

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

COLUMBIA INSURANCE COMPANY,
Appellant

v.

SIMPSON STRONG-TIE COMPANY INC.,
Cross-Appellant

2021-2145, 2021-2157

Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. PGR2019-00063.

Decided: March 31, 2023

KURT JAMES, Stinson LLP, St. Louis, MO, argued for appellant. Also represented by BRADLEY SCOTT EIDSON, JOHN R. SCHROEDER.

RICHARD CRUDO, Sterne Kessler Goldstein & Fox, PLLC, Washington, DC, argued for cross-appellant. Also represented by MICHELLE HOLOUBEK, JON WRIGHT.

Before MOORE, *Chief Judge*, PROST and HUGHES, *Circuit Judges*.

Opinion for the court filed by *Circuit Judge* HUGHES.

Dissenting-In-Part Opinion filed by *Chief Judge* MOORE.
HUGHES, *Circuit Judge*.

Columbia Insurance Company appeals a decision from the Patent Trial and Appeal Board that original claims 1–20 and substitute claims 21–39 of U.S. Patent No. 10,316,510 are unpatentable. Simpson Strong-Tie Company, Inc. cross-appeals the Board’s decision that substitute claim 40 is patentable. As to the lead appeal, we affirm the unpatentability of claims 1–39 because substantial evidence supports the Board’s decision that claims 1–19 and 21–39 lack written description; and because the Board did not err in finding claims 1–11, 13–18, and 20 unpatentable as obvious. As to the cross-appeal, we affirm the patentability of claim 40 because the Board did not err in finding claim 40 definite and non-obvious.

I

A

U.S. Patent No. 10,316,510 relates to a construction product called a “truss hanger.” A truss is an example of a support beam commonly used to build structures. Support beams must be securely connected to a wall frame on either side of the beam. One way to connect the beam to the frame is to use a hanger that attaches to the top of the wall frame with an upper hook and holds the bottom of the support beam with a lower hook.

This type of conventional hanger has been used to connect support beams to wall frames for over a century. In modern buildings, these hangers must account for a layer of sheathing, such as drywall, between the edge of the support beam and the wall frame. In some buildings, two-

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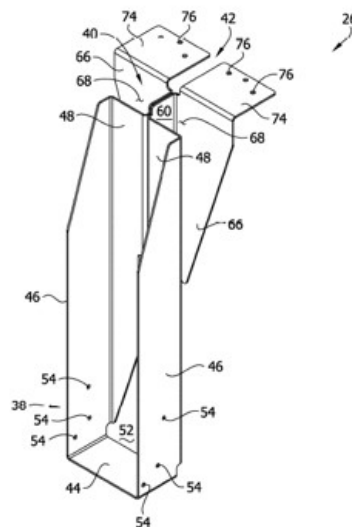
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layers of sheathing are required to ensure fire resistance and meet building codes.

A common way to account for sheathing between a support beam and a wall frame is to cut out the portion of the sheathing that overlaps with the hanger. While this type of cutout allows the hanger to be secured directly onto the wall frame, larger cutouts in the sheathing lead to decreased fire-resistance.

The '510 patent purports to solve this problem by claiming a hanger that extends through the sheathing. The claimed hanger has three main parts: (1) a “channel-shaped portion” (52), (2) a “connection portion” (74 and 66), and (3) an “extension portion” (60). The channel-shaped portion is the lower hook of the hanger—it holds the support beam. The connection portion is the upper hook of the hanger—it attaches to the wall frame by draping over the top and down the side of the frame. The “extension portion” is the purportedly inventive aspect of the invention—it defines a space to fit sheathing by extending from the lower hook to the upper hook.

FIG. 2



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'510 patent, Fig. 2.

