

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

HEBEI HUATONG WIRES AND CABLES GROUP CO, LTD.,
Petitioner,

v.

GULF COAST DOWNHOLE TECHNOLOGIES LLC,
Patent Owner.

IPR2023-00908
Patent 7,581,565 B1

Before JAMES P. CALVE, PATRICK R. SCANLON, and
JAMES J. MAYBERRY, *Administrative Patent Judges*.

MAYBERRY, *Administrative Patent Judge*.

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

I. INTRODUCTION

A. *Background and Summary*

Hebei Huatong Wires and Cables Group Co., Ltd. (“Petitioner”) filed a Petition requesting *inter partes* review of “all claims surviving the reexamination” of U.S. Patent No. 7,581,565 B2 (Ex. 1001, the “’565 patent”). Paper 1, 1 (“Pet.”); *see* Ex. 1002 (providing reexamination certificate, including the status of claims). Patent Owner did not make an appearance.

We have authority to determine whether to institute an *inter partes* review. 35 U.S.C. § 314 (2018); 37 C.F.R. § 42.4(a) (2023) (permitting the Board to institute trial on behalf of the Director). To institute an *inter partes* review, we must determine that the information presented in the Petition shows “a reasonable likelihood that the petitioner would prevail with respect to at least 1 of the claims challenged in the petition.” 35 U.S.C. § 314(a). For the reasons set forth below, upon considering the current record, we do not institute an *inter partes* review.

B. *Real Parties-in-Interest*

Petitioner identifies Hebei Huatong Wires and Cables Group Co., Ltd. as the sole real party-in-interest. Pet. iv. The file history for the ’565 patent in the record indicates that the ’565 patent is assigned to Gulf Coast Downhole Technologies LLC. Ex. 1005, 1.

C. *Related Matters*

Petitioner indicates that there are no matters related to the ’565 patent. Pet. iv.

D. *The ’565 Patent*

The ’565 patent, titled “Tear Cord for Jacketed Tube,” issued September 1, 2009, from application US 12/178,246, filed July 23, 2008.

Ex. 1001, codes (54), (45), (21), (22). The '565 patent was the subject of an *ex parte* reexamination, Serial No. 90/020,065. *See* Ex. 1002 (providing the Reexamination Certificate); *see also* Ex. 1006 (providing the file history of the reexamination).

The '565 patent “pertains to installing a tear cord between a solid wall metal tube (hereinafter ‘tube’) and a protective jacket.” Ex. 1001, 1:15–17. We reproduce Figure 1 below.

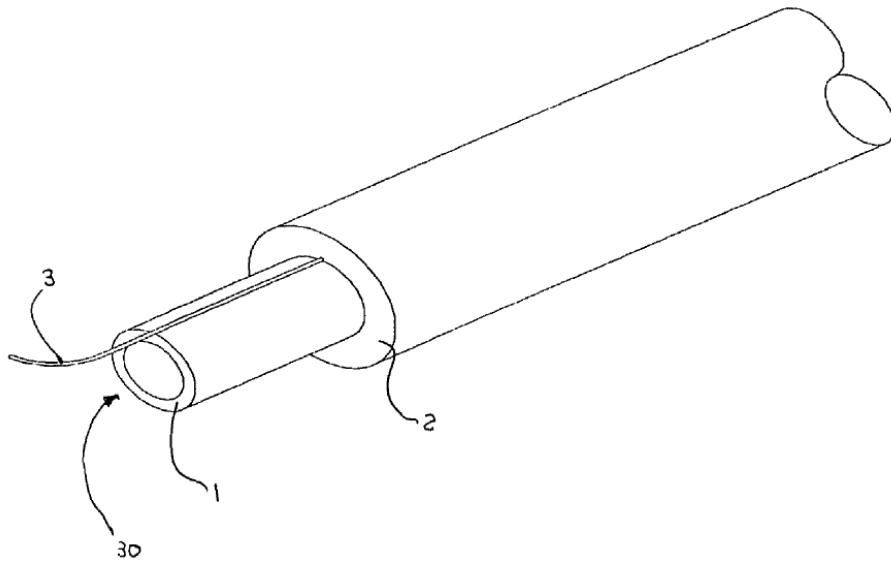


Figure 1

Figure 1 depicts “a single tube with a protective jacket and tear cord.” *Id.* at 1:29–30. Figure 1 includes tube 1 covered with protective jacket 2, made of hard thermoplastic rubber or similar material. *Id.* at 1:47–49. Tear cord 3 is positioned adjacent to tube 1 and under jacket 2. *Id.* at 3:22–23.

