

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

KOKI HOLDINGS AMERICA LTD.,
Petitioner,

v.

KYOCERA SENCO INDUSTRIAL TOOLS, INC.,
Patent Owner.

IPR2025-00263
Patent 11,241,776 B2

Before BARRY L. GROSSMAN, MITCHELL G. WEATHERLY, and
SCOTT C. MOORE, *Administrative Patent Judges*.

GROSSMAN, *Administrative Patent Judge*.

DECISION
Granting Institution of *Inter Partes* Review
35 U.S.C. § 314

I. INTRODUCTION

A. *Background and Summary*

Koki Holdings America Ltd. (“Petitioner”) filed a Petition (Paper 1, “Pet.”) requesting an *inter partes* review of claims 1–30 (the “challenged claims”) of U.S. Patent No. 11,241,776 B2 (Ex. 1001, “the ’776 patent”). Kyocera Senco Industrial Tools, Inc. (“Patent Owner”) filed a Preliminary Response (Paper 7, “Prelim. Resp.”). We authorized additional briefing to address Patent Owner’s arguments regarding the construction of certain claim terms. Accordingly, Petitioner filed a Preliminary Reply to Patent Owner’s Preliminary Response. Paper 8 (“Prelim. Reply”). Patent Owner filed a Preliminary Sur-reply to Petitioner’s Reply. Paper 9 (“Prelim. Sur-Reply”).

We have jurisdiction under 35 U.S.C. § 314. Under § 314, an *inter partes* review may not be instituted “unless . . . there is a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). The Board determines whether to institute a trial on behalf of the Director. 37 C.F.R. § 42.4(a).

Petitioner has the burden of proof. *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016) (“In an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.”).

After considering the Petition, the Preliminary Response, the Reply, the Sur-Reply, and the evidence of record, based on the analysis in this Decision, we determine that Petitioner has demonstrated that there is a reasonable likelihood that at least one of the challenged claims is

unpatentable. Accordingly, we institute an *inter partes* review of all challenged claims and on all grounds asserted in the Petition. A decision to institute is a “yes-or-no institution choice respecting a petition, embracing all challenges included in the petition.” *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018).

B. Real Parties-in-Interest

Petitioner identifies itself and Koki Holdings Co., Ltd. as the real parties-in-interest. Pet. 2.

Patent Owner identifies itself as the sole real party-in-interest. Paper 6, 1.

C. Related Matters

The ’776 patent is part of a large family of fourteen related patents. See “Family Tree” chart at the end of this subsection. This chart illustrates and summarizes the family, litigation involving some of the older family members, and parallel *inter partes* review proceedings and litigation for the newer family members.

Petitioner identifies the following litigation matters involving related patents from the same patent family as the ’776 patent challenged in the proceeding before us (*see* Pet. 2). The ’776 patent, however, is *not* involved directly in any of the related proceedings cited by Petitioner.

Senco Brands, Inc. v. Hitachi Koki USA Ltd., No. 1:17-cv-00061 (S.D. Ohio Jan. 25, 2017), which was dismissed and refiled in Delaware with the same named parties as No. 1:17-cv-00598 (D. Del. May 23, 2017) (referred to on the Family Tree as “Del.-1”). Pursuant to 28 U.S.C. § 1659, a mandatory stay of this action was entered (Ex. 3001) until the determination

of a parallel ITC proceeding, cited below, becomes final. This stay has been lifted (Ex. 3002). Thus, this Delaware case is active and on-going.

Petitioner also cites as a related matter an ITC investigation, *In the Matter of Certain Gas Spring Nailers and Components Thereof*, ITC Inv. No. 337-TA-1082. This ITC investigation involved patents related to the '776 patent. It did *not* involve the '776 patent. Following a final ITC decision, there was an appeal to the Federal Circuit, which vacated the ITC decision and remanded the case to the ITC (*see* Federal Circuit decision cited below). On remand, the ITC granted Patent Owner's motion to terminate the investigation and vacate the remedial orders issued. Ex. 3003.

Petitioner also identifies as a related matter *Kyocera Senco Indus. Tools Inc. v. Int'l Trade Comm'n*, 22 F.4th 1369 (Fed. Cir. 2022). This Federal Circuit decision addressed cross-appeals from the ITC investigation cited above.

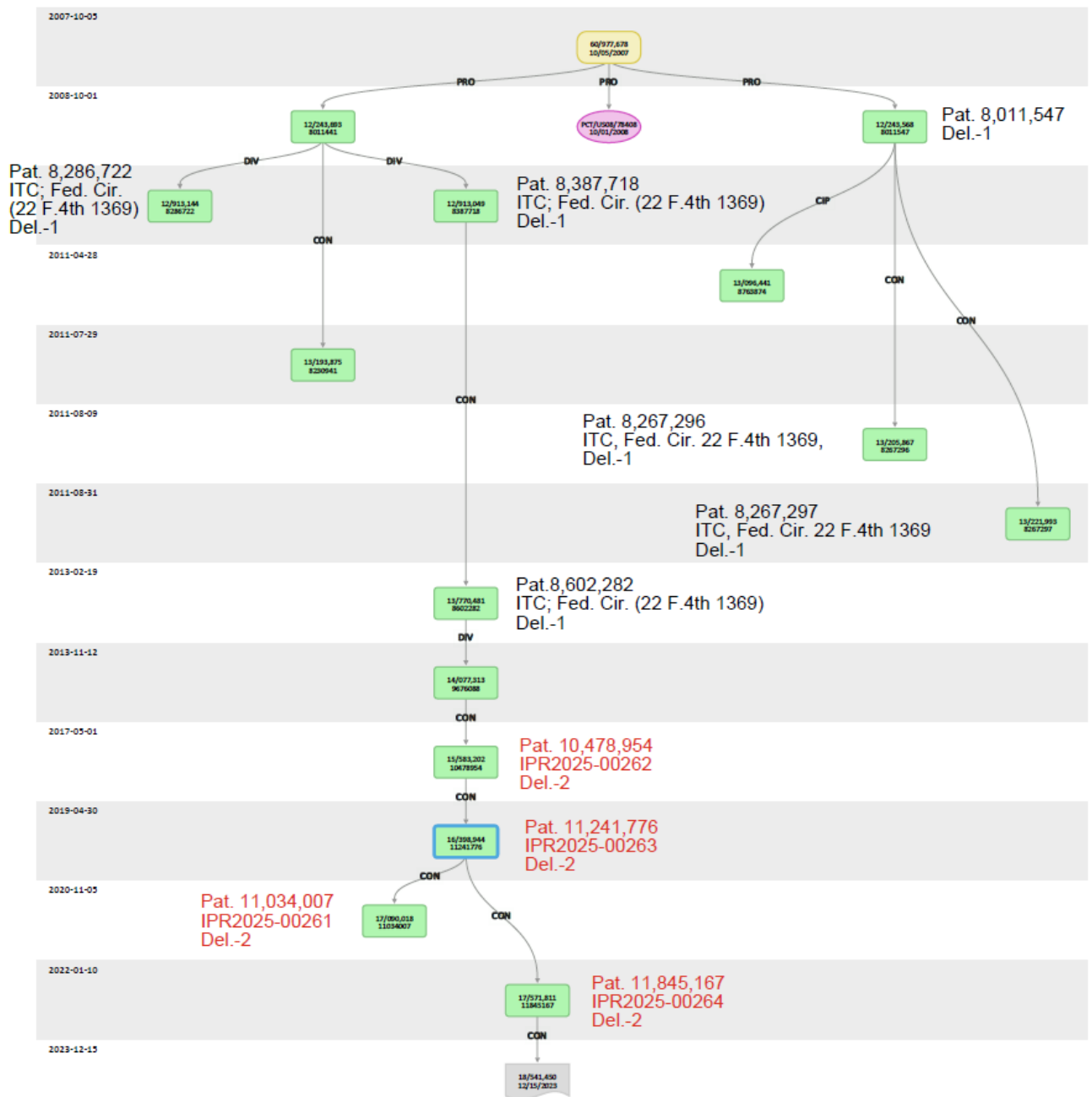
Petitioner also states that the '776 patent "is in the same patent family" as three U.S. patents that Petitioner also is challenging in three pending IPR proceedings. Pet. 3. These three pending IPR proceedings, and the patents challenged in them are: IPR2025-00261 (challenging Patent No. 11,034,007); IPR2025-00262 (challenging Patent No. 10,478,954), and IPR2025-00264 (challenging Patent No. 11,845,167). Paper 6, 1–2 (Patent Owner's Updated Mandatory Notice). All four petitions in the related IPRs were filed on December 13, 2024.

Patent Owner indicates that the '776 patent also is involved in the following litigation: *Kyocera Senco Industrial Tools, Inc. v. Koki Holdings America, LTD.*, Case No. 1:24-cv-01383 (D. Del. Dec. 17, 2024) (referred to on the Family Tree as "Del.-2"). Paper 6, 1–2. This Delaware case asserts

infringement of the '776 patent in the IPR proceeding before us. *See* Ex. 3004. This Delaware case also asserts infringement of the three other patents in the three pending IPR proceedings identified above, IPR2024-00261; 00262; and 00264. *Id.* The complaint in this Delaware litigation was filed on December 17, 2024, four days *after* the relevant four IPRs were filed.

An annotated “Family Tree” illustrating the various relationships of the patents, litigations, and IPR proceedings is provided below. This Family Tree chart is best viewed by enlarging it. The active IPR proceedings, IPR2025-00261; 00262; 00263; and 00264, are shown in red.

IPR2025-00263
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A Family Tree chart showing the connection between related patents and annotated to identify litigation and IPR proceedings in which a patent is involved.¹

¹ On this chart: “Del.-1” refers to Case No. 1:17-cv-00598 (D. Del. May 23, 2017); “Del-2” refers to Case No. 1:24-cv-01383 (D. Del. Dec. 17, 2024); “ITC” refers to ITC Inv. No. 337-TA-1082.

D. The '776 patent

The '776 patent, titled “Fastener Driving Tool Using a Gas Spring,” issued Feb. 8, 2022. Ex. 1001, codes (45), (54). It claims priority to a long line of prior applications, the earliest being provisional application No. 60/977,678, filed on Oct. 5, 2007. *Id.* code (60).

