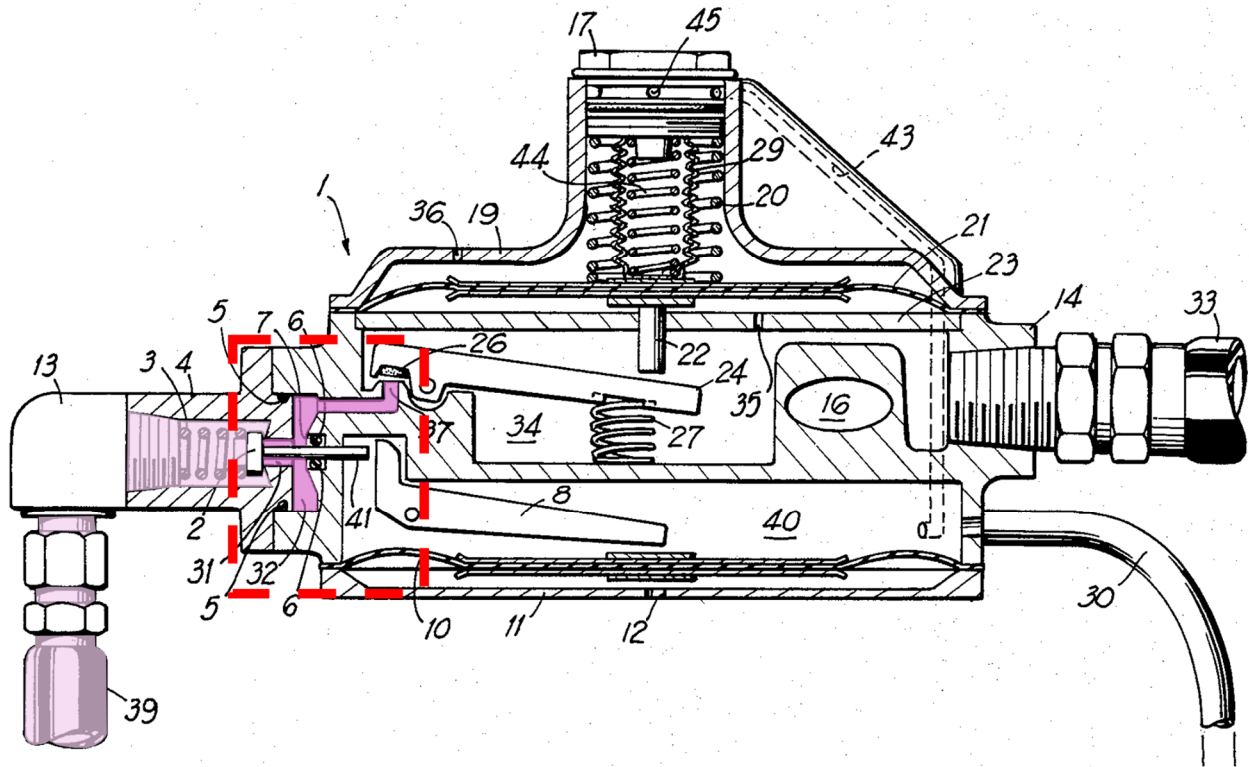


As Petitioner explains, when Hallberg’s “engine is started, a vacuum is created in line 30, urging diaphragm 10 upward against liquid inlet lever 8.” Pet., 60 (citing EX1006, 8:31-38). Petitioner continues: “Actuating inlet lever 8 drives inlet valve shaft 41 against bias spring 3 which opens liquid inlet valve 2 *allowing propane to flow through the propane fuel line to the engine.*” Pet., 60 (citing