The tear cord allows a worker to pull back the tear cord and create a slit in the protective jacket. Ex. 1001, 3:6–7. The Specification explains that creating a slit in the protective jacket using the tear cord avoids the need to use tools to remove the jacket, thus avoiding the chance of damaging the tube. *See id.* at 2:21–56.

The jacketed tube described in the Specification “may be used in downhole applications related to the production of hydrocarbons,” and “may be used to convey chemicals and hydraulic fluids.” Ex. 1001, 1:43–44, 2:10–11. Also, the contents may be subjected to positive or negative pressures, such that “[t]he sealing surface of the tubing is of prime importance, i.e., the wall of the tubing is to be free from nicks and gouges.” *Id.* at 2:21–22.

E. Challenged Claims

The Petition challenges “all claims surviving the reexamination.” Pet. 1. Exhibit 2 provides a Reexamination Certificate for the ’565 patent, which indicates that claims 1–7, 9–15, 18–20, and 22, as amended in the reexamination, survived the reexamination. Ex. 1002, 1:18–19. Also, claim 24, which depends from an amended claim, and newly added claim 25 survived reexamination. *Id.* at 1:20–22. The Petition, however, does not challenge all surviving claims, as it does not challenge claim 24. *See* Pet. 16 (listing grounds, which challenge claims 1–7, 9–15, 18–20, and 22, but not including claims 24 and 25 in the listings), 23–51 (providing analysis for each ground, and not including claim 24 in the analysis for any ground (but including claim 25 in Ground 7 (Pet. 50–51))).

Claims 1, 14, and 18 are independent, with Claims 1 and 18 being representative. We reproduce claims 1 and 18 below.

1. A jacketed metal tube comprising
a metal tube,
a first protective jacket adjoining and surrounding the metal tube, and
a tear cord positioned between the metal tube and the first protective jacket characterized
wherein the protective jacketed metal tube is for use in downhole applications relating to hydrocarbon extraction,

wherein the protective jacketed metal tube has a wall which is of hollow cylindrical shape and is smooth walled, solid, substantially straight, continuous, without break or interruption, is structured to be hermetically sealed, maintain a positive or negative pressure, and is structured for connection to hermetically sealing compression fittings to convey fluids downhole, and

in that the tear cord is positioned proximate to an outer surface of the metal tube and inside the diameter of the outer first protective jacket and is able to be pulled back to create a slit in the first protective jacket and to allow the first protective jacket to be separated from the metal tube without damage to the metal tube surface.

Ex. 1002, 1:24–52 (brackets and italic text omitted).

18. A method of conveying fluids into a well bore, the method comprising:

i. placing a first outer protective jacket around a metal tube to form a jacketed tube which is spoolable, the metal tube having a wall which is of hollow cylindrical shape and is smooth, solid, substantially straight, continuous, without break or interruption, capable of being hermetically sealed and suitable for connection to hermetically sealing compression fittings to convey fluids under positive or negative pressure downhole;

ii. placing a tear cord proximate to an outer surface of the metal tube and inside the first protective jacket; and

iii. pulling the tear cord back to create a slit in the first protective jacket to allow the first protective jacket to be separated from the metal tube without damage to the metal tube surface.

Ex. 1002, 2:66–3:14 (brackets and italic text omitted).

F. Prior Art and Asserted Grounds

Petitioner asserts that the Challenged Claims are unpatentable based on seven grounds:

Claims Challenged	35 U.S.C. §	References/Basis
1–5, 11, 13, 18–20, 22	102(b) ¹	Hurley ²
1–5, 11, 13, 18–20, 22	103(a)	Hurley
1–5, 11, 13, 18–20, 22	103(a)	Hurley, Bowker ³
6, 9	103(a)	Hurley, Okada ⁴
7	103(a)	Hurley, Varkey ⁵
10	103(a)	Hurley, Gaillard ⁶
12, 14, 15, 25 ⁷	103(a)	Hurley, Blew ⁸

Pet. 16, 50–51.

