

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

PANDUIT CORP.,
Petitioner,

v.

CORNING OPTICAL COMMUNICATIONS LLC,
Patent Owner.

Case IPR2017-00029
Patent 8,538,226 B2

Before BEVERLY M. BUNTING, JENNIFER MEYER CHAGNON, and
TERRENCE W. McMILLIN, *Administrative Patent Judges*.

BUNTING, *Administrative Patent Judge*.

FINAL WRITTEN DECISION
35 U.S.C. § 318(a) and 37 C.F.R. § 42.73

I. INTRODUCTION

Panduit Corp. (“Petitioner”) filed a Petition requesting an *inter partes* review of claims 1–13 and 32–48 of U.S. Patent No. 8,538,226 B2 (Ex. 1001, “the ’226 patent”). Paper 1 (“Pet.”). Corning Optical Communications LLC (“Patent Owner”), the assignee of the ’226 patent, filed a Preliminary Response to the Petition. Paper 6 (“Prelim. Resp.”). Upon consideration of the information presented in the Petition, we determined that Petitioner had demonstrated that there was a reasonable likelihood that it would prevail with at least one challenged claim, and instituted this trial, pursuant to 35 U.S.C. § 314(a), only as to claims 1–13, 32–36, and 42–48 (“the instituted claims”) of the ’226 patent. Paper 7, 19–20 (“Decision on Institution” or “Dec.”).¹

Subsequent to institution, Patent Owner filed a Patent Owner Response (Paper 13, “PO Resp.”), and Petitioner filed a Reply (Paper 17, “Reply”).² A transcript of the oral hearing held on January 9, 2018, has been entered into the record as Paper 23 (“Tr.”).

This Final Written Decision is entered pursuant to 35 U.S.C. § 318(a). For the reasons that follow, we conclude that Petitioner has demonstrated, by a preponderance of the evidence, that claims 1–13, 32–36, and 42–48 of the ’226 patent are unpatentable.

¹ We did not institute trial as to challenged claims 37–41. Dec. 19–20.

² Petitioner filed evidentiary objections to Patent Owner’s Response (Paper 13) but did not file a motion to exclude, which is required to preserve any evidentiary objection. See 37 C.F.R. § 42.64(c).

II. BACKGROUND

A. *Real Party in Interest*

Petitioner names Panduit Corp. as the real party in interest. Pet. 1.

B. *Related Matters*

The parties indicate that the '226 patent has been asserted in: *Corning Optical Communications LLC v. Panduit Corp.*, 16-cv-00268-GMS (D. Del) filed April 15, 2016. Pet. 1; Paper 4, 1. Patent Owner identifies an additional proceeding in which the '226 patent has been asserted: *Corning Optical Communications LLC v. Diversified Material Specialists, Inc.*, 15-cv-00786 (M.D. Fla.). Paper 4, 1.

C. *The '226 Patent (Ex. 1001)*

The '226 patent issued on September 17, 2013, from U.S. Patent Application No. 12/576,806, filed on October 9, 2009, which claims priority to U.S. Provisional Application No. 61/180,331, filed May 21, 2009, U.S. Provisional Application No. 61/219,233, filed June 22, 2009, U.S. Provisional Application No. 61/180,334, filed May 21, 2009, and U.S. Provisional Application No. 61/219,241, filed June 22, 2009. Ex. 1001, (45), (21), (22), (60).

The '226 patent is directed to fiber optic modules in fiber optic equipment to support fiber optic connections. *Id.* at 1:48–50. According to the '226 patent, “[a] fiber optic module is designed to provide cable-to-cable fiber optic connections and manage the polarity of fiber optic cable connections. A fiber optic module is typically mounted to a chassis or housing which is then mounted inside an equipment rack or cabinet.” *Id.* at 2:1–5. This mounting is accomplished using fiber optic equipment guides and/or rails that provide for movement of the fiber optic equipment, to

facilitate access thereto. *Id.* at 2:20–23. Fiber optic equipment is described as including, but not limited to, “fiber optic equipment chassis, drawers, equipment trays, and fiber optic modules.” *Id.* at 2:24–26. As shown in Figure 19a, reproduced below, the fiber optic equipment guides and/or rails include at least one stopping member to provide at least one stopping position during movement. *Id.* at 2:16–20.

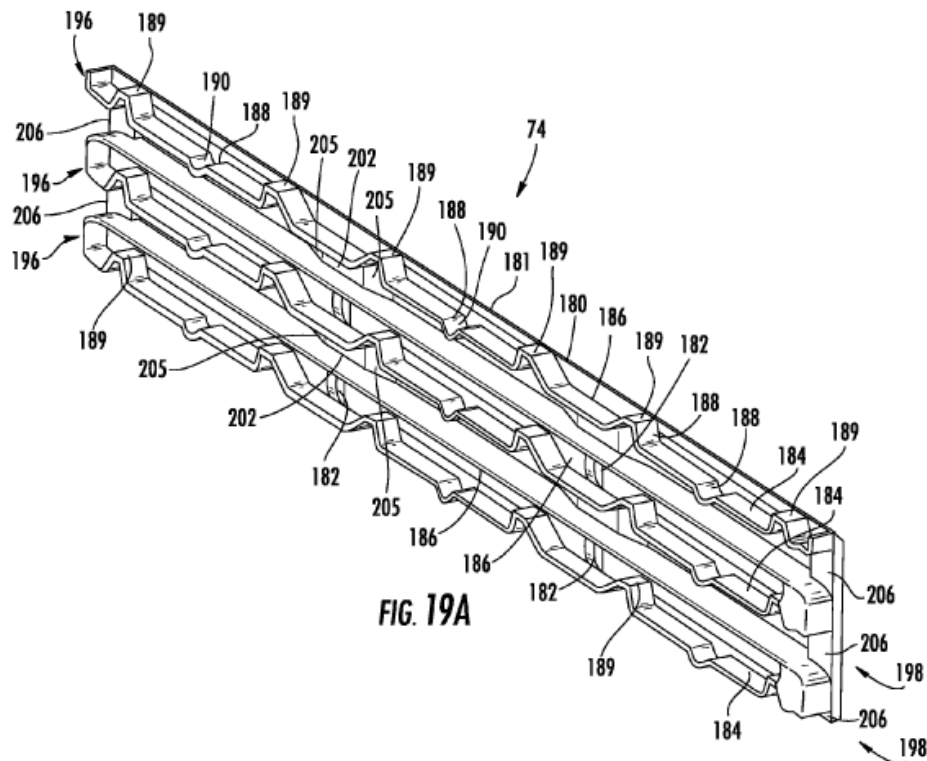


Figure 19a is a perspective view of a tray guide disposed in a fiber optic equipment drawer and configured to receive a fiber optic equipment tray.

Tray guide 74 is disposed in fiber optic equipment drawer 20 and supports one or more fiber optic modules 26 in fiber optic equipment drawer 20. *Id.* at 18:3–5. Tray guide 74 includes guide panel 180, which further includes elongated member 181 and guide members 184. *Id.* at 18:9–16. Guide members 184 are configured to receive tray rail 136 of the fiber optic

equipment tray, and “include guide channels 186 configured to receive and allow tray rails 136 to move along the guide channels 186 for translation of the fiber optic equipment trays 22 about the fiber optic equipment drawer 20.” *Id.* at 18:24–27. Guide members 184 also include leaf springs 188 that “are each configured to provide stopping positions for the tray rails 136 during movement of the fiber optic equipment tray 22 in the guide members 184.” *Id.* at 18:29–31. Leaf springs 188 “contain protrusions 190 that are configured to be received in detents 192 . . . disposed in the tray rails 136 to provide stopping or resting positions.” *Id.* at 18:34–37. The ’226 patent contemplates that the stopping positions will retain the fiber optic equipment tray in place until application of a predetermined force disengages protrusions 190 in leaf spring 188 from corresponding detent 192 of tray rail 136, enabling translation of fiber optic equipment tray 22 with respect to guide panel 180. *Id.* at 18:42–19:3.