The '776 patent is “directed to portable tools that drive staples, nails, or other linearly driven fasteners,” such as “a gas spring linear fastener driving tool, in which a cylinder filled with compressed gas is used to quickly force a piston through a driving stroke movement, while also driving a fastener into a workpiece.” Ex. 1001, 1:30–37. According to the '776 patent, there is a need for a portable fastener driving tool that “uses few moving parts, which allows for simplicity of operation and provides a substantially gas-tight system for containing the pressurized gas for the gas spring.” *Id.* at 2:6–11, 2:15–3:11.

Figure 16 of the '776 patent, reproduced below, is a side, elevational view of an embodiment of a fastener driving tool. Ex. 1001, 6:8–10.

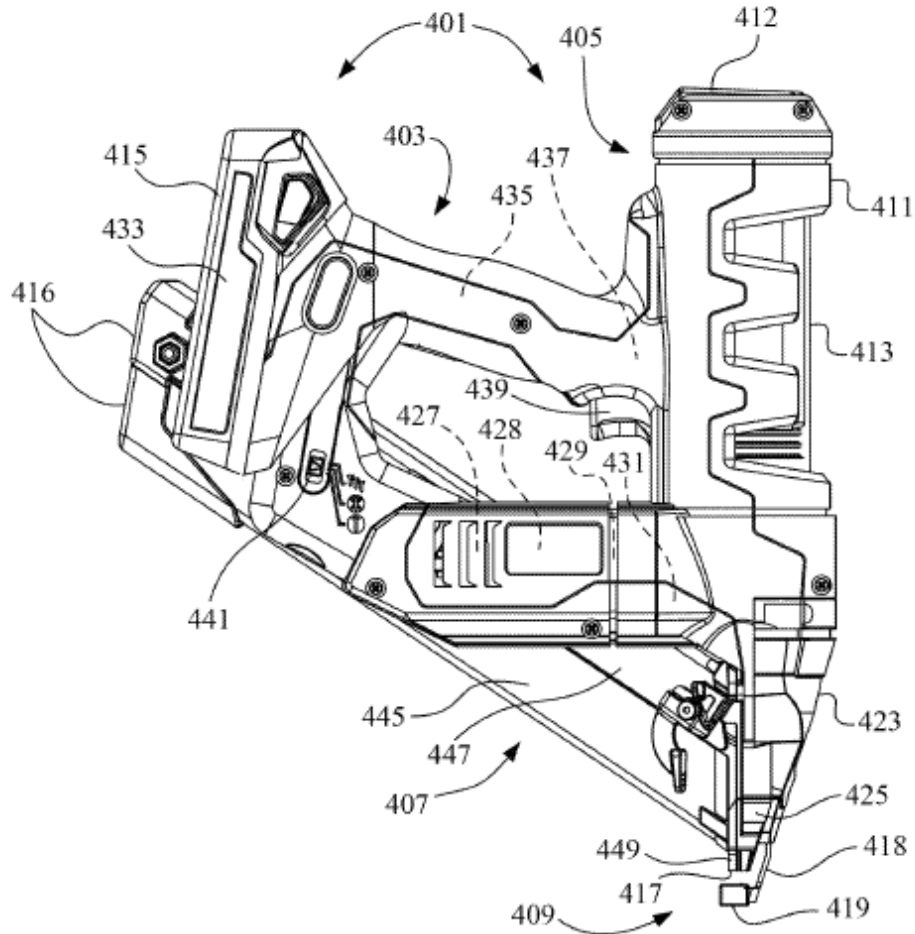


Fig. 16

Figure 16 depicts driving tool 401 that releases a fastener from bottom 417. Ex. 1001, 20:40–60. Tool 401 includes upper guide body 421 (labeled in Figures 20 and 21) and front cover 423, in which upper guide body 421 “generally is in mechanical communication with” magazine portion 407 that is included in the tool. *Id.* at 20:60–63. Magazine portion 407 includes magazine housing 445 with fastener track 447 to run individual fasteners

from feeder carriage 448 (shown in Figure 18) into a drive mechanism area. *Id.* at 20:64–21:2. In this embodiment, motor 427 drives gearbox 428 which drives lifter drive shaft 402 (shown in Figure 27) via output shaft 429 of the gearbox. *Id.* at 21:12–16. Battery 433 is located rear of handle portion 403. *Id.* at 21:18–21. Controller 435, having a printed circuit board, is positioned within handle portion 403. *Id.* at 21:22–25. Triggerswitch 437 is activated by trigger actuator 439 “for linear actuation by a person’s finger.” *Id.* at 21:25–31. Switch 441 allows two modes of operations. *Id.* at 21:32–37.

Figures 20 and 21, reproduced below, have been colored and annotated by Petitioner. Pet. 6.

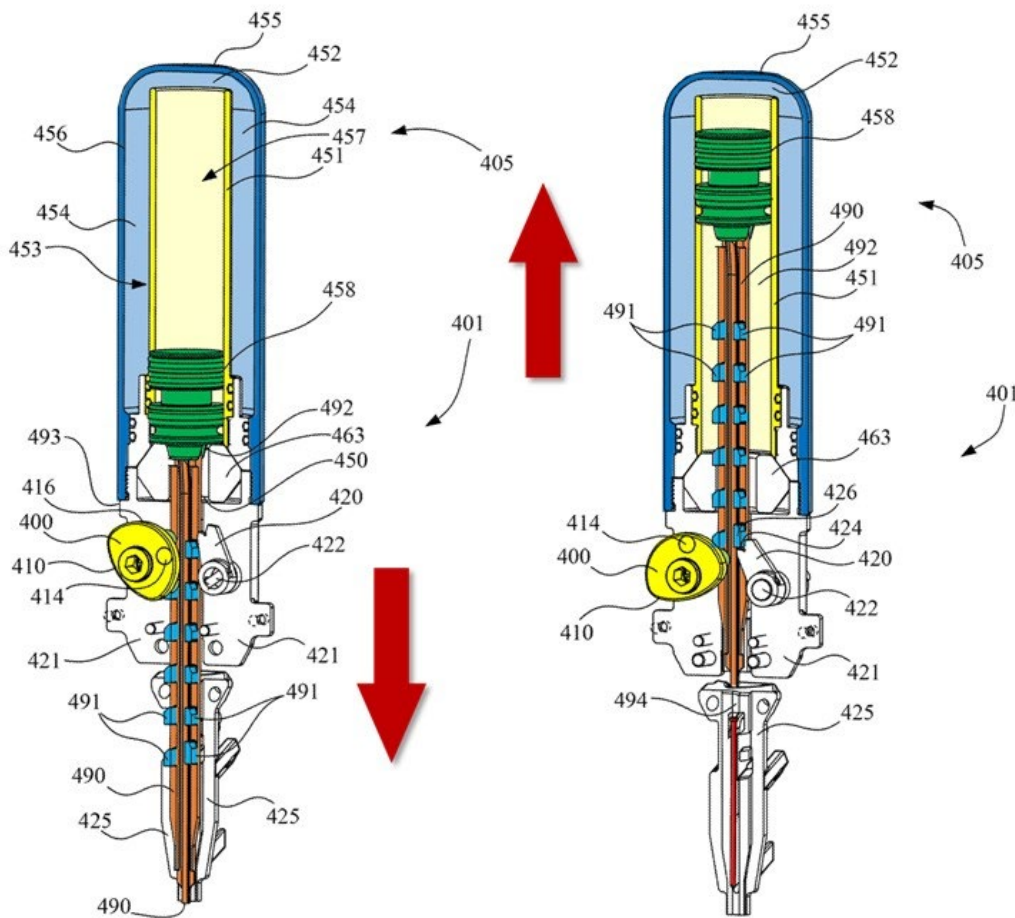


Fig. 20

Fig. 21

Figures 20 and 21 of the '776 patent are side views and partial cross-sections of a gas spring cylinder portion of the fastener driving tool embodiment of Figure 16, having a piston in a lowest driven position (Fig. 20) and a piston in a top-most position (Fig. 21). Ex. 1001, 6:19–29.

As shown in the Figures, a driver member 490 (orange) is attached to a piston 458 (green) and lifted by a lifter member 400 (bright yellow) against compressed gas in a hollow cylinder 492 (light yellow) and a main storage chamber 454 (blue). *Id.* at 21:53–22:18. Driver member 490 is then released and the compressed gas pushes on the piston and driver member to drive a nail (red) into a workpiece. *Id.*

Working cylinder 453 includes cylinder wall 451 which encloses movable piston 458. *Id.* at 21:56–58. Surrounding cylinder wall 451 and within outer pressure vessel wall 456 is main storage chamber 454 which is a “pressure vessel storage space.” *Id.* at 21:60–63. Fastener driver portion 405 has upper end portion 455 for the cylinder mechanism and includes “mechanisms that will actually drive a fastener into a solid object,” such as driver 490, cylinder “venting chamber” 492 located under piston 458, rotary-to-linear lifter 400, and latch 420. *Id.* at 21:65–22:7. Driver 490 is elongated and has teeth 491 along outer longitudinal edges thereof. *Id.* at 22:10–18. Drive shaft 402 (shown in Figure 27) protrudes through the center portions of fastener driver portion 405 and through the center of rotary-to-linear lifter 400, “and this shaft is used to rotate the lifter, as desired by the control system.” *Id.* at 22:41–45.

The '776 patent discloses that after driving tool 401 has been used to drive a fastener (Figure 20), the tool then must cause the driver 490 to be “lifted” back to its top-most position for a new firing (driving) stroke (Figure

21), This function is accomplished by rotary-to-linear lifter 400, which is actuated by motor 427, through gearbox 428. *Id.* at 25:18–23. Figure 20 shows rotary-to-linear lifter 400 rotating counterclockwise with one of its pins (such as pin 408 shown in Figure 24) coming into contact with one of teeth 491 of drive 490 and then with the next tooth “so that the driver 490 continues to move upward.” *Id.* at 25:24–34.

E. Illustrative Claim

Petitioner challenges claims 1–30. Claims 1, 9, 17, and 24 are independent claims. Claims 2–8 depend from claim 1, claims 10–16 depend from claim 9, claims 18–23 depend from claim 17, and claims 25–30 depend from claim 24.

Independent claim 1 is illustrative and is reproduced below with bracketed labels employed by Petitioner to facilitate analysis and discussion. *See* Pet. vi.