Petitioner also relies on the declaration testimony of Dr. John Ballato. Ex. 1003.

The following subsections provide brief descriptions of two⁹ of the asserted prior art references.

¹ The Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112-29, 125 Stat. 284, 296–07 (2011), took effect on September 16, 2011. The changes to 35 U.S.C. §§ 102 and 103 in the AIA do not apply to any patent application filed before March 16, 2013. Because the earliest possible priority date for the ’565 patent is before March 16, 2013, we refer to the pre-AIA version of the statute.

² US 7,113,680 B2, issued September 26, 2006 (Ex. 1004, “Hurley”).

³ US 2006/0153508 A1, published July 13, 2006 (Ex. 1007, “Bowker”).

⁴ US 6,236,790 B1, issued May 22, 2001 (Ex. 1009, “Okada”).

⁵ US 7,324,730 B2, issued January 29, 2008 (Ex. 1010, “Varkey”).

⁶ US 2002/0085820 A1, published July 4, 2002 (Ex. 1011, “Gaillard”).

⁷ Claim 25 is not listed in the “Grounds” or the section heading for Ground 7. *See* Pet. 16, 44. Claim 25 is, however, included in the Petition’s analysis of Ground 7. *Id.* at 50–51.

⁸ US 5,469,523, issued November 21, 1995 (Ex. 1008, “Blew”).

⁹ As will be apparent from our analysis, we need discuss Hurley and Bowker only.

1. *Hurley (Ex. 1004)*

Hurley, titled “High Density Fiber Optic Cable,” issued September 26, 2006, making it prior art to the ’565 patent under 35 U.S.C. § 102(b).

Ex. 1005, codes (54), (45). Hurley is directed to a fiber optic cable including a bundle of optical fibers, a separation layer surrounding the bundle, and a jacket surrounding the separation layer. *Id.* at 3:21–31.

We reproduce Figure 4 from Hurley, below.

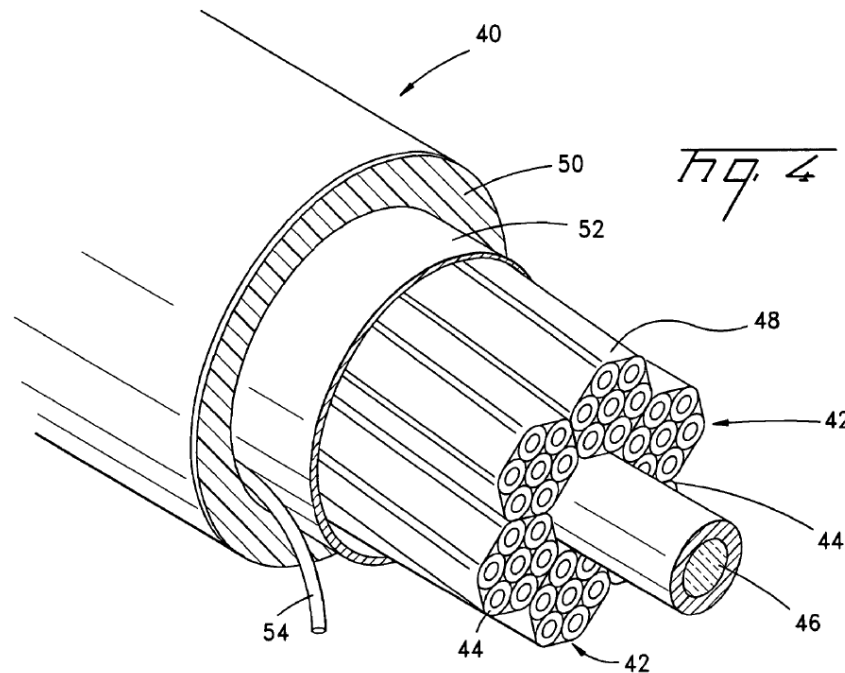


Figure 4 depicts an exemplary fiber optic cable 40. Ex. 1004, 4:16–17. Cable 40 includes jacket 50, separation layer 52, bundles 42 of optical fibers 44, and ripcord 54. *Id.* at 5:1–7, 8:32–37.

