Paper 7 Date: February 12, 2021

#### UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

HUNTING TITAN, INC., Petitioner,

v.

DYNAENERGETICS EUROPE GMBH, Patent Owner.

PGR2020-00080 Patent 10,472,938 B2

Before JOSIAH L. COCKS, SCOTT A. DANIELS, and ERIC C. JESCHKE, *Administrative Patent Judges*.

COCKS, Administrative Patent Judge.

DECISION
Denying Institution of Post-Grant Review
35 U.S.C. § 324

#### I. INTRODUCTION

#### A. Background and Summary

Hunting Titan, Inc. ("Petitioner") filed a Petition requesting post-grant review of claims 1–20 of U.S. Patent No. 10,472,938 B2 (Ex. 1001, "the '938 patent"). Paper 1 ("Pet."). DynaEnergetics Europe GmbH ("Patent Owner") filed a Preliminary Response to the Petition. Paper 6 ("Prelim. Resp.").

We have authority to determine whether to institute a post-grant review. 35 U.S.C. § 324. For the reasons discussed below, we deny the Petition and do not institute a post-grant review.

# B. Related Proceedings

Both parties identify the following matter involving the '938 patent: *DynaEnergetics Europe GmbH, and DynaEnergetics US, Inc. v. Hunting Titan, Ltd.*, that was initially Civil Action No. 6:20-cv-00069 in the Western District of Texas but has since been transferred and is now Civil Action No. 4:20-cv-02123 in the Southern District of Texas. Pet. 2; Paper 4, 1–2.

<sup>&</sup>lt;sup>1</sup> The Petition identified "DynaEnergetics GmbH & Co. KG" as the patent owner with respect to the '938 patent. Pet. i (caption). In its Mandatory Notice (Paper 3), Patent Owner indicates that "DynaEnergetics GmbH & Co. KG has been dissolved and as recorded at Reel/Frame: 051691/0453 has assigned U.S. Patent No. 10,472,938 to DynaEnergetics Europe GmbH, the patent owner and real party in interest to this proceeding." Paper 4 n.1. We, therefore, regard DynaEnergetics Europe GmbH as Patent Owner in this proceeding, which is reflected in the caption of this Decision.

#### C. The '938 Patent

The '938 patent is titled "Perforation Gun Components and System." Ex. 1001, code (54). The Abstract of the '938 patent is reproduced below:

Components for a perforation gun system are provided including combinations of components including a self-centralizing charge holder system and a bottom connector that can double as a spacer. Any number of spacers can be used with any number of holders for any desired specific metric or imperial shot density, phase and length gun system.

# *Id.* at code (57).

Figures 1 and 2 of the '938 patent are reproduced below:

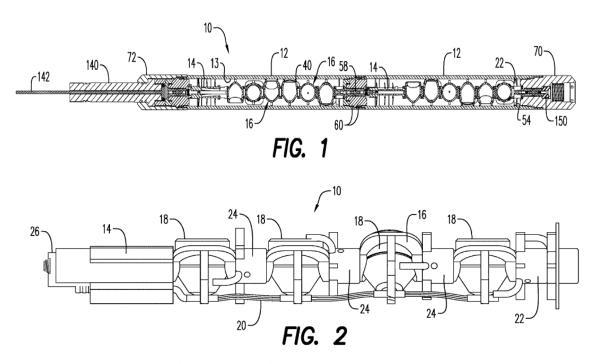


Figure 1 above depicts "a side cut view of a perforation gun system according to an embodiment." *Id.* at 3:54–55. Figure 2 above shows "a side view of a top connector, bottom connector and stackable charge holders of a perforation gun system in accordance with another embodiment." *Id.* at 3:56–58. Gun system 10 includes outer gun carrier 12 (shown in Figure 1), top connector 14, stackable charge holder 16 for centralizing single shaped

charge 18 within gun carrier 12, detonation cord 20 (shown in Figure 2), and bottom connector 22. *Id.* at 5:38–46.

Figure 27 of the '938 patent is reproduced below:

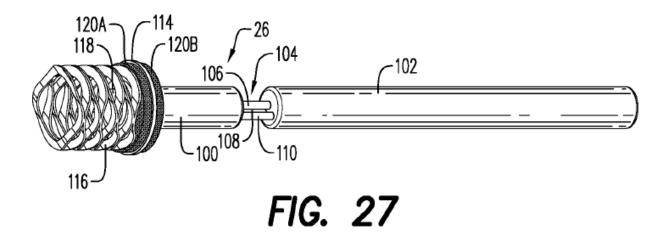


Figure 27 above shows a "perspective view of a detonator" according to an embodiment. *Id.* at 4:42–43. Detonator assembly 26 includes detonator head 100, detonator body 102, and a plurality of detonator wires 104, including through wire 106, signal-in wire 108, and ground wire 110. *Id.* at 8:6–10.