- [1.P] 1. A fastener driving tool, comprising:
 - [1.1] (a) a guide body that has a receiving end, an exit end, and a passageway therebetween, said guide body being configured to receive a fastener;
 - [1.2] (b) a hollow cylinder comprising a cylindrical wall and having a movable piston therewithin, said hollow cylinder having a first end and a second, opposite end, said hollow cylinder containing a displacement volume created by a stroke of said piston;
 - [1.3] (c) an elongated driver member having a first end and a second end, said first end being in mechanical communication with said movable piston, said second end being sized and shaped to push a fastener from said exit end of the guide body, and said driver member having at least one longitudinal edge with a plurality of spaced-apart protrusions;
 - [1.4] (d) a rotatable lifter member that makes contact with said at least one plurality of spaced-apart protrusions of said

- driver member such that, if said lifter member is moved in a first direction, it causes said driver member to be moved toward a ready position; and
- [1.5] (e) main storage chamber that, during an operating cycle, is always in fluidic communication with said displacement volume of the hollow cylinder, wherein said main storage chamber and said displacement volume are both charged with a pressurized gas, wherein said pressurized gas is not exhausted to atmosphere after a driving stroke, but instead is re-used for a plurality of said operating cycles;
- [1.6] wherein said cylinder and piston act as a gas spring to move said driver member toward the driven position, using said pressurized gas of both said main storage chamber and said displacement volume acting on said piston.

Ex. 1001, 38:62–39:29.

Independent claim 9 is identical to claim 1, except that claim 9 recites “a rotatable component,” rather than a “a rotatable lifter member,” as recited in claim 1. Ex. 1001, 39:55–40:22. Independent claim 17 is identical to claim 1, except that claim 17 adds the phrase “and when said lifter member is moved to a holding position, it temporarily holds said driver member at said ready position by use of a holding contact between said lifter member and said driver member.” *Id.* at 40:49–41:19. Independent claim 24 is identical to claim 1, except that claim 24 recites both “a rotatable component” and the phrase “and when said rotatable component is moved to a holding position, it temporarily holds said driver member at said ready position by use of a holding contact between said rotatable component and said driver member.” *Id.* at 41:40–42:28.

F. Prior Art and Asserted Grounds

Petitioner asserts that one or more of the challenged claims would have been obvious on the following four grounds:

Claim(s) Challenged	35 U.S.C. § ²	Reference(s)/Basis
1–30	103	Haley, ³ Lai ⁴
1–30	103	Saari, ⁵ Enstrom, ⁶ Lai
1–30	103	Kondo ⁷
1–30	103	Pedicini ⁸

Petitioner also relies on the declaration testimony of Dr. Glenn E. Vallee. *See* Ex. 1003.⁹ Patent Owner did not submit any declaration testimony.

II. ANALYSIS

A. *Legal Standards*

Section 103 forbids issuance of a patent when “the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said

² The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 296–07 (2011), took effect on September 16, 2011. The changes to 35 U.S.C. § 103 in the AIA do not apply to any patent application filed before March 16, 2013. Because the application for the patent at issue in this proceeding claims priority to applications filed before March 16, 2013, we refer to the pre-AIA version of the statute.

³ U.S. Patent No. 3,150,488, Sept. 29, 1964, Ex. 1004 (“Haley”).

⁴ U.S. Patent No. 5,503,319, Apr. 2, 1996, Ex. 1005 (“Lai”).

⁵ U.S. Patent No. 3,924,692, Dec. 9, 1975, Ex. 1006 (“Saari”).

⁶ U.S. Patent No. 3,913,685, Oct. 21, 1975, Ex. 1007 (“Enstrom”).

⁷ U.S. Patent No. 5,720,423, Feb. 24, 1998, Ex. 1008 (“Kondo”).

⁸ U.S. Patent Application Publ. No. 2006/0180631 A1, Aug. 17, 2006, Ex. 1009 (“Pedicini”).

⁹ Dr. Vallee earned a Master’s degree in Mechanical Engineering and Applied Mechanics and a Ph.D. degree also in Mechanical Engineering and Applied Mechanics. Ex. 1003 ¶ 5. He currently is “an Associate Professor and Chair of Mechanical Engineering” at Western New England University. *Id.* His experience is summarized in his testimony. *See id.* ¶¶ 5–10.

subject matter pertains.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). The question of obviousness is resolved on the basis of underlying factual determinations, including: (1) the scope and content of the prior art; (2) any differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) when available, evidence such as commercial success, long felt but unsolved needs, and failure of others.¹⁰ *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966); *see KSR*, 550 U.S. at 407 (“While the sequence of these questions might be reordered in any particular case, the [*Graham*] factors continue to define the inquiry that controls.”). The Court in *Graham* explained that these factual inquiries promote “uniformity and definiteness,” for “[w]hat is obvious is not a question upon which there is likely to be uniformity of thought in every given factual context.” 383 U.S. at 18.

The Supreme Court made clear that we apply “an expansive and flexible approach” to the question of obviousness. *KSR*, 550 U.S. at 415. Whether a patent claiming the combination of prior art elements would have been obvious is determined by whether the improvement is more than the predictable use of prior art elements according to their established functions. *Id.* at 417. To support this conclusion, however, it is not enough to show merely that the prior art includes separate references covering each separate limitation in a challenged claim. *Unigene Labs., Inc. v. Apotex, Inc.*, 655 F.3d 1352, 1360 (Fed. Cir. 2011). Rather, obviousness additionally requires that a person of ordinary skill at the time of the invention “would have

¹⁰ Patent Owner does not direct us to any objective evidence of non-obviousness in its Preliminary Response.

selected and combined those prior art elements in the normal course of research and development to yield the claimed invention.” *Id.*

In determining whether there would have been a motivation to combine prior art references to arrive at the claimed invention, it is insufficient to simply conclude the combination would have been obvious without identifying any reason *why* a person of skill in the art would have made the combination. *Metalcraft of Mayville, Inc. v. Toro Co.*, 848 F.3d 1358, 1366 (Fed. Cir. 2017).

Moreover, in determining the differences between the prior art and the claims, the question under 35 U.S.C. § 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755 F.2d 158, 164 (Fed. Cir. 1985) (“It is elementary that the claimed invention must be considered as a whole in deciding the question of obviousness.”); *see also Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 1537 (Fed. Cir. 1983) (“[T]he question under 35 U.S.C. § 103 is not whether the differences *themselves* would have been obvious. Consideration of differences, like each of the findings set forth in *Graham*, is but an aid in reaching the ultimate determination of whether the claimed invention *as a whole* would have been obvious.”).

As a factfinder, we also must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *KSR*, 550 U.S. at 421.

Applying these general principles, we consider the evidence and arguments of the parties.

B. Claim Construction

We construe each claim “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. [§] 282(b).” 37 C.F.R. § 42.100(b) (2021). Under this standard, claim terms are generally given their ordinary and customary meaning as would have been understood by a person of ordinary skill in the art at the time of the invention and in the context of the entire patent disclosure. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312–14 (Fed. Cir. 2005) (en banc) (“We have frequently stated that the words of a claim ‘are generally given their ordinary and customary meaning.’” (citations omitted)).

1. Lifter Member

Independent claims 1 and 17, and many of the claims dependent from claims 1 and 17, use the term “lifter member.” *See, e.g.*, Ex. 1001, 39:11, 30–32 (claim 1 specifically including “a rotatable lifter member;” claim 2 specifically referring to “the lifter member”).

Petitioner asserts the term “lifter member” in the claims of the ’776 patent is “a means-plus-function term” because the claims “lack any ‘recital of structure, material, or acts in support thereof’ for the ‘lifter’ element.” Pet. 7 (citing 35 U.S.C. § 112(f)).

Petitioner also asserts “[t]he Federal Circuit held that the term ‘lifter member’ in the related patents is a means-plus-function term subject to §112(f).” Pet. 7. Petitioner cites no authority for this assertion. We understand this assertion to refer to the decision in *Kyocera Senco Indus. Tools Inc. v. Int’l Trade Comm’n*, 22 F.4th 1369 (Fed. Cir. 2022), identified by Petitioner as a related matter. Pet. 2. In this case, which involved patents from the same family as the ’776 patent (*see* Section I.C of this Decision),

the Federal Circuit concluded that “§ 112 ¶ 6 applies to the ‘lifter member’ limitation, and it must be construed to cover only ‘the structure, materials, or acts described in the specification as corresponding to the claimed function and equivalents thereof.’” *Id.* at 22 F.4th 1379–1381. “Where multiple patents derive from the same parent application and share many common terms, we must interpret the claims consistently across all asserted patents.” *Samsung Elecs. Co. v. Elm 3DS Innovations, LLC*, 925 F.3d 1373, 1378 (Fed. Cir. 2019) (citing *SightSound Techs., LLC v. Apple Inc.*, 809 F.3d 1307, 1316 (Fed. Cir. 2015) (internal quotation marks omitted).

Patent Owner asserts that Petitioner:

fails to comply with the requirement of 37 C.F.R. § 42.104(b)(3) to specifically identify the structure in the specification associated with that element. As ‘lifter’ is present in every challenged claim under all four grounds, Petitioner’s failure to provide a claim construction for ‘lifter’ is fatal to its Petition.

Prelim. Resp. 13. We disagree.

First, the claims in the ’776 patent do *not* use the single word “lifter” alone. The term used in some of the claims, *see, e.g.*, independent claims 1 and 17, and the claims dependent from claims 1 or 17, is “lifter member.” We recognize that the written description in the ’776 patent states “the rotary-to-lifter 100 is also sometimes referred to herein as a ‘lifter member,’ or simply as a ‘lifter.’” Ex. 1001, 9:5–7. This suggests that that term “lifter” is intended to mean the “lifter member,” which makes the use of either term a distinction without a substantive difference. Moreover, neither independent claims 9 or 24, nor the claims dependent from claims 9 and 24, use the word “lifter” or “lifter member.