Hurley discloses that ripcord 54 facilitates removing jacket 50. Jacket 50 can be formed from different materials, but is typically formed of a plastic, like polyvinyl chloride. Ex. 1004, 8:15–16. Separation layer 52 is typically formed of a polyester, but may “be formed from an armor layer, for example, a metal or dielectric layer that may be formed from one or more pieces.” *Id.* at 10:48–50.

2. *Bowker (Ex. 1007)*

Bowker, titled “System and Method for Deploying an Optical Fiber in a Well,” published July 13, 2006, making it prior art to the ’565 patent under 35 U.S.C. § 102(b). Ex. 1007, codes (54), (43). Bowker “relates to an improved method for deploying fiber optic sensors into hostile environments such as down well bores.” *Id.* ¶ 3. Relevant to this proceeding, Bowker is directed to an optical fiber assembly deployed down an instrumentation tube located in a well bore and including a flexible protective barrier. *Id.* ¶ 12. In one embodiment, “the protective barrier is a metal tube through which an optical fiber is disposed. The metal tube has a wall thickness that provides flexibility to the metal tube, allowing the tube and fiber to be spooled for storage, and unspooled” and is, preferably, a hermetically sealed tube. *Id.* ¶ 15.

II. ANALYSIS OF PETITIONER’S CHALLENGES

A. *Applicable Law*

One of Petitioner’s asserted grounds of unpatentability is based on anticipation under 35 U.S.C. § 102(b). A “prior art reference—in order to anticipate under 35 U.S.C. § 102—must not only disclose all elements of the claim within the four corners of the document, but must also disclose those elements ‘arranged as in the claim.’” *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1369 (Fed. Cir. 2008) (quoting *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 1548 (Fed. Cir. 1983)).

Petitioner’s other six asserted grounds of unpatentability are each based on obviousness under 35 U.S.C. § 103(a).

Section 103(a) [of 35 U.S.C.] forbids issuance of a patent when “the differences between the subject matter sought to be patented

and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.”

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

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

normal course of research and development to yield the claimed invention.”
Id.

“[O]bviousness must be determined in light of *all the facts*, and . . . a given course of action often has simultaneous advantages and disadvantages, and this does not necessarily obviate motivation to combine” teachings from multiple references. *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1165 (Fed. Cir. 2006) (emphasis added); *see also PAR Pharm., Inc. v. TWI Pharms., Inc.*, 773 F.3d 1186, 1196 (Fed. Cir. 2014) (“The presence or absence of a motivation to combine references in an obviousness determination is a pure question of fact.”). As a factfinder, we also must be aware “of the distortion caused by hindsight bias and must be cautious of arguments reliant upon *ex post* reasoning.” *KSR Int’l Co.*, 550 U.S. at 421.

For institution, “[t]he ‘reasonable likelihood’ standard is a somewhat flexible standard that allows the Board room to exercise judgment.” Patent Trial and Appeal Board Consolidated Trial Practice Guide 53 (Nov. 2019), *available at* <https://www.uspto.gov/TrialPracticeGuideConsolidated>.

B. Level of Ordinary Skill in the Art

The level of skill in the art is “a prism or lens” through which we view the prior art and the claimed invention. *Okajima v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001). Petitioner contends that “a person of ordinary skill in the relevant technology—jacketed cables—would have had at least an undergraduate degree in materials science, and at least three years of experience in cable technology.” Pet. 12 (referencing Ex. 1003 ¶ 34).

For the purposes of this Decision, we apply Petitioner’s definition of the level of ordinary skill in the art. We determine that this definition is consistent with the prior art of record and the skill reflected in the Specification of the ’565 patent, based on our review of the limited record.

C. Claim Construction

In *inter partes* reviews, we interpret a claim “using the same claim construction standard that would be used to construe the claim in a civil action under 35 U.S.C. 282(b).” 37 C.F.R. § 42.100(b). Under this standard, we construe the claim “in accordance with the ordinary and customary meaning of such claim as understood by one of ordinary skill in the art and the prosecution history pertaining to the patent.” *Id.*

Petitioner contends that certain claim terms are not entitled to patentable weight, including “for use in downhole applications relating to hydrocarbon extraction,” and “to convey hydraulic fluid.” Pet. 12–16.

