

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HUNTER'S MANUFACTURING COMPANY, INC. d/b/a
TENPOINT CROSSBOW TECHNOLOGIES,

Petitioner,

v.

RAVIN CROSSBOWS, LLC,

Patent Owner.

IPR2023-00407
Patent 9,354,015

Patent Owner's Preliminary Response
Pursuant to 35 U.S.C. §313 and 37 C.F.R. §42.107(a)

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TABLE OF EXHIBITS

Exhibit No.	Exhibit
2001	Declaration in Support of Motion for <i>Pro Hac Vice</i> Admission of Kadie M. Jelenchick
2002	Declaration in Support of Motion for <i>Pro Hac Vice</i> Admission of Michelle A. Moran
2003	Scheduling Order, <i>Ravin Crossbows, LLC v. Hunter's Mfg. Co., Inc.</i> , Case No. 2:21-cv-02213-GMN-EJY, Dkt. 36 (D. Nev.)
2004	Case Transfer Confirmation, <i>Ravin Crossbows, LLC v. Hunter's Mfg. Co., Inc.</i> , Case No. 2:21-cv-02213-GMN-EJY, Dkt. 77 (D. Nev.)
2005	Animation of Figure 12 of U.S. Patent No. 9,354,015
2006	Joint Claim Construction Chart, <i>Ravin Crossbows, LLC v. Hunter's Mfg. Co., Inc.</i> , Case No. 2:21-cv-02213-GMN-EJY, Dkt. 47-1 (D. Nev.)
2007	Complaint, <i>Ravin Crossbows, LLC v. Hunter's Mfg. Co., Inc.</i> , Case No. 2:21-cv-02213-GMN-EJY, Dkt. 1 (D. Nev.)
2008	Patent Owner's Supplemental Rule 26(a) Disclosures served March 10, 2023, <i>Ravin Crossbows, LLC v. Hunter's Mfg. Co., Inc.</i> , Case No. 2:21-cv-02213-GMN-EJY (D. Nev.)
2009	Patent Owner's Amended and Supplemental Infringement Contentions served February 3, 2023, <i>Ravin Crossbows, LLC v. Hunter's Mfg. Co., Inc.</i> , Case No. 2:21-cv-02213-GMN-EJY (D. Nev.)

Exhibit No.	Exhibit
2010	Excerpt from U.S. District Courts – National Judicial Caseload Profile, through December 2022, including time to trial statistics for Northern District of Ohio (also available at https://www.uscourts.gov/sites/default/files/data_tables/fcms_na_distprofile1231.2022.pdf)
2011	Time to Trial Statistics for the Northern District of Ohio, LexMachina.com
2012	Patent Owner's Preliminary Infringement Contentions served May 23, 2022, <i>Ravin Crossbows, LLC v. Hunter's Mfg. Co., Inc.</i> , Case No. 2:21-cv-02213-GMN-EJY (D. Nev.)
2013	Petitioner's Initial Invalidity Contentions served July 7, 2022, <i>Ravin Crossbows, LLC v. Hunter's Mfg. Co., Inc.</i> , Case No. 2:21-cv-02213-GMN-EJY (D. Nev.)

I. INTRODUCTION

Ravin Crossbows, LLC (“Patent Owner”) submits this Preliminary Response under 35 U.S.C. §313 and 37 C.F.R. §42.107(a) in response to the Petition for *inter partes* review (“IPR”) of Claim 1 (“Challenged Claim”) of U.S. Patent No. 9,354,015 (“the ’015 Patent”). This Preliminary Response is timely filed within three months of the Board’s Notice, mailed January 11, 2023 (Paper 3).

The Petition should be denied at least because it lacks a reasonable likelihood of success in demonstrating unpatentability of the single Challenged Claim. Petitioner fails to identify any reference that discloses a crossbow including, among other elements, “a...string guide mounted to the...bow limb and rotatable around a first axis” or otherwise provide the specificity required for an IPR. Discretionary denial is also warranted.

II. BACKGROUND

Patent Owner asserted 15 claims from the ’015 Patent against Petitioner in district court litigation in *Ravin Crossbows, LLC v. Hunter’s Mfg. Co., Inc.*, Case No. 2:21-cv-02213-GMN-EJY (D. Nev.) (“Nevada Litigation”), along with claims from five other related patents. Petitioner challenges only one of the ’015 Patent’s asserted claims in this Petition. Petitioner has not filed IPR petitions on the other asserted patents, which are now time-barred.

The Nevada Litigation, which was filed in Petitioner's state of incorporation on December 17, 2021, proceeded swiftly through the exchange of contentions and claim construction briefing. EX2003. However, on March 17, 2023, before issuing any *Markman* order, the Nevada Court transferred the Nevada Litigation to the United States District Court for the Northern District of Ohio based on 28 U.S.C. §1404(a). The Nevada Litigation is now styled *Ravin Crossbows, LLC v. Hunter's Mfg. Co., Inc.*, Case No. 5:23-cv-00598 (N.D. Ohio) (the "Ohio Litigation"). EX2004. Although no schedule has been entered in the Ohio Litigation, Patent Owner expects the case will continue to proceed swiftly.

III. LEVEL OF ORDINARY SKILL IN THE ART

Solely for purposes of this Preliminary Response, Patent Owner does not dispute Petitioner's proposed qualifications of a person of ordinary skill in the art ("POSA"). Patent Owner reserves the right to propose alternative qualifications in this proceeding or in the Ohio Litigation.

IV. CLAIM CONSTRUCTION

Claim terms are generally given their ordinary and customary meaning, which is the meaning the term would have to a POSA at the time of invention. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312-13 (Fed. Cir. 2005) (en banc). "[O]nly those terms need be construed that are in controversy and only to the extent necessary to resolve

the controversy.” *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999).

Petitioner identifies two terms for construction—“mounted to” and “helical power cable take-up journal.”

A. “Mounted to”

Petitioner’s proposed construction of “mounted to” as “connected to, either directly or indirectly” is overly-broad and not supported. In Petitioner’s view, *any component* of a crossbow is “mounted to” *every other component* regardless of where it is located or how many intermediate components exist in the chain of physical connections between the recited components. This proposed construction cannot be the ordinary and customary meaning of “mounted to” as it would render the term “meaninglessly empty.” *Ethicon Endo-Surgery, Inc. v. United States Surgical Corp.*, 93 F.3d 1572, 1578 (Fed. Cir. 1996) (refusing to interpret “connected to” to encompass indirect connections).

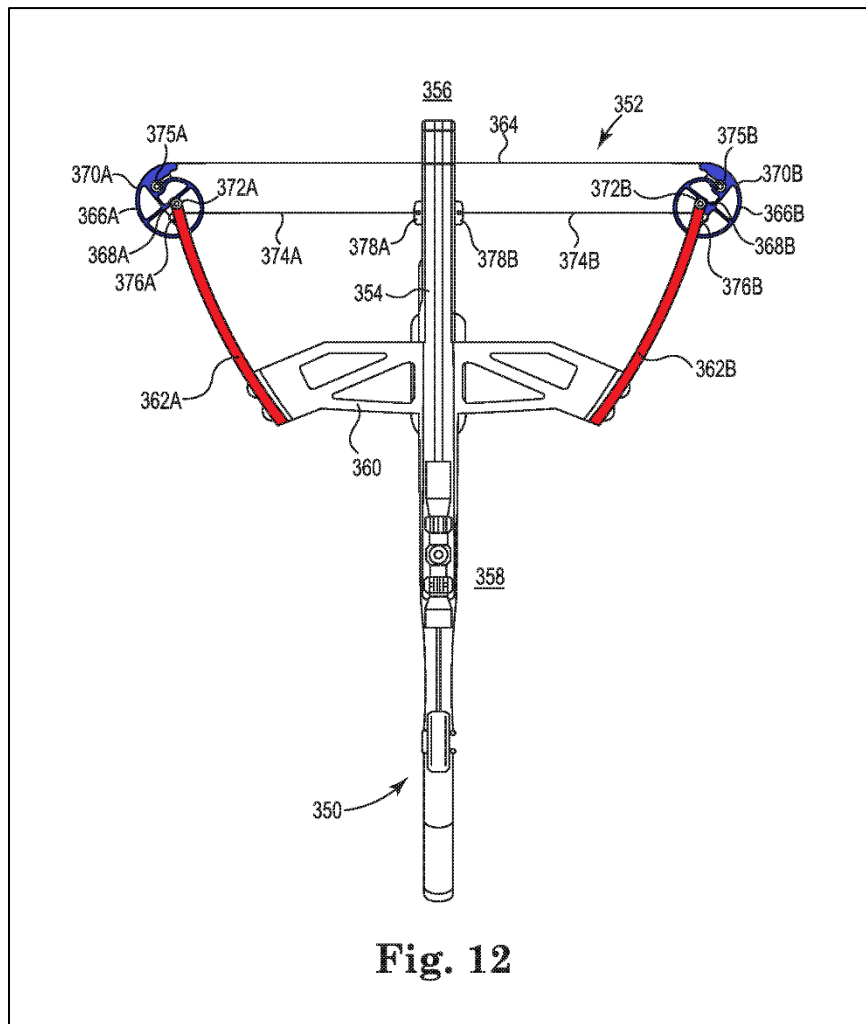
Petitioner’s proposed construction fails to provide a POSA with any frame of reference to understand how the claimed crossbow components are arranged relative to one another. Under Petitioner’s construction, “mounted to” is unbounded, with no way to differentiate between a seemingly infinite number of possible physical relationships between the string guide and the limb. For example, applying Petitioner’s proffered construction, the string guide is not only “mounted to” the

limb but also to the central portion, the other limb, the other string guide, the draw string, both power cables, and every other component of the crossbow, all of which the string guide is “connected to, either directly or indirectly.” Thus, Petitioner’s construction provides no meaningful information about the physical relationship between the string guide and the limb.

The Challenged Claim provides: a “crossbow, comprising:” “first and second flexible limbs” and “a first string guide mounted to the first bow limb and rotatable around a first axis.” EX1001, Claim 1. Under Petitioner’s construction, which permits both direct and indirect connections, “mounted to,” is read entirely out of the claim—it tells the POSA nothing about the specific physical relationship between the “string guide” and the “limb.” Adopting Petitioner’s proposed construction effectively (and improperly) amends Claim 1 as follows: “a first string guide ~~mounted to the first bow limb and~~ rotatable around a first axis” and “a second string guide ~~mounted to the second bow limb and~~ rotatable around a second axis.”

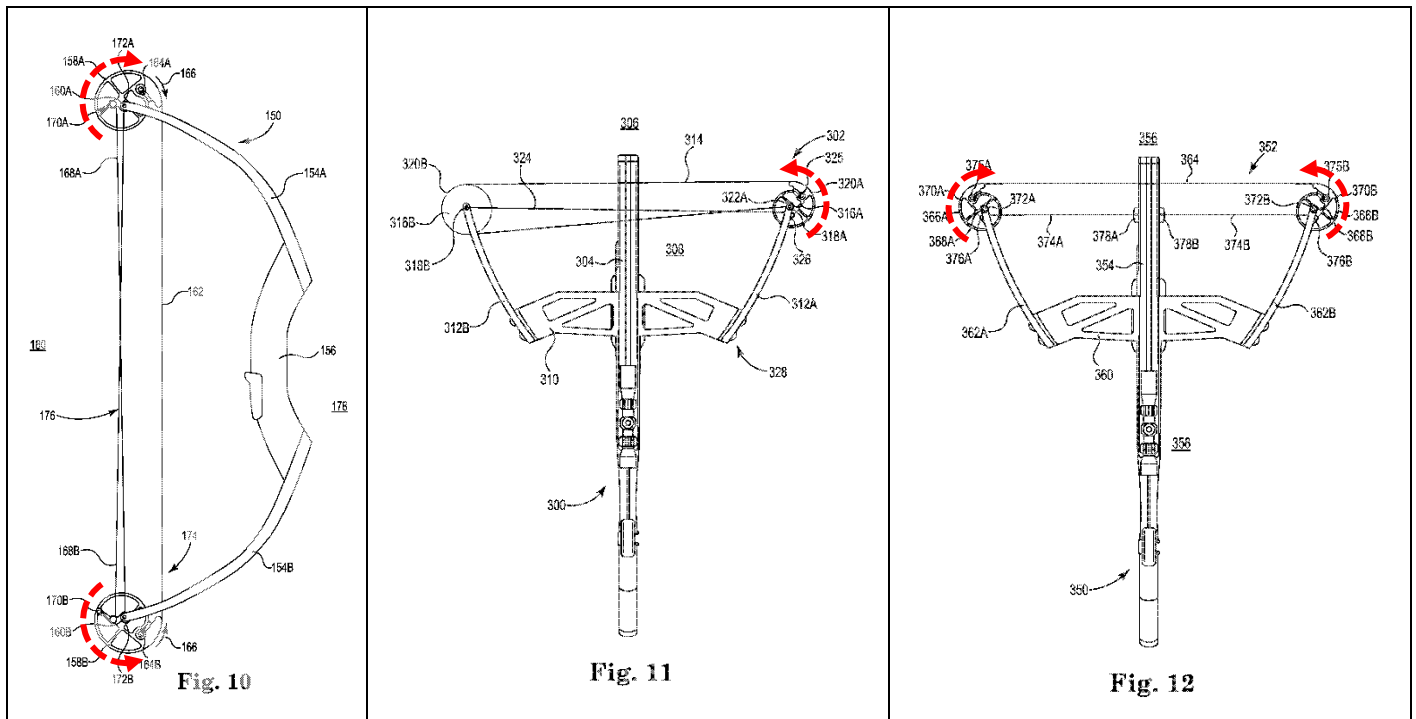
The ordinary and customary meaning of “mounted to” must be: “physically connected to allow only rotation about a fixed axis” when interpreted consistent with the specification and claims of the ’015 Patent. In the ’015 Patent, “mounted to” describes the physical connection between a string guide and a limb and the resulting physical constraints on the string guide. Specifically, Claim 1 recites “a first string guide mounted to the first bow limb and rotatable around a first axis.” EX1001,

Claim 1. As described and illustrated in Figure 12, the string guide is physically connected with the limb such that the string guide always moves with the limb it is mounted to, but for the ability of the string guide to rotate relative to the limb about an axis: “[t]he string guides 366 are mounted to the bow limb 362 and are rotatable around first and second axis 368A, 368B (‘368’), respectively.”



Id., 6:34-36, Fig. 12 (annotated with string guides in blue and limbs in red).

Similarly, all other embodiments describe and illustrate the string guides as physically connected to the limbs such that a string guide always moves with the limb it is mounted to, but for the ability of the string guide to rotate relative to the limb about an axis even when the embodiments are structurally different. For example, the specification describes applying the claimed string guide system to not only crossbows but also vertical bows. *Id.*, Figs. 10-12, 3:34-42. Yet, despite such differences, as seen in exemplary Figures 10-12 below, all figures depict the string guide physically connected to the limb such that the string guide always moves with the limb, but for the ability of the string guide to rotate relative to the limb about an axis:



Id., Figs. 10-12 (annotated). “Mounted to” must be construed to include these characteristics.

