

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

GODBERSEN-SMITH CONSTRUCTION COMPANY
d/b/a GOMACO CORPORATION,
Petitioner,

v.

GUNTERT & ZIMMERMAN CONST. DIV., INC.,
Patent Owner.

Case PGR2024-00026
U.S. Patent No. 11,772,723

PATENT OWNER'S SUR-REPLY

[REDACTED VERSION]

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I. INTRODUCTION

The Board should affirm the patentability of the Challenged Claims because the '723 Patent is ineligible for post grant review (PGR) since its claims and the claims of the '571 Patent it references in the priority chain find written description support in the originally filed pre-AIA application. *See* AIA § 3(n)(1). The Board should also affirm patentability for at least the reasons that follow.

First, the Challenged Claims are patentable under 35 U.S.C. § 112 because the specification provides written description support for an “angular position transducer disposed on the modular frame or swing leg.” Angular position transducers measure the angle between two components, and a POSITA understands that when such a transducer is located at a “pivot connection” between two elements, the choice of which element the transducer is mounted on is ultimately a design choice. Accordingly, the specification discloses locating an angular position transducer at the pivot connection between the modular frame and swing leg, the transducer “disposed on the modular frame or the swing leg,” as claimed.

Second, the Challenged Claims are directed to and cover the on-the-fly embodiments, *i.e.* the coordinated adjustment of the swing leg and crawler track while moving and under load (on-the-fly adjustment), which is not disclosed by the art of record alone or in combination. CIII and Rio, taken alone or in combination, are incapable of on-the-fly adjustment because its swing legs **are locked in place**

while the paver is in motion, and Petitioner's (GOMACO's) Reply argument that it would have been obvious to modify the CIII-Rio paver to reach such adjustments are the product of hindsight and fail to show that the paver would (or even could) work as intended.

Finally, the objective indicia of nonobviousness confirm patentability because there was a long-felt need for on-the-fly paver adjustments with industry skepticism of G&Z's claimed on-the-fly solution that was followed by praise, commercial success, and copying.

II. THE '723 PATENT IS A PRE-AIA PATENT AND THEREFORE INELIGIBLE FOR PGR

A. The '723 Patent is Ineligible for PGR Under AIA § 3(n)(1)(A)

The '723 Patent is ineligible for PGR because each claim of the '723 Patent has an effective filing date predating March 16, 2013. AIA § 3(n)(1)(A). The '723 Patent is entitled to an effective filing date of no later than March 22, 2011, because the '723 Patent, and each of the applications in its priority chain, provide written description for an "angular position transducer... disposed on the modular frame or the swing leg to measure an angular position between the swing leg and the modular frame." See Section III, *infra*.

Even if there was a written description defect (there is not), new matter added during prosecution cannot transform a pre-AIA patent into AIA patent. Prelim.

Resp. (“POR”), 10-12 (citing MPEP § 2159.02). Although Petitioner cites *Flex Logix* (Reply, 1-2) for the proposition that MPEP § 2159.02 only applies to pending applications, not issued patents, that panel decision is not precedential, and it is inconsistent with 35 U.S.C. § 100(i)(1). This statute, which defines the term “effective filing date” only allows for two possibilities for the effective filing date of a patent: (a) the actual **filing date** of the patent or (b) the **filing date** of the earliest application to which the patent is entitled to claim priority. 35 U.S.C. § 100(i)(1).

Accordingly, while amendments introduced **after** an application’s filing date may be invalid under 35 U.S.C. § 112 for lack of written description, such amendments cannot, for example, change the effective filing date of the patent to the date that the amendment was introduced, by function of the statute. This is why MPEP § 2159.02 focuses on whether the patent application “**as originally filed**, discloses and claims only subject matter also disclosed in an earlier application (filed before March 16, 2013) to which the later filed application is entitled to priority or benefit.” MPEP § 2159.02¹. Because the allegedly offending amendment was not included in the application “as originally filed,” it cannot have any effect on the effective filing date, or the AIA status, of the ’723 Patent.

¹ Unless otherwise noted, all emphasis was added.

B. There is No Basis for PGR Eligibility Under AIA § 3(n)(1)(B)

Claim 8 of the '571 Patent also has an effective filing date predating March 16, 2013, because (1) collateral estoppel bars Petitioner's attempt to relitigate this issue and (2) the claim has written description support in the pre-AIA applications, and as determined in IPR2021-00135 (the "-00135 IPR"). Therefore, the '723 Patent does not reference under § 120 a patent that contains a claim with an effective filing date after March 2013 (AIA § 3(n)(1)(B)).