We determine that we need not expressly construe any claim terms to resolve the parties’ disputes on the current record. *See Realtime Data, LLC v. Iancu*, 912 F.3d 1368, 1375 (Fed. Cir. 2019) (“The Board is required to construe ‘only those terms that . . . are in controversy, and only to the extent necessary to resolve the controversy.’”) (quoting *Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999)). To the extent that the scope of any particular claim term requires discussion, however, we provide it in our assessment of the challenges, which we turn to next.

D. Ground 1: Claims 1–5, 11, 13, 18–20, and 22 as anticipated by Hurley

Petitioner contends that Hurley anticipates each limitation of claims 1–5, 11, 13, 18–20, and 22. Pet. 25–36.

1. *Independent claim 1: “the protective jacketed metal tube . . . is structured to be hermetically sealed, maintain a positive or negative pressure, and is structured for connection to hermetically sealing compression fittings to convey fluids downhole”*

Independent claim 1 recites, in relevant part, “the protective jacketed metal tube . . . is structured to be hermetically sealed, maintain a positive or negative pressure, and is structured for connection to hermetically sealing compression fittings to convey fluids downhole.” Ex. 1002, 1:32–36.

Petitioner maps Hurley’s separation layer 52 to the jacketed metal tube.

Pet. 25. As for being structured to be hermetically sealed, Petitioner contends that Hurley depicts, in Figure 4, separation layer 52 “having a round, undeformed tube circumference required for hermetic sealing.” *Id.* at 27. Petitioner contends that Hurley teaches that separation layer 52 “may provide, for example, crush resistance.” *Id.* (referencing Ex. 1004, 10:46–52). Petitioner adds that “Patent Owner argued during reexamination that a round, undeformed tube circumference allows for hermetic sealing.” *Id.* at 28 (referencing Ex. 1006¹⁰, 62). Petitioner makes similar contentions with respect to the requirement that the metal tube be structured for connection to hermetically sealing compression fittings to convey fluids downhole. *See id.* at 28–29.

Specific to the requirement that the metal tube be structured to maintain positive or negative pressure, Petitioner contends that Hurley teaches that using tear cord 54 avoids nicks and gouges on the tube that

¹⁰ The Petition cites to Exhibit 1004, which is Hurley. This is an apparent typographical error and we understand the proper citation to be Exhibit 1006, the reexamination record.

would otherwise cause pressure loss. Pet. 28 (referencing Ex. 1001¹¹, 2:21–22). Petitioner adds that “[t]he applicant argued during reexamination that nicks and gouges from the use of other than tear cords result in loss in pressure.” *Id.* (referencing Ex. 1006, 143 ¶¶ 4, 7).

Dr. Ballato’s Declaration merely provides the same claim chart as is provided in the Petition, without providing any additional testimony directed to this limitation. *Compare* Ex. 1003 ¶ 57 *with* Pet. 27–29.

We find, upon review of the information in the Petition and evidence of record, that Petitioner fails to demonstrate a reasonable likelihood that Hurley discloses that its separation layer 52, even when formed of flexible armor (*see* Pet. 26) is structured to be hermetically sealed or maintain a positive or negative pressure as required by claim 1. Petitioner fails to direct us to sufficient evidence to support a finding that separation layer 52 is structured to be hermetically sealed or maintain a positive or negative pressure. Dr. Ballato does not provide any testimony in support.

Petitioner’s reliance on Patent Owner’s statement during reexamination distinguishing other prior art references is also misplaced. A declarant for Patent Owner stated that “[a] compression fitting used for creating an hermetical seal as taught by [the ’565 patent] requires a round, undeformed tube circumference.” Ex. 1006, 62. This statement merely declares a necessary configuration for the tube to connect to a compression fitting, not that all such structured tubes would be structured to be hermetically sealed and maintain a positive or negative pressure based only

¹¹ The Petition cites to Exhibit 1004. It appears that Petitioner meant Exhibit 1001, col. 2, lines 21–22, which states “[t]he sealing surface of the tubing is of prime importance, i.e., the wall of the tubing is to be free from nicks and gouges.”

on the use of this structure alone. For example, the '565 patent indicates that the insertion of ferrules or sleeves as part of the mechanical connection hardware in direct contact with the metal tube surface is important to making a hermetically sealed connection. *See* Ex. 1001, 2:48–56.