D. Illustrative Claim

Challenged claims 1, 32, 42, and 45 are independent. Ex. 1001, 28:2–12, 30:14–28, 31:1–9, and 31:15–32:7. Claim 1, reproduced below, is illustrative of the challenged claims:

1. A fiber optic equipment guide panel, comprising:
an elongated member; and
at least one guide member disposed in the elongated member and
configured to receive fiber optic equipment;
wherein the elongated member is configured to be attached
to a chassis; and
further comprising at least one stopping member disposed within
the at least one guide member, wherein the at least one
stopping member is configured to receive at least one
complementary member in the fiber optic equipment.

Id. at 28:2–12.

E. Evidence

Petitioner relies on the following prior art references (Pet. 3–4):

References	Patent	Date	Exhibits
Smrha	U.S. Patent No. 7,570,861 B2	Aug. 4, 2009	1004
Barnes	U.S. Patent No. 7,171,099 B2	Jan. 30, 2007	1005

Additionally, Petitioner relies on the declaration of Casimer DeCusatis, Ph.D. (Ex. 1003) and Patent Owner relies on the declaration of Eric R. Pearson (Ex. 2001). The parties rely on other exhibits as discussed below.

F. Instituted Grounds of Unpatentability

We instituted the instant trial based on the following grounds of unpatentability (Dec. 20).

References	Basis ³	Claims Challenged
Smrha	102(e)	1–3, 6–8, 10–13, 42, 43, and 45–48
Smrha	103(a)	9, 32–34, 36, and 44
Smrha, Barnes	103(a)	4, 5, and 35

III. ANALYSIS

A. Legal Principles

We analyze the instituted grounds of unpatentability in accordance with the principles stated below.

³ The relevant sections of the Leahy-Smith America Invents Act (“AIA”), Pub. L. No. 112–29, 125 Stat. 284 (Sept. 16, 2011), took effect on March 16, 2013. Because the application from which the ’226 patent issued was filed before that date, our citations to Title 35 are to its pre-AIA version.

1. Burden of Proving Unpatentability

In *inter partes* reviews, petitioner bears the burden of proving unpatentability of the challenged claims, and the burden of persuasion never shifts to the patent owner. *Dynamic Drinkware, LLC v. Nat'l Graphics, Inc.*, 800 F.3d 1375, 1378 (Fed. Cir. 2015). To prevail in this proceeding, Petitioner must support its challenges by a preponderance of the evidence. 35 U.S.C. § 316(e); 37 C.F.R. § 42.1(d). Accordingly, all of our findings and conclusions are based on a preponderance of the evidence.

2. Anticipation

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. Inc., v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987). Moreover, “[b]ecause the hallmark of anticipation is prior invention, the 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). Whether a reference anticipates is assessed from the perspective of an ordinarily skilled artisan. *See Dayco Prods., Inc. v. Total Containment, Inc.*, 329 F.3d 1358, 1368 (Fed. Cir. 2003) (“[T]he dispositive question regarding anticipation [i]s whether *one skilled in the art* would reasonably understand or infer from the [prior art reference’s] teaching that every claim element was disclosed in that single reference.”).

3. Obviousness

A claim is unpatentable under § 103(a) if the differences between the claimed subject matter 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 skill in the art; and (4) where in evidence, so-called secondary considerations. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 17–18 (1966).

We note that, with respect to the fourth *Graham* factor, the parties have not presented arguments or evidence directed to secondary considerations of nonobviousness. The obviousness analysis below addresses the first three *Graham* factors.

B. Level of Skill in the Art

In determining the level of ordinary skill in the art, various factors may be considered, including the “type of problems encountered in the art; prior art solutions to those problems; rapidity with which innovations are made; sophistication of the technology; and educational level of active workers in the field.” *In re GPAC, Inc.*, 57 F.3d 1573, 1579 (Fed. Cir. 1995) (citation omitted). In that regard, Petitioner asserts that a person having ordinary skill in the art would have a “(a) Bachelor’s Degree in Mechanical Engineering or similar, with at least 5 years of experience designing fiber optic equipment housings for data center deployment; or (b) a Master’s Degree in Mechanical Engineering or similar, with at least 3-5 year[s] of experience designing fiber optic equipment housings for datacenter deployment.” Pet. 12 (citing Ex. 1003 ¶ 19).

According to Patent Owner, one of skill in the art “would have a bachelor’s degree in mechanical engineering, materials science, or a related field; and 2 years of experience in fiber optic equipment.” PO Resp. 1 (citing Ex. 2001 ¶¶ 15–16).

Our determination regarding the patentability of the challenged claims does not turn on the differences between these definitions. We note the parties’ proposals differ in the specific number of years of education and experience required; however, neither party argues this distinction makes a difference in analyzing the asserted grounds or other issues in this proceeding. Based on this record, we accept Petitioner’s formulation as consistent with the challenged patent and the asserted prior art. We, therefore, adopt the Petitioner’s proposed level of ordinary skill in the art, finding that a person having ordinary skill in the art would have a “(a) Bachelor’s Degree in Mechanical Engineering or similar, with at least 5 years of experience designing fiber optic equipment housings for data center deployment; or (b) a Master’s Degree in Mechanical Engineering or similar, with at least 3-5[s] year of experience designing fiber optic equipment housings for datacenter deployment.” Pet. 12 (citing Ex. 1003 ¶ 19).

C. Claim Construction

The Board interprets claims of an unexpired patent using the broadest reasonable construction in light of the specification of the patent in which they appear. 37 C.F.R. § 42.100(b); *Cuozzo Speed Techs., LLC v. Lee*, 136 S. Ct. 2131, 2144–46 (2016). Under the broadest reasonable interpretation standard, and absent any special definitions, claims terms are given their ordinary and customary meaning, as would be understood by one of ordinary skill in the art in the context of the entire disclosure. *In re*

Translogic Tech. Inc., 504 F.3d 1249, 1257 (Fed. Cir. 2007). Any special definitions for claim terms or phrases must be set forth with reasonable clarity, deliberateness, and precision. *In re Paulsen*, 30 F.3d 1475, 1480 (Fed. Cir. 1994). In the absence of such a definition, limitations are not to be read from the specification into the claims. *See In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993).

Petitioner does not propose a specific construction for any claim term in its Petition. Pet. 13. Instead, Petitioner asserts that the broadest reasonable construction will suffice. *Id.* In turn, Patent Owner contends that the term “fiber optic module” requires construction. PO Resp. 17–22. Having considered the entire record, we determine that express construction of only the claim term “fiber optic module” is necessary for purposes of this decision. *See Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[O]nly those terms need be construed that are in controversy, and only to the extent necessary to resolve the controversy.”).

Independent claim 32, as recited in the preamble, is directed to a “method of providing access to a fiber optic module in fiber optic equipment.” Ex. 1001, 30:14–15. Petitioner argues that the preamble of claim 32 is not limiting, but if limiting, “Smrha teaches a method of providing access to a fiber optic module in fiber optic equipment.” Pet. 70 (citing Ex. 1003 ¶ 103).

We have reviewed the parties’ contentions and supporting evidence and agree with Petitioner that the preamble is not limiting. “In general, a preamble limits the invention if it recites essential structure or steps, or if it is ‘necessary to give life, meaning, and vitality’ to the claim.” *Catalina Mktg. Int’l, Inc. v. Coolsavings.com, Inc.*, 289 F.3d 801, 808 (Fed. Cir.