Figure 32 of the '938 patent is reproduced below:

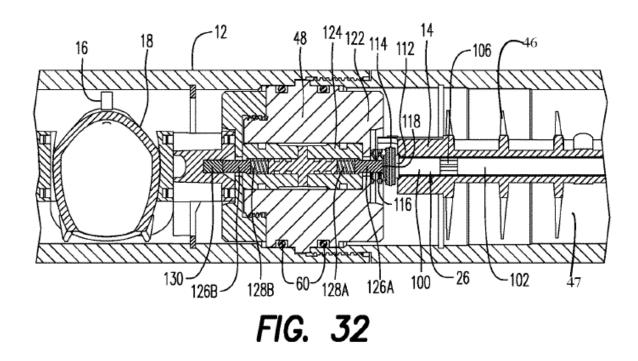


Figure 32 above depicts "a detailed side view of a tandem seal adapter and detonator" in accordance with an embodiment of the invention of the '938 patent. *Id.* at 4:53–54. Figure 32 also shows connection of detonator assembly 26 to tandem seal adapter 48 and pressure bulkhead 124. *Id.* at 8:28–31.

#### D. Illustrative Claim

Independent claims 1 is illustrative of the claimed subject matter and is reproduced below:

- 1. A perforating gun, comprising:
- an outer gun carrier;
- a charge holder positioned within the outer gun carrier and including at least one shaped charge;
- a detonator contained entirely within the outer gun carrier, the detonator including
  - a detonator body containing detonator components,

a wireless signal-in connector, a wireless through wire connector, and a wireless ground contact connector, and

an insulator electrically isolating the wireless signal-in connector from the wireless through wire connector; and,

a bulkhead, wherein the bulkhead includes a contact pin in wireless electrical contact with the wireless signal-in connector, wherein

at least a portion of the bulkhead is contained within a tandem seal adapter, and the wireless ground contact connector is in wireless electrical contact with the tandem seal adapter.

Ex. 1001, 11:16–35.

## E. Evidence Relied Upon

Petitioner relies upon the following references in asserting that the challenged claims are unpatentable:

Reference	Publication/Patent Number	Exhibit
Black	US 2012/0247771 A1 published Oct. 4, 2012	1002
Lendermon	US 4,744,424 issued May 17, 1988	1003
Schacherer	US 9,689,223 B2 issued June 27, 2017	1004
SLB Catalog	Schlumberger 2008 Perforating Services Catalog	1005
Harrigan	US 2016/0084048 A1 published Mar. 24, 2016	1012
EWAPS	2012 European and West African Perforating Symposium, Selective Perforation: A Game Changer in Perforating Technology- Case Study	1013
Rogman	US 2015/0330192 A1 published Nov. 19, 2015	1014
Lanclos	US 9,080,433 B2 issued July 14, 2015	1015
Goodman	US 2008/0149338 A1 published June 26,	1018

2008	

Petitioner also relies upon the declaration testimony of Mr. Robert Parrott (Ex. 1007) in support of its challenges.

# F. Asserted Grounds of Unpatentability

Petitioner asserts that claims 1–20 of the '938 patent are unpatentable on the following grounds (Pet. 4–5):

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
1–20	112	"Indefinite"
1–20	112	"Written Description"
1, 2, 4, 5, 7–20	102	"Anticipated by Schacherer"
3, 6	103	"Obvious by Schacherer with common knowledge, Rogman, Harrigan, EWAPS, Lendermon, and/or Goodman"
1–20	103	"Obvious by Schacherer with common knowledge, Black, Lanclos, Rogman, Harrigan, EWAPS, Goodman, and/or SLB Catalog"
1, 2, 4, 5, 7–9, 11–20	102	"Anticipated by Black"
3, 6, 10	103	"Obvious by Black with common knowledge, Schacherer, Rogman, Harrigan, EWAPS, Lendermon, and/or Goodman"
1, 2, 4, 5, 7–20	102	"Anticipated by Lanclos"
3, 6	103	"Obvious by Lanclos with common knowledge, Rogman, Harrigan, EWAPS, Lendermon and/or Goodman"
1–20	103	"Obvious by Lanclos with common knowledge, Schacherer,