We also find that Petitioner's reliance on Mr. Watson's declaration submitted during reexamination of the '565 patent is misplaced. *See* Ex. 1006, 143 ¶¶ 4, 7. At best, these statements provide evidence that gouging and nicks may require the tube to be sanded and polished, which may reduce the tube's diameter, affecting connection to compression fittings. *See* Ex. 1006, 62 (arguing that statements by Mr. Watson went to the seal of the compression fittings).

Significant to our finding here is the Examiner's finding with respect to Hurley. The Examiner expressly found that

Although separation layer 52 is shown in Fig. 4 as appearing to be a smooth walled, continuous and solid tube, there is no disclosure or suggestion in Hurley '680 that separation layer 52 is structured to be "hermetically sealed, maintain a positive or negative pressure, and is structured for connection to hermetically sealing compression fittings to convey fluids" as recited in claim 1.

Ex. 1006, 7–8.

In summarizing the reexamination history, Petitioner states that Patent Owner misled the Examiner by characterizing separation layer 52 as being made of MYLAR and also directing the Examiner to Hurley's Figure 8, which depicts a CPID interlock armor layer with an outer ridged surface in distinguishing Hurley from the claimed invention. Pet. 9–11. The Examiner, however, does not reference Figure 8 or MYLAR or a CPID interlock armor layer in the Statement of Reasons for Patentability, indicating that the Examiner was not misled by these arguments. *See*

Ex. 1006, 7–8. We are not persuaded that the information in the Petition overcomes the Examiner’s finding sufficient for institution.

For these reasons, we find that the information in the Petition does not demonstrate a reasonable likelihood that independent claim 1 is unpatentable under 35 U.S.C. § 102(b) as anticipated by Hurley.

2. *Independent claim 18: “the metal tube . . . capable of being hermetically sealed and suitable for connection to hermetically sealing compression fittings to convey fluids under positive or negative pressure downhole”*

Similar to claim 1, independent claim 18 recites, in relevant part, “the metal tube . . . capable of being hermetically sealed and suitable for connection to hermetically sealing compression fittings to convey fluids under positive or negative pressure downhole.” Ex. 1002, 3:2–8. Petitioner makes the same contentions with respect to this subject matter as made for claim 1. *See* Pet. 32–33. Also, Dr. Ballato’s Declaration does not add testimony directed to this subject matter other than producing the same claim chart as is in the Petition. *See* Ex. 1003 ¶ 57.

For the same reasons as discussed above in connection with our analysis of claim 1, we find that the information in the Petition does not demonstrate a reasonable likelihood that independent claim 18 is unpatentable under 35 U.S.C. § 102(b) as anticipated by Hurley.

3. *Dependent claims 2–5, 11, 13, 19, 20, and 22*

Dependent claims 2–5, 11, 13, 19, 20, and 22 depend directly from either claim 1 or claim 18. The Petition does not provide information for these dependent claims that would remedy the deficiencies we find for claims 1 and 18. Accordingly, for the same reasons as discussed above in connection with our analysis of independent claims 1 and 18, we find that the information in the Petition does not demonstrate a reasonable likelihood

that dependent claims 2–5, 11, 13, 19, 20, and 22 are unpatentable under 35 U.S.C. § 102(b) as anticipated by Hurley.

E. Ground 2: Claims 1–5, 11, 13, 18–20, and 22 as obvious over Hurley

Petitioner contends that, to the extent that we do not agree that Hurley expressly discloses a jacketed metal tube with smooth, solid, substantially straight, continuous walls, then this subject matter would have been obvious over Hurley. Pet. 37. This contention appears to be in response to Petitioner’s understanding that the Examiner in the reexamination found that Hurley’s armor separation layer was a CPID interlock armor layer. Pet. 10.