2002) (citations omitted). “Conversely, a preamble is not limiting ‘where a patentee defines a structurally complete invention in the claim body and uses the preamble only to state a purpose or intended use for the invention.’” *Id.* In other words, the preamble is regarded as limiting if it recites essential structure that is important to the invention or necessary to give meaning to the claim. *NTP, Inc. v. Research In Motion, Ltd.*, 418 F.3d 1282, 1305–06 (Fed. Cir. 2005). When the limitations in the body of the claim “rely upon and derive antecedent basis from the preamble, then the preamble may act as a necessary component of the claimed invention.” *Eaton Corp. v. Rockwell Int’l Corp.*, 323 F.3d 1332, 1339 (Fed. Cir. 2003).

In the present case, the term fiber optic module in the preamble does not recite essential structure nor steps, but rather recites an intended use for the recited method. Nonetheless, we also consider whether the recitation of fiber optic module in the preamble imparts “life, meaning or vitality” to the claim. The body of claim 32 includes the steps of “imparting a force on a fiber optic equipment tray supporting one or more fiber optic modules to move at least one fiber optic equipment rail . . .”; “releasing at least one detent disposed in the fiber optic equipment rail . . . to allow the fiber optic equipment tray to move”; and “engaging a second stopping member . . . with the at least one detent . . . to stop movement of the fiber optic equipment tray.” Ex. 1001, 30:16–28. The body of the claim is directed to controlling the movement of the fiber optic equipment tray. The reference to fiber optic module in the body of the claim designates what is carried by the moving fiber optic equipment tray. The claim itself does not associate any structure or function with the fiber optic module or otherwise constrain the claims. Thus, we find that the preamble does not limit the claims. *See IMS Tech.*,

Inc. v. Haas Automation, Inc., 206 F.3d 1422, 1434 (Fed. Cir. 2000) (“The phrase ‘control apparatus’ in the preamble merely gives a descriptive name to the set of limitations in the body of the claim that completely set forth the invention. Its use does not limit the claims”). For these reasons, we do not accord patentable weight to the recitation of fiber optic module in the preamble of claim 32.

This does not end our inquiry, however, as to the meaning of “fiber optic module,” because the body of claim 32 recites the step of “imparting a force on a fiber optic equipment tray supporting one or more *fiber optic modules* to move at least one fiber optic equipment rail attached to the fiber optic equipment tray about a fiber optic equipment guide disposed in the fiber optic equipment.” Ex. 1001, 30:16–20 (emphasis added). We, thus, further consider the parties’ arguments regarding the meaning of “fiber optic modules,” as recited in the body of claim 32. We are not persuaded by Patent Owner’s assertion that “the broadest reasonable construction of the term ‘fiber optic module’ read in the context of the ’226 patent requires modularity (i.e., the ability to be inserted/removed as a module) and front/rear ends defining an inside with fiber optic components disposed therein.” PO Resp. 22 (citing Ex. 2001 ¶ 56). Specifically, Patent Owner contends that the fiber optic module “should include the feature that it be ‘removed independently of other modules.’” *Id.* at 20–21. To support its proposed construction, Patent Owner directs us to a passage in the ’226 patent describing the modularity of fiber optic module 26, i.e., its ability to be “‘installed’ and ‘removed from’ the chassis.” *Id.* at 18 (citing Ex. 1001, 15:56–59). Patent Owner further argues that both parties’ experts agree that “term ‘fiber optic module’ refers to a modular cassette that can be ‘removed

independently of other modules.’” *Id.* at 20 (citing Ex. 2004, 87:22–88:21; Ex. 2001 ¶ 47). Patent Owner distinguishes related U.S. Patent Application No. 12/323,415 (now U.S. Patent No. 8,452,148 (“the ’148 patent”)) from the ’226 patent, arguing that the panel of unenclosed adapters described in the ’148 patent “is not a ‘fiber optic module’ as that term is used in the patent.” *Id.* at 21 (citing Ex. 2003 ¶ 140).

Petitioner counters that the term fiber optic module, as used in the ’226 patent, “does not require a removable module that includes ‘a housing with components that are disposed through its walls and extend into the interior of the housing.’” Reply 5. In view of the evidence presented during trial, we view Patent Owner’s construction as too narrow in certain respects. *See Intellectual Ventures II LLC v. Ericsson Inc.*, 686 Fed. App’x 900, 906 (Fed. Cir. 2017) (“The Board is not constrained by the parties’ proposed constructions and is free to adopt its own construction. . . .”) (citing *SAS Inst., Inc. v. ComplementSoft, LLC*, 825 F.3d 1341, 1351 (Fed. Cir. 2016)).

In determining the broadest reasonable construction of fiber optic module, we look first to the Specification. “[A] proper claim construction analysis endeavors to assign a meaning to a disputed claim term ‘that corresponds with . . . how the inventor describes his invention in the specification.’” *In re Power Integrations, Inc.*, ___ F.3d ___, slip op. at 13 (Fed. Cir. Mar. 19, 2018) (quoting *In re Smith Int’l, Inc.*, 871 F.3d 1375, 1383 (Fed. Cir. 2017)). The broadest reasonable interpretation, however, differs from the “broadest possible interpretation.” *Id.* Here, the disagreement between the parties as to the scope of the term fiber optic module centers on whether this term should be construed broadly, as

proposed by Petitioner, or narrowly as proposed by Patent Owner, in light of specific descriptions found in the Specification.

The Specification of the '226 patent describes at least one embodiment in which “[t]he fiber optic module(s) can be moved out from the fiber optic equipment tray(s) to provide further enhanced access to the fiber optic module(s). Enhanced access may be useful for installing or re-installing, re-configuring, and/or removing fiber optic modules and accessing fiber optic connections made therein.” Ex. 1001, 6:58–63. Figure 16a illustrates an embodiment of fiber optic module 26 supported in the fiber optic equipment tray (*id.* at 16:20–23), being “comprised of a number of fiber optic adapters 152 disposed on a front end 156 of the fiber optic module 26” (*id.* at 16:26–28); and that “may also manage polarity between the fiber optic adapters 152 disposed on the front end 156 of the fiber optic module 26 and the fiber optic adapter 158 disposed on the rear end 160 of the fiber optic module 26” (*id.* at 16:36–39). At most, these passages inform us that the fiber optic module has a front end and a rear end.

But, as Petitioner points out, the Specification of the '226 patent states,

“[a] fiber optic module is designed to provide cable-to-cable fiber optic connections and manage the polarity of fiber optic cable connections” and is “typically mounted to a chassis or housing which is then mounted inside an equipment rack or cabinet.” (Ex. 1001, 2:1–5 (emphasis added)) The ['226 patent] later explains that “[t]he fiber optic modules can include any fiber optic connection type, including but not limited to fiber optic connectors and adapters, and number of fiber optic connections, density, etc.” (*Id.* at 27:44–47).

Reply 2.

This description of “fiber optic module” in the Specification does not support limiting the fiber optic module to being modular or removable as Patent Owner suggests. As Petitioner points out, the Specification states that “[t]he fiber optic module is movable about the module guide(s)” and “can be moved out from the fiber optic equipment drawer” (Ex. 1001, 6:38–63), and further explains that it “can be removed from the fiber optic trays 22, if desired” (Ex. 1001, 8:5–6). Reply 4.

While our understanding of the claim language may be aided by the explanations contained in the written description, we take care not to import limitations that are not a part of the claim. For example, a particular embodiment appearing in the written description may not be read into a claim when the claim language is broader than the embodiment. *Superguide Corp. v. DirecTV Enters., Inc.*, 358 F.3d 870, 875 (Fed. Cir. 2004). Thus, we determine from a plain reading of the claim as a whole, as well as the Specification of the ’226 patent, that the evidence indicates that the fiber optic module is described more by the function it performs (i.e., containing fiber optic adapters and providing fiber optic connections) rather than a specific structural configuration.