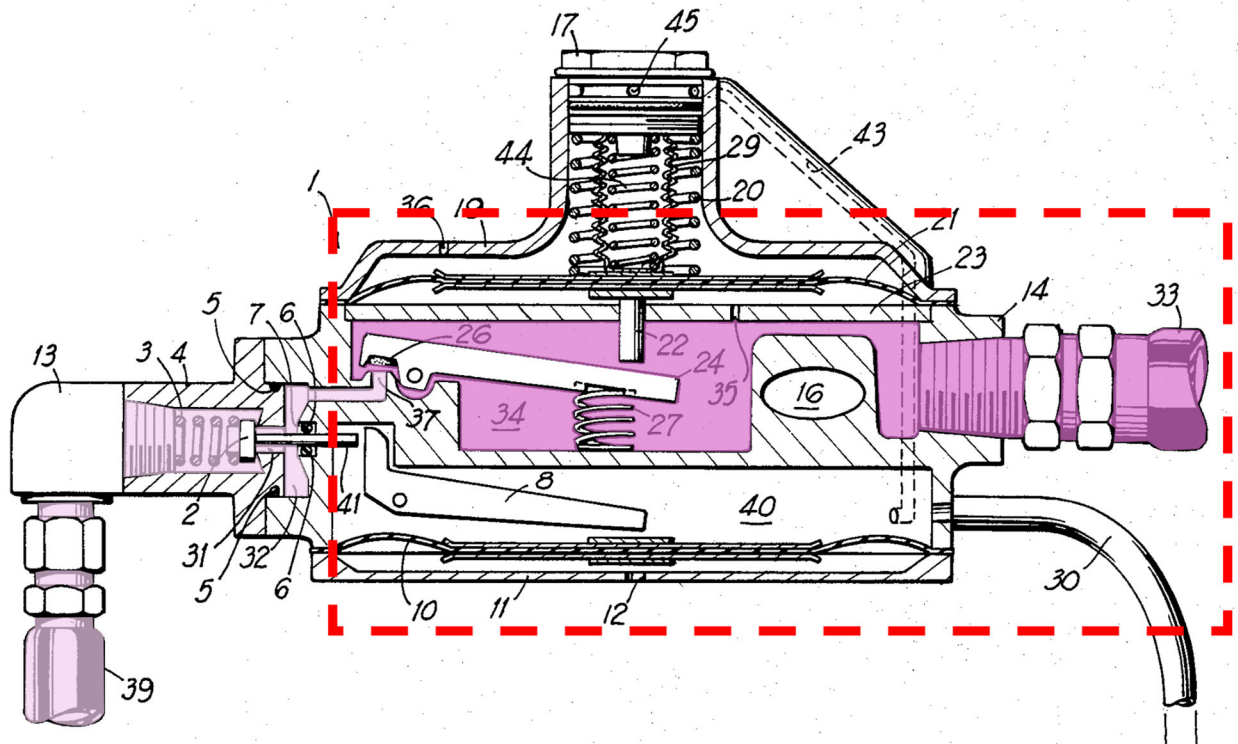
EX1006, 8:38-42) (emphasis added). However, Hallberg does not state that opening liquid inlet valve 2 allows propane to flow through propane fuel line to the engine. Instead, it states that “liquified gaseous fuel flows through inlet valve orifice 31 into liquified fuel passage 32.” EX1006, 8:40-42; *see also id.*, 4:19-40 (“Movement of the inlet valve lever urges the liquid inlet valve open, thereby permitting liquid propane to enter a fuel passage in the converter.”).

Hallberg next teaches that “Propane is admitted through a second valve in the converter structure into a gaseous fuel chamber where it expands to a gas with the resulting gas pressure normally being regulated to 11 inches w.c.” *Id.*, 4:32-35. The state of fuel flow where (1) liquid inlet valve 2 is opened (allegedly via actuation of dual valve structure 300), and (2) the “second valve in the converter structure” is closed is depicted in annotated Figure 1, below.⁷

⁷ Hallberg refers to the “second valve” as “fuel outlet cover 26” which (when opened) “permit[s] flow of fuel into gaseous fuel chamber 34.” Figure 1 depicts fuel outlet cover 26 in an open position.



Fuel outlet cover 26 is actuated to an open position when “the pressure within gaseous fuel chamber 34 of converter 1 is reduced” which is caused when “mixer 100 admits pressurized gaseous fuel to the engine ... through gaseous fuel line 33 when the engine is being started or is running.” EX1006, 8:56-60. This state (where fuel outlet cover 26 is in an open position, and propane is admitted to the engine) is depicted in annotated Figure 1, below.