The dispute is whether collateral estoppel applies to the -00135 IPR or the -00136 IPR because those decisions are irreconcilable, and Petitioner has not actually raised the issue of lack of written description for **any** limitation of Claim 8 in this case. Pet., 119. Petitioner does not dispute the fact that it failed to raise a priority date challenge to Claim 8 of the '571 Patent. Reply, 1-2. Instead, as it did in the Petition, it asks the Board to adopt the determination from the -00136 IPR **without evaluating the merits of the argument**, which is to say, it asks the Board to apply collateral estoppel against G&Z. *Id.* However, for the reasons established in the POR, which Petitioner also does not dispute, collateral estoppel cannot possibly attach to the -00136 decision because this issue was not "actually litigated" in that case. POR, 8-10. On the other hand, collateral estoppel **must** attach to the decision in the -00135 IPR because the issue was actually litigated in that case, and decisions

denying *inter partes* reviews are final decisions because they are subject to at review on rehearing and mandamus. *Id.*, 4-8.

Because Petitioner has not argued here that Claim 8 of the '571 is not entitled to claim priority to its ancestral applications, the Board should not reach that issue in this case. Petitioner was the master of its own petition and could have substantiated its argument that Claim 8 of the '571 Patent is an AIA patent because it is not entitled to a priority date prior to March 16, 2013. However, the Petition did not file the relevant priority documents with the Board, and it did not inform the Board that those documents were determined to contain written description of the claimed invention. Nor, for its part, did the Board articulate what limitations are found to be lacking in the priority documents or the basis for such a finding. Paper 11 at 12.

To the extent that the Board intends to reach the priority date question for Claim 8 of the '571 Patent, it should conclude that this claim is fully supported in the pre-AIA ancestral Guntert reference (U.S. Pub. 2011/0236129), as it did in the -00135 IPR. As established in that case, the priority documents **do** provide written description for the limitations of Claim 8 contested in that case, and Petitioner has never disputed those arguments. For example, the Guntert reference discloses laterally telescoping legs. Ex. 2004, 29-30 ("The bolsters that connect the jacking column with the crawlers of the paver are connected to the platform with the

telescopic extension arms or support beams which can be retracted into the center module....”). The Guntert reference also discloses the linear position transducer of Claim 8. *Id.* at 31 (establishing that the Guntert reference discloses “an on-board computer processor that receives outputs from transducers in order to keep all the crawler tracks’ orientations synchronized” and that such a transducer is required “between the forward bolster and laterally telescoping leg” for this purpose).

For the foregoing reasons, collateral estoppel bars Petitioner’s attempt to relitigate the pre-AIA status based on the Board’s decision in the -00135 IPR where the issue was fully litigated, and collateral estoppel does not attach to the Board’s decision in the -00136 IPR where the issue was not actually litigated. Petitioner has not squarely raised the priority date issue in this case, and the record establishes that Claim 8 of the ’571 Patent is entitled to claim priority to the Guntert reference because it discloses the only limitations challenged in the -00135 and -00136 IPRs.

III. GROUND 3: THE ’723 PATENT PROVIDES WRITTEN DESCRIPTION SUPPORT FOR THE “ANGULAR POSITION TRANSDUCER DISPOSED ON” TERM

The ’723 Patent’s disclosure of an “angular position transducer[] at the pivot connection for the swing leg at the hinge bracket” provides written description for “an angular position transducer disposed on the modular frame or the swing leg to measure an angular position between the swing leg and the modular frame.” POR, 39-41.

G&Z's argument does not depend on extending the disclosure of the '723 Patent to obvious but undisclosed variants, as Petitioner suggests (Reply, 4-6), it depends on the well-known fact that anything that is installed at a "**pivot connection**" between two components must be "disposed on" one of those components or the other. *See id.*, 5; POR, 40 (citing Ex. 2017, 5; Singhose Tr. II (Ex. 2009), 11:6-12:18; Ex. 2018).