Claim 1 is representative of claims 1–19 and substitute claims 21–39:

1. A hanger for connecting a structural component to a wall adapted to have sheathing mounted thereon, the hanger comprising:

a channel-shaped portion configured to receive the structural component . . . ;

an extension portion extending from the channel-shaped portion and configured to extend through the sheathing; and

a connection portion including a top flange configured for attachment to a top surface of a top plate of the wall, the connection portion further including a back flange extending from an edge of the top flange in a direction toward a plane of the base of the channel-shaped portion, . . . the extension portion spacing the side panels from the back flange plane by a distance *sized large enough to permit two layers of 5/8 inch thick sheathing to be received between the rear edge plane and the back flange plane, but too small to permit three layers of 5/8 inch thick sheathing to be received between the rear edge plane and the back flange plane.*

'510 patent, 12:10–36 (emphasis added).

Claim 20 is similar to these claims but defines the size of the extension portion differently:

20. . . . the extension portion spacing the channel-shaped portion from the back flange plane by a *distance sized large enough to permit the drywall to be received* between the channel-shaped portion and the back flange plane.

'510 patent, 14:22–39 (emphasis added).

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Substitute claim 40 is the same as claim 20 but adds, “wherein the extension portion includes *an extension flange extending from* the back flange of the connection portion to the channel-shaped portion,” to the end of the claim. J.A. 93 (emphasis added).

B

Appellee/Cross-Appellant Simpson Strong-Tie Company, Inc. petitioned for post-grant review of claims 1–20 of the ’510 patent under various theories of unpatentability, including lack of written description, indefiniteness, and obviousness.¹ During the proceeding, Appellant/Cross-Appellee Columbia Insurance Company filed a revised contingent motion to amend that proposed substitute claims 21–40 to replace claims 1–20 if the Board were to find the original claims unpatentable.

The Board found claims 1–19 unpatentable for lack of written description and claims 1–11, 13–18, and 20 unpatentable as obvious over Simpson’s proposed combination of Gilb ’155, Bundy, and Allan.^{2,3} As to the contingent substitute claims, the Board found claims 21–39 invalid for the same lack of written description as claims 1–19. The

¹ Simpson also challenged claims 1–19 as anticipated by Brekke ’370, to which the ’510 patent claims priority. The parties agree that this anticipation ground rises and falls with the written description ground, and so we need not address anticipation separately. Appellant’s Br. 68; Appellee’s Br. 20, n. 4.

² Gilb, U.S. Patent No. 4,261,155, issued April 14, 1981 (Gilb ’155); Bundy et al., U.S. Patent No. 9,394,680, filed December 14, 2013 and issued July 19, 2016 (Bundy); Allan, U.S. Patent No. 4,827,684, issued May 9, 1989 (Allan).

³ The Board rejected Simpson’s arguments that claim 20 is unpatentable for indefiniteness, as well as Simpson’s other obviousness arguments.

only claim the Board found patentable was claim 40, which it concluded was neither indefinite nor obvious.

Columbia appeals as to claims 1–39, and Simpson cross-appeals as to claim 40. We have jurisdiction under 28 U.S.C. § 1295(a)(4)(A).

II

We set aside the Board’s actions if they are “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law,” or “unsupported by substantial evidence.” 5 U.S.C. § 706(2). The Board’s legal determinations are reviewed de novo, and its factual findings are reviewed for substantial evidence. *Arendi S.A.R.L. v. Google LLC*, 882 F.3d 1132, 1133 (Fed. Cir. 2018). Written description is a question of fact that we review for substantial evidence. *Fleming v. Cirrus Design Corp.*, 28 F.4th 1214, 1225 (Fed. Cir. 2022). Claim construction and obviousness are questions of law that depend on underlying findings of fact, which are reviewed for substantial evidence. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 325–28 (2015); *In re Brandt*, 886 F.3d 1171, 1175 (Fed. Cir. 2018). “Indefiniteness is a question of law that we review de novo, subject to a determination of underlying facts, which we review for substantial evidence.” *Guangdong Alison Hi-Tech Co. v. Int’l Trade Comm’n*, 936 F.3d 1353, 1359 (Fed. Cir. 2019).

III

We begin with the Board’s conclusion that claims 1–19 and substitute claims 21–39 lack written description under 35 U.S.C. § 112(a). Because this conclusion is a finding of fact supported by substantial evidence, we affirm.