Second, as stated in Petitioner’s Preliminary Reply, the Petition “identifies the portions of the specification that describe the corresponding structure for the ‘lifter’ when comparing its structure to that of the Lai prior art.” Prelim. Reply 1. The Petition provides a colored version of Figure 12 from the ’776 patent (reproduced below) and identifies the following corresponding structures from the Specification of the ’776 Patent:

The “lifter member” of the ’776 patent includes a rotatable cam lifter 100 (yellow []), with pin 104, 106, and 108 (green) on its face surface that engage protrusions 92 (blue) on the driver member 90 (orange). ’776 patent, 9:30–46, 16:34–48, Fig. 12. The ’776 patent also discloses two-pin variants: lifter members 465 and 480 in Figs. 31, 33. [citing] ’776 patent, 32:15–30, 32:48–63.

Petition at 13.

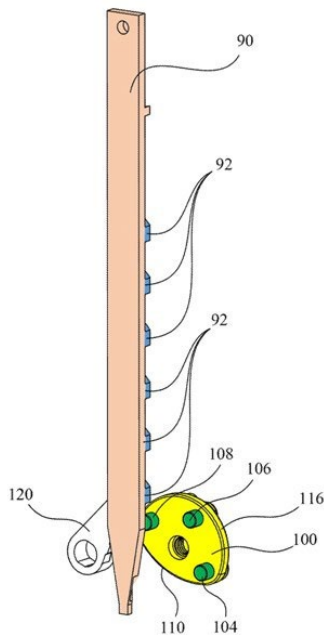


Fig. 12

Based on the record before us, we determine that this identification of corresponding structure is sufficient to satisfy 37 C.F.R. § 42.104(b)(3). We also note that at this stage of the proceeding, Patent Owner does not dispute that Petitioner has identified the correct corresponding structure. To the extent the parties wish to further address the construction of this claim limitation, they may do so during trial, as permitted by our rules.

2. *Storage Chamber*

Petitioner also proposes that the term “storage chamber” be construed to mean “a chamber that is distinct from the displacement volume of the hollow cylinder and contains part of the working air volume during operation.” Pet. 8. According to Petitioner “there is nothing in the intrinsic record or any of the claims of the ’776 patent that prevents the ‘main storage chamber’ from being *in* the hollow cylinder, so long as it is *distinct* from its separately-recited ‘displacement volume.’” *Id.* at 9 (emphases added).

Patent Owner asserts that “[g]rounds 2 and 4 each requires this Board to interpret the ‘storage chamber’ to be the same structure as the hollow cylinder.” Prelim. Resp. 31. According to Patent Owner, “[t]he Federal Circuit, considering both parties’ claim construction arguments, rejected that construction.” *Id.* Patent Owner does not provide any citation to support its reference to the Federal Circuit decision. It appears to be a reference to the *Kyocera* decision considering review of the ITC determination. *See Kyocera*, 22 F.4th at 1383. That decision, however, construed claims in a related patent to “require *two distinct structures*: the main storage volume and a smaller “hollow cylinder” *contained within the main storage volume*. Based on the record before us, Petitioner’s proposed construction is consistent with the Federal Circuit’s construction, which states two

structures can be distinct even if one distinct structure is “contained within” the other distinct structure.

Although the parties dispute the construction of the “storage chamber” claim limitation, this dispute relates only to Grounds 2 and 4. *See* Prelim. Resp. 31. We need not resolve it to determine whether to institute review. The parties are welcome to develop their arguments regarding this claim limitation during trial.

3. Conclusion Regarding Claim Construction

Our claim construction analyses in this decision to institute a trial do not preclude the parties from arguing their proposed constructions of the claims during trial. Indeed, the parties are hereby given notice that claim construction, in general, is an issue to be addressed at trial. Claim construction will be determined at the close of all the evidence and after any hearing. The parties are expected to assert all their claim construction arguments and evidence in the Petition, Patent Owner’s Response, Petitioner’s Reply, or otherwise during trial, as permitted by our rules.

C. Patent Owner’s Argument that Alleged Deficiencies in the Petition Merit Denial of Institution

Patent Owner asserts that “[t]he Board should exercise its discretion to deny institution in light of the Petition’s many deficiencies.” Prelim. Resp. 36 (*see* heading IV, capitalization modified). Patent Owner argues, “even if arguments as to a few claims might have been properly presented in the Petition, a decision to institute here would require the Board to address—for the first time and with no Petitioner input—critical claim construction issues affecting nearly every claim and every ground.” *Id.* at 37. We disagree.

For the reasons discussed above, we are not persuaded on the current record that Petitioner has violated 37 C.F.R. § 42.104(b)(3), or that there exist critical and unresolved claim construction issues sufficient to justify denial of institution. We, therefore, decline to deny institution on this basis. As explained above in Section II.B, we determine that Petitioner's claim constructions are sufficient at this stage of this proceeding to support, along with the other evidence of record, a reasonable likelihood that Petitioner will prevail with respect to at least 1 of the claims challenged in the petition. *See* 35 U.S.C. § 314(a).

We now turn to the merits of the grounds set forth in the Petition.

D. Level of Ordinary Skill in the Art

The level of skill in the art is “a prism or lens” through which we view the prior art and the claimed invention. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). “This reference point prevents . . . factfinders from using their own insight or, worse yet, hindsight, to gauge obviousness.” *Id.*

“The *Graham* analysis includes a factual determination of the level of ordinary skill in the art. Without that information, a . . . court cannot properly assess obviousness because the critical question is whether a claimed invention would have been obvious at the time it was made to one with ordinary skill in the art.” *Custom Accessories, Inc. v. Jeffrey-Allan Indus., Inc.*, 807 F.2d 955, 962 (Fed. Cir. 1986); *see also Ruiz v. A.B. Chance*, 234 F.3d 654, 666 (Fed. Cir. 2000) (“The determination of the level of skill in the art is an integral part of the *Graham* analysis.”).

Factors pertinent to a determination of the level of ordinary skill in the art include: (1) educational level of the inventor; (2) type of problems

encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of workers active in the field. *Env't Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696–697 (Fed. Cir. 1983) (citing *Orthopedic Equip. Co. v. All Orthopedic Appliances, Inc.*, 707 F.2d 1376, 1381–82 (Fed. Cir. 1983)). Not all such factors may be present in every case, and one or more of these or other factors may predominate in a particular case. *Id.* Moreover, these factors are not exhaustive but are merely a guide to determining the level of ordinary skill in the art. *Daiichi Sankyo Co. v. Apotex, Inc.*, 501 F.3d 1254, 1256 (Fed. Cir. 2007). In determining a level of ordinary skill, we also may look to the prior art, which may reflect an appropriate skill level. *Okajima*, 261 F.3d at 1355.

Surprisingly, considering the “critical question” controlling the outcome of this case, neither party proposes or defines what is the level of ordinary skill in this case. *See generally*, Pet., Prelim. Resp.

We note, however, that Dr. Vallee, Petitioner’s Declarant, provides testimony on the level of ordinary skill. *See* Ex. 1003 ¶¶ 48–49. Petitioner did not cite this testimony.¹¹ Dr. Vallee states the factors he considered in

¹¹ *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.”); *see also Novartis AG v. Torrent Pharms.*, 853 F.3d 1316, 1326 n.2 (Fed. Cir. 2017) (explaining that a party failed to provide sufficient argument in support of its motion before the Board because the motion’s “superficial treatment amounts to little more than a request that the Board peruse the cited evidence and piece together a coherent argument on [the movant’s] behalf”). Petitioner is advised that its briefs in the future must cite to and/or include the evidence it wants us to consider,

reaching his opinion (*id.* ¶ 48) and testifies in his declaration that one of ordinary skill in the art relevant to the '776 Patent:

would have either (i) a Master's degree in mechanical engineering with at least two years of experience in power nailer design; (ii) a Bachelor's degree in mechanical engineering with at least five years of experience in powered nailer design; or (iii) ten (or more) years of experience in powered nailer design. This experience in powered nailer design would include mechanical design, tool design, manufacturing, mechanics of materials, stress analysis, ergonomics, and human factors.

Ex. 1003, ¶ 49. For purposes of this Decision, based on the sophistication of the disclosed and claimed technology, the cited references, and Dr. Vallee's testimony, we adopt and apply in this decision Dr. Vallee's proposed level of ordinary skill in the art. Patent Owner may address this issue in its Response.

*E. Ground 1 — Claims 1–30 in View of
Haley and Lai*

Petitioner asserts claims 1–30 are unpatentable under 35 U.S.C. § 103 as obvious in view of Haley and Lai. Pet. 9–37. First, we summarize the disclosures of Haley and Lai.

1. Haley (Ex. 1004)

Haley “relates to . . . a pressure fluid power device for operating hand tools.” Ex. 1004, 1:7–9. Haley explains that one object is to provide a power device “having a reservoir of stored energy and a means for automatically releasing the energy to operate a desired hand tool.” *Id.* at 1:13–16.

Figure 1 of Haley, reproduced below with Petitioner's added coloring, is a partial sectional view of a power device with a drive piston and an

accumulator piston in an initial position prior to operation. Ex. 1004, 1:66–69.