However, as evident from our analysis above in connection with Ground 1, we find that the information in the Petition fails to sufficiently demonstrate that Hurley discloses that its separation layer 52, even when formed of flexible armor, is structured to be hermetically sealed or maintain a positive or negative pressure as required by claims 1 and 18. In conjunction with our analysis of Ground 1, we also found that the Examiner does not reference Figure 8 or a CPID interlock armor layer in the Statement of Reasons for Patentability, and determined that the information did not overcome the Examiner’s findings with respect to Hurley sufficient for institution. Indeed, if anything, embodiments in Hurley that use ridged CPID interlock armor seem to undermine Petitioner’s contentions that Hurley’s separation layer 52 is “smooth walled” as claimed. And, nothing in the Petition directed to Ground 2 changes that determination.

Accordingly, for the same reasons as discussed above in connection with our analysis of independent claims 1 and 18, we find that the information in the Petition does not demonstrate a reasonable likelihood that

claims 1–5, 11, 13, 18, 19, 20, and 22 are unpatentable under 35 U.S.C. § 103(a) over Hurley.

F. Ground 3: Claims 1–5, 11, 13, 18–20, and 22 as obvious over Hurley and Bowker

Petitioner contends that claims 1–5, 11, 13, 18–20, and 22 are obvious over the combination of Hurley and Bowker. Pet. 38–40. Petitioner contends that Bowker discloses the “performance limitations” of “maintaining pressure and hermetic sealing.” Pet. 39.

Petitioner contends that “*Bowker’s* Field of Invention is ‘deploying fiber optic sensors into hostile environments such as down well bores.’” Pet. 38 (referencing Ex. 1007 ¶ 3; Ex. 1003 ¶ 62). Petitioner contends that “[t]he substantial similarity between” the field of use for the ’565 patent and Bowker “indicates that one facing the problem confronted by the inventors of the ’565 Patent would have been motivated to consult Bowker for the downhole-specific application.” *Id.* (referencing Ex. 1003 ¶ 62).

Petitioner’s contention with respect to motivation is directed merely to a motivation to consult Bowker. That is, Petitioner’s contention is directed to whether Bowker is analogous art to the ’565 patent. We agree it is.

However, “[o]bviousness requires, *inter alia*, a finding that a skilled artisan would have been motivated *to combine the teachings of prior art in such a way that the combination discloses the claimed limitations.*” *Elektro Ltd. v. ZAP Surgical Sys., Inc.*, 81 F.4th 1368, 1374 (Fed. Cir. 2023) (emphasis added). This inquiry is separate from the requirement that the prior art is analogous. *See Corephotonics, Ltd. v. Apple Inc.*, 84 F.4th 990, 1003–04 (Fed. Cir. 2023) (“Prior art references are applicable to the obviousness inquiry only when they are analogous to the claims being challenged.”); *Johns Manville Corp. v. Knauf Insulation, Inc.*,

IPR2018-00827, Paper 9 at 10–11 (PTAB Oct. 16, 2018) (informative) (denying institution after determining that showing that the references are analogous art and *could* be combined does not necessarily establish a sufficient rationale for combining the references). The Petition does not provide any contentions directed to why a person having ordinary skill in the art would have been motivated to *combine* Bowker’s teachings with Hurley to arrive at the claimed invention. As such, the Petition fails to provide a reason, supported by rational underpinnings, to combine the teachings of Hurley and Bowker and, accordingly, fails to demonstrate obviousness. *Cf. KSR Int’l Co.*, 550 U.S. at 418 (stating that, to facilitate the analysis of an obviousness position, the proponent should provide “some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness”).

Dr. Ballato’s Declaration adds nothing to Petitioner’s analysis. The Declaration merely repeats what is in the Petition and provides no support for the testimony. *See* 37 C.F.R. § 42.65(a) (“Expert testimony that does not disclose the underlying facts or data on which the opinion is based is entitled to little or no weight.”); *see also Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15–17 (PTAB Aug. 24, 2022) (precedential) (according “little weight” to declaration testimony that contains a verbatim restatement of a petition’s conclusory assertions without additional supporting evidence or reasoning).