To satisfy the written description requirement, “the disclosure of the application relied upon [must] reasonably convey[] to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date.” *Ariad Pharms., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010) (en banc) (citing *Vas-Cath Inc.*

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v. Mahurkar, 935 F.2d 1555, 1562–63 (Fed. Cir. 1991)). In a patent system which allows claim amendments and continuation applications long after an initial application is filed, the written description requirement serves an important purpose: to ensure that the patent owner may only exclude others from what they had actually invented *as of the priority date*. See *Ariad*, 598 F.3d at 1351. The written description analysis thus requires the factfinder to compare the claim scope with what is disclosed in the specification from the perspective of a skilled artisan. See, e.g., *ULF Bamberg v. Dalvey*, 815 F.3d 793, 797–98 (Fed. Cir. 2016) (affirming the Board’s decision that there was insufficient written description because the claim covered a layer that melted both above and below 220 °C, but the specification only disclosed a layer melting above 220 °C).

Here, the claims are drafted to require an extension portion that:

spac[es] the side panels from the back flange plane by a distance *sized large enough to permit two layers of 5/8 inch thick sheathing to be received* between the rear edge plane and the back flange plane, but *too small to permit three layers of 5/8 inch thick sheathing to be received* between the rear edge plane and the back flange plane.

’510 patent, 12:30–36 (emphasis added). This claim language covers a range of extension portion sizes. It specifies both a lower bound (large enough to fit two layers of 5/8-inch-thick sheathing) *and* an upper bound (too small to fit three layers of 5/8-inch-thick sheathing), while covering all sizes that fall in between these two values.

In contrast, the Board found that the specification only discloses the lower bound of this range: an extension portion sized to fit *exactly* two layers of 5/8 inch drywall, with no additional space left between the wall frame and the support beam. Unlike the claims, there is nothing in the specification suggesting any sort of *upper* limit on the size

of the extension portion, and the Board found that a skilled artisan would not consider disclosure of just one extension portion size to show possession of the claimed range. Throughout its analysis, the Board relied on the disclosure in the specification, including the figures. J.A. 25–29 (citing, *e.g.*, '510 patent 4:10–28, Figs. 1, 10A, 11, 13A, 14A, 35, 36, 38, and 39). The Board also relied on expert testimony by Simpson's expert, who testified that nothing in the specification or prosecution history would suggest to a skilled artisan the claimed upper limit. J.A. 25–29 (citing, *e.g.*, Ex. 1003 (Fennell Expert Declaration) ¶¶ 18, 68, 70–71). This constitutes substantial evidence and is sufficient support for the Board's conclusion that these claims lack written description.

Columbia presents various arguments to support its position to the contrary, but none warrant remand or reversal. *First*, Columbia argues that the Board erred in construing the claim to cover a *range* of extension portion sizes. Rather, Columbia contends that a skilled artisan would understand the claim limitation as providing what Columbia calls a “go or no go” requirement—meaning that the extension portion is sized to fit “*exactly*” two $\frac{5}{8}$ -inch layers of sheathing. Appellant's Br. 63. Columbia argues the claims were drafted this way to account for a small amount of extra room for installing the sheathing and points to column 10, line 65 to column 11, line 23 of the '510 patent. Oral Argument at 7:10–9:10, https://oralarguments.cafc.uscourts.gov/default.aspx?fl=21-2145_03102023.mp3. Because this part of the specification describes sheathing being inserted *after* installation of the hanger, Columbia argues a skilled artisan would know there was necessarily more space than just the width of two $\frac{5}{8}$ -inch layers of sheathing. *Id.*

The argument that this limitation is a “go or no go” requirement is a claim construction argument that Columbia did not raise before the Board in its patent owner response