With this understanding, a POSITA would know from the description of an "angular position transducer[] at the pivot connection" between the frame and the swing leg that the transducer is disposed on either the frame or swing leg. '723 Patent, 6:22-23. Petitioner's expert confirmed this understanding when addressing Rio's "pivot" connection, testifying that a "POSITA would have known" where to dispose an angular position transducer depending on the connection design. *See Ex. 1002*, ¶¶114-115; *Supercell Oy v. Gree, Inc.*, PGR2018-00050, Paper 30 at 14-15 (P.T.A.B. Sept. 26, 2019) (finding written description support where expert acknowledges that skilled artisans "would have known from that description how to determine predetermined number of rounds using a terminal attribute table").

Additionally, because the angular position transducer is "disposed on" either the frame or swing leg through the intervening hinge bracket's "**pivot connection**," a construction covering indirect contact further confirms written description support. *X2Y Attenuators, LLC v. Int'l Trade Comm'n*, 757 F.3d 1358, 1365 (Fed. Cir. 2014)

("[I]t is well settled that a written description analysis depends on a proper claim construction.") (Reyna, J., concurring); '723 Patent, 5:67-6:2, 6:16-23. Petitioner does not dispute that the term "disposed on" encompasses indirect contact, as it states that it "does not depend on any particular construction." See Reply, 6. Thus, this limitation is satisfied by a transducer in indirect contact with either the frame or the swing leg via the hinge bracket's pivot connection.

IV. GROUND 1: THE CHALLENGED CLAIMS ARE PATENTABLE OVER CIII IN VIEW OF RIO AND FILES

A. The Prior Art Does Not Disclose or Suggest On-the-Fly Steering of a Slipform Paver Under Load

CIII and Rio, alone or in combination, do not disclose the claimed on-the-fly steering because the swing legs in those references **are prevented** from moving while under load. POR, 28-37.

1. Independent Claim 1 is Directed to the On-the-Fly Steering Embodiments

The Challenged Claims are directed to the on-the-fly steering embodiments of the '723 Patent, which concern the coordinated adjustment of the swing leg/track while moving and under load. '723 Patent, 16:14-16 ("[T]he present disclosure provides for machines that can adjust leg and crawler track location while in operation ("**on the fly**")"; POR, 28-29, 34. This on-the-fly adjustment is captured through the recitation of "a slew gear drive" that "steer[s] the **crawler track under load without lifting the crawler track**," a "**swing leg**" that "relocate[s] the jacking

column with the and crawler track **while moving and under load**,” and the use of a “**processor[’s]**” feedback loop calculations during operation. ’723 Patent, Claims 1, 6, and 7.

Claim 7’s processor’s feedback loop calculations provide enlightenment on the coordinated adjustment while the swing leg/track are moving and under load. ’723 Patent, Claim 1. In this feedback loop arrangement, the movement of the swing leg while under load (*i.e.* the “change of the first angular orientation”) prompts the processor to perform calculations that cause the slew gear drive to steer (move) the crawler track “[when] under load without lifting the crawler track.” ’723 Patent, Claims 1, 7; Ex. 1036, 39 (“[T]he feedback loop allows for changing the angular orientation of a crawler track without stopping operations (on-the-fly steering).”). In reply, Petitioner reads Claim 7 to cover adjustments when the swing leg/track are lifted off the ground (non-on-the-fly embodiments), which is broader than Independent Claim 1, an outcome not permitted by the law. Reply, 13; *Alcon Rsch., Ltd., v. Apotex Inc.*, 687 F.3d 1362, 1367 (Fed. Cir. 2012) (“It is axiomatic that a dependent claim cannot be broader than the claim from which it depends.”).

Claim 6 captures the movement of the swing leg while under load, which prompts the processor’s feedback loop calculations. ’723 Patent, Claim 6. While Petitioner contests Claim 6’s on-the-fly operations, it still attempts to rewrite the “swing leg configured to” language to allege that the crawler track is the driving

force when moving along the ground. Reply, 19 (alleging that the “swing leg relocates the jacking column in response to the **crawler track driving** along the ground”). However, the plain meaning of “swing leg configured to relocate the crawler track” requires that the swing leg itself be “designed . . . to accomplish the specified objective” of relocating the crawler track, not the crawler track alone. *Aspex Eyewear, Inc. v. Marchon Eyewear, Inc.*, 672 F.3d 1335, 1349 (Fed. Cir. 2012); '723 Patent, Claim 6.²