There is no intrinsic evidence to the contrary. The '015 Patent consistently discloses embodiments where the string guide can only translate with a corresponding movement of the limb during operation of the crossbow (*e.g.*, as the crossbow is drawn or released). As the crossbow is drawn, the limb deflects inward and the string guide translates inward because it is physically connected to the limb. EX2005; *see also* EX1001, Fig. 12. While the string guide rotates about the fixed axis, it is otherwise directly affixed to and remains in the same position relative to the limb. Indeed, the '015 Patent does not disclose any embodiments where the string guide moves relative to the limb apart from rotation about a fixed axis. Any other movement is inherently constrained by the string guide's being mounted to the limb.

B. “Helical Power Cable Take-Up Journal”

The parties agreed to construe “power cable take-up journal” as “a structure that accepts a least one power cable.” However, in the Nevada Litigation, Petitioner argued “helical” should be construed as “helical or spiral.” EX2006, 23, 25, 27, 31, 32. Patent Owner maintained that no construction was necessary. *Id.* At pages 25-26 of the Petition, Petitioner now concedes that Patent Owner is correct. Thus, the Board should construe “power cable take-up journal” as “a structure that accepts a least one power cable.” No construction of “helical” is required.

V. THE BOARD SHOULD DENY THE PETITION ON THE MERITS

“In an IPR, the petitioner has the burden from the onset to show with particularity why the patent it challenges is unpatentable.” *Harmonic Inc. v. Avid Tech., Inc.*, 815 F.3d 1356, 1363 (Fed. Cir. 2016). This burden never shifts to Patent Owner. *Dynamic Drinkware, LLC v. Nat’l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). Petitioner must explain with particularity how the prior art would have rendered the challenged claims unpatentable. 35 U.S.C. §312(a)(3). Under the Board’s rules, this means Petitioner “must specify where each element of the claim is found in the prior art patents or printed publications relied upon.” 37 C.F.R. §42.104. Here, Petitioner has failed to meet its burden.

A claim is unpatentable as anticipated under 35 U.S.C. §102 “if each and every limitation is found either expressly or inherently in a single prior art reference.” *Nidec Motor Corp. v. Zhongshan Broad Ocean Motor Co.*, 851 F.3d 1270, 1273 (Fed. Cir. 2017) (citation omitted). “A claim limitation is inherent in the prior art if it is necessarily present in the prior art, not merely probably or possibly present.” *Akamai Techs., Inc. v. Cable & Wireless Internet Servs., Inc.*, 344 F.3d 1186, 1192 (Fed. Cir. 2003).

A claim is unpatentable as obvious under 35 U.S.C. §103 if 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 to a POSA at the time of

invention. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007). “[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.” *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006). Courts and the Board must “be careful not to allow hindsight reconstruction of references to reach the claimed invention without any explanation as to how or why the references would be combined to produce the claimed invention.” *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1368 (Fed. Cir. 2012) (citation omitted).

A. Fatal Deficiencies in Petitioner's Grounds

1. Stanziale '302 (Grounds 1-2, 11)

Grounds 1-2 rely solely on U.S. Patent Pub. No. 2012/0125302 to Stanziale (“Stanziale '302”); Ground 11 relies on Stanziale '302 as a secondary reference. Stanziale '302 fails to disclose several limitations, which means Petitioner has failed to establish a likelihood of prevailing on Grounds 1-2 and 11.

a. Stanziale '302 does not disclose or render obvious “a first [and second] string guide mounted to the first [and second] bow limb”

Stanziale '302 does not disclose “a first string guide mounted to the first bow limb” or “a second string guide mounted to the second bow limb” under the correct construction of “mounted to.” See §IV(A). Petitioner identifies pulley assemblies 50

as the recited string guides. Petition, 31. These structures, however, are not mounted to the first and second limbs (identified as elastic members 10 (*id.*, 30)). Rather, pulley assemblies 50 are mounted to levers 40, which are distinct from limbs 10. Levers 40 are then connected to the limbs to provide multiple degrees of freedom between pulley assembly 50 and elastic member 10.

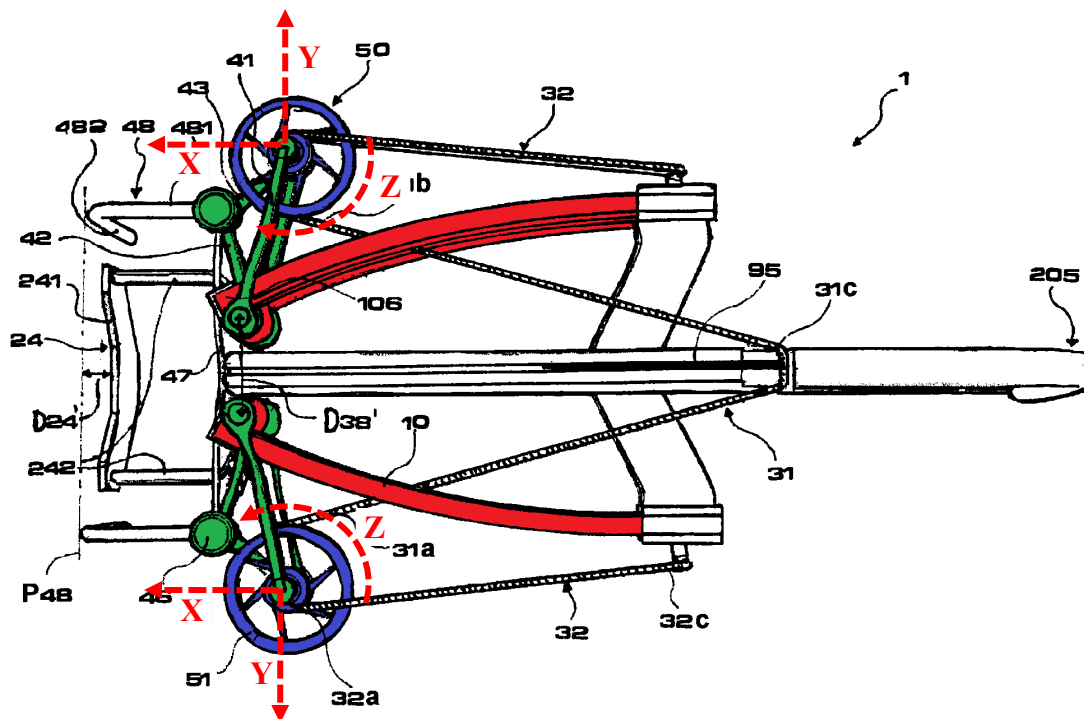
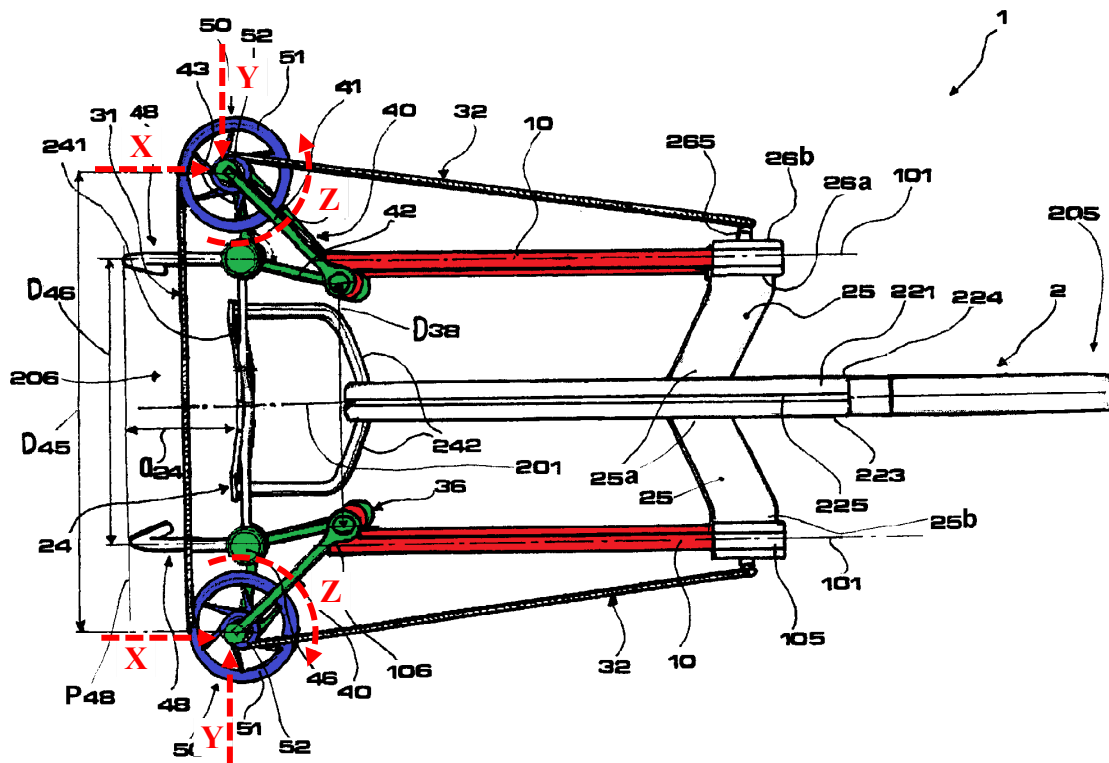
Stanziale '302 discloses that “each lever 40 comprises a rigid triangular-shaped structure formed by lower first branch 41*b*, second branch 42 and third branch 43; the upper first branch 41*a* is parallel with the lower first branch 41*b* and both are fastened to the first pivot 45.” EX1007, ¶[0095]. Then, each “pulley assembly 50, comprising a first pulley 51 and at least one second pulley 52, is mounted on the first pivot 45 and is configured to rotate with respect to the first pivot 45. Thus, the pulley assembly 50 is arranged between the upper first branch 41*a* and the lower first branch 41*b* and is pivoted to them,” where “each lever 40 is pivoted to the second end 106 of the elastic members 10 at the respective side of the stock 2.” *Id.*, ¶¶[0078], [0096]. Additionally, “[t]he pulley assembly 50 has a central bore 505 into which the first pivot 45 is inserted, so that the pulley assembly 50 is rotatable about the first pivot axis 450.” *Id.*, ¶[0099], Figs. 9-10.

Pulley assembly 50 is neither physically connected to elastic member 10 nor rotatable only about a vertical axis (pivot axis 450) relative to elastic member 10. Rather, because it is attached to an intervening lever 40 that itself rotates relative to

the elastic member 10, pulley assembly 50 is both rotatable about a vertical axis and translatable along an x- and y-axes due to the pivoting of lever 40 relative to elastic member 10, providing for three degrees of freedom between pulley assembly 50 and elastic member 10. In contrast, under the proper construction of “mounted to,” there is only one degree of freedom between the string guide and limb recited in Claim 1.

As Stanziale '302 states, “the lever 40 comprises two first branches 41 (in particular, an upper first branch 41*a* and a lower first branch 41*b*), a second branch 42 and a third branch 43. The first, second and third branches 41, 42, 43 form a substantially triangular structure, so that the lever 40 is a basically non-deformable assembly,” where “lever 40 is pivoted to the respective connecting members 35*a*, 35*b* and, then, to the elastic members 10*a*, 10*b* fastened to the latter, the entire lever 40 being rotatable about the pin axis 380.” EX1007, ¶¶[0080], [0096], Figs. 9-10. Lever 40 is a moment arm pivotally mounted to elastic member 10 and provides two degrees of freedom between lever 40 and elastic member 10 (*i.e.*, translation along x- and y-axes). Pulley assembly 50 is rotatably mounted to lever 40, providing an additional degree of freedom (*i.e.*, pulley assembly 50 rotates about a z-axis relative to lever 40). Viewed as a whole, there are at least three degrees of freedom between the elastic member and the pulley assembly (*i.e.*, x-axis translation, y-axis translation, and z-axis rotation). Figures 2 and 4, annotated below, show the three

degrees of freedom of pulley assemblies 50 (blue) and their corresponding motion as intervening levers 40 (green) rotate and elastic members 10 (red) move.



Id., Figs. 2, 4 (annotated).

These figures of Stanziale '302 clearly show three degrees of freedom between pulley assemblies 50 and elastic members 10. This is fundamentally different than what is claimed in the Challenged Claim or otherwise disclosed in the '015 Patent. As the annotated Figures 11-12 of the '015 Patent highlight, there is a single degree of freedom between the string guides (316A, 366 (blue)) and limbs (312A, 362 (red)):

