REDACTED

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

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SIMPSON STRONG-TIE COMPANY INC.
Petitioner

v.

COLUMBIA INSURANCE COMPANY
Patent Owner

_____

Case PGR2024-00050
Patent No. 11,920,339

PATENT OWNER'S SUR-REPLY TO THE PETITION FOR POST GRANT REVIEW

REDACTED

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EXHIBIT LIST

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2001	Declaration of Richard Kaczkowski
2002	Curriculum Vitae of Richard Kaczkowski
2003	U.S. Patent No. 11,142,902
2004	U.S. Patent No. 11,225,787
2005	U.S. Publication No. 2021/0396000
2006	U.S. Publication No. 2022/0243455
2007	DGT/DGHT Fire Wall Hangers
2008	"Mass Timber and Wood Framing," Architectural Record Magazine, McGraw Hill Construction, November 2012, pp. 165-169
2009	Top Flange Hangers LBV/BA/B/HB
2010	Merriam-Webster's Collegiate Dictionary – Definition of Bound
2011	New Oxford American Dictionary – Definition of Bound
2012	U.S. Patent No. 11,065,667
2013	U.S. Publication No. 2019/0136520
2014	U.S. Patent No. 4,560,301
2015	U.S. Patent No. 6,112,495
2016	Simpson Strong-Tie: New Fire Wall Hangers Optimized for Power Nailers
2017	Simpson Strong-Tie: DGHT Top-Flange Fire Wall Hanger

2018	Simpson Strong-Tie: DGT Top-Flange Fire Wall Hanger
2019	Simpson Strong Tie Co., Inc. Design No. SST/WPCF 120-01 Fire Resistant Joist Hanger DG Series Fire Wall Hanger
2020	Simpson Strong-Tie: Your Go-To, Load-Rated Fire Wall Hanger
2021	Simpson Strong-Tie: Allowable Loads for the DG and DGH hanger installed on walls over wood structural panel sheathing
2022	Simpson Strong-Tie: DGH Fire Wall Hanger Now Available Skewed or with Offset Top Flange
2023	Simpson Strong-Tie: DG/DGB/DGH Fire Wall Hangers
2024	Merriam-Webster's Collegiate Dictionary – Definition of Outwardly
2025	New Oxford American Dictionary – Definition of Outward
2026	U.S. Publication No. 2002/0104279
2027	U.S. Patent No. 11,560,707
2028	U.S. Publication No. 2002/0148191
2029	U.S. Publication No. 2013/0133284
2030	Merriam-Webster's Collegiate Dictionary – Definition of Close
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2032	Merriam-Webster's Collegiate Dictionary – Definition of Conform

2033	New Oxford American Dictionary – Definition of Conformance
2034	U.S. Patent No. 9,938,709
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2038	2012 International Building Code – Table 721.1(2)
2039	Fire Ratings of Masonry Walls
2040	Fire and Concrete Structures
2041	Fire Protection Safety with Concrete
2042	2012 International Building Code: Definition of “Fire Wall”
2043	Structural Design for Fire Safety
2044	Press Releases – MiTek Residential Construction Industry
2045	MiTek Releases FWH Fire Wall Hanger, A New USP Structural Connector Product
2046	USP Structural Connectors 2015-2016 Product Catalog
2047	Wood-Frame House Construction
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2057	Declaration of Joe Dunkle
2058	Declaration of Ryan Holmes
2059	Declaration of Michael Nelson
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2062	May 25, 2022 Deposition of William Andrew Fennell
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2073	Declaration of W. Andrew Fennell in Support of Petitioner's Reply to Patent Owner's Response and

	Petitioner's Opposition to Patent Owner's Contingent Motion to Amend (PGR2021-00109)
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2076	Expert Report of Nathan Hoffmann, PE
2077	U.S. Patent No. 537,504
2078	U.S. Patent No. 3,885,363
2079	U.S. Patent No. 6,230,466
2080	U.S. Patent No. 9,790,684
2081	U.S. Publication No. 2012/0285020
2082	U.S. Publication No. 2013/0047539
2083	File History of U.S. Application No. 18/492,460
2084	New Oxford American Dictionary – Definition of Open
2085	Merriam-Webster's Collegiate Dictionary – Definition of Opening
2086	Simpson Design File for Gypsum Board Cantilever Hanger
2087	Simpson Emails Re: DHU vs. USP's FHW (1/2)
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2090	MiTek Emails Re: FWH
2091	USP: FWH Fire Wall Hanger Testing
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2093	MiTek Emails Re: Cantilevered Hanger (Highly Confidential – Prosecution Bar)
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2125	MiTek Emails Re: Standard Pricing – Reliable- Los Angeles Apts – Laurence Hovenier 1-27-15.xlsx
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2130	Simpson Emails Re: FWH USP (4/4)

2131	Technical Bulletin: FWH Series Fire Wall Hangers
2132	Fire Wall Hangers FWH Series
2133	DG/DGB/DGH Product Literature: Your Go-To, Load-Rated Fire Wall Hanger
2134	DGF/DGHF/DGBF Product Literature: Your Go-To, Load-Rated Fire Wall Hanger
2135	DGT/DGHT Fire Wall Hanger
2136	Simpson Emails Re: DHU/DHUTF
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2143	April 15, 2025 Deposition of William Andrew Fennell
2144	2012 International Building Code: Chapters 6 and 7
2145	2000 International Building Code
2146	FW Hangers Top Mount
2147	1994 Timber Construction Manual
2148	DU-DHU-DHUTF Drywall Hangers
2149	1967 Uniform Building Code

2150	Performance Standard for Wood-Based Structural-Use Panels
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2173	January 29, 2025 Deposition of Sam Hensen Exhibit 30 (served only)
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2176	January 29, 2025 Deposition of Bryan Wert Exhibit 12 (served only)
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2183	January 29, 2025 Deposition of Steve Rotzin (served only)
2184	January 29, 2025 Deposition of Steve Rotzin Exhibit 11 (served only)
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2186	January 27, 2025 Deposition of Roger Dankel Exhibit 2 (served only)
2187	January 28, 2025 Deposition of Tom Evans Exhibit 7 (served only)
2188	January 29, 2025 Deposition of Bryan Wert Exhibit 8 (served only)
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2191	U.S. Patent No. 3,867,802
2192	U.S. Patent No. 1,368,699
2193	U.S. Patent No. 8,205,402
2194	U.S. Patent No. 8,347,581
2195	ASTM E119 – 12a
2196	ASTM E814 – 13
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2198	Third Declaration of Richard Kaczkowski
2199	September 16, 2025 Deposition of Sam Hensen

Emphasis Added Throughout Unless Indicated Otherwise

I. INTRODUCTION[1]

PO has provided substantial evidence supporting secondary consideration. Rather than acknowledging contemporaneous evidence, Simpson largely relies on contradictory present-day statements. Likewise, where PO offers economic analysis and survey evidence supported by qualified experts, Simpson merely offers attorney argument and conclusory opinions. Indeed, Simpson adduces little to no "evidence" in support of its positions regarding secondary considerations.