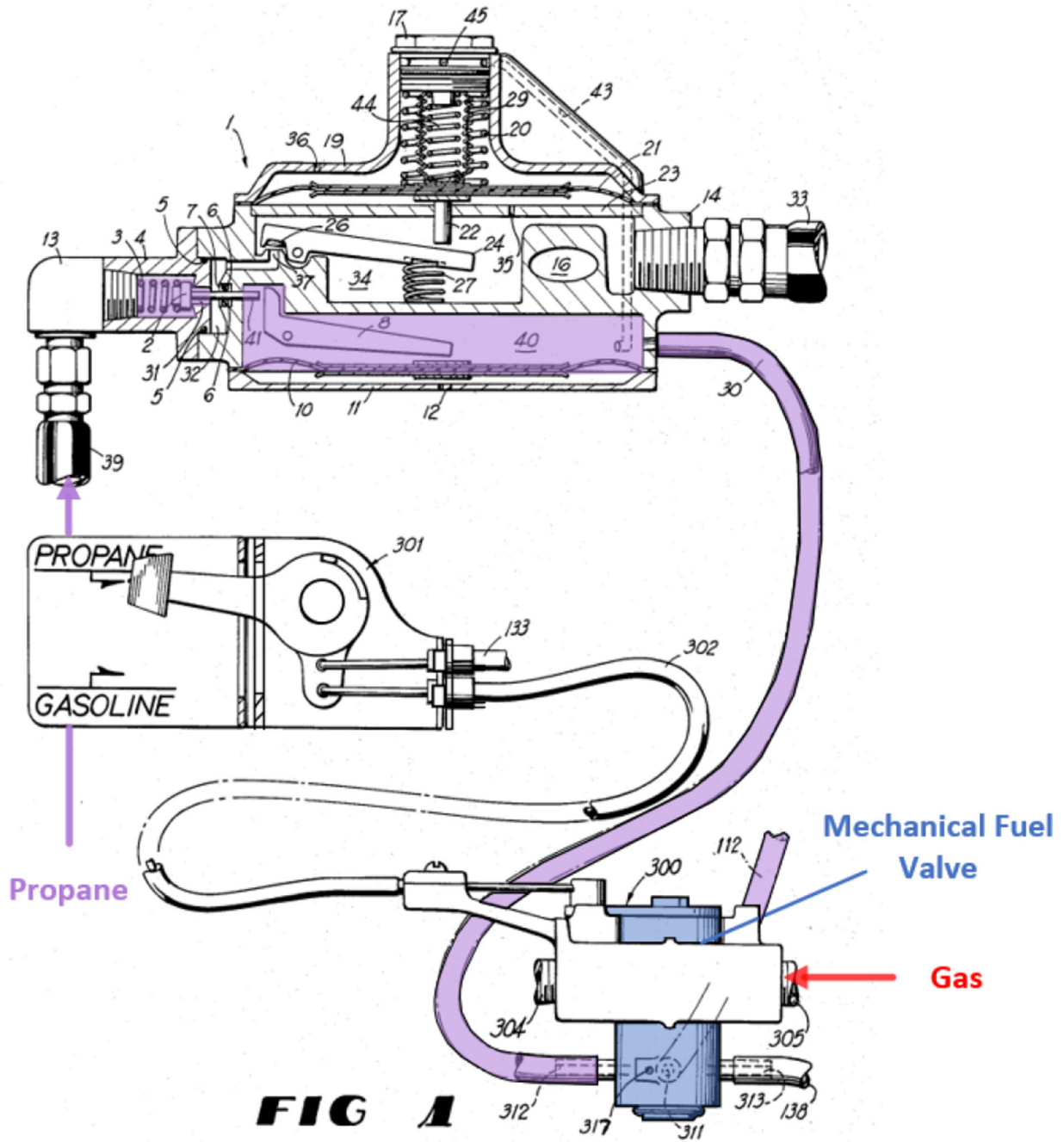


Simply put, the Petition does not adequately allege that actuation of the alleged “mechanical fuel valve” “selectively control[s] fuel flow to the dual fuel engine from ... a second fuel source through a second fuel line.”⁸ Rather, delivery of fuel to the engine is controlled (at least in part) on pressure imbalances cause by the engines operation. If the engine is not active (and therefore fuel is not exiting gaseous fuel chamber 34), fuel outlet cover 26 remains closed, preventing fuel flow *to the dual fuel engine* as required by the claim.