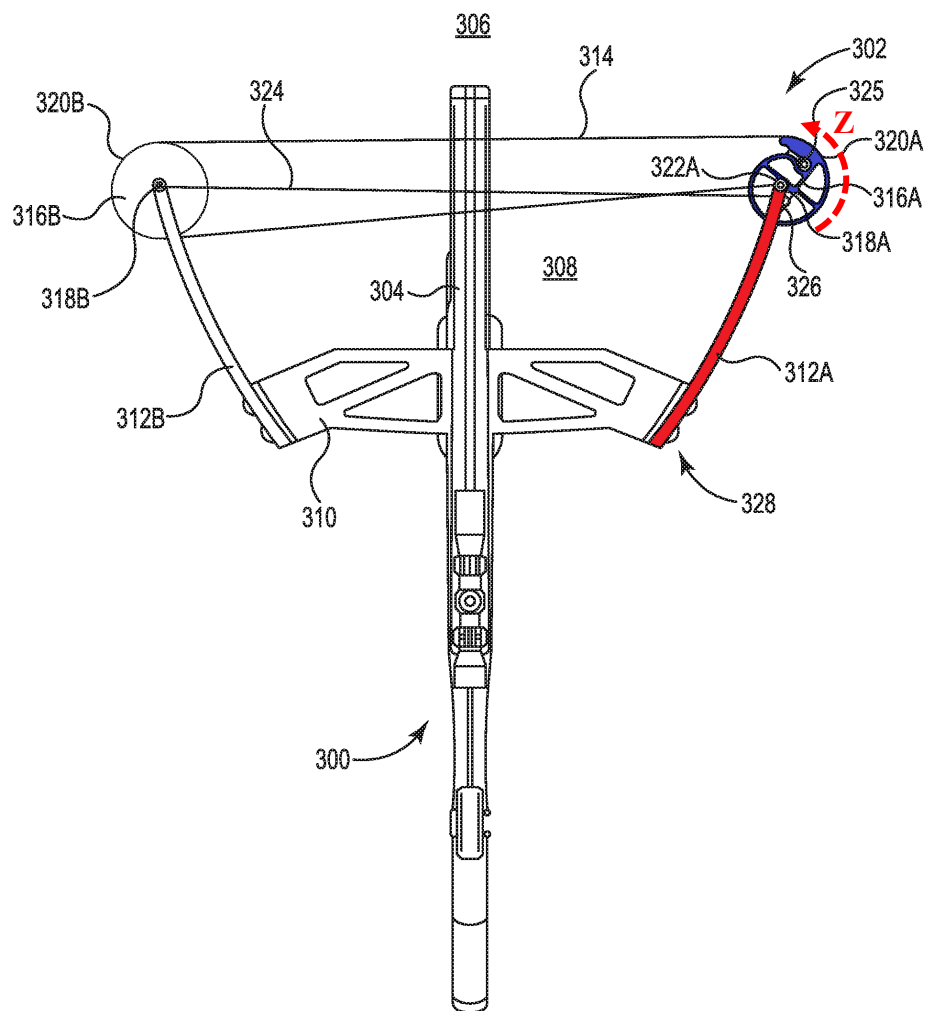
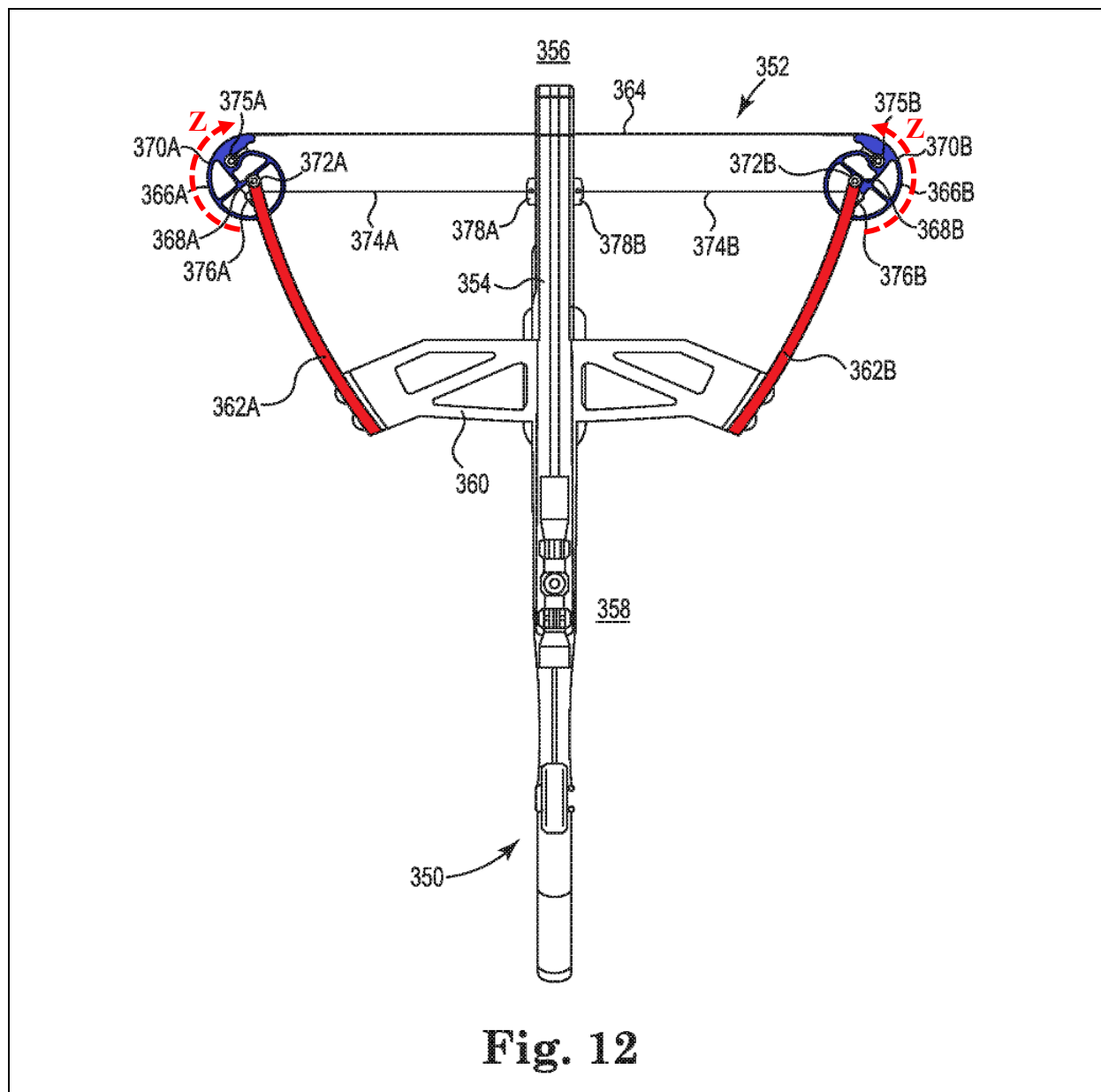


Fig. 11



EX1001, Figs. 11-12 (annotated).

When the proper construction of “mounted to” is applied, it is readily apparent that Stanziale ’302 does not disclose “a first string guide mounted to the first bow limb” or “a second string guide mounted to the second bow limb.” Thus, Stanziale ’302 cannot anticipate Claim 1, and institution based on Ground 1 should be denied.

In Ground 2, which purports to rely on obviousness vis-à-vis Stanziale '302, Petitioner relies solely on Ground 1's discussion. *See* Petition, 36. In its four sentences on this point, Petitioner offers nothing more. On this record, Stanziale '302 cannot render Claim 1 obvious. *See A123 Sys., LLC v. Long Hua Tech. Co.*, IPR2021-00894, Paper 12, 19 (PTAB Oct. 18, 2021) (no reasonable likelihood of success on obviousness ground that relied on earlier, rejected anticipation ground).

b. Stanziale '302 does not disclose or render obvious “a first [and second] helical power cable take-up journal extending in a direction perpendicular to the first [and second] plane of rotation of the first [and second] draw string journal”

Petitioner fails to identify specifically where Stanziale '302 discloses “a first helical power cable take-up journal extending in a direction perpendicular to the first plane of rotation of the first draw string journal” or “a second helical power cable take-up journal extending in a direction perpendicular to the second plane of rotation of the second draw string journal.” Petitioner's argument simply relies on its conclusory assertion that, “[b]ecause the power cable take-up journals 521 of Stanziale '302 are helical in nature, are positioned above and below the draw string journals 511, and have a common rotation axis 450, they extend perpendicular to the plane of rotation of the draw string journal 511.” Petition, 33. The only support Petitioner cites is the Batzer Declaration, which simply repeats this same argument *verbatim*, without citing any additional evidence. EX1016, ¶147. Such “evidence”

is entitled to no meaningful weight. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9, 15 (PTAB Aug. 24, 2022) (precedential).

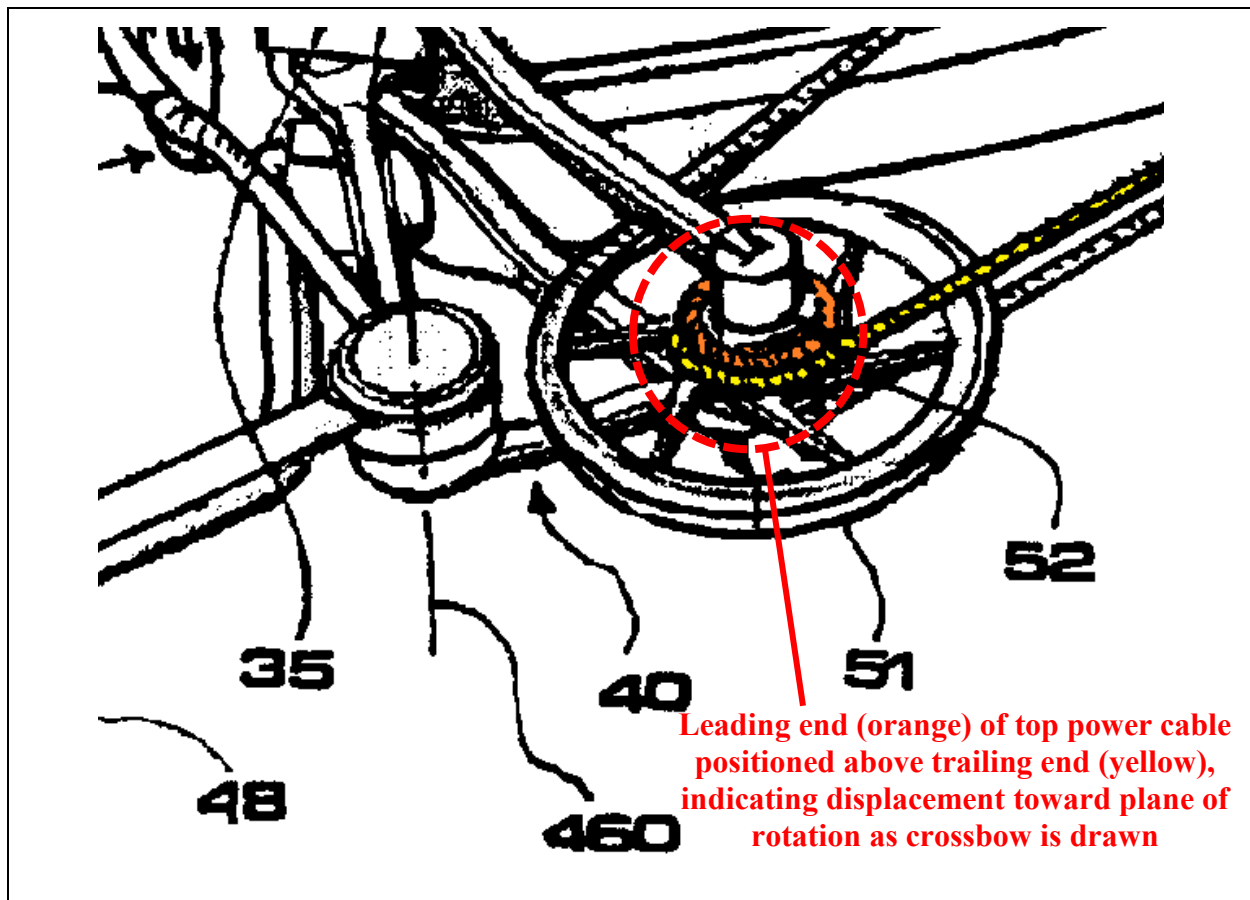
Moreover, although Petitioner and Mr. Batzer cite ¶[0106] and Figure 9 of Stanziale '302, (see EX1016, ¶147; Petition, 33), neither discloses a specific relationship between pivot axis 450 and the direction in which perimetral tracks 521 extend. Indeed, ¶[0106] never references pivot axis 450 at all. EX1007, ¶[0106]. Petitioner fails to provide any support for this critical aspect of the claim, instead relying on mere *ipse dixit* regarding the purported teachings of Stanziale '302. But “[a] reasonable likelihood of unpatentability must be shown by evidence, not *ipse dixit*.” *Unirac, Inc. v. EcoFasten Solar, LLC*, IPR2021-00532, Paper 7, 21 (PTAB July 22, 2021). Petitioner's unsubstantiated and self-serving statements are insufficient to meet Petitioner's burden. *See id.* at 20-21. Accordingly, Ground 1 should be rejected. Similarly, Ground 2, which refers back to Ground 1 for this limitation (Petition, 36), should also be rejected. *See A123*, Paper 12 at 19.

Likewise, Petitioner fails to show that Ground 11's combination of U.S. Patent No. 7,836,871 to Kempf (“Kempf '871”), further explained below, and Stanziale '302 disclose these limitations. To the extent Ground 11 can be understood, Petitioner appears to rely solely on Stanziale '302 for these limitations, arguing that Stanziale '302 discloses “that the power cable journals are helical (extending in a direction perpendicular to the draw string planes of rotation), and thus that the power

cables are displaced along the respective axes away from the planes of rotation as the cables wrap onto the helical journals.” Petition, 56. As discussed, Petitioner fails to show that Stanziale ’302 discloses this “limitation.” Petitioner fails to meet its burden on Ground 11.

- c. Stanziale ’302 does not disclose or render obvious a crossbow in which “the first and second power cables...are displaced along the first and second axes away from the first and second planes of rotation of the first and second draw string journals, respectively”**

Stanziale ’302 does not disclose a crossbow in which “the upper and lower power cables...are displaced along the first and second axes *away from the first and second planes of rotation of the first and second draw string journals.*” Even if Stanziale ’302 discloses some sort of helical shape—Stanziale ’302 states that “the perimetral track...521” of the second pulley 52 “may be a simple annular groove or it may have a spiral or helical shape so as to wind a plurality of turns of a flexible element” (EX1007, ¶[0106])—Figure 3 appears to show the power cables being displaced *toward* the first and second planes of rotation, rather than *away from* these planes as required by the Challenged Claim:



Id., Fig. 3 (excerpted and annotated).

Petitioner fails to identify any teaching in Stanziale '302 that would contradict Figure 3. Rather, as it did for the “perpendicular” limitations previously discussed, Petitioner relies on *ipse dixit*, baldly asserting that, “[b]ecause the helical power cable journals 521 are on opposite sides of the draw string journal 511, a POSA would immediately envisage that the helical configuration of the power cable journals 521 would need to be such that the power cables 32 extend away from (rather than towards) the draw string journal 511 to avoid interference with the draw string 31.” Petition, 36. Again, the only support Petitioner cites is the Batzer

Declaration, which again repeats the Petition's language *verbatim* without citing additional evidence. EX1016, ¶151. Such "evidence" is entitled to no meaningful weight. *Xerox*, Paper 9 at 15.

Again, none of the portions of Stanziale '302 that Petitioner and Mr. Batzer cite for other portions of its analysis, (*see* EX1016, ¶151; Petition, 35-36), describe or depict "the power cables wrap onto the power cable take-up journals and are displaced along the axes away from the draw string journal planes of rotation." Thus, Petitioner fails to provide any viable support for this critical limitation, instead relying on mere *ipse dixit* and conclusory arguments regarding Stanziale '302's purported teachings. This is not enough to meet Petitioner's burden. *See Unirac*, Paper 7 at 20-21.

To the extent Petitioner attempts to rely on to *Blue Calypso, LLC v. Groupon, Inc.*, 815 F.3d 1331 (Fed. Cir. 2016) to overcome Stanziale '302's missing disclosure, the Board should reject this argument as inconsistent with controlling law. Despite Petitioner's misleading parenthetical characterization, *Blue Calypso*, relying on *Kennametal, Inc. v. Ingersoll Cutting Tool Co.*, 780 F.3d 1376 (Fed. Cir. 2015), merely stands for the proposition that a reference that ***actually discloses all of the necessary elements*** of a claimed combination "need not always include an express discussion of the actual combination to anticipate" but rather "may still anticipate if that reference teaches that the disclosed components or functionalities

may be combined and one of skill in the art would be able to implement the combination.” *Id.* at 1344. The Federal Circuit has made clear that this line of cases “does **not** permit the Board to fill in missing limitations simply because a skilled artisan would immediately envision them.” *Nidec*, 851 F.3d at 1274 (“*Kennametal* does not stand for the proposition that a reference missing a limitation can anticipate a claim if a skilled artisan viewing the reference would ‘at once envisage’ the missing limitation. Rather, *Kennametal* addresses whether the disclosure of a limited number of combination possibilities discloses one of the possible combinations.”).