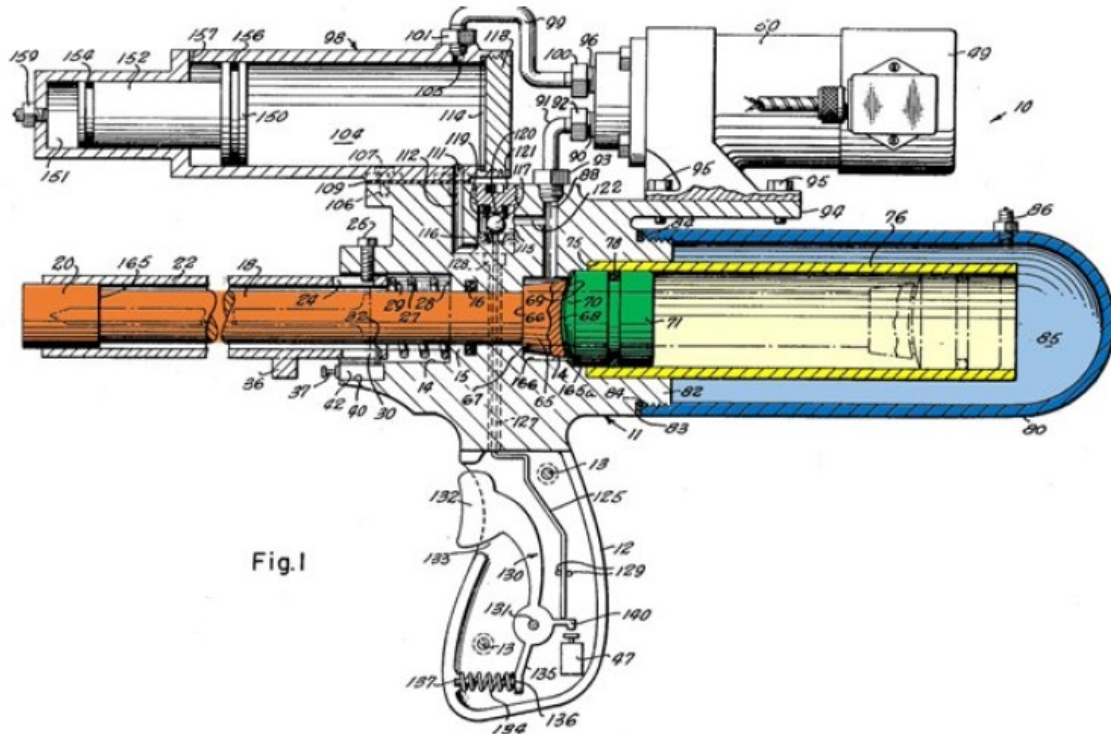
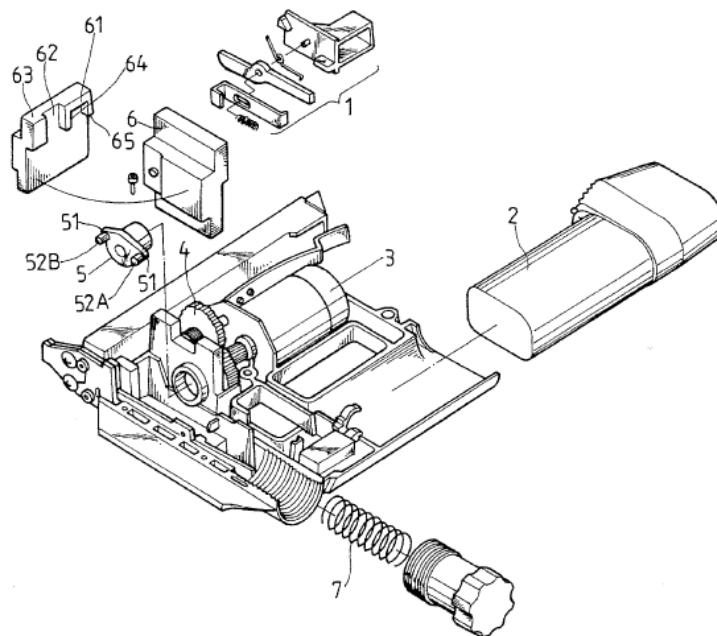


Figure 1 shows power device 10 including body 11 having lower piston-type hollow handle 12. *Id.* at 2:10–15. Body 11 supports drive piston 18 that extends to annular hammerhead 20 (red). *Id.* at 2:15–23. Casing or housing 40 has switch 33 (shown in Fig. 2) for actuation of hammerhead 20 as drive piston 18 is moved inwardly. *Id.* at 2:37–58. Power device 10 also includes extension cylinder 76 (yellow) secured in a fluid tight relation to main body 11 in which accumulator piston 71 (green) is moveable within extension cylinder 76. *Id.* at 3:32–39. Elongate accumulator shell 85 (blue) is threaded on rearward extension 82 of body 11 “to effect a fluid tight seal therebetween” so that compressed gas is introduced into the chamber of elongate accumulator shell 85 to drive accumulator piston 71. *Id.* at 3:40–54, 5:51–54.

2. *Lai (Ex. 1005)*

Lai is entitled “Transmission Mechanism for an Electric Stapling Gun.” Ex. 1005, code (54). Lai explains that “the ideal electric stapling gun should be energy saving, strong in hitting force and compact in size.” *Id.* at 1:9–10.

Figure 2 of Lai, reproduced below, is an exploded view of a transmission mechanism of an exemplary electric stapling gun. Ex. 1005, 1:45–47.



F I G . 2

Figure 2 depicts a transmission mechanism including cam 5 and hammer 6 in which cam 5 has lobes 51 mounted with pins 52A and 52B. *Id.* at 1:59–63. Hammer 6 is moveably mounted on a groove of the electric stapling gun and “is formed at the left part of its inner side with” U-shaped member 61, at the middle part of its inner side with recess 62, and at the right part of its inner side with protuberance 63. *Id.* 2:1–7.

Referring to Figure 2, reproduced above, Lai discloses that when in use, motor 3 rotates cam 5. Ex. 1005, 2:14–16. Thus, pin 52A will urge inner right side 64 of U-shaped member 61 to move rightwards thereby compressing spring 7 (*see* FIG. 4A, reproduced below). *Id.* 2:16–18. As cam 5 continues to rotate, pin 52B will force the top left side of U-shaped member 61 to go rightwards thus further compressing spring 7 (*see* FIG. 4B and 4C, reproduced below). *Id.* 2:18–20. Cam 5 then is separated from U-shaped member 61 and compressed spring 7 will restore to force U-shaped member 61 to move hammer 6 towards the left (*see* FIG. 4D, reproduced below) thereby hitting out the staple. *Id.* 2:21–24.

Figures 4A–4D of Lai, reproduced below with Petitioner’s added coloring (Pet. 20–21), “shows the principle of the transmission mechanism for the electric stapling gun,” as has been described above. Ex. 1005, 1:53–54.

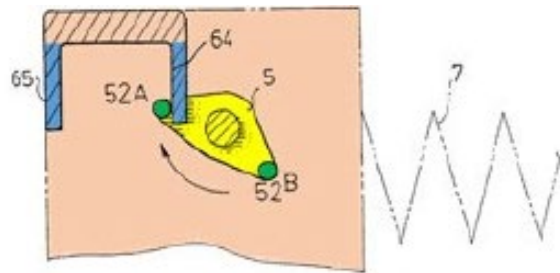


Fig. 4A.

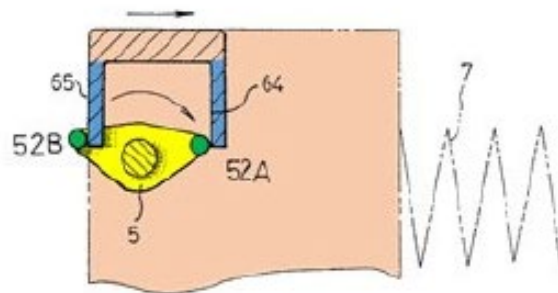


Fig. 4B.

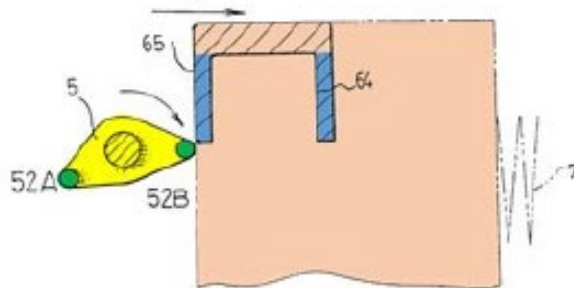


Fig. 4C.

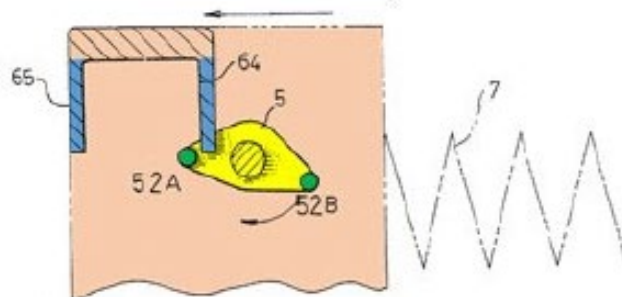


Fig. 4D.

3. Analysis of Independent Claim 1

Patent Owner does not address the merits of Petitioner's asserted grounds of unpatentability. Patent Owner's Preliminary Response argues only issues of claim construction. *See, e.g.*, Prelim. Resp., Table of Contents (each Section heading focusing on issues of claim construction).

Nonetheless, Petitioner has the burden of proof to establish a reasonable likelihood that the challenged claims are unpatentable. To meet this burden, Petitioner provides a detailed, clause-by-clause, analysis of the challenged claims asserting where each claim element and limitation is disclosed in the applied references and why it would have been obvious to combine the references as proposed by Petitioner. Pet. 9–104. Throughout its analysis, Petitioner relies on the Declaration testimony of Dr. Vallee for evidentiary support. We need not repeat the entirety of Petitioner's uncontested analysis. We analyze independent claim 1 below as representative.

a) Preamble

The preamble states “A fastener driving tool, comprising.” Ex. 1001, 38:62.

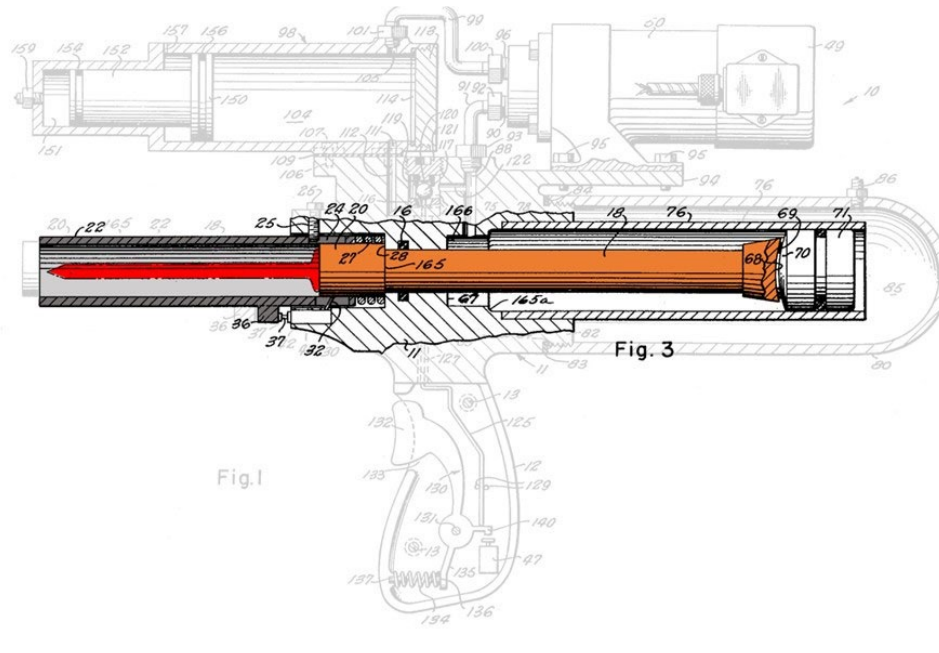
Petitioner asserts that Haley discloses a fastener driving tool that “relates to power devices and more particularly to a pressure fluid power device for operating hand tools.”. Pet. 9 (citing Ex. 1004, 1:7–9).