Although Petitioner asserts that the claims encompass embodiments that take place when the swing legs are locked, neither embodiment is the one that is claimed (i.e., in which the slew drive steers the crawler track under load). Reply, 12-13. These embodiments do not involve **steering** the crawler track because the term steering implies that the crawler tracks are rotating and the machine is moving: one does not “steer” a docked ship. And although Petitioner cites Dr. Bryden’s testimony (Reply, 12) for the proposition that “the entire paving machine need not be moving in the embodiment described above,” that is neither what Dr. Bryden

² On cross examination, Dr. Bryden testified that where the swing leg’s actuator is unpinned it is not driving the jacking column and crawler track. Ex. 1185, 60:17-70:14.

testified nor relevant because in FIGS. 8A and 8B, the crawler tracks are being rotated but not steered. Ex. 1184, 147:21-148:20 (testifying that the transport direction is not the paving direction).

For at least the foregoing reasons, the Challenged Claims are limited to the on-the-fly steering embodiments, *i.e.* the coordinated adjustments of the swing leg/track while moving and under load (on-the-fly adjustment).

2. The CIII-Rio Combination Does Not Reach the On-the-Fly Steering Embodiments

(a) *Petitioner's Argument that it Would Have Been Obvious to Modify CIII and Rio to Steer a Paver On-the-Fly is the Product of Hindsight*

The Petition's CIII-Rio combination is incapable of coordinated adjustments in the manner claimed because its swing legs are **locked in place while under load**. POR, 35, 37 (disclosing how the Petition's CIII-Rio paver is "incapable" of adjusting the swing leg/track while moving and under load); *id.*, 29, 32-34. Petitioner's rationale for modifying CIII's paver with Rio's locking mechanism is based on Rio's disclosure "automat[ing] the rotation of the swing leg." Pet., 38. However, this automatic rotation occurs **only** when there the machine is stopped, the swing leg is lifted off the ground, and the anti-swing device is disengaged. POR, 31-32; Rio, 7:62-8:27.

Petitioner's allegation (Reply, 20) that it would have been **obvious** to move the swing legs while under load in a way not suggested in the Petition is based on a hindsight desire to meet the claimed invention. *Medtronic, Inc. v. Teleflex Innovations S.a.r.l.*, 70 F.4th 1331, 1347 (Fed. Cir. 2023) ("The extensive need to modify Kontos' device in a way not suggested in the Petition supports [Patent Owner's] argument that the proposed modifications are based on hindsight desire to recreate the claimed invention."). Indeed, Petitioner relies on the **'723 Patent** for motivation to turn Rio's **anti-swing device** into an actuator that enabled steering of the swing leg under load. Reply, 20. "In other words, [Petitioner] simply retraced the path of the inventor with hindsight, discounted the number and complexity of the alternatives, and concluded that the invention . . . was obvious." *Ortho-McNeil Pharm. v. Mylan Labs., Inc.*, 520 F.3d 1358, 1364 (Fed. Cir. 2008).

Petitioner's reliance on the '723 Patent is also meritless because the '723 Patent distinguishes the claimed invention from embodiments that employ locking mechanisms to keep the crawler track oriented in the right direction. *Compare* '723 Patent, 6:47-51 *with id.* 6:51-54. Like the unclaimed locking mechanism embodiment, Rio's locking mechanism **only** allows swing leg movement when the leg is lifted off the ground. POR, 31-32 (citing Rio, 7:62-8:27 (disclosing that its "anti-swing device" is disengaged **after** the machine is stopped and the track lifted off the ground)).

(b) Petitioner's State-of-the-Art Evidence Does Not Inform a POSITA on How CIII's Paver as Modified Would Work

Petitioner's state-of-the-art evidence does not support the conclusion that the combined teachings of CIII and Rio would have led to the coordinated adjustment of the swing leg/track while moving and under load, as claimed. Reply, 15-17; POR, 36-37. Whether or not light-work vehicles like those disclosed in Littman and Skotnikov could simultaneously control a wheel and an element for connecting the wheel to a frame does not shed light on whether a POSITA would have redesigned the CIII paver, a far heavier machine with jacking-column-equipped swing legs, to forego its locking mechanism, especially when Rio's more moderately sized machine **also** required that the swing leg be locked while the machine was in motion. See Section, IV.A.2.a, *supra*.