⁸ In fact, the Petition does not actually identify the alleged “first fuel line” or “second fuel line” with particularity.

b. The Petition relies on a fundamental misunderstanding of Hallberg.

Petitioner appears to mistakenly believe that Hallberg discloses propane which flows *through* dual valve structure 300 en route to the engine, bypassing fuel outlet cover 26 and gaseous fuel chamber 34 entirely. *See, e.g.,* Pet., 67 (“Positioning control 301 in gasoline mode, acts through control cable 302, to rotate spool 306 within valve body 307 to ... lock out propane (a second fuel) from flowing *through fluid dual valve structure 300*”). This interpretation is supported by Petitioner’s expert, who prepared the following figure, apparently depicting propane flowing through engine intake manifold pressure chamber 40, converter vacuum line 30, first vacuum outlet port 312, before dual valve structure 300, and intake manifold vacuum line 112. EX1003, ¶212



Contrary to Petitioner's representations, converter vacuum line 30 and intake manifold vacuum line 112 are *vacuum* lines which provide for the flow of air, *not* propane fuel lines. Additionally, Hallberg does not disclose fluid connection between liquified fuel passage 32 and engine intake manifold pressure chamber 40.

Relying on its fundamental misunderstanding of Hallberg, Petitioner alleges that “[a]ctuating inlet lever 8 drives inlet valve shaft 41 against bias spring 3 which opens liquid inlet valve 2 allowing propane to flow through the propane fuel line to the engine.” Pet., 60. But, as explained above (and contrary to Petitioner’s incorrect interpretation of Hallberg), actuation of dual valve structure 300 does not “selectively control fuel flow to the dual fuel engine.” See §VI.B.2.a, *supra*.

C. Ground 3 does not demonstrate a reasonable likelihood that any claims are unpatentable.

Claim 8 of the ’780 Patent recites “A method of assembling a mechanical fuel lockout switch for an internal combustion engine.” EX1001, Cl. 8. According to Petitioner, Independent Claim 8 includes certain structural limitations which are “similar to those” found in Independent Claims 1 and 15. Pet., 73-74. Thus, according to Petitioner, a POSITA “would have looked to Rumao to teach, and render obvious, any limitation not disclosed by the combination of DuroMax and Elsdon, or alternatively, Hallberg.” *Id.*

Confusingly, Ground 3 expresses two alternative invalidity theories. First, Petitioner argues that Independent Claim 8 (and corresponding dependent claims) are obvious over Rumao, in view of DuroMax and Elsdon under Petitioner’s proposed constructions of “fuel lockout apparatus,” “prevent ... coupling” and “permit ... to couple.” Second, Petitioner argues that Independent Claim 8 (and

corresponding dependent claims) are obvious over Rumao in view of Hallberg under Patent Owner’s “apparent” constructions. Petitioner’s analysis under each alternative theory is not broken out on a claim-by-claim or element-by-element basis, but rather interwoven throughout Ground 3. *Corephotonics, Ltd. v. Apple Inc.*, 84 F.4th 990, 1001 (Fed. Cir. 2023) (“The IPR petition, thus, must provide an understandable explanation of the element-by-element specifics of the patentability challenges, including the identification of particular portions of prior art on which the petitioner is relying.”).

1. The deficiencies in Grounds 1, 2A, and 2B are equally present in Ground 3.

At various points throughout Ground 3, Petitioner incorporates its analysis of Independent Claims 1 and 15 under both (1) Petitioner’s proposed construction of “fuel lockout apparatus” (*see* Ground 1; Duromax in view of Elsdon) and (2) Patent Owner’s “apparent” construction of “fuel lockout apparatus” (*see* Grounds 2A and 2B; Hallberg). As explained in additional detail, below, Petitioner’s Ground 3 fails for the same reasons as Grounds 1 and 2A/2B.

a. Petitioner’s arguments based on Petitioner’s proposed constructions are deficient for the same reasons as Ground 1.