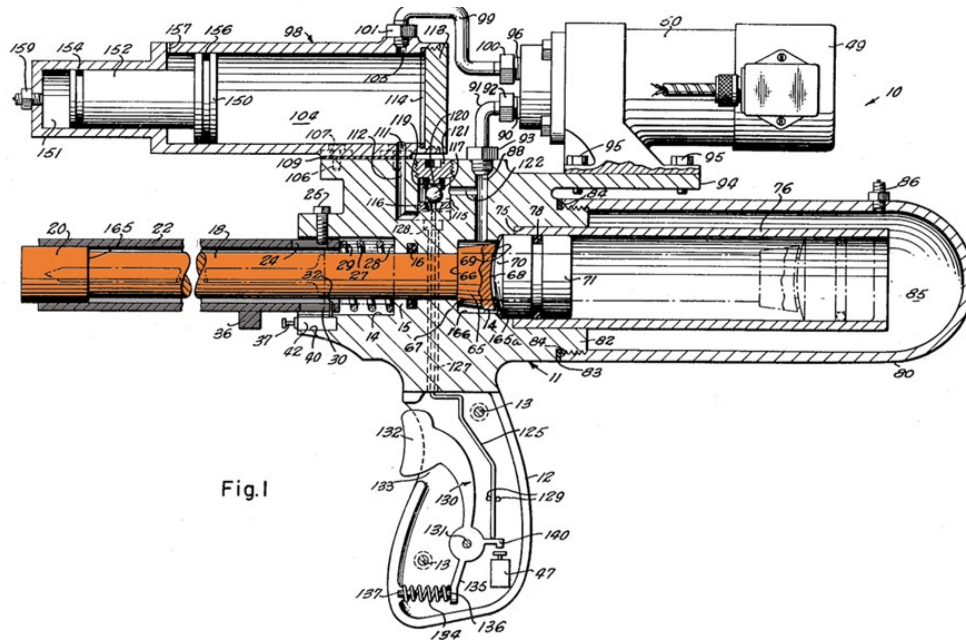
Patent Owner does not challenge this assertion. Based on the record before us, we determine that Petitioner has made a sufficient showing that Haley discloses the subject matter of the preamble.

b) Clause 1.1

Clause 1.1 states “(a) a guide body that has a receiving end, an exit end, and a passageway therebetween, said guide body being configured to receive a fastener.” Ex. 1001, 38:63–65.

Petitioner asserts that “Haley’s guide body (‘guide barrel 22,’ grey below) has a passageway between a receiving end(right) and exit end (left), and configured to receive a fastener (nail, red). Pet. 9–10 (citing Ex. 1004, 2:23–27, Figs. 1, 3 (colored by Petitioner and reproduced below)).





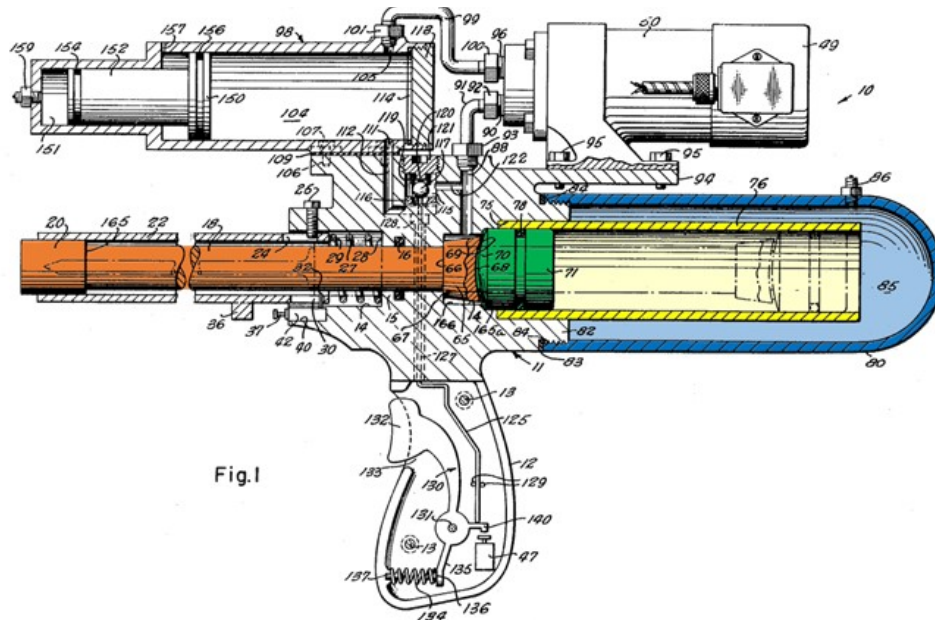
Patent Owner does not challenge this assertion. Based on the record before us, we determine that Petitioner has made a sufficient showing that Haley discloses the subject matter of clause 1.1.

c) Clause 1.2

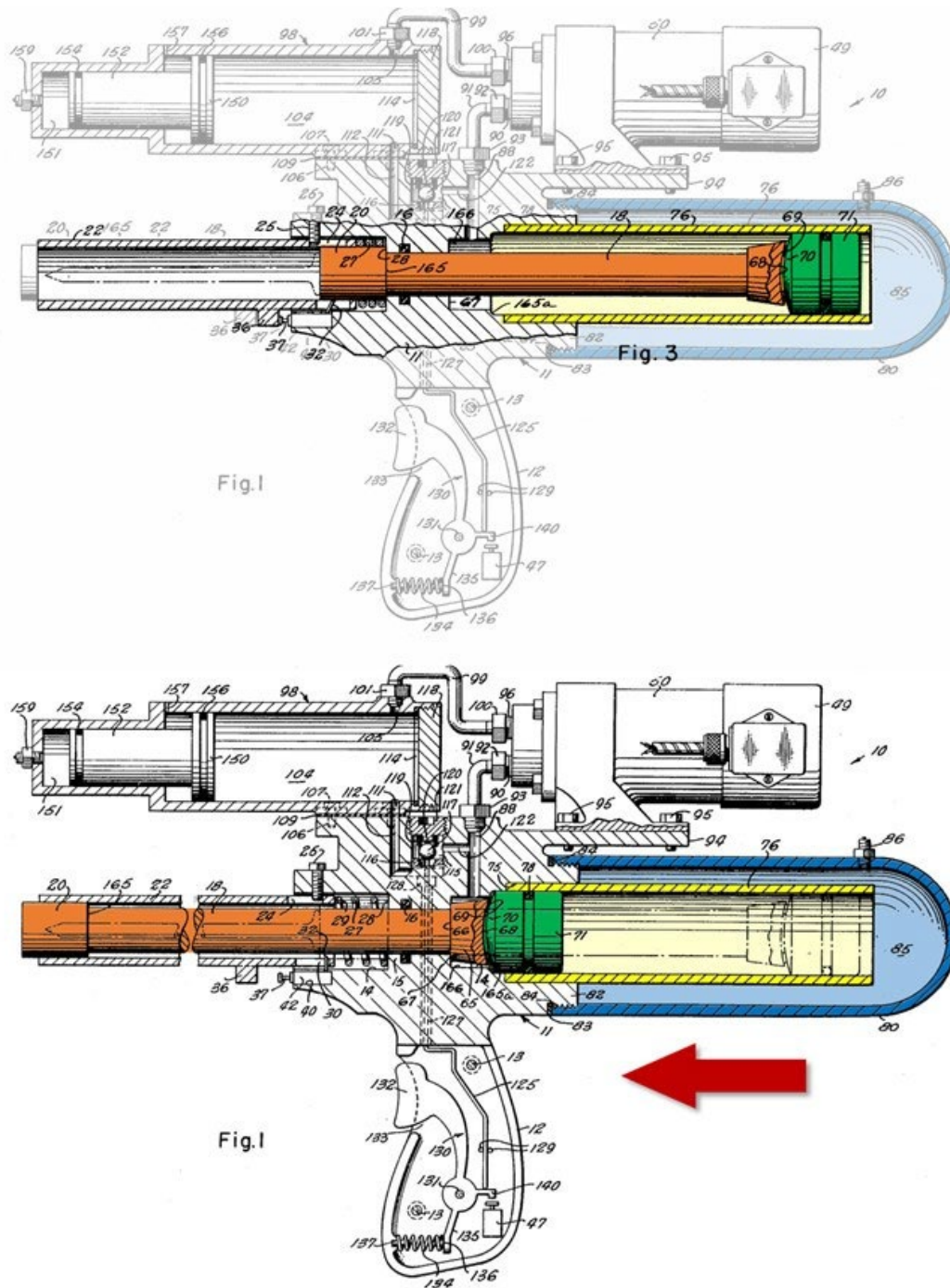
Clause 1.2 states “(b) a hollow cylinder comprising a cylindrical wall and having a movable piston therewithin, said hollow cylinder having a first end and a second, opposite end, said hollow cylinder containing a displacement volume created by a stroke of said piston.” Ex. 1001, 38:66–39:3.

Petitioner asserts “Haley’s hollow cylinder comprising a cylindrical wall (extension cylinder 76, yellow) has a first end opposite to a second end. Pet. 11. According to Petitioner, Haley’s piston (“accumulator piston 71,” green) is within that hollow cylinder and is “moveable within the cylinder extension.” *Id.* (citing Ex. 1004, 3:33, 3:35–39, Figs. 1–4). Petitioner also

provides a colored version of Figure 1, reproduced below to illustrate its interpretation of the Hayley structure.