The references relied on fail to disclose a swing leg assembly (inclusive of a swing leg, jacking column, and a crawler track), let alone the coordinated adjustment of a paver's swing leg and crawler track under load. Petitioner relies on Littman, but that reference does not disclose a swing leg assembly design, as Figure 2 confirms. Littman (Ex. 1007), Fig. 2; POR, 36-37. Petitioner also relies on Skotnikov, but Skotnikov discloses a "relatively light and delicate" machine, and "comparing this to a paving machine is like comparing my car to my grandchildren's wagon." Ex. 1185 at 38:13-16, 41:3-13. It also does not disclose a swing leg with

a jacking column, so the forces on the relevant components, including the frame, the leg, the crawler track, and the rotary actuators themselves are all different.

Accordingly, this state of the art evidence does not establish that it was known (or even obvious) to operate a paver with swing legs, jacking columns, and crawler tracks without the required locking mechanism.

B. The CIII-Rio Combinations Do Not Render Obvious the “Crawler Track Coupled to a Yoke which is Rotatably Coupled to the Jacking Column” and the “Slew Gear Drive Secured at a Lower End” Claim Limitations

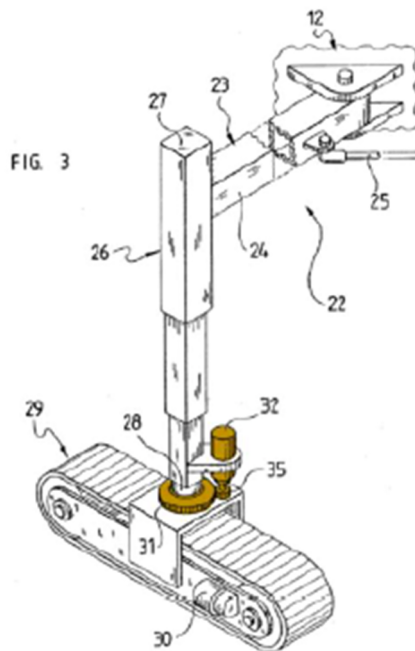
The Challenged Claims are also patentable because the CIII-Rio combination does not teach a “crawler track coupled to a yoke which is rotatably coupled to the jacking column” and the “slew gear drive secured at a lower end.” Petitioner does not dispute the proposed construction for these terms, which is one side of the slew drive is coupled to the jacking column, one side of the slew drive is coupled to the yoke of the crawler track, and neither cylinder of the jacking column rotates along with the crawler track. POR, 17.

Petitioner wrongly argues that the panel's findings in the IPR challenge against the '749 Patent apply here. Reply, 7-10. Although G&Z argued that the claims did not encompass situations where the crawler track rotates relative to only a *portion* of the jacking column, the Board did not limit the claims to those situations. Ex. 1036 at 36 (“We determine that we need not expressly construe this term to

resolve the parties' disputes.""). Instead, the Board adopted a much broader construction of the term, which required only that the power drive be "physically between" the jacking column and crawler track without specifying (1) which if any components were coupled to each other and (2) which components rotate with respect to which components. *Id.*, 35-57. Accordingly, collateral estoppel cannot apply to these findings because those findings were not necessary to the judgment. *In re Freeman*, 30 F.3d 1459, 1466 (Fed. Cir. 1994) ("In order to give preclusive effect to a particular finding in a prior case, that finding must have been necessary to the judgment rendered in the previous action.").

Moreover, because the previous panel found that the '749 Patent claims encompassed non-on-the-fly embodiments, it did not address whether CIII's paver as modified would provide the coordinated adjustment of the swing leg/track under load (the on-the-fly embodiments). POR, 20-21. Petitioner did not address this argument in the Reply.

Petitioner tacitly acknowledges that neither CIII nor Rio suggests a slew gear drive coupling, and its alleged state-of-the-art evidence does not resolve the coupling deficiencies. Petitioner points to Whitaker as allegedly disclosing a "slew drive," however, components 32 and 35 of Whitaker (annotated by Petitioner) point to a ring and pinion gear, not a slew drive. Reply, 8-9.