Having considered all the arguments and evidence presented, we do not adopt Patent Owner’s proposed construction. Instead, we construe “fiber optic module” broadly, but reasonably, as a structure encompassing unenclosed (or enclosed) fiber optic adapters or connectors.

D. Anticipation by Smrha

Petitioner challenges the patentability of claims 1–3, 6–8, 10–13, 42, 43, and 45–48 of the ’226 patent under 35 U.S.C. § 102(e) as anticipated by Smrha. Pet. 19–60. In support thereof, Petitioner identifies the disclosures

in Smrha alleged to describe the subject matter in each of the challenged claims. *Id.* Petitioner supports its arguments and evidence with the testimony of its declarant, Dr. DeCusatis. Ex. 1003.

Patent Owner disagrees, arguing that Smrha does not disclose certain limitations of the instituted claims, namely the “stopping member” limitation (e.g., claim 1) and the “leaf spring” limitation (e.g., claim 42). PO Resp. 22–26, 32–36. Patent Owner supports its arguments and evidence with the testimony of its declarant, Mr. Pearson. Ex. 2001.

We have reviewed Petitioner’s contentions and supporting evidence of record in this trial. For the reasons given below, we conclude that Petitioner has demonstrated by a preponderance of the evidence that claims 1–3, 6–8, 10–13, 42, 43, and 45–48 of the ’226 patent are anticipated by Smrha. We begin our analysis with a brief summary of Smrha, and then address the parties’ contentions in turn.

1. Overview of Smrha (Ex. 1004)

Smrha is titled, “Adapter Panel with Lateral Sliding Adapter Arrays.” Ex. 1004, (54). The apparatus disclosed in Smrha is directed to a termination panel (*id.* at 1:14) for use with various types of fiber optic adapters (*id.* at 7:36–37). Smrha teaches:

An adapter panel arrangement including a chassis and a panel of adapters. The adapters defining rearward cable connections and forward cable connections of the panel arrangement. Openings permitting access to the rearward and forward cable connections of the adapters are provided. The chassis further including a removable rear chassis portion to provide access to cable routing areas within the chassis interior.

Id. at (57) (Abstract).

Figure 1 of Smrha, reproduced below, depicts a drawer of the adapter panel arrangement in an open position. *Id.* at 1:58–61.

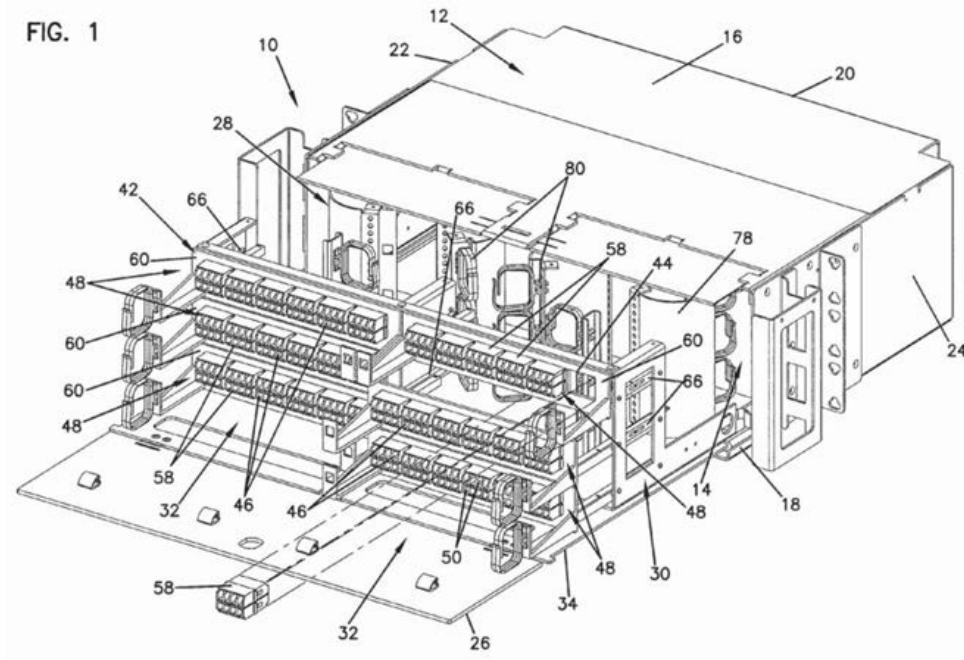


Figure 1 is a front perspective view of the adapter panel arrangement with the drawer in an open position.

Smrha states, “[t]he adapter panel arrangement 10 is designed to provide a high density of cable terminations, yet facilitate access to the cable terminations from the rear during installation procedures.” *Id.* at 2:39–42.

Figure 7 of Smrha, reproduced below, illustrates the sliding frame piece and adapter array.

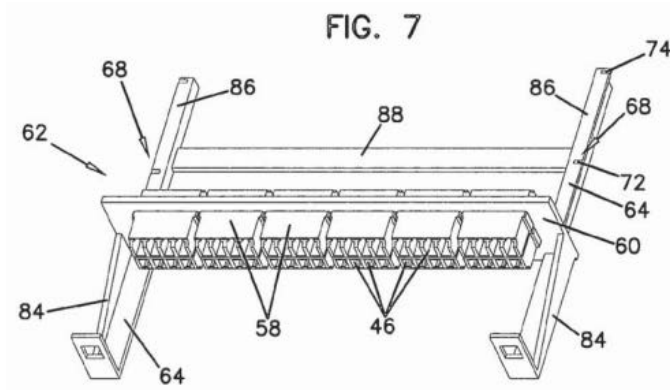


Figure 7 is a perspective view of the sliding frame piece and adapter array.

Sliding frame piece 62 includes elongated rail members 64 arranged to engage and slide within corresponding guides 66 that are mounted to framework structure 30. *Id.* at 4:5–6, 12–15. Figure 10, reproduced below, depicts the guide.

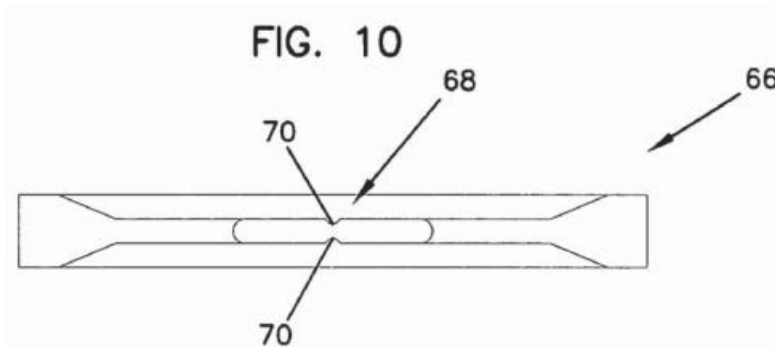


Figure 10 is a side elevation view of the guide.

Rail members 64 and guide 66 include stop arrangement 68 “that limits the sliding motion of the panel sections 60 between a rearward position . . . and a forward position.” *Id.* at 4:16–19. As shown in Figure 12, reproduced below, stop arrangement 68 includes at least one

projection 70 located on guide 66 and corresponding pockets or detents 72, 74, formed in rail member 64. *Id.* at 4:21–32.

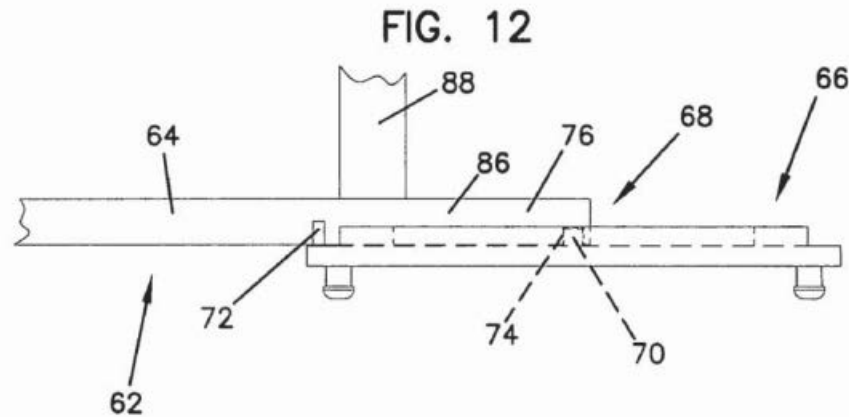


Figure 12 is a top plan view of the guide and sliding frame piece.