Here, Petitioner fails to identify any portion of Stanziale ’302 that purportedly discloses that “the power cables wrap onto the power cable take-up journals and are displaced along the axes away from the draw string journal planes of rotation.” As discussed, to the extent Stanziale ’302 discloses any displacement along the axes, it discloses displacement **toward** the draw string journal planes of rotation, not away from them. Thus, this limitation is entirely absent from Stanziale ’302 regardless of what Petitioner claims a POSA would “envisage.” Accordingly, Stanziale ’302 does not anticipate Claim 1, and Ground 1 must fail.

In Ground 2, Petitioner relies primarily on Ground 1’s discussion as it relates to these limitations, adding only a cursory assertion that a POSA would find it “obvious to try” wrapping the power cables away from the planes of rotation.

Petition, 36. As discussed below, this fails to meet Petitioner's burden on motivation to modify. *See* §V(B)(1). Accordingly, Ground 2 must also fail.

Likewise, Ground 11's combination of Kempf '871 and Stanziale '302 does not disclose this limitation. To the extent Ground 11 can be understood, Petitioner appears to rely solely on Stanziale '302 for this limitation as it argues that Stanziale '302 discloses "that the power cable journals are helical (extending in a direction perpendicular to the draw string planes of rotation), and thus that the power cables are displaced along the respective axes away from the planes of rotation as the cables wrap onto the helical journals." Petition, 56. This is incorrect for at least the reasons set forth above. Petitioner also fails to meet its burden on Ground 11.

2. Stanziale '062 (Grounds 3-4)

Grounds 3-4 rely solely on WO 2011/158062 to Stanziale ("Stanziale '062"). Petitioner's cursory discussion of these grounds, however, fails to establish a reasonable likelihood of prevailing.

a. Stanziale '062 does not disclose or render obvious "a first [and second] string guide mounted to the first [and second] bow limb"

Stanziale '062 does not disclose "a first string guide mounted to the first bow limb" or "a second string guide mounted to the second bow limb" under the correct construction of "mounted to." *See* §IV(A). To the extent Ground 3 can be understood (*see* §V(C)), it appears Petitioner identifies either pulleys 145 or the combination of

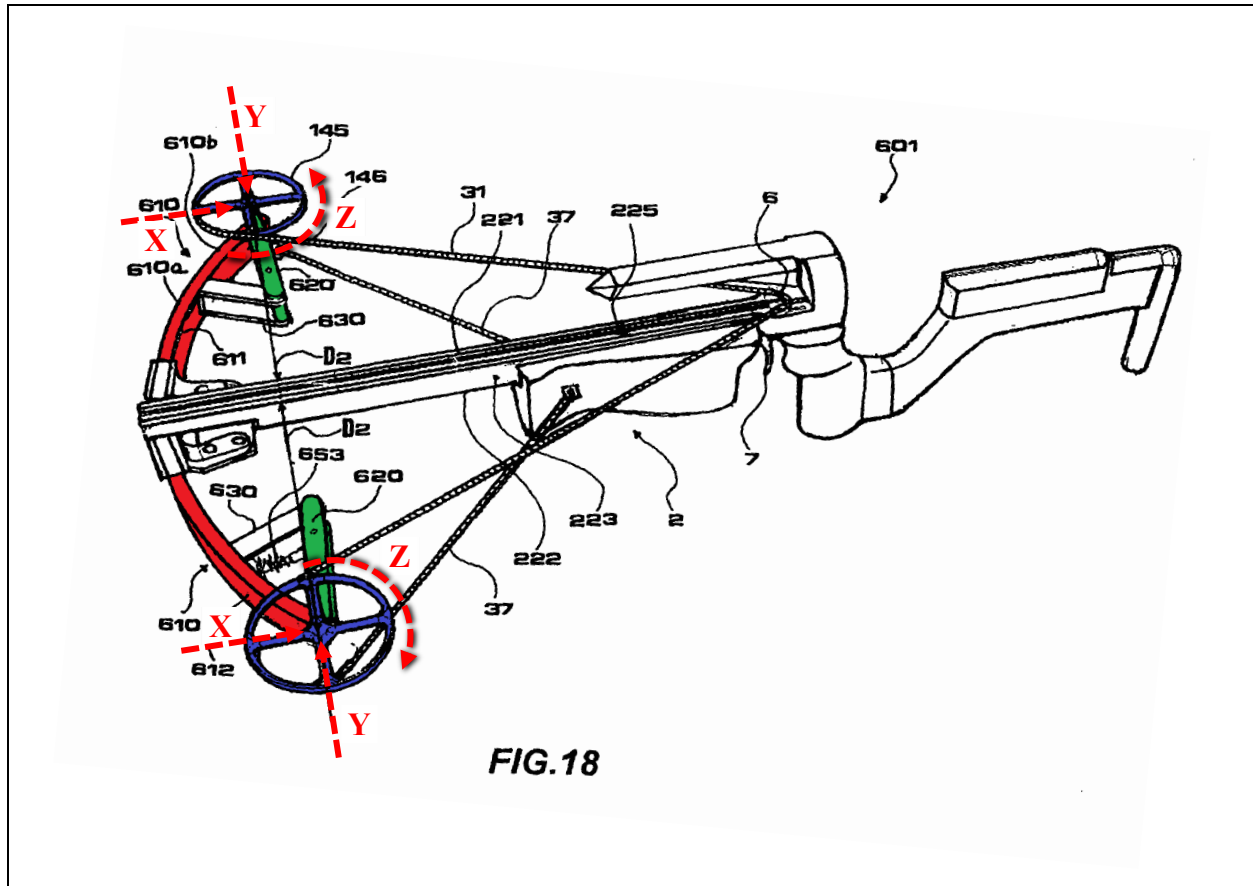
pulleys 145, pulleys 146, and pivot 147 (hereinafter, “pulley assembly 145-146-147”) as the recited string guides. Petition, 37-38. Regardless of which interpretation is used, however, neither of these structures is mounted to the first and second limb (apparently identified as elastic members 610 (*id.*)). Rather, pulleys 145/pulley assemblies 145-146-147 are mounted to auxiliary arms 620, which are distinct from elastic members 610. Auxiliary arms 620 are then connected to the limbs to provide multiple degrees of freedom between pulleys 145/pulley assemblies 145-146-147 and elastic members 610.

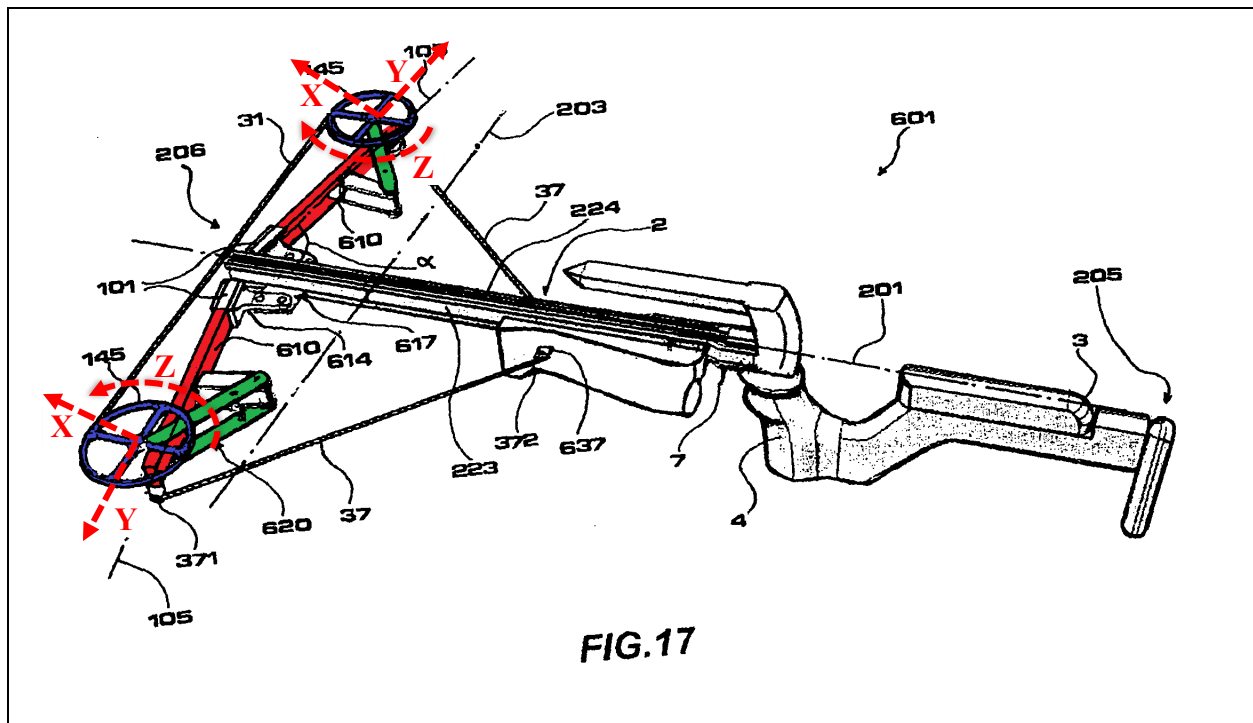
Specifically, Stanziale '062 discloses that “[t]he second length 610b of the elastic member 610, the stirrup 630 and the auxiliary arm 620 form a triangle having a variable shape, i.e. having one movable side 620,” and “the auxiliary arm 620 crosses the respective elastic member 610.” EX1011, 29:30-35. “The auxiliary arm 620 is then a supporting member for the pulleys 145, 146, which are pivotably mounted on the auxiliary arm 620 itself,” while “the auxiliary arms 620 move on a plane which is substantially parallel to a plane on which portions of elastic members 610 move during deformation.” *Id.*, 29:2-3, 29:15-16; *see also id.*, 29:23-29. Additionally, “[t]he first and second pulleys 145, 146 rotate jointly around an axis of rotation 150, which is the axis of pivot 147 and of tubular housing 681.” *Id.*, 27:34-28:1; *see also id.*, Figs. 20-21.

Pulley 145/pulley assembly 145-146-147 is neither physically connected to elastic member 610 nor rotatable only about a vertical axis (axis 150) relative to elastic member 610. Rather, because it is attached to an intervening auxiliary arm 620, pulley 145/pulley assembly 145-146-147 is both rotatable about a vertical axis and translatable along x- and y-axes due to the pivoting of auxiliary arm 620 relative to elastic member 610, providing for three degrees of freedom between pulleys 145/pulley assemblies 145-146-147 and elastic member 610. In contrast, under the proper construction of “mounted to,” there is only one degree of freedom between the string guide and limb recited in Claim 1.

Like Stanziale '302's lever 60, Stanziale '062's auxiliary arm 620 is a moment arm pivotally mounted to elastic member 610 and provides two degrees of freedom between auxiliary arm 620 and elastic member 610 (*i.e.*, translation along x- and y-axes). Pulley 145/pulley assembly 145-146-147 is rotatably mounted to auxiliary arm 620 and provides an additional degree of freedom (*i.e.*, the pulley/pulley assembly rotate about a z-axis relative to auxiliary arm 620). When this linkage of components is viewed as a whole, there are three degrees of freedom between the elastic member and the pulley/pulley assembly (*i.e.*, x-axis translation, y-axis translation, and z-axis rotation). Stanziale '062's Figures 17-18, annotated below, show the three degrees of freedom of pulleys 145/pulley assemblies 145-146-147

(blue) and their corresponding motion as intervening auxiliary arms 620 (green) rotate and elastic members 610 (red) move.





EX1011, Figs. 17-18 (annotated). These figures of Stanziale '062 demonstrably show three degrees of freedom between pulleys 145/pulley assemblies 145-146-147 and elastic members 610. This is fundamentally different from the '015 Patent, which provides for a single degree of freedom between the string guides and limbs. See §V(A)(1)(a).

When the proper construction of “mounted to” is applied, it is readily apparent that Stanziale '062 does not disclose “a first string guide mounted to the first bow limb” or “a second string guide mounted to the second bow limb.” Thus, Stanziale '062 cannot anticipate Claim 1, and Ground 3 must fail.

In Ground 4, which purports to rely on obviousness vis-à-vis Stanziale '062, Petitioner relies solely on the discussion of Ground 3. See Petition, 40-41. In three

short paragraphs, Petitioner offers nothing more on this element. On this record, Stanziale '062 cannot not render Claim 1 obvious. *See* *A123*, Paper 12 at 19.

b. Stanziale '062 does not disclose or render obvious “a first [and second] helical power cable take-up journal extending in a direction perpendicular to the first [and second] plane of rotation of the first [and second] draw string journal”

Petitioner fails to identify specifically where Stanziale '062 discloses “a first helical power cable take-up journal extending in a direction perpendicular to the first plane of rotation of the first draw string journal” or “a second helical power cable take-up journal extending in a direction perpendicular to the second plane of rotation of the second draw string journal.” Although Grounds 3-4 are difficult to parse (*see* §V(C)), it appears Petitioner cites “17:20-25, 29:8-9, Figs. 17, 22” of Stanziale '062 as support for this limitation. *See* Petition, 38. However, this does not disclose a power cable take-up journal “extending in a direction perpendicular to” *any* plane of rotation, let alone a specific relationship between “axis of rotation 150” and a “plane of rotation...formed by the wound string 31.” Likewise, to the extent Petitioner cites the Batzer Declaration as “support,” Mr. Batzer simply repeats Petitioner's argument *verbatim* without citing any evidence beyond the same inapplicable sections of Stanziale '062. EX1016, ¶162. Such “evidence” is entitled to no meaningful weight. *Xerox*, Paper 9 at 15.

Petitioner fails to provide any support for this critical aspect of the claim, instead relying on mere *ipse dixit* regarding Stanziale '062's purported teachings. But "[a] reasonable likelihood of unpatentability must be shown by evidence, not *ipse dixit*." *Unirac*, Paper 7 at 21. Petitioner's conclusory arguments and testimony are simply insufficient to meet its burden on Ground 3. *See id.* at 20-21. Similarly, Ground 4, which refers back to Ground 3 for this limitation (Petition, 40-41), should also be rejected. *See A123*, Paper 12 at 19.

- c. **Stanziale '062 does not disclose or render obvious a crossbow in which "the first and second power cables...are displaced along the first and second axes away from the first and second planes of rotation of the first and second draw string journals, respectively"**

Stanziale '062 does not disclose a crossbow in which "the upper and lower power cables...are displaced along the first and second axes *away from the first and second planes of rotation of the first and second draw string journals*." Although Stanziale '062 may disclose a helical shape of some sort—it states that "track or groove 1461" of second pulley 146 may "ha[ve] a spiral or helical shape, so as to wind a plurality of turns of flexible force element 37..." (EX1011, 17:4-9)—it says nothing about displacing power cables "along first and second axes *away from the first and second planes of rotation of the first and second draw string journals*" as recited in Claim 1.