As to the *prima facie* obviousness analysis, Simpson merely refers back to its prior deficient arguments. Reply: 3. Notably, under current guidance, Simpson's

[1] Simpson's Reply incorporates voluminous arguments (approximately 70 paragraphs worth) made or supported only in the Exhibit 1068 Declaration of Mr. Fennell in violation of 37 C.F.R. 42.6(a)(3). Such incorporation by reference represents an improper attempt to circumvent the word count limit for the Reply. Due to its own word count limits, PO is restricting its response to arguments properly raised and articulated in the Reply itself.

reliance on gap-filling and inability to specify where claim elements are found in the prior art would preclude institution. *See*, July 31, 2025 Memorandum.[2]

While Simpson also gives lip service to its § 112 arguments, Simpson's arguments fail to adequately rebut the arguments raised in the Patent Owner Response ("POR").

In view of the problems with the *prima facie* case, strong evidence for objective indicia of nonobviousness, and insufficiency of its § 112 arguments, the Board should uphold the validity of the '339 Patent.

II. THE OBJECTIVE EVIDENCE OF NONOBVIOUSNESS REMAINS OVERWHELMING

Simpson misapprehends the burden born by the parties in presenting and refuting objective indicia of nonobviousness. Certainly, PO bears an initial burden to produce evidence establishing objective indicia of nonobviousness. However, PO is not required to prove in the first instance that the objective evidence is not due to factors other than the patented invention. *Demaco Corp. v. F. Von Langsdorff Licensing Ltd.*, 851 F. 2d 1387, 1394 (Fed. Cir. 1988). Rather, it is Simpson's burden to produce ***evidence*** that other factors were responsible. *Id.*; *PPC Broadband, Inc.*

[2] https://www.uspto.gov/sites/default/files/documents/aapa_memo_final__signed.pdf?utm_campaign=subscriptioncenter&utm_medium=email&utm_source=govdelivery.

v. Iancu, 739 Fed. Appx. 615, 627 (Fed. Cir. 2018). Simpson provides no contrary evidence, but instead relies on attorney argument and conclusory opinions. Simpson never acknowledges or explains the multiplicity of its own internal statements supporting secondary considerations.

Simpson argues at some length against nexus by presumption—which PO maintains is applicable—but ignores the overwhelming direct evidence demonstrating nexus-in-fact. Simpson has failed to carry its burden of proof to rebut nexus, whether by presumption or nexus-in-fact.

A. Commercial Success

Simpson does not dispute MiTek's FWH or its own DG, DGF, and DGT Series products were commercially successful or that the products are used according to the claimed method. Rather, Simpson focusses on MiTek's FWH and argues its revenue growth was attributable to industry trends for multi-family housing starts, rather than consumer preference for the claimed method of constructing firewall assemblies.

The market dominance of MiTek's FWH and Simpson's DG, DGF, and DGT Series [redacted]—demonstrated in the graphs below—belies Simpson's argument.

Exhibit 2075: ¶67.

EX2055: ¶47.

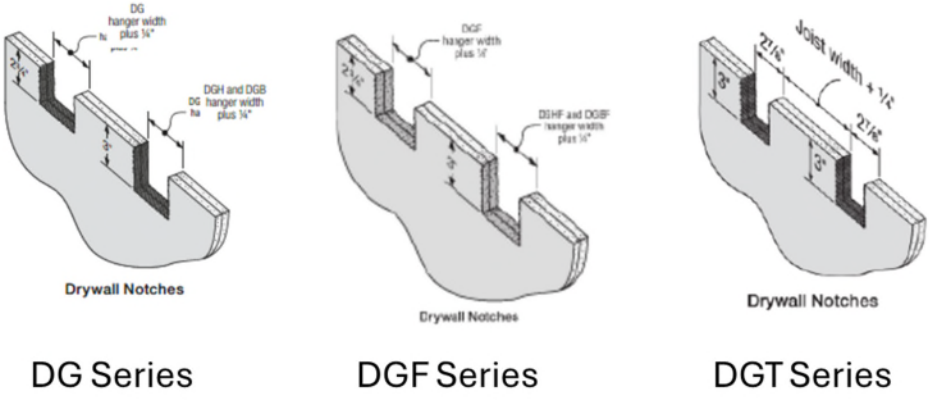
From 2014-2017, MiTek's FWH and Simpson's DU Series hangers were the only hangers on the market specifically design and marketed for use in installing two-hour fire-rated wall assemblies. EX2059: ¶¶3, 5 2055: ¶¶34-35. The FWH hangers were capable of installation prior to the sheathing, while the DU Series required installing sheathing before the hanger. EX2106: SST046441; EX2075: ¶31.

Simpson was the entrenched leader with approximately [redacted]% market share for structural connectors, while MiTek had approximately [redacted]%. EX2066: 173:6-15. Further, Simpson's DU hanger beat the FWH to market and was considerably less expensive. EX2059: ¶6l; EX2064: 160:9-18.

If the success of the FWH hanger was merely attributable to increasing multi-family housing starts, the DU hanger should have outperformed the FWH by a wide margin. [redacted] the FWH hanger [redacted] was indisputably attributable to its ability to be installed prior to the sheathing according to the claimed method, while the DU hanger could not. EX2050: ¶¶203-212; EX2051: ¶¶228-261; EX2055: ¶¶28-44; EX2075: ¶¶49-54 (Simpson's district court expert acknowledging "[redacted]"); EX2066: 120:15-121:8. The

nexus of the FWH hanger' commercial success to the claimed method is further expressly documented in Simpson's own contemporaneous documents, as well as by customer testimonials. EX2094 ("[redacted]") EX2096; EX2102; EX2103; EX2104; EX2107; EX2108; EX2056: ¶¶11-15; EX2058: ¶¶9-15; *see also* EX2050: ¶¶203-234; EX2051: ¶¶248-259; EX2055: ¶¶28-44.

The dominance of hangers capable of installation before sheathing only widened when [redacted]." EX2075: ¶¶90-94. Notably the DG/DGF/DGT hangers require a larger cutout than the FWH hanger, thus providing proof that <u>limiting the cutout to a slit was not critical to the FWH's commercial success</u>.



DG Series DGF Series DGT Series

EX2133; EX2134; EX2135.

B. Nexus-In-Fact of the Commercial Success

Simpson spends a substantial portion of their brief critiquing PO's survey evidence, but otherwise largely ignores the rest of the evidence supporting nexus-in-fact. POR: 75-82, 97-101. Setting aside the other substantial evidence of nexus-in-fact, PO's survey is sufficient under Federal Circuit precedent. *Apple Inc. v. Samsung Elecs. Co.*, 839 F.3d 1034, 1055 (Fed. Cir. 2016) (crediting "survey evidence that customers would be less likely to purchase a portable device without the [claimed] feature and would pay less for products without it"); *Winner Int'l Royalty Corp. v. Wang*, 202 F.3d 1340, 1350–51 (Fed. Cir. 2000) (crediting survey evidence that the claimed feature "was the very reason they purchased the device, as opposed to those [that lacked the claimed feature], and was the reason they were willing to pay more for such [product] than for one without it").

While PO's survey expert—Michael Alley—has over 20 years of experience in the market research industry, Simpson offers only attorney argument and the lay opinion of Mr. Fennell—an engineer lacking any specialized knowledge, experience, or training to opine on surveys—to rebut him. *Compare* EX2054 ¶¶11-15; EX1003: ¶¶6-10; EX2197: 121:8-128:13. Simpson does not provide any survey evidence of its own, or even a qualified expert to opine on Mr. Alley's methodology or opinions.