Additionally, Petitioner asserts that “the hollow cylinder has a displacement volume created by the stroke of the piston, shown by Figure 1’s dashed-line illustration of the piston.” Pet. 11–12 (citing Ex. 1004, Figs. 1, 3) (colored, annotated, and labeled by Petitioner, and reproduced below).



Patent Owner does not challenge this assertion. Based on the record before us, we determine that Petitioner has made a sufficient showing that Haley discloses the subject matter of clause 1.2.

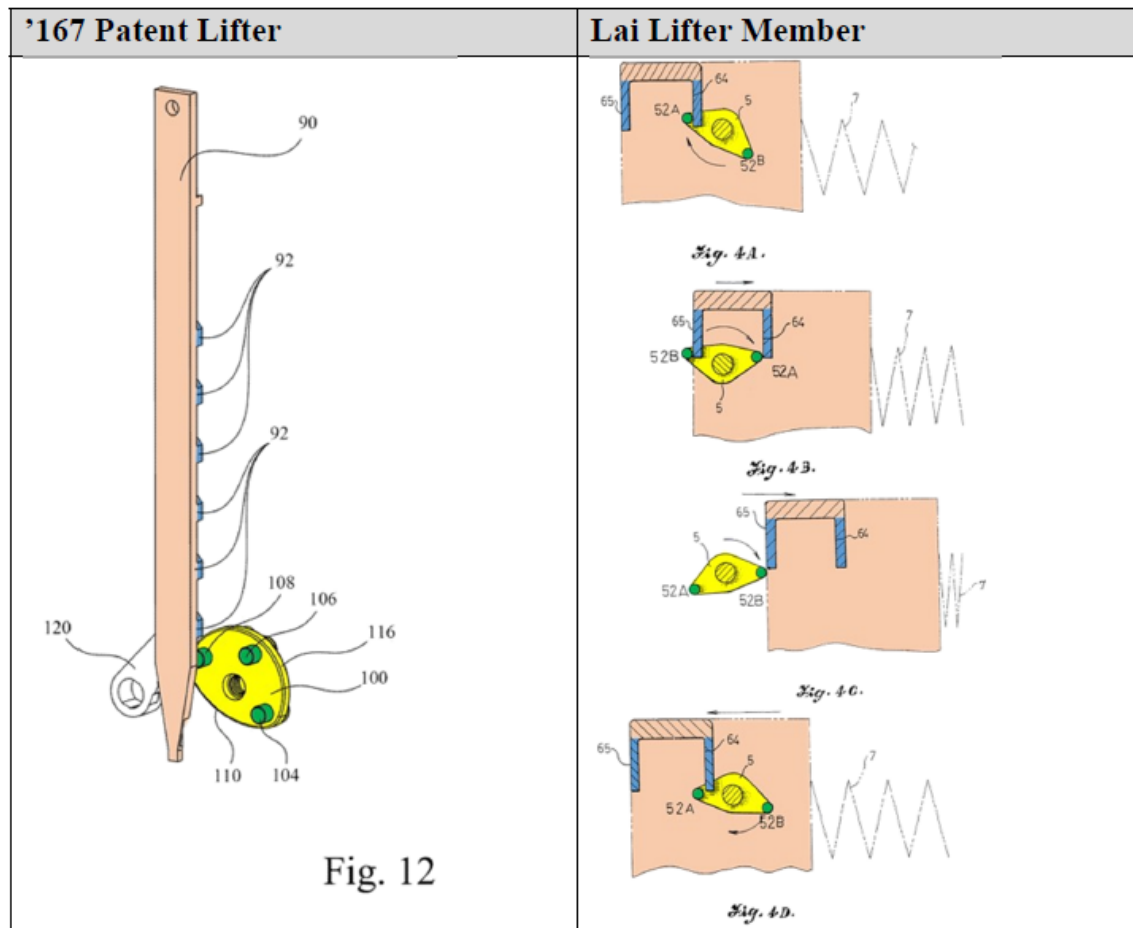
d) Clause 1.3 and Clause 1.4

Clause 1.3 states “(c) an elongated driver member having a first end and a second end, said first end being in mechanical communication with said movable piston, said second end being sized and shaped to push a fastener from said exit end of the guide body, and said driver member having at least one longitudinal edge with a plurality of spaced-apart protrusions.” Ex. 1001, 39:4–10.

Clause 1.4 states “(d) a rotatable lifter member that makes contact with said at least one plurality of spaced-apart protrusions of said driver member such that, if said lifter member is moved in a first direction, it causes said driver member to be moved toward a ready position.” Ex. 1001, 39:11–15.

Petitioner asserts that Hayley discloses most of the structure and limitations of clauses 1.3 and 1.4, but concedes that Haley does *not* disclose that its driver member has “at least one longitudinal edge with a plurality of spaced-apart protrusions,” as required by clause 1.4. Petitioner further asserts, however, that it would have been obvious “to replace Haley’s hydraulic lifter with the claimed ‘lifter,’ disclosed by [Lai]”. Pet. 13. (citing Ex. 1003 ¶ 54). Dr. Vallee’s cited Declaration testimony provides his opinion on this issue, which is consistent with Petitioner’s argument.

Petitioner also asserts that “Lai discloses an electrically-powered, mechanical lifting mechanism with a structure that is essentially identical to the ‘lifter member’ disclosed in the ’776 patent. Pet. 13. Petitioner provides side-by-side colored figures from the ’776 patent and from Lai, reproduced below, to illustrate its argument. Pet. 14.



According to Petitioner, the side-by-side comparison of Petitioner's colored versions of Fig. 12, from the '776 patent, with Petitioner's colored versions of Figs. 4 A–D, reproduced above, illustrate why and how the proposed modification would have been obvious.

As described by Petitioner, the “lifter member” of the '776 patent includes a rotatable cam lifter 100 (yellow), with pins 104, 106, and 108 (green) on its face surface that engage protrusions 92 (blue) on the driver member 90 (orange). Pet. 13 (citing Ex. 1001, 9:30–46, 16:34–48, Fig. 12). Petitioner also cites the “two-pin variants: lifter members 465 and 480” shown in Figs. 31, 33 of the '776 patent. *Id.*

Petitioner also asserts that, as shown in the side-by-side comparison above, Lai discloses a rotatable cam 5 (yellow), with pins 52A and 52B (green) on its face surface that engage two protrusions 64 and 65 (blue) from a U-shaped member 61 on the driver member 6 (“hammer,” orange). Pet. 13 (citing Ex. 1005, 1:62–63, 2:14–25, Figs. 4A–D).

Petitioner asserts that while “Lai use[s] metal springs rather than compressed gas springs, a POSITA¹² would consider metal springs and compressed-gas springs to be interchangeable depending on the use case. Pet. 15 (citing Ex. 1003 ¶ 58). Petitioner also explains that “Lai expressly discusses its benefits in efficiency, power, and compactness over the prior art.” Pet. 17. For example, Lai identifies an “ideal” electric stapling gun as being “energy saving, strong in hitting force and compact in size” and further explains that its disclosed lifter member with two pins that engage two protrusions of the U-shaped member 61 leads to “1.8 times the compression of the prior art,” “provide the same hitting effect with less power consumption,” and be “smaller in size thereby increasing flexibility.” *Id.* (citing Ex. 1005, 1:9–10, 2:26–45). According to Petitioner, a “POSITA would have understood that by adding protrusions to Haley’s driver blade it could be lifted by Lai’s lifter member and would have achieved the same results predicted by Lai.” *Id.* at 17–18 (citing Ex. 1003 ¶ 63).

Throughout its analysis, Petitioner cites Dr. Vallee’s testimony for further evidentiary support. *See, e.g.*, Ex. 1003 ¶¶ 55–63, 65. In the cited testimony, Dr. Vallee details the way in which driving tools evolved from Haley’s relatively cumbersome hydraulic nail gun to Lai’s portable electric

¹² “POSITA” is a patent acronym for a “person of ordinary skill in the art.”

stapler. He also explains why developments like Lai's electrically driven cam drive appeared first in low-power staple guns, and would later be applied to higher-power nail guns. *Id.* ¶ 58. According to Dr. Vallee, an ordinarily skilled artisan "would look to Lai's portable stapler design for improvements to incorporate into nailers such as Haley's nail gun." *Id.*

Dr. Vallee further opines that an ordinarily skilled artisan would have had reason to replace Haley's hydraulic lifting mechanism with Lai's lifter member because:

Haley's hydraulic lifting mechanism is bulky and subject to the risk of hydraulic fluid leaking into the compressed gas chambers. This problem was explicitly discussed less than a decade later in U.S. Patent No. 3,636,707 (Ex. 1012), which explained that "[t]he Haley devices are cumbersome, too heavy for prolonged use by an operator and subject to comingling of the noncompressible fluid with the compressible fluid or gas resulting in malfunctioning of the devices as well as having too long a time cycle between operative strokes thereof." Ex. 1012, 1:12–16.

Ex. 1003 ¶ 59.

Dr. Vallee then opines that one of ordinary skill in the art: would have solved Haley's problem by incorporating Lai's lifter member. Lai was a known solution to Haley's identified problem of being bulky (solved by Lai's use of a compact mechanical lifter member rather than a bulky hydraulic lifting mechanism, as well as due to Lai's improved design for its specific mechanical lifter member) and Haley's identified problem of being subject to the risk of hydraulic fluid leaking (solved by Lai's use of a mechanical lifter member rather than a hydraulic lifting mechanism).

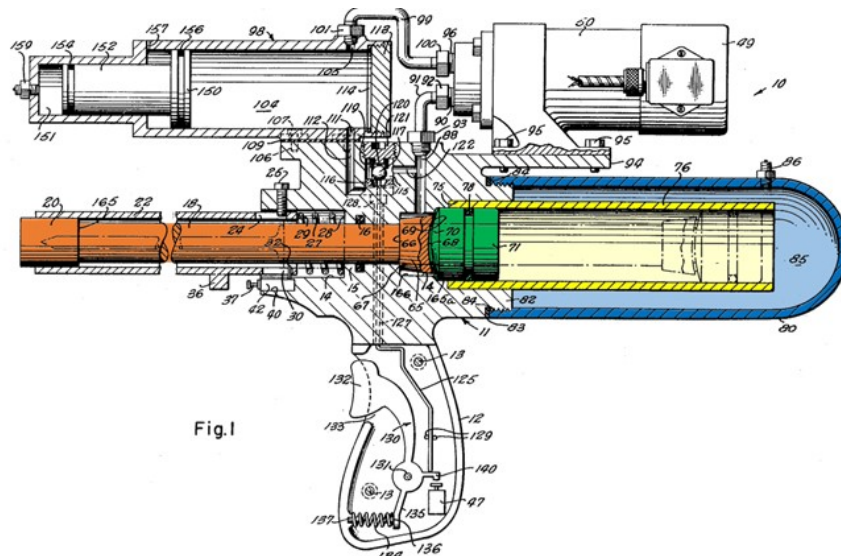
Ex. 1003 ¶ 63. Dr. Vallee additionally testifies that one of ordinary skill would have been motivated by "market forces and design needs favoring a portable battery-powered nailer." *Id.* ¶ 64.