Petitioner fails to identify any teaching in Stanziale '062 that would conceivably disclose this limitation. Rather, it relies on *ipse dixit*, baldly asserting that “[t]he helical nature of journals 1461 means that a POSA would at once envisage that the cable 37 wraps on those journals in one of two directions along the axis 150: toward the string planes of rotation or away.” Petition, 39. However, the only support Petitioner cites is the Batzer Declaration, which repeats this same phrase *verbatim* without citing any evidence. EX1016, ¶167. Such “evidence” is entitled to no meaningful weight. *Xerox*, Paper 9 at 15.

Again, none of the portions of Stanziale '062 that Petitioner and Mr. Batzer cite for other portions of its argument, (*see* EX1016, ¶167; Petition, 39), describe or depict “the power cables wrap onto the power cable take-up journals and are displaced along the axes away from the draw string journal planes of rotation.” Petitioner fails to provide any viable support for this critical aspect of the claim, instead relying on mere *ipse dixit* and conclusory arguments regarding Stanziale '062's purported teachings. This is not enough to persuasively show likelihood of success on Grounds 3-4. *See Unirac*, Paper 7 at 20-21.

Blue Calypso cannot salvage Petitioner's arguments. As discussed (*see* §V(A)(1)(c)), Federal Circuit precedent “does **not** permit the Board to fill in missing limitations simply because a skilled artisan would immediately envision them.” *Nidec*, 851 F.3d at 1275 (emphasis added). Petitioner fails to identify any portion of

Stanziale '062 that purportedly discloses that “the power cables wrap onto the power cable take-up journals and are displaced along the axes away from the draw string journal planes of rotation.” Thus, Stanziale '062 cannot anticipate Claim 1, regardless of what Petitioner claims a POSA would “envisage,” because this limitation is wholly missing from Stanziale '062. Ground 3 must fail.

In Ground 4, Petitioner relies on Ground 3's discussion as it relates to these limitations, adding only a cursory assertion that a POSA would find it “obvious to try” wrapping the power cables away from the planes of rotation. Petition, 40. As discussed below, however, this fails to meet Petitioner's burden on motivation to modify. *See* §V(B)(1). Accordingly, institution on Ground 4 would also be improper.

3. Stanziale '771 (Grounds 5-6)

Grounds 5-6 rely solely on WO 2011/141771 to Stanziale (“Stanziale '771”). Petitioner's cursory discussion of these grounds, however, fails to establish a reasonable likelihood of prevailing.

a. Stanziale '771 does not disclose or render obvious “a first [and second] string guide mounted to the first [and second] bow limb”

Stanziale '771 does not disclose “a first string guide mounted to the first bow limb” or “a second string guide mounted to the second bow limb” under the correct construction of “mounted to.” *See* §IV(A). To the extent Ground 5 can be understood (*see* §V(C)), it appears Petitioner identifies either pulleys 145 or pulley assemblies

145-146-147 as the recited string guides. Petition, 41-42. Regardless of which interpretation Petitioner intended, neither of the identified structures are mounted to the first and second limbs (apparently identified as elastic members 10 (*id.*)). Rather, pulleys 145/pulley assemblies 145-146-147 appear to be mounted to pushing arms 32, which are distinct from elastic members 10. Although Stanziale '771's disclosure is unclear, pushing arms 32 may (or may not) then be connected to the limbs to provide multiple degrees of freedom between pulleys 145/pulley assemblies 145-146-147 and elastic members 10. The Batzer Declaration says nothing on this point.

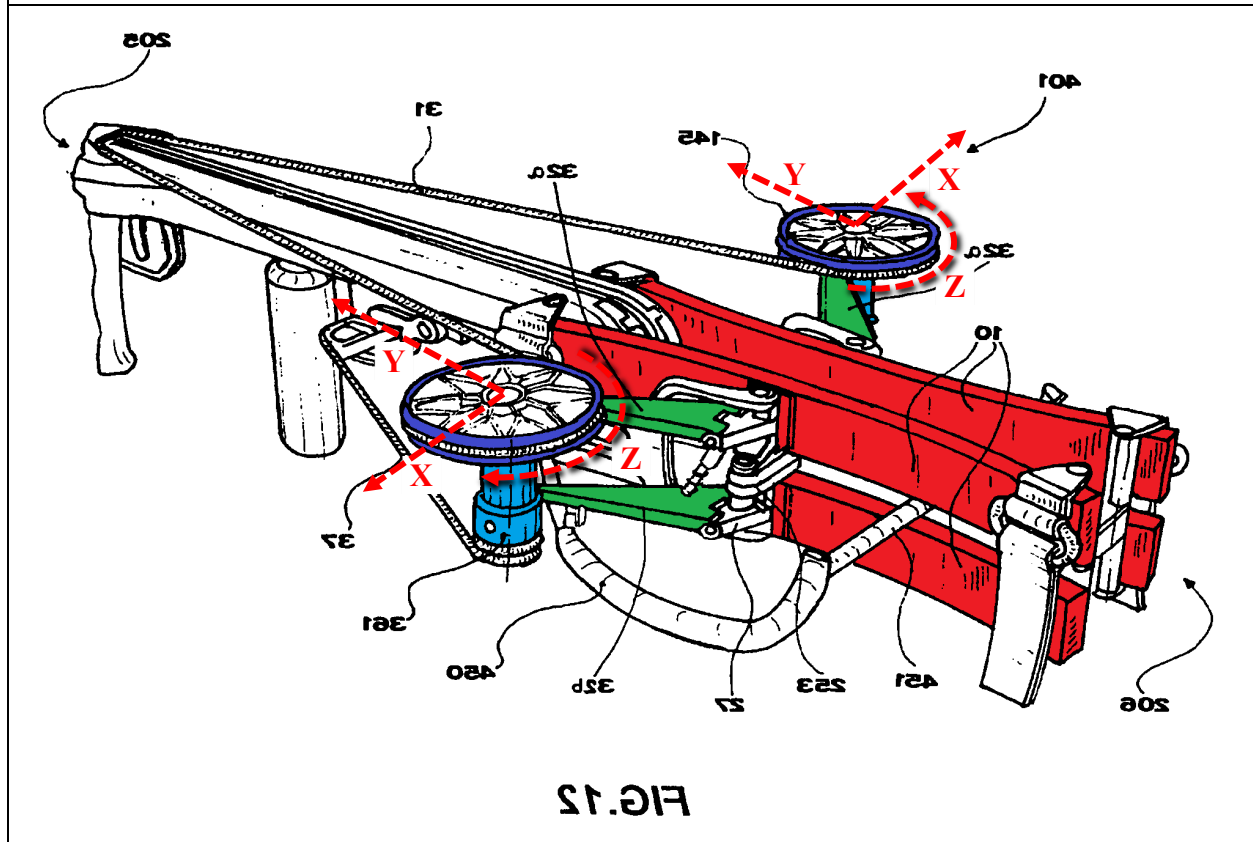
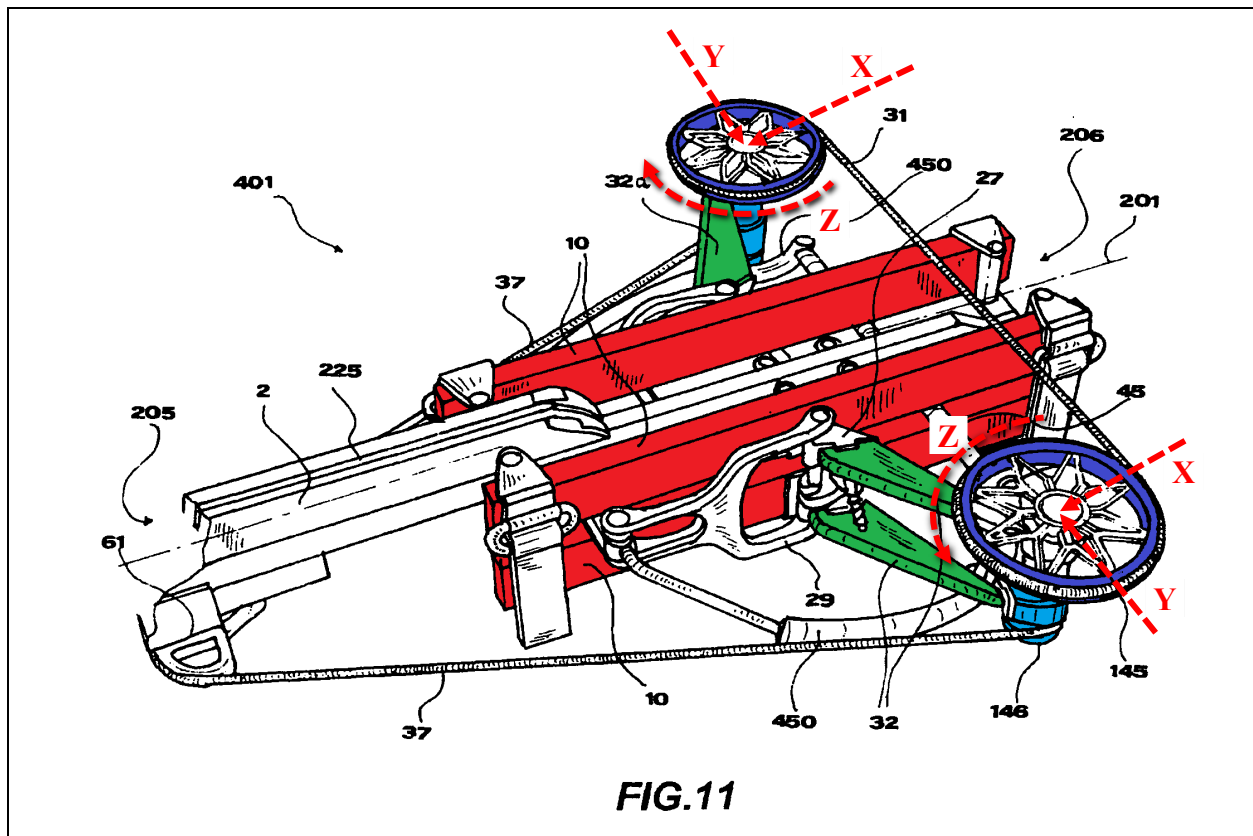
Stanziale '771 discloses that four pushing arms 32 form “pushing means” that are “apt to cooperate with the elastic members 10 to accumulate potential energy (*i.e.*, to store elastic energy) in the elastic members 10 during a loading phase of the device 1, and to transfer the accumulated energy to the projectile during the launch phase.” EX1012, 9:32-10:6. Stanziale '771 does not clearly explain, however, how pushing arms 32 attach to elastic members 10, if at all. For example, although certain figures appear to show pushing arms 32 connecting to elastic members 10 via element 27, the written description states that “pushing arms 32 are *rotatably associated to the stock 2* through a respective connecting element 27,” not to elastic members 10. *Id.*, 10:10-11 (emphasis added), Figs. 7, 11-12. At best, it is ambiguous whether pushing arms 32 are attached to elastic members 10 at all.

The relationship between pushing arms 32 and connecting element 27 is somewhat more clear—Stanziale '771 teaches that “pushing arm 32 is...rotatably associated with the connecting element 27 thanks to hinge pin 278, said rotation taking place about a respective second rotation axis 93....” *Id.*, 13:3-5. Meanwhile, “pulleys 145, 146 are positioned at opposite sides of the pair of pushing arms 32” and “rotate jointly about an axis of rotation 150....” *Id.*, 15:29-30, 16:2-5. As a result, “the pulleys 145, 146 move synchronized with the respective pushing arms 32, with ***a combined translation and rotation movement.***” *Id.*, 18:16-18 (emphasis added).

Even if one assumes pushing arms 32 are attached to elastic members 10 (versus the stock), pulley 145/pulley assembly 145-146-147 is neither physically connected to elastic member 10 nor rotatable only about a vertical axis (axis 150) relative to elastic member 10. Rather, because it is attached to intervening pushing arms 32, pulley 145/pulley assembly 145-146-147 is both rotatable about a vertical axis and translatable along x- and y-axes due to the pivoting of pushing arms 32 relative to elastic member 10, providing for at least three degrees of freedom between pulleys 145/pulley assemblies 145-146-147 and elastic member 10. In contrast, under the proper construction of “mounted to,” there is only one degree of freedom between the string guide and limb recited in Claim 1.

Stanziale '771 states “the pulleys 145, 146 move synchronized with the respective pushing arms 32, with ***a combined translation and rotation movement.***”

Id., 18:16-18 (emphasis added). Stanziale '771's pushing arm 32 is a moment arm pivotally mounted to elastic member 10 and provides at least two degrees of freedom between pushing arm 32 and elastic member 10 (*i.e.*, translation along x- and y-axes). Pulley 145/pulley assembly 145-146-147 is rotatably mounted to pushing arm 32 and provides an additional degree of freedom (*i.e.*, the pulley/pulley assembly rotate about a z-axis relative to pushing arm 32). When this linkage of components is viewed as a whole, there are at least three degrees of freedom between the elastic member and the pulley/pulley assembly (*i.e.*, x-axis translation, y-axis translation, and z-axis rotation). Figures 11-12, annotated below, show the at least three degrees of freedom of pulleys 145/pulley assemblies 145-146-147 (blue) and their corresponding motion as intervening pushing arms 32 (green) rotate and elastic members 10 (red) move.



EX1012, Figs. 11-12 (annotated, Fig. 12 mirrored). These figures of Stanziale '771 highlight three degrees of freedom between pulleys 145/pulley assemblies 145-146-147 and elastic members 10. This is different than the '015 Patent, which provides for a single degree of freedom between the string guides and limbs. *See* §V(A)(1)(a).

When the proper construction of “mounted to” is applied, Stanziale '771 does not disclose “a first string guide mounted to the first bow limb” or “a second string guide mounted to the second bow limb.” Consequently, Stanziale '771 cannot anticipate Claim 1, and Ground 5 must fail.

In Ground 6, which purports to rely on obviousness vis-à-vis Stanziale '771, Petitioner relies solely on the discussion of Ground 5. *See* Petition, 44-45. In that single page, Petitioner offers nothing more on this element. On this record, Stanziale '771 cannot not render Claim 1 obvious. *See* A123, Paper 12 at 19.

b. Stanziale '771 does not disclose or render obvious “a first [and second] helical power cable take-up journal extending in a direction perpendicular to the first [and second] plane of rotation of the first [and second] draw string journal”

Petitioner fails to identify specifically where Stanziale '771 discloses “a first helical power cable take-up journal extending in a direction perpendicular to the first plane of rotation of the first draw string journal” or “a second helical power cable take-up journal extending in a direction perpendicular to the second plane of rotation

of the second draw string journal.” Although Grounds 5-6 are difficult to follow (*see* §V(C)), it appears Petitioner cites “17:34-18:5, Figs. 1, 5, 8-10A” or “17:22-23, 18:4-5, 26:11-21” of Stanziale ’771 as support for this limitation. *See* Petition, 43, 45. However, none of these portions of Stanziale ’771 disclose a power cable take-up journal “extending in a direction perpendicular to” **any** plane of rotation, let alone the draw string journal’s plane of rotation. Likewise, to the extent Petitioner cites the Batzer Declaration as “support,” Mr. Batzer simply repeats Petitioner’s arguments *verbatim*. EX1016, ¶¶181, 190. Without more, such “evidence” is entitled to no meaningful weight. *Xerox*, Paper 9 at 15.