Mr. Alley's survey included both open-ended (EX2054: ¶¶34-36) and close-ended questions (EX2054: ¶¶37-41). Of these, Simpson focuses on the unprompted responses to open-ended questions, to accuse Mr. Alley of making a "patently false" statement. While Mr. Alley's use of "majority" in his Paragraph 23 was an error (the correct statement "significant portion" appears in Paragraph 80), his declaration clarifies that he was not using the open-ended responses to provide a statistical analysis. EX2054: ¶¶83-84.

While open-ended questions can provide qualitative data, they are ill suited for the quantitative treatment that Simpson attempts. *In re NJOY, Inc. Consumer Class Action Litig.*, 120 F. Supp. 3d 1050, 1113–14 (C.D. Cal. 2015). Because open-ended questions allow for free-form answers, they often result in unfocused or irrelevant responses and fail to provide a check on respondents that misinterpret the question in the first place (e.g., interpreting the questions as to why they chose the FWH over the DGT or vice versa).

Here, several of the responses in the survey were simply uninformative (e.g., "very innovative," "nothing influenced me," and "its good and helpful") and yet Simpson includes them for their calculations. Additionally, open-ended questions present complexity in response interpretation, such that Mr. Alley's identification of 22 open-ended responses mentioning installation method should not be taken as definitive.

The fact that approximately a quarter of the respondents mentioned installation method as being influential when providing unprompted responses to an open-ended question is impressive. EX2054: ¶80.

Simpson also makes attorney argument regarding 82% of survey respondents identifying penetration of the drywall without reducing the fire-resistance rating as a reason for preferring the hangers. Reply: 6. When questioned on this, Mr. Duncan, PO's economics expert explained:

> [F]or our purposes of using stated preference which is very important to not rely on strictly stated preference, it needs to augmented with revealed preference data, the totality of that evidence is quite clear that a primary driver is the sequencing.

EX1053: 48:1-48:7.

It goes without saying that when selecting a firewall hanger, a hanger that does not diminish the fire-rating of the firewall is preferable. Absent a compelling benefit (such as avoiding pre-rocking), the customer would always prefer a hanger never penetrate the sheathing. Thus, a stated preference for a hanger that penetrates the fire-barrier membrane without affecting the fire-rating, while important, is not a commercially distinguishing feature over other firewall hangers, such as the DU hanger.

While construction professionals may find other factors were also important, the close-ended survey results showed that a significant majority of the respondents identified the order of installation as a primary factor in their purchasing

decisions. EX2054: ¶¶86-93. Likewise, a significant majority of respondents indicated a willingness to pay a price premium for firewall hangers which can be installed prior to drywall installation. EX2054: ¶¶91-96. "It is not necessary … that the patented invention be solely responsible for the commercial success, in order for this factor to be given weight appropriate to the evidence, along with other pertinent factors." *Oren Techs., LLC v. Proppant Express Invs. LLC,* No. 2019-1778, 2021 WL 3120819, at *6–7 (Fed. Cir. July 23, 2021) (quoting *Continental Can Co. v. Monsanto Co.*, 948 F.2d 1264, 1273 (Fed. Cir. 1991)).

The declaration and survey submitted by Mr. Alley was but one piece of evidence demonstrating that the commercial success of MiTek's FWH and Simpson's DG, DGF, and DGT hangers was attributable to being capable of installation before sheathing according to the claimed method. Simpson entirely ignores that PO's economic expert—Dwight Duncan—further analyzing the stated preferences from Simpson's own internal communications, as well as performing a revealed preference analysis comparing sales of the FWH, DG, DGF, and DGT products to the DU product. EX2055: ¶¶28-52.

C. Long-Felt Need

Simpson's rebuttal to the PO's assertion that there was a long-felt need consists primarily of statements from Thomas Evans and Sam Hensen [redacted] and speculation that the need for a fire-wall hanger

was the result of rising demand for fire-rated assemblies in wood-frame mid-rise construction in the early 2010s.

Even if Mr. Evans or Mr. Hensen [redacted] does not foreclose that there was a need well before then. Mr. Church provided testimony that it was a topic of discussion in seminars dating back to around 2008 and that he worked with firewall and fire-barrier assemblies dating back to the 1990s. EX2056: ¶12; EX1057: 15:9-19, 18:21-20:10, 31:8-34:7. Thomas Irmiter likewise testified to personally constructing firewalls as a carpenter in the 1980s. EX1054: 24:24-28:18; *see also* EX2052: ¶¶36-42 (discussing design work for firewalls that he was personally aware of).

D. Failure of Others

Simpson relies on present day testimony to argue that it did not try and fail to develop a hanger that could be installed prior sheathing [redacted][3] Simpson's revisionist testimony is contradicted by contemporaneous evidence f[redacted] Exhibit 2086 betrays that the [redacted]

[3] Notably, Simpson's argument about "pre-rocking" as a trending practice, contradicts its arguments regarding motivation to combine. Petition: 27, 71, 152-153.

[redacted]

EX2086: SST0105115.

[redacted]. EX1048: ¶9.

Again, Exhibit 2086 documented that [redacted] EX2086: SST0105115, SST0105127-SST0105130 (see images below).

[redacted]

E. Skepticism

Simpson's Reply attempts to downplay the skepticism of the FWH as but "one person's individual, unsubstantiated skepticism." Reply: 20. But considerably more than a single person expressed skepticism and/or surprise upon learning of the FWH. *See* EX2064: 168:23-170:13, 171:13-174:24, 176:4-178:25 ([redacted]); EX2090 (Troy Bean); EX2107 [redacted]); EX2124 ([redacted]); EX2070: 70:6-71:25 ([redacted]); EX2088: SST0087827 [redacted]); EX2089: SST0087752 ([redacted]); EX2092: SST0087797 ([redacted]); *see also* EX1050: 29:15-30:23 (Ryan Holmes describing that "everybody looks at it and goes what in the world is that"). Just because Mr. Daudet and Mr. Evans came to understand the FWH hanger and would later emulate it, does not negate that their initial reaction was one of skepticism or surprise.

F. Copying

This is not an instance where copying is based solely on accusations that Simpson's product falls within the claims' scope. There is contemporaneous evidence—as compared to Simpson's present-day denials—that [redacted] Simpson set out with the specific intent of copying aspects of the FWH hanger.[4]

[4] Simpson's reference to the DGT hanger not being a copy is disingenuous as the DGT was designed years later and only released in 2023.

Numerous documents evidence that Simpson was under pressure [redacted]

EX2050: ¶¶247-262; EX2051: ¶¶273-284; EX2106; EX2104; EX2107; EX2096; EX2136; EX2137; EX2108, EX2094; EX2105; EX2100; EX2109.

The evidence—[redacted]—likewise demonstrates that Simpson had the FWH in hand as it developed its prototypes.

EX2113: SST045546; EX2199: 93:22-94:14.

The Federal Circuit has clarified that the "statement copying requires the replication of a specific product" from *Iron Grip Barbell*[5] is not requiring a replica of the specific product, but instead was meant to "require[] duplication of features of the patentee's work based on access to that work." *Liqwd Inc. v. L'Oreal USA Inc.*, 941 F.3d 1133, 1137-38 (Fed. Cir. 2019) (internal quotations omitted). The fact that Simpson ultimately released a different product—[redacted]—does not diminish that its design path started with copying.