For example, in positioning panel section 60 in the rearward position, projections 70 seat within first detent 72 to retain the panel in the rearward position. *Id.* at 4:33–36. Smrha discloses that

guides 66 are flexibly constructed so that when the panel section 60 is pulled forward, the projections 70 un-seat and slide along top and bottom surfaces 76, 77 . . . [and] when the panel section 60 reaches the forward position, the projections 70 seat within the second detents 74 of the rail members 64.

Id. at 4:37–42.

2. Discussion

a. Claim 1

Claim 1 recites in part “an elongated member,” “at least one guide member disposed in the elongated member” and that the “elongated member is configured to be attached to a chassis.” Ex. 1001, 28:3–7. Patent Owner does not dispute Petitioner’s contentions that these limitations are satisfied by the disclosure in Smrha regarding “[t]he pairs of elongated rail members 64 are arranged to engage and slide within pairs of guides 66 (one shown in

FIGS. 10–12) that are mounted to the framework structure 30 (FIG. 1) of the arrangement 10” (Pet. 22–24 (citing Ex. 1004 (4:12–15)) and further that adapter panel arrangement 10 includes “a framework structure 30 (FIG. 1) that is attached or mounted to the drawer 34. A panel of adapters 32 is mounted to the framework structure 30. . . . [T]he drawer 34 is designed to slide outward from the chassis 12 primarily for installation purposes” (*id.* at 24 (citing Ex. 1004, 2:53–59)).

We previously instructed Patent Owner that “any arguments for patentability not raised in the [Patent Owner Response] will be deemed waived.” Paper 10, 6; *see also* 37 C.F.R. § 42.23(a) (“Any material fact not specifically denied may be considered admitted.”); *In re NuVasive, Inc.*, 842 F.3d 1376, 1380–81 (Fed. Cir. 2016) (determining Patent Owner waived arguments made only in its Preliminary Response but not raised in the Patent Owner Response after institution). With the complete trial record before us, we note that we have reviewed arguments and evidence advanced by Petitioner to support its unpatentability contentions where Patent Owner chose not to address certain limitations in its Patent Owner Response. In this regard, the record now contains persuasive arguments and evidence presented by Petitioner, regarding the manner in which the asserted prior art teaches corresponding limitations of the claims against which that prior art is asserted. Based on the preponderance of the evidence before us, we find that Petitioner presents sufficient evidence to support a finding that those limitations, not disputed by Patent Owner, are disclosed by Smrha. *See In re NuVasive, Inc.*, 841 F.3d 966, 974 (Fed. Cir. 2016) (“Although the Board did not make findings as to whether any of the other claim limitations . . . are disclosed in the prior art, it did not have to: NuVasive did not present

arguments about those limitations to the Board.”). We address the disputed limitations below.

We first consider the “stopping member” limitation of claim 1, which Patent Owner disputes is disclosed by Smrha. Claim 1 requires, in relevant part, “one stopping member disposed within the at least one guide member” and further that “the at least one stopping member is configured to receive at least one complementary member in the fiber optic equipment.” Ex. 1001, 28:8–12 (“stopping member” limitation). Petitioner asserts that the stopping member limitation is satisfied by the disclosure in Smrha regarding guides 66 having stop arrangement 68, which includes projection 70 and detents 72, 74. Pet. 46 (citing Ex. 1004, 4:15–24). According to Petitioner, “projection 70 engages a complementary detent 72 or 74 in the rail member 64 attached to the fiber optic equipment 60” (*id.* at 47 (citing Ex. 1004, 4:20–28; Ex. 1003 ¶ 53)).

Patent Owner disputes that Smrha discloses the stopping member limitation. PO Resp. 22–26. Directing us to the Specification of the ’226 patent, Patent Owner argues that the “claimed ‘stopping member’” is described “in the context of ‘stopping members 206.’” *Id.* at 22 (citing Ex. 1001, 19:57–58). To the extent Patent Owner is arguing that the Specification discloses a plurality of stopping members, this argument is not persuasive because it is not commensurate with the scope with claim 1, which recites “at least one stopping member,” i.e., one or more.

Next, Patent Owner argues that Smrha’s stopping member (i.e., projection 70) is not “configured to receive” the identified complementary member (i.e., detents 72, 74). *Id.* at 23 (citing Ex. 2001 ¶¶ 19–26). Although Patent Owner agrees that “projection 70 **engages** a detent 72,”

Patent Owner disputes that “projection 70 ‘is configured to receive’ that detent—projection 70 does not ‘receive’ anything; the projection slides into and seats within the detent.” *Id.* at 25 (citing Ex. 2001 ¶¶ 23–26; Ex. 1004, 4:41).

In our Decision on Institution, we were not persuaded by Patent Owner’s similar argument in view of Petitioner’s reliance on the following passage from Smrha expressly stating that

stop arrangement 68 (FIG. 12) is defined by at least one projection 70 (FIGS. 10 and 11) located on each guide 66 of the pair of guides, and first and second pockets or detents 72, 74 (FIG. 9) formed in the rail members 64 Correspondingly, upper and lower detents 72, 74 (see FIG. 8) are formed in the rearward rail portions 86 of the rail members 64.

Ex. 1004, 4:20–28. We explained that

[o]ther than requiring that the stopping member be ‘configured to receive at least one complementary member’ (Ex. 1001, 28:10), claim 1 does not recite any physical attributes of either the stopping member or the complementary member, nor how the stopping member receives the complementary member. As such, the description in Smrha regarding projection 70 *engaging* complementary detent 72 or 74 satisfies the stopping member limitation.

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Now, with the trial record complete, we remain unpersuaded by Patent Owner’s arguments. In its Reply, Petitioner again directs us to Figure 12 of Smrha, reproduced below.

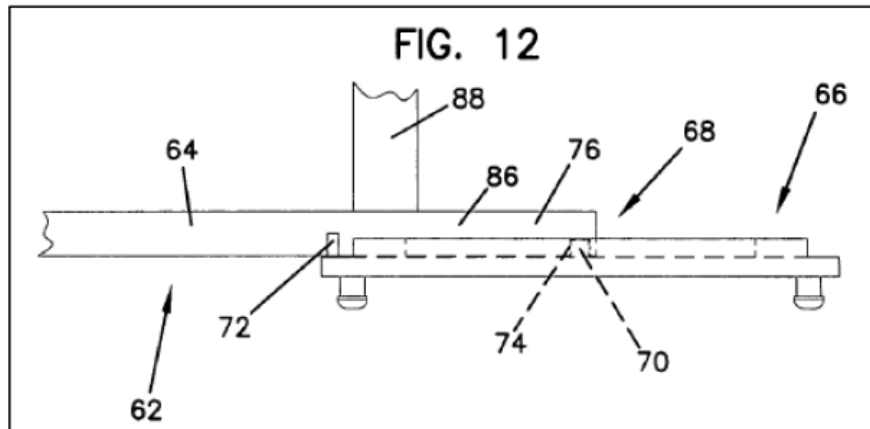


Figure 12 is a top plan view of the guide and sliding frame piece (Ex. 1004, 2:19–20).