Accordingly, the Petition fails to provide information sufficient to demonstrate for institution that the combination of Hurley and Bowker renders claims 1–5, 11, 13, 18–20, and 22 unpatentable under 35 U.S.C. § 103(a) over Hurley and Bowker. *Cf. Apple Inc. v. Corephotonics, Ltd.*, 81 F.4th 1353, 1360 (Fed. Cir. 2023) (“We held that, under the [Administrative

Procedure Act], the Board erred in adopting an argument that the petitioner had not sufficiently made.”).

G. Ground 4–6: Claims 6, 7, 9, and 10 as obvious over Hurley and Okada (claims 6 and 9), Hurley and Varkey (claim 7), Hurley and Gaillard (claim 10)

For Grounds 4–6, Petitioner contends that Hurley in combination with either Okada, Varkey, or Gaillard renders obvious certain dependent claims, all of which depend directly from claim 1. *See* Pet. 16, 40–44. None of Petitioner’s contentions with respect to these dependent claims remedies the deficiency we identify with respect to claim 1 in our analyses of Grounds 1 and 2.

Accordingly, for at least the reason identified above, the Petition fails to provide information sufficient to demonstrate for institution that the combination of Hurley and Bowker renders claims 6 and 9 unpatentable under 35 U.S.C. § 103(a) over Hurley and Okada, claim 7 unpatentable under 35 U.S.C. § 103(a) over Hurley and Varkey, or claim 10 unpatentable under 35 U.S.C. § 103(a) over Hurley and Gaillard.

H. Ground 7: Claims 12, 14, 15, and 25 as obvious over Hurley and Blew

Petitioner contends that the combination of Hurley and Blew renders independent claim 14 and dependent claims 12, 15, and 25 obvious.

1. Independent claim 14: “wherein the metal tubes comprise smooth metal walls structured to be hermetically sealed, maintain a positive or negative pressure, and are structured for connection to hermetically sealing compression fittings”

Similar to claim 1, independent claim 14 recites, in relevant part, “wherein the metal tubes comprise smooth metal walls structured to be hermetically sealed, maintain a positive or negative pressure, and are

structured for connection to hermetically sealing compression fittings.”

Ex. 1002, 2:46–51. Petitioner makes the same contentions with respect to this subject matter as made for claim 1. *See* Pet. 48–49. Also, Dr. Ballato’s Declaration does not add testimony directed to this subject matter other than producing the same claim chart as is in the Petition. *See* Ex. 1003 ¶ 77.

Neither Petitioner nor Dr. Ballato relies on teachings from Blew to augment contentions with respect to the above-quoted limitation. *See, e.g.*, Pet. 44 (identifying Blew’s teaching of electrically conductive wires with a steel center or core).

For at least the same reasons as discussed above in connection with our analyses of claim 1 for Grounds 1 and 2, we find that the information in the Petition does not demonstrate a reasonable likelihood that independent claim 14 is unpatentable under 35 U.S.C. § 103(a) over Hurley and Blew.

2. *Dependent claims 12, 15, and 25.*

Claims 12 and 25 depend directly from claim 1 and claim 15 depends directly from claim 14. *See* Ex. 1002. The Petition does not provide information for these dependent claims that would remedy the deficiencies we find for claims 1 and 14. *See* Pet. 44–51. Accordingly, for the same reasons as discussed above in connection with our analysis of independent claims 1 and 14, we find that the information in the Petition does not demonstrate a reasonable likelihood that dependent claims 12, 15, and 25 are unpatentable under 35 U.S.C. § 103(a) over Hurley and Blew.

III. CONCLUSION

Based on the information presented, we determine Petitioner has not established a reasonable likelihood that it would prevail with respect to any

of the Challenged Claims. Accordingly, we do not institute an *inter partes* review.

IV. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that, pursuant to 35 U.S.C. § 314(a), the Petition is *denied*.

IPR2023-00908
Patent 7,581,565 B1

For PETITIONER:

Darlene F. Ghavimi-Alagha
Kara M. Dally
K&L GATES LLP
Darlene.Ghavimi@klgates.com
Kara.Dally@klgates.com

For PATENT OWNER:

No appearances.