Patent Owner does not challenge Petitioner’s assertions or Dr. Vallee’s testimony. Based on the record before us, we determine that Petitioner has made a sufficient showing that the combined teachings of Haley and Lai suggest the subject matter of clauses 1.3 and 1.4.

e) Clause 1.5

Clause 1.5 states “(e) a main storage chamber that, during an operating cycle, is always in fluidic communication with said displacement volume of the hollow cylinder, wherein said main storage chamber and said displacement volume are both charged with a pressurized gas, wherein said pressurized gas is not exhausted to atmosphere after a driving stroke, but instead is re-used for a plurality of said operating cycles.” Ex. 1001, 39:16–24.

Petitioner relies on Haley for the disclosure of this claimed element. Pet. 21–23. Petitioner provides the colored Fig. 1 from Haley (below) to illustrate its argument.



According to Petitioner, Haley’s main storage chamber (“chamber 85,” blue in the colored Figure 1 above) is formed by “elongate accumulator

shell 80,” is distinct from the cylinder 76 (yellow), and remains in fluidic communication at all times with the cylinder’s displacement volume, as shown in Figure 1, where the first end of cylinder 76 (right side in Figure 1) is open to chamber 85. Pet. 22 (citing Ex. 1004, Fig. 1; 3:40–54).

Petitioner also asserts that Haley’s main storage chamber and displacement volume are charged with a pressurized gas that is not exhausted to atmosphere after a driving stroke, but instead is re-used for a plurality of said operating cycles. *Id.* Additionally, Petitioner asserts that Haley states that “the gas introduced into the gas chamber 85 may be initially of a relatively large value, say 1,000 pounds per square inch.” Pet. 22–23 (citing Ex. 1004, 7:1–13). Petitioner also asserts that movement of the accumulator piston upward causes the gas pressure in chamber to increase up to 2,000 psi. *Id.* at 23 (citing Ex. 1004, 7:6–10).

Patent Owner does not challenge these assertions. Based on the record before us, we determine that Petitioner has made a sufficient showing that Haley discloses the subject matter of clause 1.5.

f) Clause 1.6

Clause 1.6 states “wherein said cylinder and piston act as a gas spring to move said driver member toward the driven position, using said pressurized gas of both said main storage chamber and said displacement volume acting on said piston.” Ex. 1001, 39:25–29.

Petitioner again relies on Haley for the disclosure of this element. Petitioner asserts that Haley discloses that pressurized gas of the storage chamber (“chamber 85”) and the cylinder (“extension cylinder 76”) act on the piston (“accumulator piston 71”) to form a gas spring for driving a nail

during a drive stroke. Pet. 23 (citing Ex. 1004 Figs. 1, 4; 5:74–6:7; 6:7–26; 6:48–53; 7:6–13. As summarized by Haley,

the power device illustrated and described performs work due to the expansion of the compressed gas in the power accumulator or gas chamber 85 since the gas introduced into the gas chamber 85 may be initially of a relatively large value, say 1,000 pounds per square inch, that the further compression of the gas in the chamber 85 due to the movement of the accumulator piston 71 in the cylinder extension 76 by the non-compressible power fluid causes it to attain a pressure of a still higher value, say 2,000 pounds per square inch, and that the energy thus stored in the compressed gas is employed to operate the drive piston which may perform such functions as the driving of a nail.

Ex. 1004, 7:1–13.

Patent Owner does not challenge this assertion. Based on the record before us, we determine that Petitioner has made a sufficient showing that Haley discloses the subject matter of clause 1.6.

g) Conclusion Regarding Claim 1

For the reasons set forth above, based on the record before us, we determine that Petitioner has demonstrated a reasonable likelihood of proving that claim 1 would have been obvious based on Haley and Lai.

4. Independent claims 9, 17, and 24

Independent claims 9, 17, and 24 are similar to claim 1.

Independent claims 9 and 24 use the term “rotatable component” rather than the term “rotatable lifter member” used in claims 1 and 17. *See, e.g.,* Ex. 1001, 40:4–9 (for claim 9). In the context of the ’776 patent, this is a distinction without a substantive difference.

Independent claims 17 and 24 add a clause, not in either claims 1 or 9, that “when the lifter member (claim 17) or rotatable component (claim 24) is

“moved to a holding position, it temporarily holds said driver member at said ready position by use of a holding contact between said lifter member (claim 17) [or rotatable component for claim 24] and said driver member.” *See, e.g.*, Ex. 1001, 42:11–14 (for claim 24). This added clause also is found in dependent claim 8, which depends from claim 1, and dependent claim 16, which depends from claim 9.

Regarding the “holding position” clause, Petitioner relies on the disclosure in Haley. Pet. 32–33. Petitioner asserts that Haley discloses “as the drive piston is moved inwardly from the position illustrated in FIGURE 1 to the retracted or cocked position illustrated in FIGURE 3, the normally closed switch 33 is first opened and maintained open as long as the drive piston is in substantially its fully retracted position.” Pet. 32 (citing Ex. 1004, 2:51–56, Figs. 1, 3). Then, Haley discloses that “the normally open switch 38 is closed as the guide barrel is moved to its fully retracted position.” *Id.* (citing Ex. 1004, 2:57–58, Figs. 1, 3). Petitioner asserts that “Haley’s circuit will power the lifter until the drive piston reaches its fully retracted position and then, if the guide barrel is not pressed against the workpiece, will turn off the circuit leaving the drive piston at that fully retracted position.” *Id.* (citing Ex. 1003 ¶¶ 87-88). Dr. Vallee’s testimony merely repeats Petitioner’s argument. According to Petitioner, “Haley’s drive piston will thereby be held at the ready position by contact with the [sic] Lia’s lifter at its holding position.” *Id.*

Patent Owner does not challenge these assertions concerning the “holding position” clause.

Based on the record before us, we determine that Petitioner has made a sufficient showing that Haley discloses the subject matter of the “holding position” clause in independent claims 17 and 24.

a) Conclusion Regarding Claims 9, 17, 24

For the reasons set forth above, based on the record before us, we determine that Petitioner has demonstrated a reasonable likelihood of proving that claims 9, 17, and 24 would have been obvious, and thus are unpatentable, based on Haley and Lai.

5. Dependent Claims 2–8, 10–16, 18–23, and 25–30

Other than their dependency from different claims, claims 2–8 (dependent from claim 1), claims 10–16 (dependent from claim 9), claims 18–23 (dependent from claim 17), and claims 25–30 (dependent from claim 24, respectively, are substantially identical. For example, claims 3, 11, 19, and 26 each recite “wherein there is no gas replenishment system on-board said tool.”

Petitioner asserts that dependent claims 2–8, 10–16, 18–23, and 25–30 would have been obvious based on Haley and Lai and supports its assertions with testimony from Dr. Vallee. *See*, Pet. 24–33 (for claims 2–8), Pet. 37 (for claims 10–16, 18–23, and 25–30).

Patent Owner does not challenge any of Petitioner’s assertions concerning the dependent claims.

Based on the record before us, we determine that Petitioner has demonstrated a reasonable likelihood of proving that claims 2–8, 10–16, 18–23, and 25–30 would have been obvious, and thus are unpatentable, based on Haley and Lai.

F. Grounds 2–4

Petitioner sets forth three other challenges that claims 1–30 are unpatentable as obvious over other prior art. Having determined that there is a reasonable likelihood that all the challenged claims are not patentable based on Ground 1, we need not address these additional challenges to determine whether to institute review.

III. CONCLUSION

We have determined that there is a reasonable likelihood that Petitioner will prevail on at least one challenged claim. Accordingly, we institute an *inter partes* review on all challenged claims on each asserted ground. *PGS Geophysical*, 891 F.3d at 1360 (A decision to institute is a “yes-or-no institution choice respecting a petition, embracing all challenges included in the petition.”).

Our review of the Petition under 35 U.S.C. § 314 is not to determine whether an individual asserted fact is indisputable or whether a preponderance of the evidence supports Petitioner. Our review is to determine whether the totality of the information presented in the Petition and Preliminary Response shows that there is a reasonable likelihood that Petitioner would prevail with respect to at least one of the claims challenged in the Petition. “The ‘reasonable likelihood’ standard is a somewhat flexible standard that allows the Board room to exercise judgment.” Patent Trial and Appeal Board Consolidated Trial Practice Guide at 53 (Nov. 2019), *available at* <https://www.uspto.gov/sites/default/files/documents/tpgnov.pdf>.

This is a decision to institute an *inter partes* review under 35 U.S.C. § 314. Our determinations at this stage of the proceeding are preliminary, and based on the evidentiary record developed thus far. This is

not a final decision as to the patentability of claims for which *inter partes* review is instituted. Any final decision will be based on the record as fully developed during trial, including all arguments and evidence in the Patent Owner's Response,¹³ or submitted otherwise during trial, as permitted by our rules.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), *inter partes* review is instituted as to claims 1–30 of the '776 patent on each ground set forth in the Petition; and

FURTHER ORDERED that, pursuant to 35 U.S.C. § 314(c) and 37 C.F.R. § 42.4(b), *inter partes* review of the '776 patent shall commence on the entry date of this Decision, and notice is hereby given of the institution of a trial.

¹³ See *In re Nuvasive, Inc.*, 842 F.3d 1376, 1381 (Fed. Cir. 2016) (explaining that a patent owner waives an issue presented in its preliminary response if it fails to renew the issue in its response after trial is instituted).

IPR2025-00263
Patent 11,241,776 B2

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