Petitioner fails to provide any support for this critical aspect of the claim, instead relying on mere *ipse dixit* regarding Stanziale ’771’s purported teachings. But “[a] reasonable likelihood of unpatentability must be shown by evidence, not *ipse dixit*.” *Unirac*, Paper 7 at 21. Petitioner’s conclusory arguments and testimony are not enough to persuasively show likelihood of success on Ground 5. *See id.* at 20-21. Similarly, Ground 6, which refers back to Ground 5 for this limitation (Petition, 44-45), should also be rejected. *See A123*, Paper 12 at 19.

4. Darlington (Grounds 7-8, 12)

Grounds 7-8 and 12 rely on U.S. Patent Pub. No. 2011/0030666 to Darlington (“Darlington”). Petitioner’s cursory discussion of these grounds, however, fails to establish a likelihood of prevailing. In fact, Darlington teaches away from

implementing one of the limitations of Claim 1, a fact Petitioner wholly neglects to acknowledge.

Petitioner implicitly concedes that Darlington does not disclose “that the power cable journals are helical (extending in a direction perpendicular to the draw string planes of rotation), and thus that the power cables are displaced along the respective axes away from the planes of rotation as the cables wrap onto the helical journals.” Petition, 48. This is an admission that Darlington does not disclose “a first helical power cable take-up journal extending in a direction perpendicular to the first plane of rotation of the first draw string journal,” “a second helical power cable take-up journal extending in a direction perpendicular to the second plane of rotation of the second draw string journal,” or that “the upper and lower power cables...are displaced along the first and second axes away from the first and second planes of rotation of the first and second draw string journals.” EX1001, Claim 1.

To overcome this deficiency, Petitioner argues (in cursory fashion) that it would have been obvious to modify Darlington in view of U.S. Patent No. 7,578,289 to Norkus (“Norkus”) or U.S. Patent Pub. No. 2012/0312287 to Park (“Park”) to meet the “limitation” that “the power cable journals are helical (extending in a direction perpendicular to the draw string planes of rotation), and thus that the power cables are displaced along the respective axes away from the planes of rotation as the cables wrap onto the helical journals.” Petition, 48-52. Petitioner similarly argues

in Ground 12 that it would have been obvious to modify U.S. Patent Pub. No. 2011/0308508 to Islas (“Islas”) in view of both Darlington and Park to arrive at a combination meeting this same limitation. *Id.*, 60-62. These arguments should be rejected as Darlington expressly *teaches away* from implementing power cable take-up journals that “displace[]” the power cables when the bow is drawn.

Darlington “is directed to a compound archery crossbow *wherein the power cables and the bowstring remain substantially parallel....*” EX1013, Abstract (emphasis added). Darlington explains that, in its crossbow, the first and second power cables must “remain substantially parallel to each other, just as in the ‘relaxed’ position” when the bow is drawn. EX1013, ¶[0046]. This is critical to Darlington’s functionality as it allows the crossbow to maintain a “shoot-through” configuration:

[T]he first power cable 28, the second power cable 30, and the bowstring 32 extend substantially parallel to each other between the first cam 24 and second cam 26, with the bowstring 32 being vertically disposed in between the first power cable 28 and the second power cable 30 (hereinafter, the “shoot-through” configuration).

...

Because the first power cable 28 and second power cable 30 are substantially parallel to each other and are anchored

at the top and bottom of the first cam 26 and second cam 28, they can be provided a sufficient vertical distance apart to allow the arrow pass between them. Accordingly, the first power cable 28 and second power cable 30 do not have to be deflected in the vertical direction to remove them from the path of the arrow.

Id., ¶¶[0041]-[0043]; *see also id.*, ¶[0053].

This is the exact opposite of Claim 1's arrangement, which configures the crossbow so the power cables are "deflected" or "displaced" when the crossbow is drawn. *See, e.g.*, EX1001, Abstract, 4:25-30, 4:50-53 ("The helical journals 122 displace the power cables 102 away from the draw string 114 as the bow is drawn...."), Claim 1. Darlington therefore teaches away from Petitioner's proposed combinations. A POSA reading Darlington would be motivated to keep the power cables parallel, not to use helical journals to displace the power cables. Thus, as discussed further below (*see* §V(B)(2)(a)), a POSA would not be motivated to combine Darlington with any reference(s) to deflect or displace the power cables. All Darlington-based grounds—Grounds 7-8 and 12—must fail.

5. Kempf '871 (Grounds 9-11)

Grounds 9-11 rely on Kempf '871. Petitioner's cursory discussion of these grounds fails to establish a reasonable likelihood of prevailing.

a. Petitioner fails to demonstrate that Kempf '871 discloses “a second draw string journal”

Petitioner fails to show Kempf '871 discloses “a second string guide...comprising a second draw string journal” as required by Claim 1. As Petitioner admits, Kempf '871 primarily teaches a crossbow design with a first string guide in the form of a pulley (28) and second string guide in the form of a cam (36). EX1014, 3:57-59, 3:64-66; *see also* Petition, 53. In an apparent effort to argue that Kempf '871 discloses the dual requirements of “the first string guide comprising a first draw string journal...” and “the second string guide comprising a second draw string journal...,” Petitioner argues that both pulley (28) and cam (36) “ha[ve] a draw string journal (called outer track) 30....” Petition, 54. Yet Kempf '871 only discloses outer track (30) as part of pulley (28)—the first string guide. EX1014, 3:57-59, Fig. 1. On the other hand, cam (36)—the second string guide—does **not** have an outer track (30). *Id.*, 3:64-66, Fig. 1. Thus, as to Kempf '871's primary embodiment, Petitioner's argument that “[e]ach string guide has a draw string journal (called outer track) 30” is false.

Moreover, to the extent Petitioner attempts to rely on Kempf '871's alternative embodiment, this, too, is incorrect. This alternative embodiment provides that “two synchronized **cams**...may be used in place of the cam (36) and pulley (28).” EX1014, 4:12-13 (emphasis added); *see also* Petition, 53 (“Figure 1 shows a

pulley 28 and a cam 36 as the string guides, *but two cams may also be used.*”). But Kempf ’871 never discloses or suggests an embodiment using two *pulleys*. Because Kempf ’871 only discloses outer track (30) as part of pulley (28) but never discloses an embodiment with two pulleys (28), Kempf ’871 cannot disclose two outer tracks (30). By extension, Petitioner’s argument that Kempf ’871 discloses “a second draw string journal” in the form of a second outer track (30) must fail.

Petitioner does not identify any other structure that could meet this limitation, which demands that Grounds 9-11 should be rejected. *See In re Magnum Oil Tools Int’l, Ltd.*, 829 F.3d 1364, 1381 (Fed. Cir. 2016) (Board is not “free to adopt arguments on behalf of petitioners that could have been, but were not, raised by the petitioner during an IPR”).

b. Petitioner fails to demonstrate that Kempf ’871 discloses “a second...power cable take-up journal”

Petitioner fails to show Kempf ’871 discloses “a second helical power cable take-up journal extending in a direction perpendicular to the second plane of rotation of the second draw string journal.” Although Grounds 9-11 are difficult to understand (*see* §V(C)), Petitioner appears to admit that Kempf ’871 fails to disclose “power cable take-up journal[s]” that are “helical” and that “extend[] in a direction perpendicular to the first [or second] plane of rotation of the first [or second] draw

string journal.” Petition, 54-55. Nevertheless, Petitioner argues that Kempf ’871 discloses two “power cable take-up journal[s].” This is incorrect.

Petitioner identifies a pair of inner tracks (32) as Kempf ’871’s two “power cable take-up journal[s].” *Id.*, 54. Inner track (32) is only ever disclosed as part of pulley (28), not cam (36). EX1014, 3:57-59, 3:64-66, Fig. 1. As with outer track (30), neither Kempf ’871’s primary embodiment (teaching one pulley (28) and one cam (36)) nor its alternative embodiment (teaching two cams) discloses two inner tracks (32). By extension, Petitioner’s apparent argument that Kempf ’871 discloses “a second...power cable take-up journal” in the form of a second inner track (32) must fail for the same reasons as its “second draw string journal” arguments. *See* §V(A)(5)(a).

Because Petitioner does not identify any other structure that could meet this limitation, Grounds 9-11 should be rejected. *See Magnum*, 829 F.3d at 1381.

6. Islas (Ground 12)

Petitioner’s cursory discussion of Ground 12, which relies on Islas, fails to establish a likelihood of prevailing. Additionally, Ground 12 must fail because Islas teaches away from the proposed combination with Darlington because such a combination would be inoperable for its intended purpose, a fact Petitioner fails to acknowledge.

Although Petitioner's analysis of Islas is difficult to understand (*see* §V(C)), Petitioner admits that, in Islas, the "bowstring is not secured in a reverse draw configuration (with the string adjacent the down-range side of the string guides 20 in a released configuration, such that the string translates from the down-range side toward the up-range side while being drawn)." Petition, 60. While not actually a limitation of the Challenged Claim, Patent Owner understands this to constitute an admission that Islas fails to disclose "a draw string...secured to the crossbow in a reverse draw configuration with the draw string adjacent the downrange side of the string guides in a released configuration, wherein the draw string translates from the down-range side toward the up-range side...." EX1001, Claim 1.

To overcome this deficiency, Petitioner argues (in cursory fashion) that it would have been obvious to modify Islas's forward-draw crossbow design to incorporate the reverse-draw crossbow designs of Darlington. Petition, 60-61. However, in doing so, Petitioner fails to acknowledge that modifying Islas's crossbow to have a reverse-draw configuration would render the crossbow inoperable for its intended purpose. This, in turn, means Islas and Darlington teach away from Petitioner's proposed combination. *McGinley v. Franklin Sports, Inc.*, 262 F.3d 1339, 1354 (Fed. Cir. 2001) ("If references taken in combination would produce a 'seemingly inoperative device,'...such references teach away from the combination....") (citation omitted).

Darlington explains that reverse-draw configurations require a “shoot-through configuration,” *i.e.*, a configuration where the bowstring is “vertically disposed in between the first power cable 28 and the second power cable 30,” which “allow[s] the bowstring 32 to be pulled away from the riser 20 and through the first power cable 28 and second power cable 30.” EX1013, ¶[0041]-[0042]. In Islas, however, the bowstring is positioned on top of the stock and therefore above the power cables, not between them. EX1015, Fig. 1, ¶[0014] (bowstring’s string release 34 is “mounted on a track on the top of the beam 12”). A POSA would recognize that attempting to implement Darlington’s reverse-draw configuration in Islas would result in interference between the power cables and the drawstring as the crossbow is drawn and the drawstring is forced to cross and tangle with the upper power cables. This would, in turn, render the crossbow inoperable for its intended purpose and undermine Petitioner’s stated goal of maximizing the power stroke, (Petition, 60), as a crossbow that cannot be fully drawn effectively has *no* power stroke.

Islas and Darlington in combination teach away from Ground 12’s proposed combination. Thus, as discussed further below (*see* §V(B)(4)), a POSA would not have been motivated to combine Islas with Darlington. Ground 12 must fail.

B. Petitioner Fails to Demonstrate Motivation to Combine or Modify

Petitioner fails to meet its burden of showing motivation to combine or modify for each proposed obviousness ground, instead relying on conclusory arguments that are fraught with hindsight bias.

1. Petitioner fails to establish motivation to modify Stanziale '302, Stanziale '062, or Stanziale '771 (Grounds 2, 4, 6)

The Board should reject Petitioner's assertions that it would have been obvious to modify Stanziale '302, Stanziale '062, or Stanziale '771 as wholly conclusory and unsupported by any evidence.

In Grounds 2, 4, and 6, Petitioner appears to argue it would have been obvious to modify each Stanziale reference to meet the requirement that “the first and second power cables...are displaced along the first and second axes away from the first and second planes of rotation of the first and second draw string journals, respectively” because, with “only two options,” *i.e.*, displacement towards the plane of rotation or away from the plane of rotation, “it would be obvious to try each.” Petition 36; *see also id.*, 40, 45. Utterly lacking from the Petition, however, is any explanation of *why* a POSA would have wanted to try each configuration. These *ipse dixit* assertions amount to nothing more than an unsubstantiated claim that a POSA *could* have made the asserted change, without explaining why a POSA would have been *motivated to* do so. This is not enough to meet Petitioner's burden on motivation to

modify. *Palo Alto Networks, Inc. v. Finjan, Inc.*, IPR2015-01979, Paper 62, 62-63 (PTAB Mar. 15, 2017) (“It is not enough to assert that the prior art provides two options and that it would have been predictable to implement either.”); *see also Belden v. BerkTek LLC*, 805 F.3d 1064, 1073 (Fed. Cir. 2015) (“[O]bviousness concerns whether a skilled artisan not only *could have made* but *would have been motivated to make* the combinations or modifications of prior art to arrive at the claimed invention.”) (original emphasis).

The Board should reject Petitioner's attempts to rely on Batzer's Declaration. Mr. Batzer simply repeats Petitioner's arguments *verbatim* without providing any additional evidence. *Compare* Petition, 36, 40, 45 with EX1016, ¶¶155, 173, 191. Such “evidence” is insufficient to support motivation to modify and is entitled to little or no weight. *Samsung Elecs. Co. v. LED Wafer Sols., LLC*, IPR2021-01491, Paper 11, 12-13 (PTAB Oct. 26, 2022); *see also Xerox*, Paper 9 at 15. Because Petitioner has nothing more, Petitioner fails to meet its burden on motivation to modify the Stanziale references.¹

¹ Petitioner's arguments for modifying Stanziale '062 and Stanziale '772 to meet other limitations, (*see* Petition, 40, 44), are similarly deficient. Patent Owner reserves the right to address these deficiencies if trial is instituted.

2. Petitioner fails to establish motivation to combine Darlington with Norkus or Park (Grounds 7-8, 12)

a. Petitioner fails to explain why a POSA would combine art that teaches away

Darlington expressly teaches away from the claimed invention (§V(A)(4)), which Petitioner fails to address. *See* Petition, 48-52. This alone is sufficient to decline institution on Grounds 7-8 and 12.