G. Industry Praise

Simpson attempts to argue that the industry praise identified in the POR was not tied to the invention by identifying a handful of allegedly generic statements. In making this argument, Simpson cherry picks 8 of the 18 exhibits cited in the POR to highlight. *Compare* POR: 88-89; Reply: 19; (not addressing EX2089; EX2094; EX2104; EX2105; EX2106; EX2108; EX2122; EX2123; EX2125; EX2126; EX2159). Not only does Simpson cherry pick exhibits—presumably ignoring the exhibits that failed to fit its narrative—Simpson selectively excerpted quotes from the exhibits it did address.

As an example, Simpson excerpts "[redacted]" from Exhibit 2012. But elsewhere in the exhibit, the quote's author elaborates "[redacted]

[5] *Iron Grip Barbell Co. v. USA Sports, Inc.*, 392 F.3d 1317, 1325 (Fed. Cir. 2004).

[redacted] thus explicitly tying his praise to the claimed method.

Simpson excerpts [redacted] from Exhibit 2103, but neglects statements such as [redacted] In yet an additional example, the allegation that the praise was generic in Exhibit 2118 is dispelled in that the author—Matt Church—also offered declaration testimony explicitly praising the order of installation. *See* EX2118, EX2056: ¶11.

H. Presumption of Nexus

Simpson does not dispute that the FWH, DG, DGF, or DGT hanger products embody the claimed invention of the ’339 patent. Rather, Simpson’s attack on nexus can be summed up as an argument that the commercial success of the FWH is at least partially attributable to unclaimed features.

Simpson misinterprets the nexus requirement. While the presumption of nexus is rebuttable, to do so Simpson must present evidence showing the proffered objective evidence was “due to extraneous factors other than the patented invention.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1329 (Fed. Cir. 2016). “[A] patent challenger cannot successfully rebut the presumption with argument alone—it must present evidence.” *Polaris Indus., Inc. v. Arctic Cat, Inc.*, 882 F.3d 1056, 1072 (Fed.

Cir. 2018); *see also Quanergy Sys., Inc. v. Velodyne Lidar USA, Inc.*, 24 F.4th 1406, 1418 (Fed. Cir. 2022).

Simpson cites to *Fox Factory* to support its unclaimed features argument, but that case does not stand for the proposition that the existence of unclaimed features necessarily defeats the presumption:

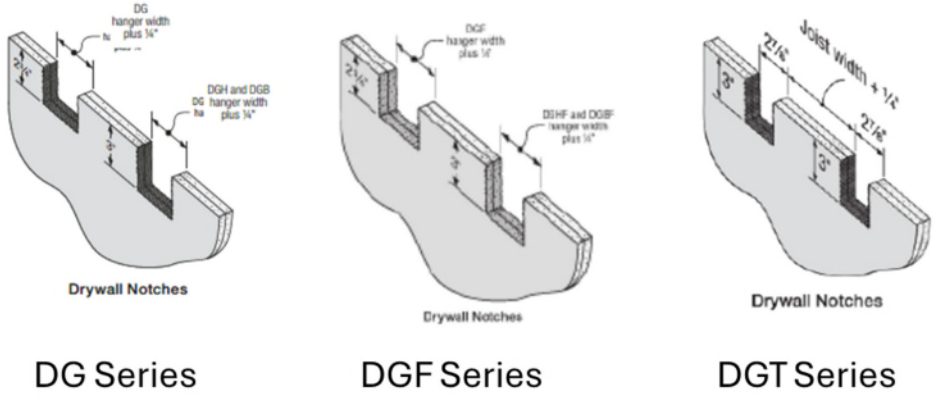
> To be sure, we have never held that the existence of one or more unclaimed features, standing alone, means nexus may not be presumed. Indeed, there is rarely a perfect correspondence between the claimed invention and the product. As we explained, the purpose of the coextensiveness requirement is to ensure that nexus is only presumed when the product tied to the evidence of secondary considerations is the invention disclosed and claimed.

Fox Factory, Inc. v. SRAM, LLC, 944 F. 3d 1366, 1375 (Fed. Circ. 2019)[6] (internal quotations omitted). Instead, "[t]he presumption analysis requires the fact finder to consider the unclaimed features of the stated products to determine their level of significance and their impact on the correspondence between the claim and the products." *Teva Pharms. Int'l GmbH v. Eli Lilly & Co.*, 8 F.4th 1349, 1361 (Fed. Cir. 2021)

[6] *Fox Factory* is an extreme case where the patent owner admitted that unclaimed features were "'critical to the product's ability" and "go to the 'heart' of another one of" its patents. 944 F.3d at 1374-75. There are no such admissions in this case.

Attempting to overcome the presumption of a nexus, Simpson alleges various aspects of the extension flanges were critical, namely: (1) minimizing the penetration through the sheathing to only a slit and (2) providing load path management. Notably, Simpson's own arguments with respect to the motivation to combine and reasonable expectation of success betray the criticality of these supposedly unclaimed features. Specifically, Simpson's prior art combinations would require larger penetrations through the sheathing and Simpson has argued that load path management was well within the level of skill in the art.

Notably, Simpson's own DG, DGF, and DGT hangers do not share the allegedly unclaimed features that Simpson identifies for the FWH, and as such the presumption of nexus with respect to the commercial success of the DG, DGF, and DGT series hangers remains unrebutted. Indeed, the DG/DGF/DGT hangers require a larger cutout than the FWH hanger.



EX2133; EX2134; EX2135.

Further, the success of the DG, DGF, and DGT hangers —which have a larger market share than the FWH—contradicts Simpson's argument that minimizing the penetration through the sheathing to only a slit is a critical feature of the FWH.

Exhibit 2075: ¶67.

Further, the alleged "unclaimed features" of the FWH are linked to the novel features recited in the claims. For example, Claim 1 is directed to a "method of constructing a fire-resistive wall assembly" and requires a hanger comprising "an extension portion … spacing the channel-shaped portion [from the frame wall]" thus allowing installation of the hanger prior to "inserting the fire retardant sheathing between the channel-shaped portion … and the frame wall" and "moving the fire retardant sheathing … [such that] the fire wall hanger extends through the opening

in the fire retardant sheathing." It is these novel features of the constructing a fire-resistive wall assembly that also allow the FWH hanger to minimize the interruptions in the fire-retardant sheathing. EX 2001 28; EX1001: 4;34-36, 11:33-41.

Fox Factory, likewise does not stand for the proposition that just because the FWH is covered under U.S. Patent Nos. 10,024,049 and 11,649,626, that the presumption of nexus is prohibited. Both patents share the same specification and claim essentially the same invention as the '339 Patent. The claims of the patents recite the same components—a connection portion, channel shaped portion, and extension portion. *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1324-25 (Fed. Cir. 2016) (presuming nexus between a product and the asserted claims of two related patents where the patents covered essentially the same invention); *PPC Broadband*, 815 F.3d at 737-39 (presuming nexus where three patents recited the same essential features); *Gator Tail, LLC v. Mud Buddy LLC*, 618 F. App'x 992, 995, 999-1000 (Fed. Cir. 2015) ("the [related] patents essentially claim the same invention").

Simpson's argument that the nexus related to known prior art elements is also misguided. The fact that it was known to install drywall around hangers—typically in non-firewall applications—after the hanger was installed does not defeat nexus. The nexus of secondary consideration evidence is not negated just because aspects of the claimed invention can be found in the prior art. For example, in *Ex parte Whirlpool* there was industry praise for mounting an ice bin on the refrigerator door.