Reply, 9; Ex. 1011, 4:10-16; Ex. 2005, ¶42. This ring gear is not coupled to a rotationally fixed jacking column, it is affixed to the crawler track and the lower end of the jacking column, which is cylindrically shaped so that it can rotate within the rectangular telescopic shaft. Ex. 1011, 4:1-16; Ex. 2005, ¶42; Ex. 2009 (Singhose Tr. II), 24:24-25:11. Thus, Whitaker does not disclose a slew drive rotationally coupled to the jacking column and crawler track as claimed, nor would it inform a POSITA to rotationally couple a slew drive to a rotationally fixed jacking column.

The same goes for the new unsupported claim that its GT-3200 machine disclosed a slew drive (or other rotary actuator) that ensured that the crawler track rotated with respect to a rotationally fixed jacking column. Reply, 9. But this machine includes a Helac rotary actuator **inside** the jacking column, [REDACTED]

[REDACTED] POR,

57 (citing Exs. 2011, 2012); Ex. 1037, 69 (discussing evidence that the GT-3200's "rotary actuator is within the jacking column"). Indeed, Dr. Bryden plainly testified that it was impossible to tell based only on the photographs produced at his deposition whether "rotary actuator could be turning the inner column, as in some of the other designs." Ex. 1184, 132:2-24. And despite its obviousness case depending on the allegedly known benefits of this design, it abandoned this design for the GT-3200 altogether and rejected the idea of using it on its pavers because it was impracticable to make the jacking columns large enough to contain a rotary actuator strong enough for the application. IPR2024-00835, Ex. 2037, 7 ("Front Steering Only System" is done "with a hydraulic steering cylinder"); *see also* Exs. 2011 and 2012.

Because neither Petitioner's combination art nor state-of-the-art evidence discloses a slew gear drive coupling configuration viable for CIII-Rio paver, it is evident that Petitioner "draws[s] on hindsight knowledge of the patented invention, . . . as a template for its own reconstruction," which is "an illogical and inappropriate process by which to determine patentability." *Sensonics, Inc. v. Aerosonic Corp.*, 81 F.3d 1566, 1570 (Fed. Cir. 1996); POR, 27-28.

**V. GROUND 2: THE CHALLENGED CLAIMS ARE PATENTABLE
OVER CIII, RIO, FILES, AND TAX**

The addition of Tax's crane disclosure does not save the CIII-Rio combination. POR, 38-39. Regardless of whether Tax is analogous art (Reply, 17-18), Tax's **crane** would not have informed a POSITA on how to relocate a paver machine's swing leg/track because, as an industry expert stated, [REDACTED] Ex. 2007, 1; POR, 38-39.

Although Petitioner disputes this statement, its dispute relies on attorney argument that "it was well known to use slew drives on machines while driving and steering under load." Reply, 23. It was not. For one, conventional cranes in the 2000s did not drive and steer while under load, as the industry expert stated, and Tax's crane disclosure issued roughly 40 years before that time. Ex. 2007, 1; POR, 38-39. Also, Tax's **crane** does not include a swing leg assembly (crawler track, jacking column, and swing leg), let alone how to drive and steer a crane with such a swing leg assembly (*i.e.* providing coordinated swing leg/track adjustments). POR, 38. Therefore, Tax's **crane**, like any conventional crane in the 2000s, does not provide "the path that the person of ordinary skill in the art would have followed" for the CIII paver as modified. *Otsuka Pharm. Co. v. Sandoz, Inc.*, 678 F.3d 1280, 1296 (Fed. Cir. 2012). Finally, no other reference, Skotnikov included, describes a

paver's "unique application" of driving and steering the swing leg assembly. *Supra* § IV.A.2.b.

**VI. THE OBJECTIVE INDICIA EVIDENCE CONFIRM THE
NONOBVIOUSNESS OF ON-THE-FLY PAVER ADJUSTMENTS**

**A. There Exists a Nexus Between the Objective Indicia Evidence and
the Unique Characteristics of G&Z's On-the-Fly Embodiments**

A nexus exists between the objective indicia evidence and the unique characteristics of G&Z's on-the-fly embodiments that provided "a new, market-making, commercially successful product that provided significant benefits over prior art devices, received praise in the art, and was copied by competitors." *Medtronic*, 70 F.4th at 1337-38; POR, 46-49. Petitioner only musters a conclusory denial in response to G&Z's argument that this evidence has a nexus to the Challenged Claims. Reply, 22.