“A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant.” *DePuy Spine, Inc. v. Medtronic Sofamor Danek, Inc.*, 567 F.3d 1314, 1327 (Fed. Cir. 2009) (quoting *Ricoh Co. v. Quanta Computer Inc.*, 550 F.3d 1325, 1332 (Fed. Cir. 2008)). Even where a mere preference might not rise to the level of “teaching away,” it may nonetheless suffice to overcome a motivation to combine. *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1070 (Fed. Cir. 2018). In these circumstances, the Board has properly declined institution where a Petitioner fails to address a “teaching away” in connection with its purported motivation to combine. *See Propel Orthodontics, LLC v. OrthoAccel Techs., Inc.*, IPR2018-00398, Paper 9 at 18 (PTAB July 5, 2018) (declining institution where petition and expert “fail[ed] to refute, or even address,” prior art’s “clear and evincing descriptions of the drawbacks and problems relating to [the proposed combination].”).

Here, Petitioner completely ignores that Darlington teaches away from the proposed combination and therefore should not be included in any obviousness grounds. *See* §V(A)(4). The Darlington-based grounds (Grounds 7-8, 12) should be rejected.

b. Petitioner's stated motivation to combine Darlington with Norkus or Park is otherwise deficient

Even if Darlington did not teach away from the claimed invention (it does), Petitioner's asserted motivations to combine Darlington with Norkus or Park (and Islas with Darlington and Park) are just picking and choosing aspects of alleged prior art to attempt to satisfy the claim elements, which is not the law of obviousness. *See Metalcraft of Mayville, Inc. v. The Toro Co.*, 848 F.3d 1358, 1367 (Fed. Cir. 2017) (“[W]e cannot allow hindsight bias to be the thread that stitches together prior art patches into something that is the claimed invention.”); *InTouch Techs., Inc. v. VGO Commc'ns, Inc.*, 751 F.3d 1327, 1352 (Fed. Cir. 2014) (finding hindsight bias where expert testimony “primarily consisted of conclusory references to [the] belief that one of ordinary skill in the art *could* combine these references, not that they *would* have been motivated to do so”) (original emphasis).

Petitioner argues a POSA would be motivated to combine Darlington with Norkus because “Darlington teaches the desirability of ‘a higher level of stored energy’ and increased power stroke (*i.e.*, the distance of travel of the bowstring

between the drawn and released configurations), which ‘results in better performance’” and “Norkus likewise teaches the desirability of more energy storage, which is directly impacted by increased power stroke.” Petition, 49. Similarly, Petitioner identifies a nebulous “wish[] to increase a crossbow’s power stroke” as the sole motivation to combine Darlington with Park. *Id.*, 51. But teachings such as “more energy storage” or “increased power stroke” in a crossbow are neither unique nor relegated to the references Petitioner identifies. Rather, any functional crossbow-related art would likely have this general motivation. Petitioner’s theory of motivation to combine has little to do with the specific references and more to do with fabricating a motivation generic enough to support combining as many references as needed to create the illusion of obviousness.

Assuming *arguendo* this is a sufficient motivation to combine, Petitioner fails to explain *why* or *how* adding helical journals as described in Norkus and Park to the Darlington crossbow would actually increase the power stroke. Petitioner admits that, in its proposed combinations, the increased power stroke results from “allowing the cams (which receive the bowstring) to rotate more than once.” Petition, 49; *see also id.*, 51 (describing purported benefits of “allow[ing] more cable to be wound and unwound”). However, simply adding helical journals would not have this result. Rather, this outcome would require additional changes to the crossbow, *e.g.*, increasing the distance the power cables must travel when the crossbow is drawn.

Otherwise, simply replacing non-helical journals with helical journals would do nothing but cause the power cables to be displaced towards or from the axis of rotation without increasing the *amount* of rotation and, by extension, the power stroke. Because Petitioner fails to address this, its motivation to combine arguments must fail. *See Samsung*, Paper 11 at 13 (finding inadequate motivation to combine where petition failed to explain how proposed modifications would achieve purportedly motivating result). At least Grounds 7-8 should be rejected for these additional reasons.

3. Petitioner fails to establish motivation to combine Kempf '871 with Norkus, Park, or Stanziale '302 (Grounds 9-11)

Much like its arguments for combining Darlington with Park and Norkus, Petitioner's argument in Grounds 9-11 presses that Kempf '871 teaches "the desirability of increasing a crossbow's draw length or power stroke, which increases its potential power and thus speed" and that the cited secondary references—Norkus (Ground 9), Park (Ground 10), and Stanziale '302 (Ground 11)—have similar teachings, motivating a POSA to combine Kempf '871 with each of these references. Petition, 55-58. As discussed, teachings such as "increased power stroke" in a crossbow are neither unique nor relegated to the references identified by Petitioner. *See* §V(B)(2)(b). Any functional crossbow-related art would have this general motivation.

Neither Petitioner nor its expert—whose declaration simply repeats Petitioner's arguments *verbatim* (compare Petition, 55-58 with EX1016, ¶¶227, 232, 238-240)—explain why a POSA would be motivated to combine Kempf '871 specifically with any of the secondary references. Such cursory arguments, supported only by expert “testimony” that is entitled to virtually no weight, should be rejected. *Daifuku Co., v. Murata Machinery, Ltd.*, IPR2015-01541, Paper 11, 21 (PTAB Jan. 20, 2016) (citing *ActiveVideo Networks, Inc. v. Verizon Commc'ns, Inc.*, 694 F.3d 1312, 1327 (Fed. Cir. 2012)); *see also Samsung*, Paper 11 at 12-13. And as with the proposed combinations of Darlington and Park or Norkus, Petitioner fails to explain how the proposed combination would achieve the desired result. §V(B)(2)(b). Petitioner's professed motivation to combine and the corresponding Grounds 9-11, should be rejected.

4. Petitioner fails to establish motivation to combine Islas with Darlington and Park (Ground 12)

a. Petitioner fails to explain why a POSA would combine art that teaches away from the proposed combination

Petitioner fails to demonstrate that a POSA would have been motivated to ignore Darlington's teaching away from power cables that are “deflected” or “displaced” when the crossbow is drawn to combine it with Park's helical journals. *See* §V(B)(2)(a). These deficiencies carry through to Ground 12, which argues in

favor of combining Islas with both Darlington and Park. As such, Ground 12 should be rejected.

Islas and Darlington teach away from the claimed invention. §V(A)(6). As with Darlington's separate teaching away, however, Petitioner fails to acknowledge this at all. *See* Petition, 60-61. As with Darlington, this is grounds for declining to institute as to Ground 12. *See* §V(B)(2)(a).

b. Petitioner's stated motivation to combine Islas with Darlington and Park is otherwise deficient

Petitioner's cursory argument for combining Islas with Darlington and Park cannot overcome these significant problems. Much as with the Darlington-Park and Darlington-Norkus combinations, Petitioner's argument in Ground 12 is that both Islas and Darlington teach "the desirability of increasing crossbow speeds..., and thus a POSA would be motivated to modify Islas's crossbow to implement the reverse-draw configuration of Darlington to increase the power stroke and resulting speed." Petition, 60. As discussed, teachings such as "more energy storage" or "increased power stroke" in a crossbow are neither unique nor constrained to the laundry list of references Petitioner identifies. Rather, any functional crossbow-related art would have this generic motivation. Such cursory arguments should be rejected.

Neither Petitioner nor its expert—who simply repeats Petitioner's arguments *verbatim* (compare Petition, 60 with EX1016, ¶250)—identify any specific changes a POSA would make to implement Darlington's reverse-draw configurations in Islas. Rather, Petitioner simply pronounces “the simplicity of making such a modification,” (Petition, 60), without acknowledging the fundamental structural differences between Islas and Darlington that make this combination anything but simple. Such a superficial argument, supported only by conclusory expert “testimony” entitled to virtually no weight, cannot establish a motivation to combine Islas with Darlington, particularly where Petitioner fails to address operability. *Daifuku*, Paper 11 at 21 (citing *ActiveVideo*, 694 F.3d at 1327); *see also Samsung*, Paper 11, 12-13. Moreover, here again, Petitioner fails to explain how the proposed combination would achieve the desired result. *See* §V(B)(2)(b).

C. Grounds 3-12 Lack the Requisite Specificity

Petitioner's arguments in at least Grounds 3-12 should be rejected for failing to apply any of the references to Claim 1 on a limitation-by-limitation basis. Petitioner must explain with particularity how the prior art allegedly renders the challenged claim unpatentable. 35 U.S.C. §312(a)(3). Under the Board's rules, the particularity requirement requires Petitioner to “specify where each element of the claim is found in the prior art patents or printed publications relied upon.” 37 C.F.R. §42.104(b)(4). That is, the petition must provide “an understandable explanation of

the element-by-element specifics of the unpatentability challenges,” mapping specific elements of the claims to the particular prior art disclosures that purportedly teach them. *MModal LLC v. Nuance Commc'ns, Inc.*, 846 F. App'x 900, 906 (Fed. Cir. 2021); *see also SFC Co. v. LG Chem, Ltd.*, IPR2020-00182, Paper 16, 24 (PTAB June 2, 2020) (generally pointing to prior art “without expressly mapping the required elements of the device claims to any particular disclosures...is not sufficient to support Petitioner's burden”). Petitioner failed to meet its burden.

The Board has denied institution when petitions lack particularity or present deficient or conclusory analysis, which is the situation here. *Adaptics Ltd. v. Perfect Co.*, IPR2018-01596, Paper 20, 17-20 (PTAB Mar. 6, 2019) (informative). For example, a petition fails to provide the requisite particularity and may be denied where it fails to map specific claim elements to specific teachings in the cited prior art or fails to identify the portions of the challenged claim being discussed. *See Webinar.net, Inc. v. ON24, Inc.*, IPR2022-00826, Paper 10, 16-17 (PTAB Sept. 23, 2022) (“We are not tasked with divining where the prior art might possibly disclose the claim element at issue. The Petition fails to specify where the “exchange of data” element is found in Deutscher and fails to meet the requirements of our rule.”); *Lenovo (U.S.) Inc. v. LiTL LLC*, IPR2021-00800, Paper 7, 10-11 (PTAB Nov. 2, 2021) (failure to use shorthand abbreviations for claim limitations accurately resulted in lack of specificity); *see also Juniper Networks, Inc. v. Core Optical*

Techs., LLC, IPR2020-01664, Paper 9, 18-19 (PTAB Apr. 16, 2021) (no likelihood of success where “Petitioner, in articulating [its] theories, makes several assertions without a clear mapping to the actual language of the limitation”). Likewise, where the Petition fails even to cite or include the specific claims or limitations being discussed, it fails to provide the requisite particularity. *HTC Corp. v. Cellular Comm’cns Equip., LLP*, IPR2016-01504, Paper 7, 8-9 (PTAB Feb. 1, 2017).

The Board should reject Grounds 3-12 (relying on Stanziale ’062, Stanziale ’771, Darlington, Kempf ’871, Islas, Norkus, and Park) for failure to comply with the particularity requirement. Where “[n]o claim language is cited” in a relevant section of the Petition, that section “does not ‘specify where each element of the claim is found in the prior art patents or printed publications relied upon’” as required by 37 C.F.R. §42.104(b)(4). *HTC*, Paper 7 at 9. Likewise, where Petitioner “makes several assertions without a clear mapping to the actual language of the limitation,” it fails to show likelihood of success. *Juniper*, Paper 9 at 18-19. Here, Petitioner fails to map **any** specific elements to particular disclosures in Stanziale ’062, Stanziale ’771, Darlington, Kempf ’871, Islas, Norkus, and Park. Indeed,

Petitioner never cites to Claim 1 of the '015 Patent in Grounds 3-12 at all.² *See* Petition, 37-62. Rather, Petitioner appears to paraphrase and conflate aspects of the Challenged Claim without identifying the actual claim language or even its own short-hand designations. *Id.*, 37-62, 14-15.

At least Grounds 3-12 do not comply with 37 C.F.R. §42.104(b)(4). The Petition is therefore deficient and should be denied in its entirety. *Adaptics*, Paper 20 at 17-18 (noting that “the Board may consider whether a lack of particularity as to one or more of the asserted grounds justifies denial of an entire petition” and denying institution where three of five grounds lacked particularity).

VI. THE BOARD SHOULD DISCRETIONARILY DENY INSTITUTION UNDER 35 U.S.C. §314(a)

The Board should exercise its broad discretion and deny institution under 35 U.S.C. §314(a). *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2140 (2016); *Harmonic*, 815 F.3d at 1367 (under §314(a), “the PTO is permitted, but never compelled, to institute an IPR proceeding”); *see also* 37 C.F.R. §42.4(a) (“The Board institutes the trial on behalf of the Director.”). The Board may discretionarily deny

² Petitioner had ample space to specifically identify the claim limitations for the single Challenged Claim. Petitioner certifies that the Petition only spans 11,407 words, well below the 14,000 words permitted by 37 C.F.R. §42.24(a)(1)(i).

institution for many reasons, including “events in other proceedings related to the same patent,” such as district court litigation. Consolidated Trial Practice Guide, November 2019, 58. When considering discretionary denial in view of parallel district court proceedings, the Board weighs the following factors:

1. whether the court granted a stay or evidence exists that one may be granted if a proceeding is instituted;
2. proximity of the court's trial date to the Board's projected statutory deadline for a final written decision;
3. investment in the parallel proceeding by the court and the parties;
4. overlap between issues raised in the petition and in the parallel proceeding;
5. whether the petitioner and the defendant in the parallel proceeding are the same party; and
6. other circumstances that impact the Board's exercise of discretion, including the merits.

Apple Inc. v. Fintiv, Inc., IPR2020-00019, Paper 11, 5-6 (PTAB Mar. 20, 2020) (precedential) (“*Fintiv*”). Here, the *Fintiv* factors demonstrate that efficiency and the integrity of the IPR process are best served by denying institution.

1. Factor 1—Likelihood of a Stay

Fintiv factor one favors discretionary denial. Petitioner's carefully worded argument for this factor is to point to a now moot undecided Petitioner motion to stay the Nevada Litigation's *claim construction proceedings pending a ruling on Petitioner's January 18, 2022 motion to transfer* from the District where Petitioner

is incorporated to the United States District Court for the Northern District of Ohio. Petition, 5. This argument fails for at least two reasons.

First, Petitioner never actually sought to stay either the Nevada Litigation or the Ohio Litigation pending resolution of its IPR petition. The cited motion to stay has nothing to do with any IPR. The opposed motion to stay *claim construction* was filed on September 9, 2022, months before the Petition was filed, and focuses solely on maneuvering associated with Petitioner's since-resolved motion to transfer. EX1021. Notwithstanding Petitioner's motion, per the express directive of the Court, the Nevada Litigation proceeded under the Scheduling Order, including completion of all claim construction briefing. EX2003. On these facts, Petitioner's one sentence directed to *Fintiv* factor one falls far short of establishing that its unrelated (and moot) motion to stay claim construction has any bearing on the *Fintiv* analysis.