Petitioner’s Ground 3 incorporates portions its analysis of Independent Claims 1 and 15 under Petitioner’s proposed construction of “fuel lockout apparatus.” As

explained in additional detail, below, Petitioner’s Ground 3 fails for the same reasons as Ground 1.

First, Petitioner alleges that a POSITA “would have been motivated to combine the fuel lockout apparatus of Elsdon with the mechanical fuel valve of DuroMax to provide a fuel lockout apparatus coupled to the mechanical fuel valve.” Pet., 81 (citing §§VII.A.1.a.1-2). But, as explained above, Petitioner’s motivation to combine DuroMax and Elsdon is improperly grounded in hindsight. *See* §VI.A.1, *supra*. Petitioner’s further reliance on Rumao does nothing to resolve this deficiency.

Second, Petitioner’s treatment of Element 8.4 (relying on Petitioner’s proposed constructions and the DuroMax/Elsdon combination), incorporates Petitioner’s analysis from Ground 1; Element 1.3, which lacked evidentiary support. Pet., 85 (citing §§VII.A.1.d-e); *see also* §VI.A.2, *supra*. Petitioner’s purported analysis of Element 8.4 does not resolve the fatal deficiencies found in Ground 1.

Third, neither DuroMax, Elsdon, nor Rumao disclose a “mechanical fuel lockout switch.” Pet., 74; *see also* §VI.A.3, *supra*.

b. Petitioner’s arguments allegedly based on Patent Owner’s “apparent” constructions are deficient for the same reasons as Grounds 2A and 2B.

Petitioner’s Ground 3 also incorporates portions its analysis of Independent Claims 1 and 15 under Patent Owner’s “apparent” construction of “fuel lockout

apparatus.” As explained in additional detail, below, Petitioner’s Ground 3 fails for the same reasons as Grounds 2A and 2B.

First, Grounds 2A and 2B are allegedly based on Patent Owner’s “apparent” constructions of “fuel lockout apparatus,” “prevent ... coupling” and “permit ... to couple,” which is legally improper. *See* §VI.B.1, *supra*. Petitioner’s Ground 3 repeatedly relies on those same constructions, which is improper for the same reasons. *See, e.g.,* Pet., 81 (“Alternatively, Hallberg discloses a fuel lockout apparatus coupled to the mechanical fuel valve comprising fluid dual valve control 301 and control cable 302 that is coupled to a mechanical fuel valve”) (citing §VII.B.1.c); *see also* Pet., 25 (“in the alternative, Petitioners include ... Ground[] 3 ... showing how even under Patent Owner’s apparent construction the claims are anticipated or obvious over the prior art.”).

Second, Petitioner’s analysis of Element 8.2 (relying on Patent Owner’s “apparent” constructions and Hallberg), incorporates Petitioner’s analysis from Ground 2A; Element 1.1, which lacked evidentiary support. Pet., 77 (citing §§VII.B.1.b); *see also* §VI.B.2, *supra*. Petitioner’s purported analysis of element 8.2 does not resolve the fatal deficiencies found in Ground 2A.

2. Rumao (alone or combined with (1) DuroMax and Elsdon, or (2) Hallberg) does not disclose at least Elements 8.2 and 8.3.

As defined by Petition, Element 8.2 recites “coupling a mechanical fuel valve to the internal combustion engine...” Element 8.3 recites “coupling a fuel lockout apparatus to the mechanical fuel valve.” Rumao does not disclose coupling either (1) a mechanic fuel valve to an internal combustion engine, or (2) a fuel lockout apparatus to a mechanical fuel valve.⁹

Instead, Rumao discloses a generator with a customizable frame and chassis. EX1007, Abstract. Rumao contains over 100 figures, none of which disclose fuel valves, lockout switches, multiple fuel valves, or the like. Consistent with its stated purpose, Rumao discloses different frames, chassis, legs, and wheels to construct a generator. *Id.*, Figs. 33-103.

Petitioner relies on a single boilerplate line from Rumao as the sole support for missing Element 8.2. According to Petitioner, “Rumao discloses methods of assembling a generator system comprising engine 311 and ‘other accessories for forming a fully functional generator.’” Pet., 76 (citing EX1007, 18:34-40)

⁹ Petitioner does not allege that DuroMax, Elsdon, or Hallberg disclose any method(s) of assembly.