Claim(s) Challenged	35 U.S.C. §	Reference(s)/Basis
		Black, Rogman, Harrigan, EWAPS, Lendermon, Goodman, and/or SLB Catalog"
1–17, 19, 20	102	"Anticipated by Rogman"
10, 19	103	"Obvious by Rogman with common knowledge, Schacherer, Harrigan, Black, Lanclos, EWAPS, and/or Lendermon"
1–20	103	"Obvious by Rogman with common knowledge, Schacherer, Black, Lanclos, and/or EWAPS"
1–9, 11–20	102	"Anticipated by Harrigan"
10, 19	103	"Obvious by Harrigan with common knowledge, Schacherer, Black, Lanclos, Rogman, Harrigan, Goodman, and/or SLB Catalog"
1-6, 8-10, 12	102	"Anticipated by EWAPS"
7, 11, 13–20	103	"Obvious by EWAPS with common knowledge, Schacherer, Black, Lanclos, Rogman, Harrigan, Goodman, and/or SLB Catalog"
1–17, 19, 20	102	"Anticipated by Goodman"
1–20	103	"Obvious by Goodman with common knowledge, Schacherer, Black, Lanclos, Rogman, Harrigan, EWAPS, and/or SLG Catalog"

## II. ANALYSIS

There are certain "Requirements of Petition" that must be satisfied for a Petition requesting a post-grant review to be considered. 35 U.S.C. § 322(a). Specifically, § 322(a)(3) mandates that "the petition identifies, 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." For the reasons that follow, we are not satisfied that the Petition here satisfies the above-noted requirements.

At the outset, although the Petition purports to have nineteen proposed grounds of unpatentability (Pet. 4–5), we discern that this is not an accurate assessment of the actual number of proposed grounds. We focus first on the grounds proffered on the basis of obviousness. Each of the ten proposed obviousness grounds includes numerous references that are associated with one another using the conjunction "and/or." *Id.* For instance, one ground proposing the unpatentability of claims 1–20 lists the involved references as "Schacherer with common knowledge, Black, Lanclos, Rogman, Harrigan, EWAPS, Goodman, and/or SLB Catalog." *Id.* at 4 (Ground 5). This style is endemic in the other proposed obviousness grounds.

Patent Owner characterizes that presentation style as creating a "ballooning" effect that results in "over 1600 obviousness combinations" of prior art, "the sheer volume of which would be impossible to address given the constraints in these proceedings." Prelim. Resp. 24–25. We agree with Patent Owner. The conjunction "and/or" in the proposed obviousness grounds creates a multitude of possible combinations of the references applied to the claims of the '938 patent. The result is presentation of grounds that are uncertain and ill-defined. We also note, as does Patent Owner (*id.*), that the Petition cites routinely to testimony of Mr. Parrott, who refers to even more prior art references purportedly directed to what would fall within the general rubric of "common knowledge." *See, e.g.*, Pet. 87, 93, 100, 113, 126, 138, 171 (citing various portions of Ex. 1007). The cited

portions of Mr. Parrott's testimony serve to further heighten the uncertainty with respect to the precise character and nature of the proposed grounds on which Petitioner purports to rely.

Other panels of the Board tasked with determining whether to institute trial in post-grant proceedings have considered circumstances analogous to those present here. See, e.g., Adaptics Ltd. v. Perfect Co., IPR2018-01596, Paper 20 at 19 (PTAB Mar. 6, 2019) (informative) (denying institution for "lack of particularity that result[ed] in voluminous and excessive grounds" where the petition's catch-all ground relied on "up to ten references connected by the conjunction 'and/or,'" "yielding hundreds of possible combinations"); Invue Sec. Prods., Inc. v. Mobile Tech., Inc., IPR2019-00078, Paper 7 at 15 (PTAB May 1, 2019) (noting that "a Petition that requires the panel or the Patent Owner" "to scour the Petition to discern Petitioner's evidence" lacks particularity and "is tantamount to impermissibly shifting Petitioner's burden under 35 U.S.C. § 312(a)(3)"); PayPal, Inc. v. IoEngine, LLC, IPR2019-00931, Paper 16 at 29 (PTAB Oct. 29, 2019) (finding that the "multiplicity of theories" asserted by Petitioner "for each claim element results in a burdensome number of potential combinations for each claim"). Such panels have found a multiplicity of grounds presented in a manner similar to the grounds in this Petition to lack particularity as voluminous, excessive, and burdensome. Similarly, we conclude that the manner in which the Petition formulates the proposed grounds extends beyond merely burdensome and into the realm of near indecipherability. As a result, we cannot view the Petition as presenting grounds of unpatentability "with particularity" as 35 U.S.C. § 322(a)(3) requires.