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and is thus forfeited.⁴ But more importantly, even if the argument were not forfeited, this proposed construction is incorrect because it re-writes the claims. As discussed above, this claim was written in terms of a range with a lower bound and a *specific* upper bound. Regardless of Columbia’s alleged intention to claim only an extension portion sized to fit “*exactly*” two layers of $\frac{5}{8}$ inch thick sheathing, that is not what the claim states. The language of the claim is precise—it sets an upper limit of just under three $\frac{5}{8}$ -inch layers of sheathing. This is a large enough range to include *more* than “*exactly*” two layers of $\frac{5}{8}$ inch sheathing. Indeed, during oral argument, Columbia’s counsel expressed this view multiple times. *E.g.*, Oral Argument at 1:42–2:05, 5:37–6:20, 9:25–47 (agreeing that the claims cover an extension portion, for example, sized to fit two $\frac{5}{8}$ -inch layers of sheathing *and* an additional $\frac{1}{2}$ -inch layer of sheathing, for example). Thus, on top of belying the claim language, Columbia’s argument that we should construe the claimed hanger as “receiv[ing] exactly two sheets of sheathing,” Appellant’s Br. 63, contradicts its own counsel’s interpretation of the claims.

⁴ Neither Columbia’s patent owner response nor sur-reply asks the Board to construe this limitation. *See Simpson Strong-Tie Co., Inc. v. Columbia Ins. Co.*, PGR No. 2019-00063, Paper 27 (Patent Owner Response), 21–30; *see also Simpson Strong-Tie Co., Inc. v. Columbia Ins. Co.*, PGR No. 2019-00063, Paper 36 (Patent Owner Sur-Reply), 2–11. Moreover, Columbia’s written description section in the patent owner response says nothing about the claims not covering a range. *See* Patent Owner Response at 93–96. The closest Columbia gets to making this argument is in a single sentence in the written description section of its *sur-reply*, which states, “the claims merely require that the spacing must be sized to receive a discrete number of layers of a specific type of sheathing.” Patent Owner Sur-Reply at 26.

Second, Columbia argues that Simpson’s construction of this claim as a range is a shifting theory raised for the first time on reply. This is not so. The petition made clear Simpson’s argument—the claims cover a range of extension portion sizes while the specification discloses only one size of extension portion. *See, e.g.*, J.A. 398 (stating this limitation “identifies a measurable range that includes distances within that range and excludes distances outside that range”). In asking the Board to construe this limitation as covering a range, the petition explicitly expressed the range in terms of $1\frac{1}{4}$ inches to $1\frac{7}{8}$ inches. J.A. 398–99 (“Also, because two layers of $5/8$ ” sheathing equates to a distance of $1\frac{1}{4}$ ”, and three layers of $5/8$ ” sheathing equates to a distance of $1\frac{7}{8}$ ”, a POSITA would have understood the range recited in this claim element as equal to at least $1\frac{1}{4}$ ” but less than $1\frac{7}{8}$ ”). And Columbia understood that this was Simpson’s argument because Columbia said so in its patent owner response. *Simpson Strong-Tie Co., Inc. v. Columbia Ins. Co.*, PGR No. 2019-00063, Paper 27 (Patent Owner Response), 93 (describing Simpson’s theory as being that the claims lacked written description support for “the upper limit of the claim limitations”); *see id.* at 96. Thus, Simpson’s argument did not shift between its petition and reply.

Third, Columbia presents factual arguments about how a skilled artisan would have understood the specification. But the fact that Columbia disagrees with the Board’s finding that a skilled artisan would not have understood the specification to disclose the claimed range of sizes is not a basis for reversal. Written description is a fact-dependent inquiry, and as explained above, the Board’s conclusion was supported by substantial evidence.

Fourth, Columbia tries to distinguish this case from our precedent about the chemical arts and criticizes the Board for citing such cases. But the fact that this case involves a more predictable technology than the cases cited by the Board is not a basis for reversal. While it may be

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factually more likely in a predictable arts case for the specification to be one from which a skilled artisan could “reasonably discern a disclosure” of a claimed range, *Indivior UK Ltd. v. Dr. Reddy’s Labs. S.A.*, 18 F.4th 1323, 1328 (Fed. Cir. 2021), this does not mean that the legal standard itself is any different. Whether a claim covers a range that a skilled artisan could not “reasonably discern” from the specification is a question of fact. Here, the Board found that a skilled artisan could not “reasonably discern” the claimed range based on the specification’s disclosure of just the lower bound. As explained above, this was a factual finding supported by substantial evidence.

We have considered Columbia’s remaining arguments about written description and find them unpersuasive. Accordingly, we affirm the unpatentability of claims 1–19 and substitute claims 21–39 for lack of written description.