(referencing Element 8.2).¹⁰ Petitioner went on to allege that a POSITA “would have understood that ‘other accessories for forming a fully functional generator’ includes a mechanical fuel valve that selectively controls fuel flow of propane or gasoline to the internal combustion engine.” *Id.* (citing EX1003, ¶331). Paragraph 331 of the referenced expert report merely repeats this conclusory allegation verbatim. EX1003, ¶331.

Petitioner employs a similar strategy for Element 8.3, arguing that “Rumao discloses a method of assembling a generator system that includes ‘other accessories for forming a fully functional generator.’” Pet., 80 (cross-referencing Element 8.2). Again, Petition argues that a POSITA “would have understood that ‘other accessories for forming a fully functional generator’ include a fuel lockout apparatus configured to communicate the first fuel source to the internal combustion engine

¹⁰ Importantly, the language Petitioner quotes *is not actually found in* Rumao. Rather, the full quote is: “In one configuration, generator frame 301 may support a permanent fuel tank 360, a removable portable fuel tank 380, engine 311, handles 318 for lifting and maneuvering the generator, control panel 400, and **others** appurtenances and **accessories** (e.g. tool holders, fire extinguisher holders, power cord wrapping poles, etc.) **for forming a fully functional generator.**” EX1007, 18:34-40. Petitioner’s “quoted” language is emphasized.

and prevent the second fuel source from coupling to the internal combustion engine when the mechanical fuel valve is in the first position, and vice versa.” Pet., 80-81 (citing EX1003, ¶339). And again, Petitioner’s sole evidentiary support is conclusory expert testimony, which does nothing more than repeat Petitioner’s allegations verbatim. EX1003, ¶339.

Simply put, Rumao’s alleged reference to “other ... accessories ... for forming a fully functional generator” refers to the different frames, chassis, legs, and wheels taught by Rumao which are necessary to construct a generator, as well as the explicitly enumerated “tool holders, fire extinguisher holders, power cord wrapping poles, etc.” EX1007, 18:34-40. There is *no evidence* that Rumao’s boilerplate disclosure teaches “coupling a mechanical fuel valve to the internal combustion engine...” or “coupling a fuel lockout apparatus to the mechanical fuel valve” as recited by Elements 8.2 and 8.3. Simply put, Petitioner’s analysis of Elements 8.2 and 8.3 improperly relies on boilerplate disclosure from Rumao supported by conclusory expert testimony, both of which are legally improper. *Knowles Elecs. LLC v. Cirrus Logic, Inc.*, 883 F.3d 1358, 1367 (Fed. Cir. 2018) (holding that Petitioner’s reliance on a boilerplate “single line disclosure of solder pads in the specification is insufficient to disclose the claimed solder reflow process”) (citing *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997) (“It is not sufficient ... that the disclosure, when combined with the knowledge in the art,

would lead one to speculate as to the modifications that the inventor might have envisioned, but failed to disclose.”)); *see also Xerox Corp. et al., v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (P.T.A.B. August 24, 2022) (precedential) (expert testimony which “merely repeats, *verbatim*, the conclusory assertion for which it is offered to support ... is conclusory and unsupported, adds little to the conclusory assertion for which it is offered to support, and is entitled to little weight.”). For this reason, Ground 3 is deficient, and institution should be denied.

VII. CONCLUSION

For at least the reasons discussed above, the Petition fails to establish that the Challenged Claims are invalid.

Dated: November 4, 2025

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CERTIFICATE OF SERVICE

In accordance with 37 C.F.R. § 42.6(e), the undersigned certifies that on November 4, 2025, a complete and entire copy of the foregoing Patent Owner's Preliminary Response, including the exhibits relied upon, was served on counsel of record for Petitioner, as follows:

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CERTIFICATE OF WORD COUNT

Pursuant to 37 C.F.R. § 42.24(d), the undersigned certifies that the foregoing Patent Owner's Preliminary Response, excluding the portions exempted under 37 C.F.R. § 42.24(b), contains 9,354 words according to Microsoft Word's word count feature.

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