Petitioner explains persuasively that “stop arrangement 68 (Fig. 12) is defined by at least one projection 70 (Figs. 10 and 11) located on each guide 66 of the pair of guides, and first and second pockets or detents 72, 74 (Fig. 9) formed in the rail members.” Reply 6 (citing Pet. 25, 47; Ex. 1004, 4:20–28). We credit the testimony of Dr. DeCusatis that “there must be ‘a complementary relationship’ between the projection and the detent 74 of the rail member 64.” *Id.* (citing Ex. 1003 ¶ 53). Also persuasive is Petitioner’s argument that the ’226 patent describes

“[a] locking feature in the form of a latch 166 [that] engages a complementary detent disposed in the tray channel 130 of the module rail guides 126.” (Ex. 1001, 17:4–6) Thus, in the 226 patent itself, the latch, or protrusion, is located in the guides, and the complementary detent is located in the rail member.

Id. at 7.

For these reasons, and based on the complete record, we are persuaded by Petitioner's arguments and evidence that Smrha's guides 66 having stop arrangement 68, which includes projection 70 engaging detents 72, 74, satisfies the stopping member limitation.

b. Claims 2, 3, 6–8, and 10–13

Each of dependent claims 2, 3, 6–8, and 10–13 depends directly or indirectly from claim 1 and recites further limitations in addition to the stopping member limitation discussed above. Ex. 1001, 28:13–21, 31–40, 44–58. In support of its challenge of claims 2, 3, 6–8, and 10–13, Petitioner identifies the disclosures in each of these references alleged to describe the specific subject matter of challenged claims 2, 3, 6–8, and 10–13 respectively. Pet. 25–31. For example, Petitioner relies on the pair of elongated rail members 63 that engage and slide within guides 66 (*id.* at 26 (citing Ex. 1004, 4:12–15)); stop arrangement 68 (*id.* at 27 (citing Ex. 1004, 4:20–24)); the flexible construction of guides 66 allowing projections 70 to un-seat and slide along the surface of rail members 64 (*id.* at 27–28 (citing Ex. 1004, 4:36–40)); framework structure 30 attached to drawer 34 (*id.* at 29–30 (citing Ex. 1004, 2:53–59)); and panel sections 60 containing adapter array 48 (*id.* at 30 (citing Ex. 1004, 3:49–54)).

Patent Owner does not address the limitations expressly recited in claims 2, 3, 6–8, and 10–13 with separate, specific arguments. Instead Patent Owner relies only on its arguments presented with respect to claim 1. PO Resp. 26. As to the undisputed limitations, we find that, based on the evidence cited in the Petition, Petitioner presents sufficient evidence to support a finding that those limitations are disclosed by Smrha. *See NuVasive*, 841 F.3d at 974 (explaining that although the Board did not make findings as to whether any of the other claim limitations (such as fusion apertures or anti-migration teeth) are disclosed in the prior art, it did not have to because NuVasive did not present arguments about those limitations to the Board).

Based on further review of the record, we find that Petitioner has demonstrated by a preponderance of the evidence that Smrha discloses each of the limitations recited in claims 2, 3, 6–8, and 10–13.

c. Claim 42

Similar to claim 1, claim 42 recites in part “an elongated member,” “at least one guide member disposed in the elongated member” and that the “elongated member is configured to be attached to a chassis.” Ex. 1001, 31:1–6. As with claim 1, Patent Owner does not dispute Petitioner’s contentions (Pet. 38–40) that these limitations are satisfied by the disclosure in Smrha. Based on the preponderance of the evidence before us, and for the reasons set forth with respect to claim 1, we find that Petitioner presents sufficient evidence to support a finding that those limitations are disclosed by Smrha.

Additionally, independent claim 42 recites, in relevant part, that the stopping member includes “at least one leaf spring.” Ex. 1001, 31:8, 32:7. (“leaf spring” limitation). Relying on Dr. DeCusatis, Petitioner asserts that the leaf spring limitation is satisfied by the disclosure in Smrha describing how “guides 66 are flexibly constructed so that the projections 70 unseat from the detents 72 or 74 when force is applied to the fiber optic equipment 60.” Pet. 56 (citing Ex. 1004, 4:36–39); *see id.* at 58.

Patent Owner disputes that this passage discloses the leaf spring limitation. PO Resp. 32–36. Specifically, Patent Owner argues that “Smrha does not disclose a leaf spring disposed in guides 66.” *Id.* at 32. Patent Owner contends that the ’226 patent describes a leaf spring as “a curved or arc-shaped member” (*id.* at 33 (citing Ex. 2001 ¶¶ 29–30; Ex. 2015)), and based on this interpretation, argues that Smrha’s guide 66 and projection 70

are not a leaf spring (*id.* at 34 (citing Ex. 1004, Fig. 10)). Further, Patent Owner disputes that the passage in Smrha describing the flexible construction of guide 66 establishes that “a ‘leaf’ spring is disposed within the guides.” *Id.* (citing Ex. 2001 ¶ 36).

The Specification of the ’226 patent, however, describes leaf springs generally as “protrusions 190 that are configured to be received in detents 192 . . . disposed in the tray rails 136 to provide stopping or resting positions.” Ex. 1001, 18:28–37. Based on this passage, we agree with Petitioner’s argument that the ’226 patent “does not require the leaf spring to be curved.” Reply 15. Thus, we are persuaded by Petitioner’s arguments and evidence that “Smrha’s guides 66 with protrusions 70, which unseat from the detents 72 or 74 when force is applied to the fiber optic equipment 60” are leaf springs due to their flexible construction. *Id.* at 16 (citing Pet. 56; Ex. 1004, 4:33–40).

Therefore, based on further review of the trial record, we find that Petitioner has demonstrated by a preponderance of the evidence that Smrha discloses the leaf spring limitation of claim 42.

Thus, we find that Petitioner has demonstrated by a preponderance of the evidence that Smrha discloses each of the limitations recited in claim 42.

d. Claims 43 and 45–48

Dependent claim 43 depends directly from claim 42 and recites that the “at least one leaf spring is provided in the form of at least one curly bracket.” Ex. 1001, 31:10–11. Petitioner identifies the disclosure in Smrha regarding projection 70 and guide 66 to describe this limitation. Pet. 40–41, 57; Ex. 1004, 4:36–39.

Independent claim 45, and claims 46 through 48 which depend therefrom, recite “a fiber optic equipment rail” in the preamble (Ex. 1001, 31:15–32:17) as compared to the “fiber optic equipment guide panel” of independent claims 1 or 42 (*id.* at 28:2, 31:1). Claims 45–48 recite limitations similar to those in claims 1 and 42. To demonstrate how these limitations are satisfied, Petitioner relies on the pair of elongated rail members 64 “arranged to engage and slide within pairs of guides 66 (one shown in FIGS. 10–12) that are mounted to the framework structure 30 (FIG. 1) of the arrangement 10” (*id.* at 41 (citing Ex. 1004, 4:3–14)(emphasis omitted)); stop arrangement 68 and projection 70 (*id.* at 42 (citing Ex. 1004, 4:20–45)); the flexible construction of guides 66 allowing projections 70 to un-seat and slide along the surface of rail members 64 (*id.* at 43, 45 (citing Ex. 1004, 4:36–39)); and panel sections 60 containing adapter array 48 (*id.* at 44 (citing Ex. 1004, 3:49–54)).

Patent Owner does not address the limitations expressly recited in these claims with separate, specific arguments. Instead Patent Owner relies its arguments presented with respect to claim 42. PO Resp. 36. As to the undisputed limitations, we find that, based on the evidence cited in the Petition and for the reasons discussed above, Petitioner presents sufficient evidence to support a finding that those limitations are disclosed by Smrha.

Based on further review of the record, we find that Petitioner has demonstrated by a preponderance of the evidence that Smrha discloses each of the limitations recited in claims 43 and 45–48.