IV

Next, we address the Board’s conclusion that claims 1–11, 13–18, and 20 are unpatentable as obvious over Gilb ’155, Bundy, and Allan.⁵ Because the Board did not err in its claim construction and the Board’s factual findings supporting its obviousness conclusion under that construction were supported by substantial evidence, we affirm.

Starting with claim construction, we hold that the Board correctly construed “an extension portion extending from the channel-shaped portion and configured to extend through the sheathing,” as requiring “an extension portion extending from the channel-shaped portion toward the connection portion and defining a space to receive sheathing.”

⁵ Because the Board found that Gilb ’155 and Bundy disclose the structural limitations of claims 1, 13, and 20, it found these claims obvious over Gilb ’155 and Bundy without having to consider Allan.

J.A. 57. The claims at issue are apparatus claims that only cover the hanger itself, not the sheathing. But this limitation is worded in functional terms; it requires the extension portion to extend through the sheathing. Before the Board, Columbia did not dispute that a construction for this term required some structural or physical explanation of what is needed to extend through the sheathing. J.A. 55–56. But Columbia’s proposed solution was to construe the claims by reading in additional limitations specific to fire-resistant sheathing having an opening for the extension portion. J.A. 51. Staying true to the claim language, the Board correctly declined to read in this extra language that would artificially narrow the claim to require fire-resistant sheathing with a cutout. We agree with the Board’s construction, which properly balances the claim language itself with the specification and prosecution history. J.A. 56–57.

Columbia argues that the Board’s claim construction violated the Administrative Procedure Act and Columbia’s due process rights because the Board’s construction differed from either party’s proposed claim construction. Appellant’s Br. 38–44. We are not persuaded by these arguments. While the Board’s construction does not mirror the *exact* wording of Simpson’s proposed construction for this limitation, it is “similar enough to [Simpson’s] constructions so as to not constitute changing theories mid-stream in violation of the APA.” *Hamilton Beach Brands, Inc. v. f’real Foods, LLC*, 908 F.3d 1328, 1338–39 (Fed Cir. 2018). This is not a situation where the Board *sua sponte* raised claim construction post-institution. Rather, the parties disputed the meaning of this very limitation throughout the proceeding, and Columbia “had notice of the contested claim construction issues and an opportunity to be heard.” *Id.* at 1339. Thus, we find no procedural or constitutional error with the Board’s construction.

Having arrived at the correct claim construction, the only remaining issue is whether the Board erred in finding these claims obvious over Gilb ’155, Bundy, and Allan. We

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find no such error. The Board’s decision depends from underlying findings of fact that are supported by substantial evidence. For example, the Board found that Gilb ’155 discloses the “extend through” limitation and supported this finding with citations to Gilb ’155’s disclosure; Simpson’s expert testimony; and Columbia’s own statements during the post-grant review proceeding and prosecution of the ’510 patent. J.A. 52–54. And, despite Columbia’s arguments to the contrary, the Board also found motivation to combine the relevant references and cited ample supporting evidence. J.A. 63–69 (citing, *e.g.*, Simpson’s expert’s testimony about simple substitution and predictable results).

We have considered Columbia’s remaining arguments about the obviousness of these claims and find them unpersuasive. Accordingly, we affirm the unpatentability of claims 1–11, 13–18, and 20 as obvious over Gilb ’155, Bundy, and Allan.

V

Finally, on Simpson’s cross-appeal, we consider whether the Board erred in finding claim 40 definite and non-obvious. We find no error and thus affirm.

A

Starting with indefiniteness, we hold that the Board correctly concluded claim 40 is not indefinite. A claim is indefinite if it does not inform, with “reasonable certainty,” a skilled artisan about the scope of the claimed invention. *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 901 (2014). We agree with the board that the claim language here—“large enough to permit the drywall to be received”—informs a skilled artisan with reasonable certainty that the scope of this claim includes *any* extension portion sized larger than the smallest commonly known sheathing size. J.A. 29–34 (citing expert testimony that there were well-known, standardly available drywall sizes at the time when holding claim 20 not indefinite); J.A. 110 (adopting claim 20 indefiniteness analysis for claim 40).