Ex parte Whirlpool Corp., Appeal No. 2013-008232, 2013 WL 5866602 (P.T.A.B. Oct. 30, 2013) (designated informative). The Board found the nexus was not defeated simply because door mounted bins were known in the art, as the *claimed combination* of an ice maker placed above the door-mounted ice bin was deemed novel. *Id*. at *9. Here, none of Allan, ArchRecord, and Commins taught installing a hanger prior to sheathing. While it was conventional to install hangers before drywall—typically for non-fire-separation wall applications—Simpson has not identified a single prior art reference in which a hanger was installed, followed by inserting the sheathing between the hanger's channel-shaped portion and the wall frame and moving/arranging the sheathing so the extension portion is received in the sheathing.

Simpson has failed to adequately rebut the presumption of nexus.

IV. PETITIONER'S PRIMA FACIE CASE OF OBVIOUSNESS REMAINS DEFICIENT

Simpson's arguments for *prima facie* obviousness continue to fail to address the claims as written and do not provide a showing that all the required elements are found in the prior art.

The claims at issue in this proceeding are not directed to a hanger *per se*, but rather to a method of constructing fire-resistive wall assemblies, including: the order of construction (hanger before sheathing) and details of installing the sheathing. Simpson's expert acknowledges extension portions are now "front of mind" to him,

such that he can identify them on virtually any conventional hanger. EX2197: 89:22-94:19; EX2147: 16. The point remains that Cullen, Yamaguchi, Robinson, Allan, Commins, and ArchRecord all fail to disclose building a fire-resistive wall assembly by installing a hanger first, followed by installing sheathing in the manner claimed.[7] POR: 58-64. In the proffered combinations, Bundy alone shows physical interaction between the hanger and the sheathing or provides any disclosure regarding the installation of the hanger and sheathing. Accordingly, the deficiencies pointed out by PO in Bundy regarding discouraging penetration of sheathing and inability to

[7] None of Simpson's reference in any of the Grounds teach the inserting/moving/arranging steps of the claimed method. *See* EX2061: 54:1-21, 54:23-55:25, 59:6-17, 69:21-70:10, 71:22-72:9, 73:12-24, 74:11-13, 75:1-11, 76:5-8, 76:16-78:7 (Mr. Fennell agreeing the prior art fails to teach the inserting step); 60:8-61:3, 61:22-63:16, 64:11-64:25, 71:10-21, 74:5-10, 75:13-16, 76:2-4, 78:9-79:6 (agreeing the prior art fails to teach the moving step); 67:10-69:3, 72:14-23, 74:14-16, 76:9-12, 78:8-15; 79:16-80:2 (agreeing the prior art fails to teach the arranging step); 80:20-81:4, 92:6-17, 94:4-10, 95:15-97:4 (agreeing ArchRecord does not disclose the inserting, arranging, or moving steps); 80:4-10 (acknowledging he used "partially disclosed" when he did not find the entirety of the step disclosed).

function as a hanger applied prior to installation of sheathing do consider the combination of art and must be considered.

Contrary to Simpson's assertions, PO is not substituting the DU hanger as a strawman for the proposed prior art combinations. But as Simpson's post *hac* combinations were never actually contemplated, the development of the DU hanger is relevant as demonstrating the challenges that real world POSITAs actually experienced.

Nor did PO mischaracterize the prior art. Rather, it is Simpson taking such liberties. Simpson claims Allan "explicitly teache[s] … sliding sheathing into place." Reply: 2. Simpson likewise claims that Commins "describes … sliding the cut sheathing into place around a connector." But neither Allan, nor Commins, specify the motion (e.g., placing, sliding, aligning, tilting, …) used to put the sheathing in place, rather Simpson relies on gap filling this limitation with expert testimony. EX1006 (3:28-42, 4:1-14); EX1032: 4:27-41. Even if "sliding" was necessarily present for installing sheathing in Allan or Commins (which it is not) … there still would not be any suggestion of sliding the sheathing *into a sheathing space bounded by pre-existing components*.

As asserted in the POR, because none of the prior art references teach or suggest these claim limitations, Simpson is required to rely on circular expert arguments and "general knowledge" to fill in steps the POSA would have apparently

recognized or understood to perform. Simpson cavalierly attempts to distinguish the *Arendi* case's admonishment against using general knowledge to supply a missing limitation by pointing out that the case concerned a single reference obviousness challenge. What Simpson fails to explain is why the present failure of multiple references to disclose the missing elements is any less problematic.

Simpson raises a number of other misdirected arguments as well.

Simpson argues the Cullen, Yamaguchi, and Robinson hangers must be mounted before installing Bundy's sheathing, otherwise the sheathing would block access to the hangers' back flange mounting holes. This argument improperly skips past whether the hangers would be installed such that there would be sheathing between the hanger and the wall frame. Additionally, there would be nothing to prevent the hanger from being installed over the sheathing as actually taught by Bundy. EX2197: 17:11-21:22, 29:12-33:25.

Simpson uses testimony of Mr. Evans to argue Bundy does not teach away from cutting dry wall because he had different design concerns ([redacted]). Regardless of Simpson's present-day pretext, Bundy still explains its installation "[i]mportantly, [] does not require any alteration of the drywall." Similar, the contemporaneous evidence likewise speaks for itself in establishing that the POSITA would understand the quoted language to teach away from the use of cutouts in the drywall. EX2087: SST0077466; EX2088:

SST0087824; EX2089: SST0087749; EX2092: SST0087800); *see also* EX2065: 168:23-170:13; EX2090.

Simpson attempts to argue that it is not changing the principle of operation of the prior art hangers. Cullen is meant to mount abutting against or in the immediate proximity of the back plate. EX2001: ¶¶227-232; EX2051: ¶¶146-152; EX1004: Figs. 1 and 3, 16:13-14; 4:8-12, 13:1-5. There is not a single teaching in Cullen to the contrary. Yamaguchi likewise depicts the joist abutting the wall. EX1007; EX2001: ¶246; EX2050: ¶99; EX2051: ¶¶157-159. Yamaguchi also does not include any teaching to the contrary. For both the Cullen and Yamaguchi grounds, Simpson's proposal requires changing the load path of the hangers. EX2001: ¶234; EX2050: ¶¶62-70, 1001-102, 250-251; EX2051: ¶¶101, 152. EX2197: 98:23-99:2 (transferring load is a hanger's fundamental purpose). Robinson's hanger is meant to create a continuous horizontal space for cables and pipes in front of a masonry wall, not a discrete opening in the wall. EX1011: 2:1-6, 2:20-24, 3:11-15, 4:13-19, 5:12-13; EX2001: ¶¶260-263; EX2051: ¶¶167-170.

Simpson argues that addressing load and moment arm concerns were well within a POSA's skillset. Even if a POSA would have been able to engineer further solutions to such concerns, the need to do so in and of itself would present a disincentive to proceed.

Repeatedly, Simpson attempts to sow confusion by conflating skepticism at the time of the invention with the demonstration of nexus. PO's nexus arguments used post invention literature instructing purchasers how to use the hanger to practice the patented method, whereas the asserted combos are hindsight aided reconstructions relying on expert testimony to gap fill. Simpson's arguments likewise misleadingly conflate later-day products (designed AFTER the commercial embodiment of the '339 Patent had already proven technically and commercially successful) with the prior art. REPLY: 4, 9-10. Under Simpson's philosophy any solution that was ultimately demonstrated to be successful, would have been obvious from the start. Simpson's argument demands hindsight.