3. Summary

In view of the foregoing, we conclude that Petitioner has established by a preponderance of the evidence that claims 1–3, 6–8, 10–13, 42, 43, and 45–48 of the '226 patent are anticipated by Smrha.

E. Obviousness Grounds Based on Smrha

Petitioner challenges the patentability of claims 9, 32–34, 36, and 44 of the '226 patent under 35 U.S.C. § 103(a) as obvious based on Smrha. Pet. 62–75. In support thereof, Petitioner identifies the disclosures in Smrha alleged to describe the subject matter in the challenged claims. *Id.* As to Petitioner's proposed modification, Petitioner contends it would have been obvious "to modify the guide 66 of Smrha to include spaced-apart projections 70 rather than spaced-apart detents 72, 74 or a pair of projections formed above and below the guide 66." *Id.* at 62–63 (citing Ex. 1003 ¶¶ 111–113). According to Petitioner:

[r]eplacing spaced-apart detents 72, 74 with spaced-apart projections on the guide 66 and replacing a projection 70 on the rail 64 with a detent would have been obvious because it accomplishes the same result, which is to provide multiple stopping positions for a sliding member. (Ex. 1003, ¶113) Indeed, switching projections for detents is a simple rearrangement of known parts to arrive at a known and predictable solution.

Id. at 63. Petitioner concludes that it would have been obvious to switch which member includes projections and which includes detents. *Id.* (citing Ex. 1003 ¶¶ 111–113).

We have reviewed Petitioner's contentions and supporting evidence. Given the evidence of record, we are persuaded that Petitioner has demonstrated by a preponderance of the evidence that claims 9, 32–34, 36,

and 44 of the '226 patent would have been obvious in view of Smrha. We address below the parties' specific contentions.

1. Discussion

a. Claim 32

Claim 32 is a method claim and includes the steps of “imparting a force on a fiber optic equipment tray supporting one or more fiber optic modules to move at least one fiber optic equipment rail . . .”; “releasing at least one detent disposed in the fiber optic equipment rail . . . to allow the fiber optic equipment tray to move”; and “engaging a second stopping member . . . with the at least one detent . . . to stop movement of the fiber optic equipment tray.” Ex. 1001, 30:16–28. Petitioner argues that each of the limitations of claim 32 would have been obvious to a person of ordinary skill in the art “in view of Smrha and ordinary skill in the art.” Pet. 62. In turn, Patent Owner does not dispute Petitioner’s contentions that certain limitations are satisfied by the disclosure in Smrha. For example, Petitioner’s contentions that Smrha discloses the flexible construction of guides 66 allowing projections 70 to un-seat and slide along the surface of rail members 64 (Pet. 64 (citing Ex. 1004, 4:36–40)); as panel section 60 is pulled forward, projections 70 un-seat and slide along rail members 64 (*id.* at 65 (citing Ex. 1004, 4:33–43)); each separate panel section 60 of adapters 32 is attached to sliding frame piece 62 (*id.* (citing Ex. 1004, 4:3–6)); “when the panel section 60 is positioned in the rearward position, the projections 70 of the guides 66 seat within the first detents 72 of the rail members 64 to retain the panel section 60 in the rearward position. The guides 66 are flexibly constructed so that when the panel section 60 is pulled forward, the projections 70 un-seat and slide along top and bottom surfaces 76, 77

(FIG. 8) of the rail members 64” (*id.* (citing Ex. 1004, 4:33–40)); and stopping arrangement 68 (*id.* at 66–67 (citing Ex. 1004, 4:20–24)). As to the undisputed limitations, we find that, based on the evidence cited in the Petition, Petitioner presents sufficient evidence to support a finding that those limitations are disclosed or suggested by Smrha.

Patent Owner only disputes that Smrha discloses the “fiber optic module” limitation. PO Resp. 26–32. As discussed above in Section III.C., claim 32 recites the step of “imparting a force on a fiber optic equipment tray supporting one or more fiber optic modules to move at least one fiber optic equipment rail attached to the fiber optic equipment tray about a fiber optic equipment guide disposed in the fiber optic equipment.” Ex. 1001, 30:16–20. Petitioner contends that this limitation is satisfied by the disclosure in Smrha (1) that by pulling panel section 60, the user imparts a force on panel section 60; (2) panel section 60 supports fiber optic modules (i.e., adapter arrays 58); and (3) rails 64 engage guide 66 and translate fore-and aft about guide 66. Pet. 70–71.

Based on its proposed construction of fiber optic module, Patent Owner first argues that Smrha fails to disclose a fiber optic module having the “ability to be inserted/removed as a modular component,” as well as “having a module housing with walls defining an inside and components disposed therein.” PO Resp. 27. Specifically, Patent Owner contends that Smrha’s adapter panels are “‘a panel of unenclosed adapters’ as ‘opposed to a connection location that is enclosed within a housing or module.’” *Id.* (citing Ex. 1004, 3:36–40; Ex. 2001 ¶¶ 71–73, 75). Second, Patent Owner argues that Smrha’s adapter panels are not modular because they slide back

and forth between fixed positions, but are not removable. *Id.* at 27 (citing Ex. 1004, 4:15–45), 30 (citing Ex. 2001 ¶ 74).

As discussed above, we construe fiber optic module broadly, but reasonably as “a structure encompassing unenclosed (or enclosed) fiber optic adapters or connectors.” Thus, Patent Owner’s arguments directed to the insertion/removal of the fiber optic module as a modular component, or as having walls defining an inside and having components disposed therein, are not persuasive because they are not commensurate with the scope of claim 32 as we have construed it above.

Recognizing that Petitioner views Smrha’s adapters as a module, Patent Owner argues in the alternative that adapter arrays 58 do not manage polarity, but rather “allow the connectors at the end of two fibers to be pointed.” PO Resp. 13 (citing Ex. 2001 ¶¶ 62–64). Again, based on our construction of “fiber optic module,” Patent Owner’s argument is not persuasive because it is not commensurate with the scope of claim 32, which does not require managing polarity.

Based on further review of the trial record, we find that Petitioner has demonstrated by a preponderance of the evidence that Smrha discloses the fiber optic module limitation of claim 32. Further, Patent Owner does not challenge Petitioner’s reasoning that claim 32 would have been obvious to one of ordinary skill in the art based on Smrha. Pet. 62. Based on the record before us, we find that Petitioner has articulated an adequate reason to modify Smrha based on the knowledge of one of ordinary skill in the art, namely because “switching projections for detents is a simple rearrangement of known parts to arrive at a known and predictable solution.” *Id.* at 63.

b. Claims 9, 33, 34, 36 and 44

Dependent claims 9, 34, 36, and 44 each require a leaf spring, while claim 33 requires a stopping member that includes one detent or one protrusion. As discussed above with regard to claim 42, Petitioner presents persuasive arguments and evidence to support a finding that Smrha discloses the leaf spring limitation. And, as discussed above with regard to claim 1, Petitioner presents persuasive arguments and evidence to support a finding that Smrha discloses the stopping member limitation.

2. Summary

In view of the foregoing, we conclude that Petitioner has established by a preponderance of the evidence that claims 9, 32–34, 36, and 44 of the '226 patent are unpatentable under 35 U.S.C. § 103(a) as obvious in view of Smrha.

F. Obviousness Based on Smrha and Barnes

Petitioner challenges the patentability of claims 4, 5, and 35 as obvious under 35 U.S.C. § 103(a), based on Smrha and Barnes. Pet. 75–81. Each of these claims depends from claim 1 and further require a “pull-out limiting member.” Ex. 1001, 28:22–30, 30:34–37.