While the fact that this range of possible sizes is exceedingly broad may pose a question of written description or enablement under § 112(a),⁶ the breadth of this range by itself is not an issue of indefiniteness under § 112(b). *Niazi Licensing Co. v. St. Jude Med. S.C., Inc.*, 30 F. 4th 1339, 1347 (Fed. Cir. 2022) (“[A] claim is not indefinite just because it is broad.”). Because the claim informs a skilled artisan with reasonable certainty about the claim scope, we affirm the Board’s conclusion that claim 40 is not indefinite.

B

Finally, we address the Board’s conclusion that claim 40 is not obvious. Claim 40 recites the same elements as claim 20 but also requires “an extension flange *extending from* the back flange of the connection portion to the channel-shaped portion.” J.A. 87 (emphasis added). The Board construed this limitation as requiring the extension flange to *start from* the back flange and end at the channel-shaped portion. J.A. 112–13. We agree that this is the natural reading of what it means to “extend from” the back flange. We also agree that the specification uses the term “extending from” consistent with this reading, J.A. 114–16, and thus affirm the Board’s claim construction.

Simpson argues that, by requiring the starting point of the extension flange to be at the back flange, the Board’s construction improperly requires the extension flange to extend *directly* from the back flange. For support, Simpson points to a place in the specification where the phrase “extending *away from*” is used to refer to two components that are *indirectly* connected. But we do not depart from the natural reading of a phrase absent clear lexicography or prosecution disclaimer. *Luminara Worldwide, LLC v.*

⁶ Simpson does not argue this limitation lacks written description or enablement, and we do not reach that issue for claim 40.

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Liown Elecs. Co. Ltd., 814 F.3d 1343, 1353 (Fed. Cir. 2016). Here, “extending *away* from” is a different phrase from “extending from.” Moreover, the specification uses the phrase “extending *away* from” only once in passing to refer to two components that are indirectly connected. This is not a definition of a term, and thus does not warrant ignoring the natural reading of the phrase “extending from.” Finally, although the specification never defines the actual phrase at issue (“extending from”), it does repeatedly use this term consistent with the Board’s construction to refer to one component starting at the other component (direct connection). In fact, Simpson conceded before the Board that *every* time the specification uses the phrase “extending from,” it does so in the context of the beginning of element B’s extension being on element A (and not any intervening component). J.A. 115. We decline to look to one instance of a different phrase (“extending *away* from”) to overlook the clear meaning of the phrase “extending from,” especially when this meaning coincides with how “extending from” is used in the specification.

Given the Board’s correct construction, the only remaining issue is whether the Board erred in not finding claim 40 obvious under this construction. We find no error. Once again, the Board’s decision depends from underlying findings of fact that are supported by substantial evidence. *E.g.*, J.A. 116–24.

We have considered Simpson’s remaining arguments on cross-appeal and find them unpersuasive. Accordingly, we affirm the patentability of claim 40.

AFFIRMED

COSTS

No costs.

NOTE: This disposition is nonprecedential.

**United States Court of Appeals
for the Federal Circuit**

COLUMBIA INSURANCE COMPANY,
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Appeals from the United States Patent and Trademark Office, Patent Trial and Appeal Board in No. PGR2019-00063.

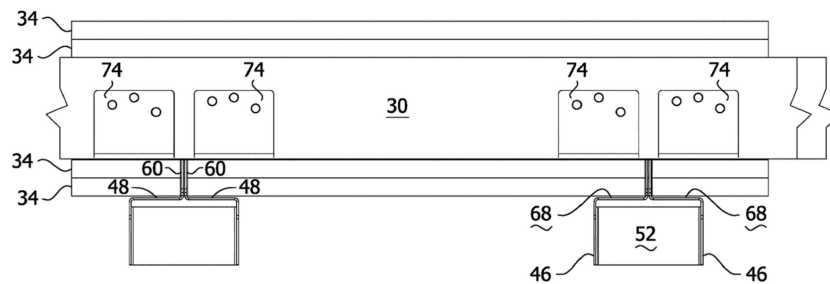
MOORE, *Chief Judge*, dissenting in part.