B. There Was a Decade Long Need for On-the-Fly Paver Adjustments

G&Z's on-the-fly solved the decade long industry need for a paver that could coordinate adjustment of its swing legs and crawler tracks while in operation. POR, 49-51 (establishing that the industry embraced the need for on-the-fly technology starting in the early 2000s). Petitioner attempts to dismiss the decade long need by alleging that the need "was not long felt" and that "the prior art already met this alleged need." Reply, 22-23 (emphasis omitted). Neither allegation has merit.

First, *Texas Instruments, Inc. v. U.S. Int'l Trade Comm'n*, 988 F.2d 1165, 1178 (Fed. Cir. 1993) held that a six-year need was long felt. *Id.*, 1177-78. If this six-year need was long felt, then a decade long need—between the industry embracing the need for on-the-fly technology and G&Z's claimed solution—is also long felt. POR, 49-50 (citing Ex. 2022, ¶¶3-5; Ex. 2023, ¶¶4-6).

Second, Petitioner's contention that the need arose "as late as 2009" (Reply, 23) is meritless. Although statement when Mr. Greenwood first began looking for a solution to this problem in 2009, that was not when the problem first arose. Petitioner has already conceded that the need for more maneuverable pavers was known at least as far back as the early 2000s. '749 IPR, Paper 76 (Oral Arg.) at 98:3-19; Ex. 2023, ¶ 4.

C. Industry Skepticism Existed on Whether the Use of a Slew Gear Drive Was a Workable Solution

Given a paver's "unique application" for driving and steering, industry experts were worried or doubtful of whether G&Z's claimed solution would work for driving and steering a paver while under load. POR, 51-52; *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1335 (Fed. Cir. 2016) (holding that "**doubt or disbelief**" on the "workability of the claimed solution" establishes skepticism);

Here, given the paver's unique application of driving and steering, Kinematics **worried** whether their slew gear drive (a twin drive unit) would provide the torque

needed for a paver and therefore was [REDACTED] Ex. 2007, 1 (concerned with whether it could provide the required components for a [REDACTED]), Ex. 2024, 4. Indeed, given the unique application, Kinematic offered no guarantees of its product without extensive in house testing. *Id.*; Reply, 23-24. Likewise, G&Z's VP of engineering was **doubtful** that G&Z's claimed solution was [REDACTED] Ex. 2024, 4.

D. The Industry Praised G&Z's Claimed Solution for On-the-Fly Paver Adjustments

The record evidence shows that industry professionals, such as Mr. Greenwood and Mr. Holley, praised G&Z's claimed on-the-fly solution. POR, 51, 58-60; Ex. 2022, ¶¶6-7 (expressing that G&Z's claimed solution "was a **revolutionary change** to the conventional slipform paver" and that it "**was a license to print money**"); Ex. 2023, ¶7 (G&Z's claimed solution was a "**game changer**").

Petitioner does not dispute that this industry praise directed to G&Z's on-the-fly paver technology. *See* Reply, 26-27. Rather, Petitioner asserts that collateral estoppel prevents the Board from readdressing praise. *Id.*, 27. However, in the previous IPRs the Board weighed this testimony in favor of G&Z. *See, e.g.*, Ex. 1036, 87. The Board should accord this evidence even more weight here because

given the long-felt need and the skepticism evidence directly share a nexus with G&Z's Smart Leg / AccuSteer technology.

E. GOMACO Copied G&Z's Design

GOMACO had access to G&Z's S600 paver with SmartLeg/AccuSteer technology and its GP3 is substantially similar to G&Z's S600, which creates a strong inference of copying. POR, 52-57; *Cable Elec. Prods., Inc. v. Gemark, Inc.*, 770 F.2d 1015, 1027 (Fed. Cir. 1985) ("Access in combination with similarity can create a strong inference of copying . . ."), overruled on other grounds by *Midwest Indus., Inc. v. Karavan Trailers, Inc.*, 175 F.3d 1356 (Fed. Cir. 1999). GOMACO does not dispute access, only similarity. Reply, 24.