Second, even if Petitioner were to seek a stay pending IPR, the Court would almost certainly deny such a request under the three factor test used in the Northern District of Ohio. Specifically, in the Sixth Circuit, the Court must consider: "[1] the stage of litigation; [2] whether a stay would simplify the issues of the case; and, [3] whether a stay would unduly prejudice the non-moving party." *Lincoln Elec. Co. v. Seabery Soluciones SL*, No. 1:15-CV-1575, 2016 U.S. Dist. LEXIS 184317, at *6 (N.D. Ohio June 17, 2016). Here, these factors weigh against a stay.

Regarding undue prejudice, “[c]ourts are generally reluctant to stay proceedings where the parties are direct competitors” due to the increased risk of undue prejudice. *VPR Brands, LP v. MONQ, LLC*, 599 F. Supp. 3d 714, 718 (M.D. Tenn. 2022); *see also Lincoln Elec.*, 2016 U.S. Dist. LEXIS 184317 at *7 (“[G]iven the fact that Lincoln and Seabery are direct competitors and the fact that Seabery’s alleged infringement of the patents-in-suit is ongoing, the alleged harm and damages would be exacerbated by granting a stay and, thereby, unduly prejudice Lincoln.”). Here, Petitioner and Patent Owner are direct competitors, and their respective crossbows compete in the marketplace. EX2007, ¶2. Indeed, Patent Owner seeks its lost profits from Petitioner’s sale of infringing crossbows. EX2008, 6. This factor weighs against a stay.

The simplification of issues factor also weighs heavily against a stay. “[W]here the scope of the issues to be resolved during litigation substantially exceeds the scope of the issues that can be resolved during the reexamination proceedings, this factor disfavors a stay.” *Everlight Elecs. Co. v. Nichia Corp.*, C.A. No. 12-cv-11758, 2013 U.S. Dist. LEXIS 61666, at *25 (E.D. Mich. Apr. 30, 2013) (quotes and citation omitted). The Petition challenges a single claim of the ’015 Patent. Petition, 17-19. In the Ohio Litigation, however, Patent Owner is asserting over 100 claims across 6 patents, including 14 additional claims from the ’015 Patent. EX2009, 2; Petition, 6. Significantly, where an IPR petition is directed to

only a subset of the asserted claims, courts invariably find a stay would not simplify the issues in any meaningful way, meaning this factor weighs against a stay. *E.g.*, *Malibu Boats, LLC v. Nautique Boat Co.*, No. 3:13-CV-656-TAV-HBG, 2014 U.S. Dist. LEXIS 107822, at *13-14 (E.D. Tenn. Aug. 6, 2014); *P&G Co. v. Team Techs., Inc.*, No. 1:12-cv-552, 2014 U.S. Dist. LEXIS 17112, at *11-12 (S.D. Ohio Feb. 11, 2014). The reasons for this are simple. “Part of the quid pro quo of any stay pending [IPR] is the promise of simplification....Where the IPR will address some, but not all, claims asserted in the district court, relative to the quo the value of the quid shrinks considerably.” *Adaptix, Inc. v. HTC Corp.*, No. 5:14-cv-02359-PSG, 2015 U.S. Dist. LEXIS 103503, at *13 (N.D. Cal. Aug. 5, 2015) (applying same factors). Here, where Petitioner challenges *less than 1%* of the claims asserted against it, that value is practically nil.

Finally, the stage of litigation also weighs against a stay. Contrary to Petitioner's arguments, the parallel litigation is well underway and **not** in its infancy. Patent Owner filed the Complaint nearly sixteen months ago, and since then, the parties have expended significant time and resources in litigating the dispute. Extensive written and document discovery has occurred, and Patent Owner has

noticed eight depositions, five of which have already taken place.³ Claim construction briefing is also complete. There is no reason to think that the Ohio Court will allow this work to go to waste. Rather, the Ohio Litigation is far more likely to pick up where the Nevada Litigation left off and proceed just as, if not more, swiftly. The parties' investment in the litigation to-date makes a stay untenable. *P&G Co.*, 2014 U.S. Dist. LEXIS 17112 at *8-9 (collecting cases); *Universal Elecs., Inc. v. Universal Remote Control, Inc.*, 943 F. Supp. 2d 1028, 1031-32 (C.D. Cal. 2013).

The district court is highly unlikely to stay the Ohio Litigation pending IPR. The first *Fintiv* factor therefore supports denial.

2. Factor 2—Proximity of Trial Date to Deadline for Final Written Decision

Currently, no trial date has been set in the Ohio Litigation. However, the most recent statistics for the Northern District of Ohio make clear that the Ohio Litigation will likely proceed to trial before any Final Written Decision can issue. Despite

³ Petitioner's decision not to serve discovery requests or deposition notices before filing the Petition (*see* Petition, 6) is irrelevant. The pace of litigation is unaffected by Petitioner's unilateral decision to delay actively taking discovery.

Petitioner's flawed arguments to the contrary,⁴ the median time to trial since 2017 in the Northern District of Ohio is, on average, only 22.75 months. EX2010; *see also* EX2011, 3 (identifying median time to trial during 2008-2023 as 19-20 months). Here, Patent Owner's Complaint was filed on December 17, 2021 (EX2007), which would result in a November 2023 trial. But with Petitioner's Preliminary Response due (and filed) on April 11, 2023, the Board has until July 11, 2023 to render an institution decision and, if trial is instituted then, until July 11, 2024 to enter a Final Written Decision. The Final Written Decision would not issue until approximately ***eight months after the expected trial date***. Thus, this factor weighs heavily in favor of denial. *See Ericsson Inc. v. Collision Commc'ns, Inc.*, IPR2022-01233, Paper 12, 13 (PTAB Jan. 19, 2023) (discretionarily denying institution where Final Written

⁴ Petitioner's time to trial arguments rely on outlier statistics that should be disregarded. Specifically, Petitioner appears to rely solely on data for the twelve month period ending June 30, 2022, without acknowledging that cases in the Northern District of Ohio typically proceed to trial far faster than reported in that period. Petitioner's own Ex. 1017 shows significantly shorter median times to trial in preceding periods and an average median time to trial of only 25.725 months even with the June 2022 data. EX1017, 42. This discrepancy is reaffirmed by more recent statistics, where even the highest median time to trial is only 24.4 months. EX2010.

Decision would not issue until at least 4 months after time for trial per median time data).

3. Factor 3—Investment in Parallel Proceeding

Fintiv factor three weighs in favor of denial. Petitioner's assertion that "the litigation is in its infancy" is unsupported. *See* Petition, 6. As discussed, the Nevada Litigation was pending for more than a year, and the parties have expended significant time and resources in litigating the claims, including through substantial fact discovery, the exchange of infringement and invalidity contentions, and claim construction briefing. Such discovery activities, coupled with the advanced state of claim construction, demonstrate that the parties and the district court(s) have made significant investments that weigh in favor of denying the Petition. *Immersion Sys. LLC v. Midas Green Techs., LLC*, IPR2021-01176, Paper 16, 13-14 (PTAB Jan. 6, 2022). Moreover, now that the Nevada Court has ruled on Petitioner's motion to transfer, there is nothing to prevent the Ohio Court from ruling on the claim construction issues, which are fully briefed. The issuance of such an order would cause this factor to weigh even further in favor of denial. *See Fintiv*, Paper 11 at 10 ("[D]istrict court claim construction orders may indicate that the court and parties have invested sufficient time in the parallel proceeding to favor denial.").

Petitioner did not act expeditiously to file the Petition, which weighs in favor of denial. *Google LLC v. Ecofactor, Inc.*, IPR2021-00488, Paper 12, 13-15 (PTAB

Aug. 11, 2021); *Immersion*, Paper 16 at 14-15. Petitioner has known that Patent Owner is asserting the Challenged Claim since the outset of the Nevada Litigation. *See* EX2007, ¶¶42-43. Petitioner has also had the benefit of Patent Owner's preliminary infringement contentions since May 23, 2022. EX2012. Although “it is often reasonable for a petitioner to wait to file its petition until it learns which claims are being asserted against it in the parallel proceeding[,]’...a petitioner should act expeditiously once the patent owner has identified the claims being asserted against it so that the petitioner can file a petition challenging all asserted claims—if it chooses to do so.” *Google*, Paper 12 at 13 (quoting *Fintiv*, Paper 11 at 11). Here Petitioner waited almost the entire year after service of the district court Complaint before filing the Petition (and almost 7 months after receiving Patent Owner's infringement contentions), even though it was aware of the sole Challenged Claim from the outset.

4. Factor 4—Overlap between Issues in Petition and in Parallel Proceeding

The Petition's sole challenged claim is part of the parallel litigation, and Petitioner has raised many of the same prior art references in that case as it has here.⁵ Thus, *Fintiv* factor four weighs in favor of denial. *Fintiv*, Paper 11 at 12.

Petitioner's argument that factor four weighs against discretionary denial because the Petition challenges only one of the 100+ claims originally asserted in the Nevada Litigation is absurd. The *Fintiv* factors focus on "whether efficiency and integrity of the system are best served by denying or instituting review." *Id.* at 6. Thus, the key issue in factor four is the extent to which matters raised in the Petition are encompassed by the parallel proceedings, not the reverse. Petitioner readily admits that the single claim challenged in the Petition is also at issue in the parallel litigation and that the Petition therefore overlaps with the parallel litigation. Petition, 6. Nonetheless, Petitioner argues that this actually weighs ***against*** denial because the parallel litigation also involves other claims that Petitioner has not challenged via IPR. *Id.* Petitioner is wrong. Where a Petition only challenges a subset of the claims

⁵ For example, Petitioner identified Stanziale '302, Kempf '871, and Islas in its initial invalidity contentions across multiple claims, not just the Challenged Claim. EX2013, 17-18.

asserted in parallel litigation, this weighs *in favor of denial*, even if the litigation also involves other issues beyond those in the Petition. *See Kranos Corp. v. Apalone, Inc.*, IPR2020-00501, Paper 13, 12-13 (PTAB July 16, 2020) (“[T]he asserted grounds in the Petition are a subset of the issues in the related litigation such that issues in the related litigation completely overlap the asserted grounds in the Petition. This factor therefore weighs in favor of exercising discretion to deny institution.”).

Additionally, the “stipulation” Petitioner offers does not short-circuit the *Fintiv* analysis. While Petitioner’s stipulation may facially resemble a *Sotera*-type stipulation, it does not accomplish the necessary goals because it is expressly limited only to the Challenged Claim (Petition, 6-7) and does not account for the significant risk of overlap between the Challenged Claim and the unchallenged claims asserted in the Ohio Litigation.

In *Sotera*, the petitioner sought review of *all* claims of the asserted patent and then broadly stipulated that it would, without limitation, not pursue in the district court “the specific grounds...[in] the instituted *inter parties* [sic] review petition, *or on any other ground...that was raised or could have been reasonably raised in an IPR (i.e., any ground that could be raised under (i.e., any ground that could be raised under §§ 102 or 103 on the basis of prior art patents or printed publications).*” *Sotera Wireless, Inc. v. Masimo Corp.*, IPR2020-01019, Paper 12, 18-19 (PTAB

Dec. 1, 2020) (emphasis and alterations by Board). The *Sotera* stipulation reasonably extended to **every** asserted claim and removed **all** anticipation or obviousness grounds based on patents or printed publications from consideration in the district court. This “mitigate[d] any concerns of duplicative efforts between the district court and the Board, as well as concerns of potentially conflicting decisions.” *Id.* at 19.

Here, unlike in *Sotera*, Petitioner narrowly limits its stipulation to “the same grounds...or any grounds that could have reasonably been raised **as to claim 1**” alone. Petition, 6-7 (emphasis added). In doing so, Petitioner carves out the 19 other claims of the '015 Patent, 14 of which are asserted in the Ohio Litigation, and all of the claims that recite the purportedly key limitation—a “helical” journal—that Petitioner stresses in arguing that the Petition presents “a textbook ‘compelling unpatentability challenge.’” EX1001, Claims 1-20; Petition, 7. Thus, Petitioner has attempted to reserve the right to assert **the same invalidity grounds** presented in the Petition against claims with **the same generalized elements** before the district court. Petitioner’s “stipulation” does not ensure that, “if an IPR or PGR is instituted, the grounds the PTAB resolves will differ from those present in the parallel district court litigation,” as contemplated by relevant Guidance. USPTO Memorandum, Interim Procedure for Discretionary Denials in AIA Post-Grant Proceedings with Parallel District Court Litigation, 7 (June 21, 2022) (“*Fintiv* Memo”). Rather, it is an empty promise that does nothing to limit risk of duplicative efforts in resolving anticipation

or obviousness arguments. Falling short of the *Sotera* standard, it cannot obviate the *Fintiv* analysis. See *Ericsson Inc. v. Godo Kaisha IP Bridge 1*, IPR2022-00726, Paper 11, 12-13 (PTAB Nov. 2, 2022) (where stipulation is narrower than *Sotera*, “the *Fintiv* Memo does not suggest that we should refrain from denying the Petition on the basis of Petitioner’s narrower stipulation”).

5. Factor 5—Whether Petitioner and Defendant in Parallel Proceeding Are the Same Party

Fintiv factor five weighs in favor of denial because Petitioner admits, as it must, that it is the same party as the defendant in the parallel litigation. Petition, 7.

6. Factor 6—Other Circumstances Impacting Board’s Exercise of Discretion

Fintiv factor six considers the merits of the petitioner’s challenge, including whether “the information presented at the institution stage presents a compelling unpatentability challenge.” *Fintiv* Memo, 4-5. Merely meeting the statutory likelihood of success threshold for institution is not enough. *Id.*, 4. Indeed, as the Director has explained, “[t]he patent system and the public benefit from instituting challenges where there is a showing of unpatentability by compelling merits, but it is only a finding under this higher standard that would compel the Board to review claims for the public benefit when other considerations favor discretionary denial.” *CommScope Techs. LLC v. Dali Wireless, Inc.*, IPR2022-01242, Paper 23, 4-5 (PTAB Feb. 27, 2023) (precedential).

For factor six, Petitioner does no more than baldly assert that the Board should not discretionarily deny institution because Petitioner believes the Petition is meritorious. Petition, 7. This self-serving, unsupported argument should be rejected. As discussed above, the Petition is plainly deficient even under the lower statutory standard. Thus, this factor favors denial, particularly when the other *Fintiv* factors also weigh in favor of denial.

VII. CONCLUSION AND RELIEF REQUESTED

The Board should deny institution as to the Challenged Claim.

Dated: April 11, 2023

Respectfully submitted,

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CERTIFICATE OF COMPLAINT

This Preliminary Patent Owner Response complies with the type-volume limitations required by 27 C.F.R. §42.24. The word count in this paper totals 13,996 words. Patent Owner has relied upon the word count feature of Microsoft Word.

Dated: April 11, 2023

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IPR2023-00407
U.S. Patent No. 9,354,015

Patent Owner's Preliminary Response

CERTIFICATE OF SERVICE

The undersigned hereby certifies that a copy of the foregoing **Patent Owner's Preliminary Response Pursuant to 35 U.S.C. §313 and 37 C.F.R. §42.107(a)** was served on April 11, 2023, by email to Petitioner's counsel of record:

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