The Board erred in finding claims 1–19 lack written description support. Properly applied, written description requires only that the '510 patent reasonably convey to a skilled artisan that the inventor possessed a joist hanger with an extension portion designed to create a spacing to receive two but not three sheets of 5/8"-thick drywall. Particularly in light of the simplicity of the claimed technology, the patent provides ample support for this limitation.

The Board found the '510 patent supports written description only for an extension portion that creates a 10/8" spacing. That conclusion neglects to look at the patent as

a whole through the eyes of a skilled artisan. The majority holds that “there is nothing in the specification suggesting any sort of *upper* limit on the size of the extension portion.” Maj. at 7–8. But nearly every figure in this patent that displays sheathing shows exactly what is claimed: a space large enough for two 5/8” sheets of drywall but not large enough for 3. Figures 1, 10, 10A, 11, 13, 13A, 14, 14A, 34–36, and 38–39 of the ’510 patent teach an extension portion creating a spacing that *clearly* permits two but not three sheets of drywall, as the example below shows:

FIG. 11



’510 patent at Fig. 11; *see id.* at 4:13–17 (stating dimensions of the two layers in the figures); *see also* J.A. 3296 ¶ 107 (expert declaration stating figures in context of dimensions in specification “provide[] the necessary context (e.g., scale) to allow” a skilled artisan “to understand a third layer . . . cannot be received”). It is clear from these figures, which are part of the specification, that the patentee possessed and disclosed in the figures themselves that the hanger can accommodate two but not three 5/8” sheets into the space.

Moreover, not only is it clear that the inventor possessed a hanger that could fit two and not three sheets, but the Board found that the ’510 patent discloses only a

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hanger that *no* skilled artisan could possess. The evidence of record demonstrates that a skilled artisan would understand that the spacing cannot be *precisely* 10/8” (i.e., a distance exactly the thickness of the two sheets) but rather must be the thickness of the two sheets plus a “tolerance.” J.A. 3176–78 (expert testimony). Indeed, engineering in this field always includes tolerances because “two pieces of material of a certain thickness” will not fit “in a space that has exactly the same width.” *Id.* There is no dispute that the ’510 patent’s written description contemplates adding sheathing into the space defined by the extension portion *after* the hanger is installed. ’510 patent at 10:65–67 (stating the hanger is “installed on the wall **28** before the sheathing **34** is mounted on the wall”). “This simplifies construction by allowing the building to be completely framed and roofed before requiring the sheathing **34** to be installed.” *Id.* at 10:67–11:2. There is also no dispute that the space must include a tolerance in order for the two sheets to be added after and thus the inventor possessed more than just 10/8” thickness. In fact, if the space was only 10/8” it would be impossible to add the sheets after as the specification expressly disclosed. Given the figures showing space for two but not three sheets of drywall, there is no reasonable basis for concluding that the inventor did not possess this claimed invention.

While the majority recognizes “it may be factually more likely in a predictable arts case” that the same level of disclosure provides sufficient written description of a claimed range, it nonetheless treated this claim as though it were in an unpredictable field rather than simply a claim to a hanger for drywall. Maj. at 10–11; *see Hologic, Inc. v. Smith & Nephew, Inc.*, 884 F.3d 1357, 1361 (Fed. Cir. 2018) (“[T]he field of this invention is a predictable art, such that a lower level of detail is required to satisfy the written description requirement than for unpredictable arts.”). Unlike the chemical arts, which involve “the unpredictable performance” of new combinations of chemical compounds,

this case involves the simple and predictable dimensions required for a construction hanger to accommodate two 5/8"-thick sheets of drywall. *In re Smythe*, 480 F.2d 1376, 1383 (C.C.P.A. 1973). The '510 patent explicitly discloses dimensions for a spacing that can accommodate two but not three 5/8"-thick sheets of drywall and depicts that spacing throughout the patent. '510 patent at 4:15–19, Figs. 1, 10, 10A, 11, 13, 13A, 14, 14A, 34–36, and 38–39. This is sufficient written description support.