GOMACO's argues that there is a "substantial" difference between the GP3 and the S600 because the S600 uses a hydraulic cylinder actuator while the GP3 uses a hydraulic rotary actuator for the swing leg. *See id.* But those components were both known in the art and both enabled the same functionalities: Like G&Z's S600's "SmartLeg," GOMACO's GP3 "Smart leg," as marketed, enables on-the-fly adjustment, includes the same feedback loop mechanism, Kinematic slew gear drive, and substantially the same swing leg actuator. *Godbersen-Smith Const. Co. v. Guntert & Zimmerman Const. Div., Inc.*, IPR2020-01698, Ex. 1165, 6; '723 Patent, 11:53-56 (disclosing the Kinematic slew gear drive). The use of Kinematic's slew drive gear is significant because this is the same company that worried whether their

slew drive could work for a paver application (as addressed above). G&Z showed that it did, and GOMACO adopted G&Z's design after failing to solve the same problem. POR, 56-57 (citing *Heidelberger Druckmaschinen AG v. Hantscho Com. Prods. Inc.*, 21 F.3d 1068, 1072 (Fed. Cir. 1994)).

Other competitors also copied G&Z's SmartLeg/AccuSteer technology of its S600 paver. POR, 57 (citing Ex. 2030, ¶¶26-27). Petitioner does not dispute the similarities, and its lack of access allegation overlooks the declaration evidence. Reply, 26. The evidence shows the release of "G&Z's S600 Slipform Paver Machine with SmartLeg / AccuSteer technology in Europe in August 2010" for Wirtgen access, and for Power Pavers, they "hired G&Z's retired VP of Engineering as a consultant to help them implement the G&Z SmartLeg / AccuSteer features in its slipform paver machine." Ex. 2030, ¶¶26-27.

F. Market Share Demonstrates Market Forces That Would Have Brought On-the-Fly Technology to Market Sooner if it Was Obvious

The evidence of commercial success tied to G&Z's on-the-fly technology confirms that it would have been brought to market sooner "had [it] been obvious to persons skilled in the art." *Galderma Lab'ys, L.P. v. Tolmar, Inc.*, 737 F.3d 731, 740 (Fed. Cir. 2013). The evidence shows that after GOMACO introduced its copycat GP3 paver in 2015, G&Z [REDACTED] of its complex paver market share while

GOMACO's market share [REDACTED] (between 2014 to 2019). Ex. 2035, 13; Ex. 2036, 10;³ POR, 61.

Initially, the Board cannot merely give this evidence “very little weight” as it did in the '749 FWD. Reply, 27. In that case, the Board was under the impression that GOMACO first released its copycat paver in “**in 2017.**” Ex. 1036 at 94. That simply is not true, and Petitioner does not attempt to defend that finding in this case. Ex. 2010 at 11:10-14:2 [REDACTED]
[REDACTED]; IPR2024-00835, Ex. 2045 at 3-4 (GOMACO introduced its “new GP3 slipform paver” at World of Concrete in Las Vegas). Its further attempts to discredit the commercial success evidence are meritless. Reply, 27-29.

First and foremost, Petitioner does not dispute the accuracy of the market share analysis. *Id.* **Second**, Petitioner's allegation that G&Z's sales declined

³ While Petitioner alleges that the exhibits are inadmissible hearsay and should be accorded no weight, these allegations are unwarranted. Reply, 27-28. The exhibits are provided as reports and indicate the “[r]evenue market share” was calculated based on “share of manufacture's estimated total revenues as a percentage of total estimated industry revenue.” Ex. 2035, 13; Ex. 2036, 1.

because of “Wirtgen competition” proves the success contributed to G&Z’s patented technology because, as established above, Wirtgen also released a copycat paver. *Id.*, 28. **Third, COVID delays** were primarily the cause of “delivery, quality, and feature issues,” which was **after** G&Z’s market share declined between 2014 and 2019. *Id.*

VII. CONCLUSION

For at least the foregoing reasons, the Board should hold patentable the Challenged Claims.

Respectfully submitted,

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CERTIFICATE OF SERVICE

The undersigned certifies, in accordance with 37 C.F.R. § 42.6(e), and pursuant to agreement by the parties that filing with the Board through the Patent Trial and Appeal Case Tracking System (P-TACTS) constitutes electronic service, that service was made on Petitioner as detailed below.

<i>Date of service</i>	July 2, 2025
<i>Manner of service</i>	Electronic Filing with the Board
<i>Documents served</i>	PATENT OWNER'S SUR-REPLY
<i>Persons served</i>	Finnegan, Henderson, Farabow, Garrett & Dunner LLP: Jason E. Stach Luke J. McCammon David K. Mroz Sonja W. Sahlsten Robert K. High

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