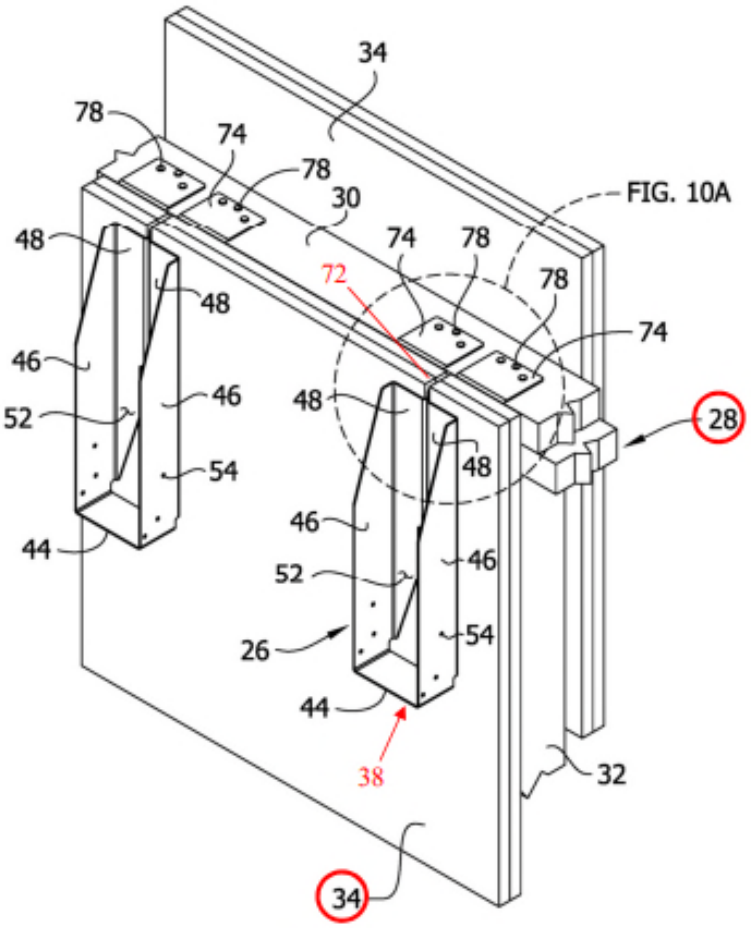
V. CLAIMS 1 AND 27: "INSERTING" AND "MOVING/ARRANGING" STEPS HAVE WRITTEN DESCRIPTION SUPPORT

Simpson's continued reliance on *Kyocera Senco Industrial Tools Inc. v. ITC*, 22 F.4th 1369, 1382 (Fed. Cir. 2022)—an apparatus case—is not applicable to the '339 Patent's method, as method steps can be performed simultaneously *or* sequentially. *Moba v. Diamond Automation*, 325 F.3d 1306, 1314 (Fed. Cir. 2003); *Niazi Licensing Corp. v. St. Jude Med. S.C., Inc.*, 30 F.4th 1339, 1352 (Fed. Cir. 2022).

With reference to Fig. 10, when the sheathing (34) is "mounted on the wall 28 by ***moving the sheathing upward*** into place" (EX1001: 8:17-18), the sheathing is both (1) inserted between the channel-shaped portion (38) and the frame wall (28),

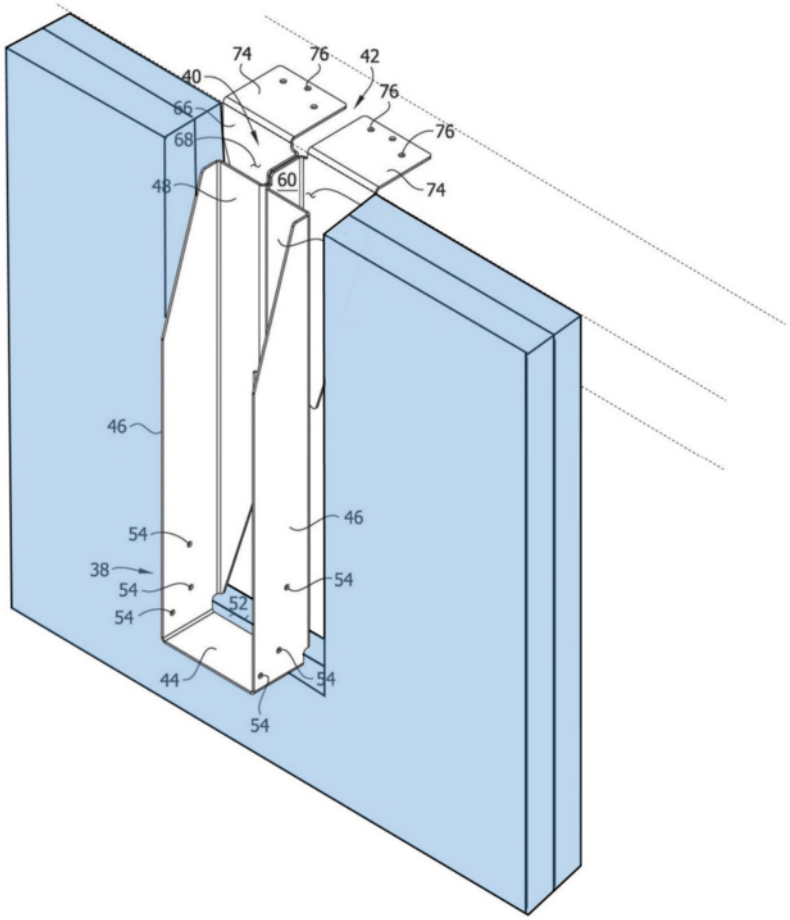
and (2) moved/arranged so the firewall hanger extends through the sheathing's opening (72). EX2001: ¶81; *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1564 (Fed. Cir. 1991) ("drawings alone *may* be sufficient to provide the 'written description of the invention' required by § 112").

FIG. 10



EX1001: Fig. 10 (annotated).

Simpson's statement the specification's description "does *not* inherently result in sheathing being *inserted* behind the channel-shaped portion" based on the below image is deficient for two reasons. Reply: 30 (emphasis in original).



Reply: 31 (created by Simpson).

First, Simpson's generated image does not meet the language of the claims, as no part of the sheathing (blue) is "between the channel-shaped portion [] and the frame wall" as required. EX1001: claims 1/27.

Second, Simpson's generated image is not the configuration of the sheathing shown in the '339 Patent. The sheathing configuration illustrated in Figs. 9 and 10

naturally results in the sheathing being inserted behind the channel-shaped portion when "moving the sheathing upward into place," as shown below in modified Fig. 10. EX1001: 8:16-21; EX2001: ¶¶81, 84-86.