Moreover, in connection with all of the grounds, the Petition frequently purports to account for claim limitations in the prior art by careening between separate claim limitations in a manner that lacks logical organization. For instance, the Petition begins its assessment of the claims vis-à-vis the prior art by addressing features in the body of the claims related to the detonator elements, such as the detonator body and wireless connections (Pet. 11–38), well before addressing features that are initially introduced in the claims in which those components reside, such as the gun carrier (id. at 125–134). That approach is disjointed and difficult to follow. Also, the Petition cites a litany of references one after another in near laundry-list fashion, which results in a lack of focus and congruity. See, e.g., Pet. 11–38 (citing each of common knowledge, Schacherer, Harrigan, Rogman, Black, Lanclos, EWAPS, and Goodman, as all allegedly accounting for detonator elements of the claims). This approach requires the panel and Patent Owner to attempt to formulate a ground or grounds of unpatentability by essentially picking and choosing various features from among the numerous references cited. The burden to establish, and cogently explain, the proposed grounds of patentability, however, is on Petitioner, not the panel or Patent Owner.

Further still, for the proposed grounds based on obviousness, we also determine that Petitioner's postulations as to reasons for combining the various teachings of the prior art and "inherent... common knowledge" rely on generalized statements that such combinations would, for instance, be "predictable," "simple substitution," application of "known techniques," and "obvious to try." *See*, *e.g.*, Pet. 8–9. Notably lacking from the Petition is specific, directed explanation of well-developed reasons why a person of

ordinary skill in the art would have modified or combined the teachings of the prior art. The type of generalized discussion in this Petition bears considerable resemblance to the unsuccessful approach that Petitioner took in its opposition to a motion to amend in connection with another proceeding, IPR2018-00600, which the Precedential Opinion Panel found insufficient. *See* Ex. 2001, 24–25 (*Hunting Titan, Inc. v. DynaEnergetics Europe GmbH*, IPR2018-00600, Paper 67 (PTAB July 6, 2020) (precedential)). Here too, we conclude that Petitioner's inadequate discussion does not elevate itself to the level of articulated reasoning with rational underpinnings that is necessary to support a motivation to combine prior art teachings. *See In re Kahn*, 441 F.3d 977, 987 (Fed. Cir. 2006), *cited with approval in KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007).

The Supreme Court and the Federal Circuit have made it abundantly clear that institution of a post-grant proceeding is a binary or all-or-nothing decision. *See SAS Inst. Inc. v. Iancu*, 138 S. Ct. 1348, 1359 (2018) ("[E]verything in the statute before us confirms that [the petitioner] is entitled to a final written decision addressing all of the claims it has challenged . . . ."); *PGS Geophysical AS v. Iancu*, 891 F.3d 1354, 1360 (Fed. Cir. 2018) ("[35 U.S.C. §314] require[s] a simple yes-or-no institution choice respecting a petition, embracing all challenges included in the petition . . . ."). We also are cognizant that there is no requirement that we institute a post-grant review, as the decision whether to institute is

PGR2020-00080 Patent 10,472,938 B2

discretionary. See 35 U.S.C. § 324(a); see also Adaptics Ltd., Paper 20 at 17–24.<sup>2,3</sup>

With those principles in mind, we conclude that, irrespective of whether there may be a potentially credible ground of unpatentability buried among the voluminous and excessive possible grounds presented here, institution of trial is not warranted.

<sup>2</sup> As articulated by the panel in *Adaptics*:

Even when a petitioner demonstrates a reasonable likelihood as to at least one claim, however, institution of an IPR remains discretionary. SAS, 138 S. Ct. at 1355 ("§ 314(a) invests the Director with discretion on the question whether to institute review"); Harmonic [Inc. v. Avid Tech., Inc.], 815 F.3d [1356,] 1367 [(Fed. Cir. 2016)] ("First of all, the PTO is permitted, but never compelled, to institute an IPR proceeding." (citing 35 U.S.C. § 314(a))). As explained in our Trial Practice Guide Update, "[t]he Director's discretion is informed by 35 U.S.C. §§ 316(b) and 326(b), which require the Director to 'consider the effect of any such regulation [under this section] on the economy, the integrity of the patent system, the efficient administration of the Office, and the ability of the Office to timely complete proceedings instituted under this chapter." Trial Practice Guide Update, 10 at 9; see also Office Patent Trial Practice Guide, August 2018 Update, 83 Fed. Reg. 39,989 (Aug. 13, 2018) (discussing and providing link to Trial Practice Guide Update).

<sup>&</sup>lt;sup>3</sup> Although the petition in *Adaptics* was seeking institution of an *inter partes* review rather than a post-grant review, the same principle of discretion to institute an *inter partes* review arising under § 314(a) also applies to a decision to institute a post-grant review under § 324(a).

# III. CONCLUSION

On this record, and for the reasons discussed above, we exercise our discretion and decline to institute trial in this proceeding. *See* 35 U.S.C. § 324(a).

# IV. ORDER

It is

ORDERED that the Petition is *denied* and no trial is instituted.

PGR2020-00080 Patent 10,472,938 B2

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