1. Overview of Barnes (Ex. 1005)

Barnes is titled, “Slide Arrangement for Cable Drawer.” Ex. 1005, [54]. Barnes “relates to cable drawers used in the telecommunications industry for storage of fiber optic cables” and to “a drawer slide that provides sliding movement of a drawer relative to a telecommunications chassis.” *Id.* at 1:7–9, 1:32–33. The drawer slide includes positive stop arrangement 90 that prevents total separation of drawer 30 from the

According to Petitioner, it would have been obvious to modify Smrha's guide 66 to include Barnes' positive stop 90 "to prevent the panel sections 60 of Smrha from being completely separated from the framework structure 30 or the adapter panel arrangement 10." *Id.* at 75–76 (citing Ex. 1003 ¶ 120). Patent Owner disputes Petitioner's reason to combine Smrha and Barnes for claims 4 and 5 (PO Resp. 36–42), which we address below. Our findings as to claims 4 and 5, discussed below, apply to claim 35 as well, which includes similar limitations.

a. Claim 4

Patent Owner acknowledges that both Smrha and Barnes have a drawer that extends out from the housing, and that Barnes discloses that stop mechanism 90 prevents the "drawer" from sliding all the way out of the housing." PO Resp. 37 (citing Ex. 1005, Fig. 2, 8:31–35). Patent Owner, however, challenges whether one of ordinary skill in the art would have had reason to add Barnes' stop mechanism to Smrha's adapter panels (i.e., guides 66), "thereby further limiting the movement of the adapter panels." *Id.* at 38.

According to Patent Owner, by "prevent[ing] the user from moving the panel section 60 a distance beyond that which cables interconnected to the panel section 60 will allow," Smrha already protects against damage to the fiber cable. *Id.* (citing 1004, 4:53–55; Ex. 2001 ¶ 88). Relatedly, Patent Owner argues that the inclusion of Barnes' additional hardware "will add complexity and cost while having no practical advantage with respect to potential damage of fiber optic cables, and one of skill in the art would thus not have seen any reason to do so." *Id.* (citing Ex. 2001 ¶ 81).

In response, Petitioner does not dispute that Smrha includes a mechanism for protecting the cables from damage, rather, Petitioner clarifies “that [a person of ordinary skill in the art] would have considered both references because they both seek to limit the strain on fiber-optic cables by preventing the module from extending too far.” Reply 17 (citing Pet. 75–76; Ex. 1003 ¶ 120).

We are not persuaded by Patent Owner’s argument that, because Smrha already protects against damage to the cables, one of skill in the art would not be motivated to seek another solution involving additional hardware and potential costs. As our reviewing court explains, the existence of better alternatives “does not mean that an inferior combination is inapt for obviousness purposes.” *In re Mouttet*, 686 F.3d 1322, 1334 (Fed. Cir. 2012) (citing *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994)); *see also Winner Int’l Royalty Corp. v. Wang*, 202 F.3d 1340, 1349 n.8 (Fed. Cir. 2000) (“The fact that the motivating benefit comes at the expense of another benefit, however, should not nullify its use as a basis to modify the disclosure of one reference with the teachings of another. Instead, the benefits, both lost and gained, should be weighed against one another.”).

We are also not persuaded by Patent Owner’s related argument concerning the desirability of modular components, i.e., that one of skill in the art would have been “frustrated” with modular components, and “would **not** have wanted to further preclude removal of adapter panels 60 like one would for a drawer.” PO Resp. 39–40 (citing Ex. 2001 ¶¶ 91–94⁴). Instead, we agree with Petitioner that “[j]ust because in some instances it would be

⁴ We recognize that Patent Owner’s citation to ¶ 64 is a typographical error.

desirable to have fiber optic modules that are removable, it does not void the situations where there would be benefits to including a positive stop, such as when there were concerns that the fiber optic cables could be damaged by overextension.” Reply 18. We also agree with Petitioner that “having a positive stop does not by itself mean that the module can never be removed. Instead, it simply means that a positive stop is provided in the guide system to prevent the panel section from being unintentionally removed from the chassis.” *Id.* at 19.

Based on the entire record, Petitioner demonstrates sufficiently that the incorporation of Barnes’ positive stop in Smrha’s guide is supported by rational underpinnings, namely, inclusion of a positive stop “that prevents complete removal also provides protection for the delicate fiber cables routed through the adapter panel arrangement.” Pet. 76 (citing Ex. 1003 ¶ 120).

b. Claim 5

As to claim 5, Patent Owner argues Petitioner (1) does not address the requirement in claim 5 that pull-out limiting members be disposed on both ends of the guide member (PO Resp. 40); (2) does not provide a reason why one of ordinary skill in the art would “add the second pull-out limiting member of Barnes to the rearward end of guides 66” of Smrha (*id.* at 42).

As an initial matter, we observe that the Petition addresses claims 4 and 5 together. With respect to the pull-out limiting member of claim 4 and front pull-out limiting member and rear pull-out limiting member of claim 5, Petitioner directs us to the same passage in Barnes describing how “the drawer slide also includes a positive stop arrangement 90 that prevents the drawer 30 from being totally separated from the chassis 16 . . . The

corresponding stops 94 extend a distance from each of the ends 80, 82 of the center rail 44 . . .” Pet. 76–78 (citing Ex. 1005, 8:31–48, Figs. 10, 13) (emphasis added). Thus, Patent Owner’s argument that Petitioner does not address this limitation is inapposite. Moreover, Patent Owner does not argue that Barnes does not teach a stop arrangement.

We also disagree with Patent Owner’s conclusory assertion that Petitioner has not provided a reason with rational underpinnings explaining why one of skill in the art would add a second stop member to the rearward end of guides 66. Petitioner stated that

[i]t would have been obvious at the time of the alleged invention of the ‘226 Patent to modify the guide 66 of Smrha to include spaced-apart projections 70 rather than spaced-apart detents 72, 74 or a pair of projections formed above and below the guide 66. (Ex. 1003, ¶111-113) Indeed, Smrha already teaches that two stopping positions can be attained when the guide 66 includes two detents 72, 74. (Ex. 1004, 4:28-32) Replacing spaced-apart detents 72, 74 with spaced-apart projections on the guide 66 and replacing a projection 70 on the rail 64 with a detent would have been obvious because it accomplishes the same result, which is to provide multiple stopping positions for a sliding member. (Ex. 1003 ¶ 113).

Pet. 62–63. We are not persuaded that Petitioner’s expressly stated rationale lacks rational underpinnings.

As discussed with respect to claim 4, Petitioner demonstrates sufficiently that the incorporation of Barnes’ positive stop in Smrha’s guide is supported by rational underpinnings, namely, inclusion of a positive stop “that prevents complete removal also provides protection for the delicate fiber cables routed through the adapter panel arrangement.” Pet. 76 (citing Ex. 1003 ¶ 120).

3. Summary

In view of the foregoing, we conclude that Petitioner has established by a preponderance of the evidence that dependent claims 4, 5, and 35 of the '226 patent are unpatentable under 35 U.S.C. § 103(a) as obvious over Smrha and Barnes.

IV. CONCLUSION

Thus, based on our further review of the record, and for the foregoing reasons, we conclude that Petitioner has established by a preponderance of the evidence that 1–13, 32–36, and 42–48 of the '226 patent are unpatentable.

V. ORDER

In consideration of the foregoing, it is hereby:

ORDERED that:

1. Claims 1–3, 6–8, 10–13, 42, 43, and 45–48 of the '226 patent are unpatentable under 35 U.S.C. § 102 by Smrha;
2. Claims 9, 32–34, 36, and 44 of the '226 patent are unpatentable under 35 U.S.C. § 103(a) based on Smrha and the prior art; and
3. Claims 4, 5, and 35 of the '226 patent are unpatentable under 35 U.S.C. § 103(a) based on Smrha and Barnes.

Because this is a Final Written Decision, parties to the proceeding seeking judicial review of the decision must comply with the notice and service requirements of 37 C.F.R. § 90.2.

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Patent 8,538,226 B2

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