FIG. 9

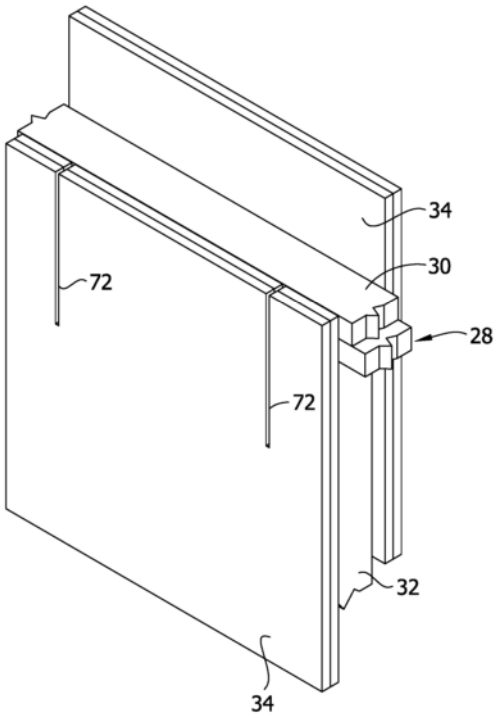
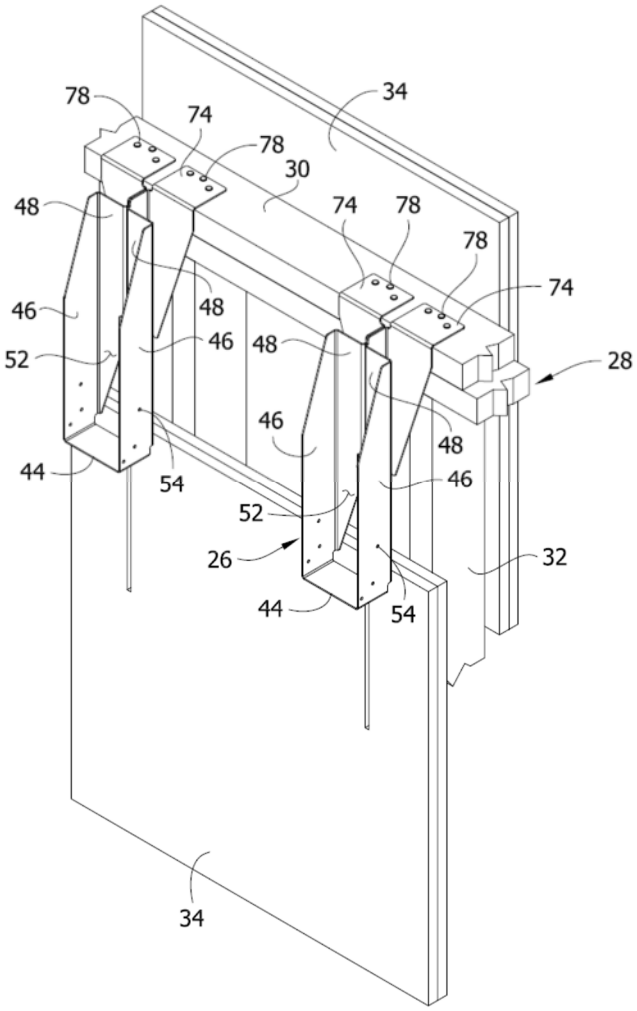


FIG. 10



EX1001: Fig. 9, Fig. 10 (modified).[8]

And like Simpson's own arguments, Simpson's questioning of Mr. Tucker—which was outside the scope of his testimony (EX2051: ¶105 ("I offer no opinions as to the written description support"))—intentionally omits looking at the '339 Patent's actual figures when understanding the written description. As explained above, the drawings and written description viewed together demonstrate possession of the "inserting" and "moving/arranging" limitations.

VI. CLAIMS 1 AND 27: "OPENING OUTWARDLY" IS DEFINITE

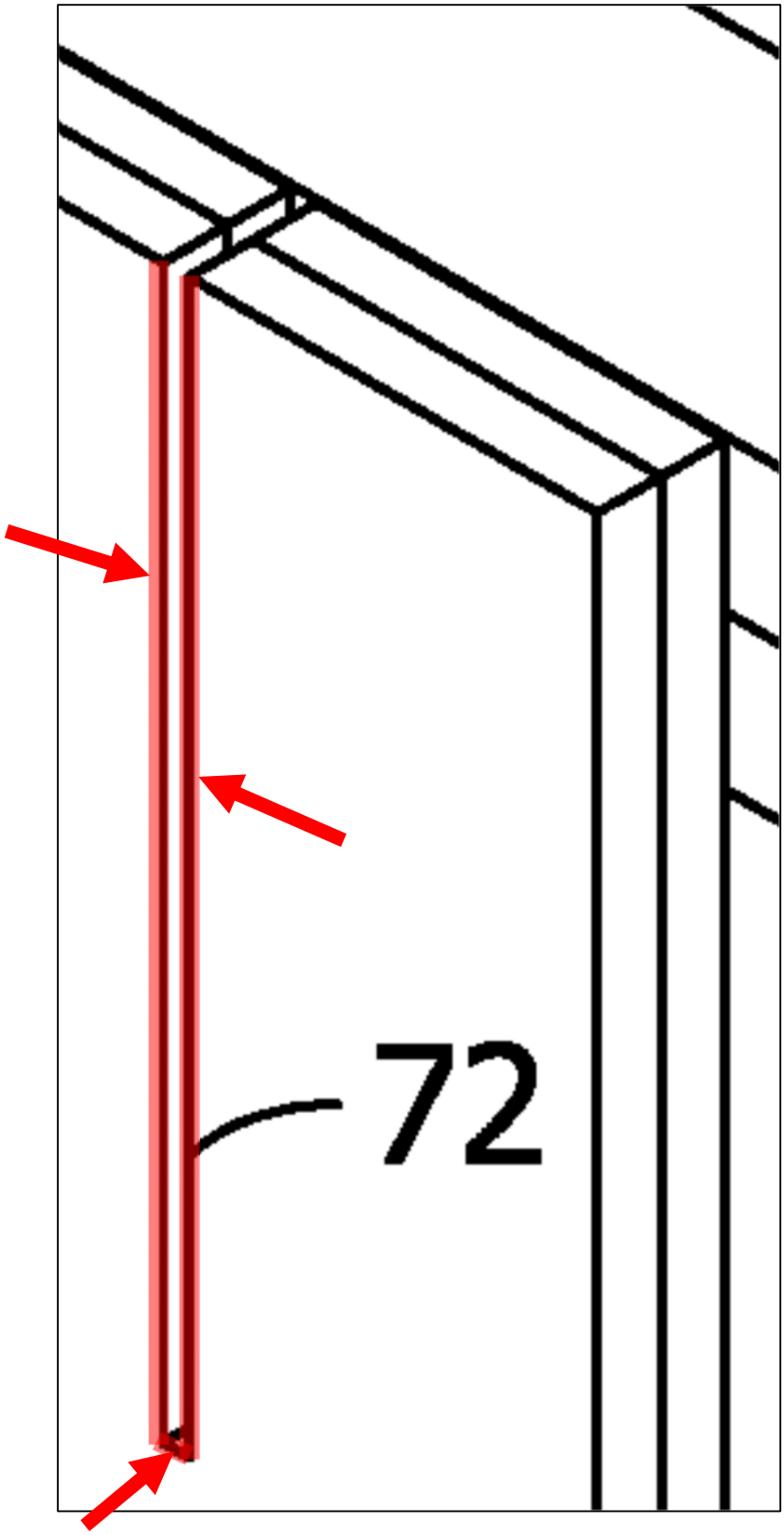
Indicating the "opening outwardly" argument was meritless from the start, Simpson has abandoned their original indefiniteness argument. Reply: 33; Pet. 16. This is not surprising, given Simpson's expert generally agrees with Columbia's construction of the limitation. EX1068: ¶28 ("an opening on … the exterior edge"); EX2050: ¶¶39-42 (the opening is constructed such that the opening has/[the open top provides] access to the outside for the opening from the edge of the sheathing). Instead, Simpson now relies on the Institution Decision's reasoning. Reply: 33.

[8] Modified to show the sheathing inserted behind the channel-shaped portion before being moved upward to have the hanger extend through the sheathing. EX2001: ¶¶85-86.

But the Institution Decision is flawed in failing to apply the rules of antecedent basis. EX2050: ¶¶43-44; EX2051: ¶113.

The "opening outwardly" limitations state "from ***the*** [exterior] edge of the fire retardant sheathing," thereby referring to the specific "[exterior] edge" previously introduced in claims 1/27. EX2050: ¶¶45-46; EX2051: ¶114. Before the "opening outwardly" limitations, claims 1/27 each recite "cutting an opening into ***an*** [exterior] edge of fire retardant sheathing." EX2050: ¶¶47-48; EX2051: ¶¶115-116. Thus the "[exterior] edge" of the sheathing the opening is "opening outwardly" from ***is the same*** "[exterior] edge" of the sheathing that was cut "into" to form the opening. EX2050: ¶¶49-50, 55; EX2051: ¶¶115-116.

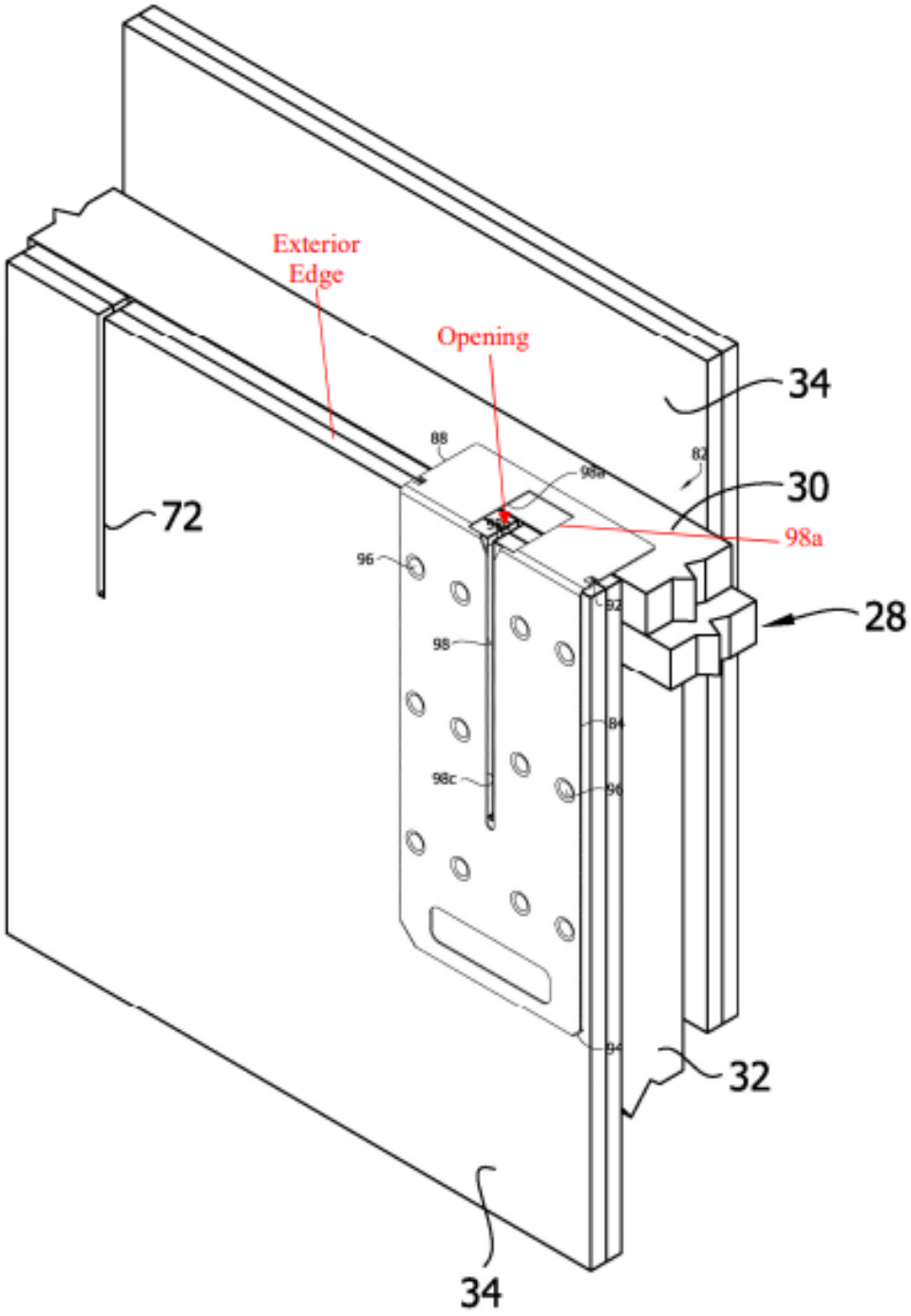
The Institution Decision points to the "edges" of the front face annotated below as possible edges the opening (72) is "opening outwardly" from (ID: 42), but these "edges" are formed by the cutting and do not exist prior to the cutting step. EX2050: ¶52. Therefore, these "edges" cannot be the "[exterior] edge" the opening is cut "into," and as a result cannot be the "[exterior] edge" the opening of claim 1 and the open top of claim 27 "open[s] outwardly" from. EX2050: ¶¶52-53.



EX1001: Fig. 9 (annotated).

Moreover, the use of the terms "edge" and "face" of the sheathing means they are different elements, and the POSA would not consider the face of the sheathing to define the edge into which the opening is cut. EX2050: ¶¶48, 51.

This interpretation is consistent with the specification's reference to an edge of the sheathing: "a top ***edge*** of the fire retardant sheathing." EX1001: 7:58-59. The disclosure regarding the template (82) also supports this understanding. The open top of the opening (72) (illustrated below) is "opening outwardly" is ***at*** the same "[exterior] edge" of the sheathing (34) the spiral bit (EX1001: 6:35) cuts "into" when the cutting tool enters the rectangular portion (98a) of the slot (98) to cut the opening. EX1001: 6:8-10, 6:32-34; EX2050: ¶54.



EX1001: Fig. 9 (with Fig. 16 superimposed).

The "opening outwardly" limitations are definite. EX2050: ¶55.

VIII. CONCLUSION

For the reasons stated in the POR and herein, Simpson has failed to demonstrate the ’339 Patent’s claims are invalid.

Dated: October 20, 2025

Respectfully submitted,

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Counsel for Columbia Insurance Company

CERTIFICATE OF SERVICE

Under 37 C.F.R. § 42.6(e), the undersigned certifies that on October 20, 2025, a copy of the foregoing PATENT OWNER'S SUR-REPLY, along with Exhibits 2190-2199, were served via email on the following:

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CERTIFICATE OF COMPLIANCE WITH TYPE-VOLUME REQUIREMENTS UNDER 37 C.F.R. § 42.24

Under 37 C.F.R. § 42.24(d), the undersigned certifies that this Patent Owner Response complies with the type-volume limitation of § 42.24(b)(2) because it contains 5,998 words, excluding the parts exempted by § 42.24(a).

This paper also complies with the typeface requirements of 37 C.F.R. § 42.6(a)(2)(ii) and the type style requirements of 37 C.F.R. § 42.6(a)(2)(iii) and (iv).

Dated: October 20, 2025

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