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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

SIMPSON STRONG-TIE COMPANY INC.
Petitioner

v.

COLUMBIA INSURANCE COMPANY
Patent Owner

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

**PATENT OWNER'S REPLY IN SUPPORT OF ITS
CONTINGENT MOTION TO AMEND UNDER 37 C.F.R. § 42.221**

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EXHIBIT LIST

Exhibit No.	Description
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

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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
2031	New Oxford American Dictionary – Definition of Close
2032	Merriam-Webster's Collegiate Dictionary – Definition of Conform

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2033	New Oxford American Dictionary – Definition of Conformance
2034	U.S. Patent No. 9,938,709
2035	U.S. Patent No. 5,237,613
2036	U.S. Patent No. 6,135,687
2037	Transcript of the May 25, 2022 Deposition of Mr. Fennel
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
2048	Proposed Stipulated Protective Order
2049	Amended Protective Order
2050	Second Declaration of Richard Kaczkowski
2051	Declaration of Paul Tucker

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2052	Declaration of Tom Irtmer
2053	Declaration of Andrea Baranyk
2054	Expert Report of Michael Alley
2055	Declaration of Dwight J. Duncan, CFA
2056	Declaration of Matt Church
2057	Declaration of Joe Dunkle
2058	Declaration of Ryan Holmes
2059	Declaration of Michael Nelson
2060	Declaration of Chris Horwitz
2061	May 14, 2025 Deposition of William Andrew Fennell
2062	May 25, 2022 Deposition of William Andrew Fennell
2063	October 5, 2022 Deposition of William Andrew Fennell
2064	January 28, 2025 Deposition of Sam Hensen
2065	March 17, 2025 Deposition of Sam Hensen
2066	January 29, 2025 Deposition of Bryan Wert
2067	April 16, 2025 Deposition of Bryan Wert
2068	January 27, 2025 Deposition of Roger Dankel
2069	January 22, 2025 Deposition of Steven Brekke
2070	January 31, 2025 Deposition of Mark Rolf
2071	January 23, 2025 Deposition of Kristi Campbell
2072	January 24, 2025 Deposition of Mike Nelson
2073	Declaration of W. Andrew Fennell in Support of Petitioner's Reply to Patent Owner's Response and

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	Petitioner's Opposition to Patent Owner's Contingent Motion to Amend (PGR2021-00109)
2074	Declaration of Sam Hensen in Support of Opposition to Motion for Preliminary Injunction
2075	Expert Report of Kenneth S. Serwin, PH.D.
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)
2088	Simpson Emails Re: USP Gypsum Hanger (1/4)
2089	Simpson Emails Re: USP Gypsum Hanger (2/4)
2090	MiTek Emails Re: FWH
2091	USP: FWH Fire Wall Hanger Testing
2092	Simpson Emails Re: USP Gypsum Hanger (3/4)

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2093	MiTek Emails Re: Cantilevered Hanger (Highly Confidential – Prosecution Bar)
2094	Simpson Emails Re: Status of DHU/DHUTF
2095	Simpson Emails Re: New DHT Drywall Hanger – Forecast Estimate
2096	Simpson Emails Re: Fire Rated Hanger
2097	Simpson Emails Re: Group Field Trial in Baltimore
2098	Simpson Emails Re: USP FWH
2099	Simpson Emails Re: Firewall Hanger (1/2)
2100	Simpson Emails Re: USP Fire Wall Hangers FWH Series
2101	Simpson Emails Re: DGF/DGHF and DGBF
2102	Simpson Emails Re: Fire Wall Hangers
2103	Simpson Emails Re: DU – DHU – DHUTF Challenge
2104	Simpson Emails Re: FWH USP (1/4)
2105	Simpson Emails Re: DHU
2106	Simpson Emails Re: USP FWH Hanger Talking Points
2107	Simpson Emails Re: FWH USP (2/4)
2108	Simpson Emails Re: Drywall Hanger
2109	Simpson Emails Re: Mitek FWH Meeting
2110	Simpson Emails Re: DHU vs. USP’s FWH (2/2)
2111	Simpson Emails Re: Confidential Drywall Hanger
2112	Simpson Emails Re: Hanger Team Meeting Minutes

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2113	Photograph of Initial Simpson FWH and MiTek FWH
2114	Simpson Emails Re: Baltimore Summary / Patent Meeting
2115	July 21, 2017 Simpson Hanger Team Minutes
2116	Simpson Emails Re: DGH/DGB Firewall Hanger is Now Available (1/2)
2117	Simpson Emails Re: DGH/DGB Firewall Hanger is Now Available (2/2)
2118	MiTek Emails Re: USP FWH Fire Wall Hanger
2119	MiTek Emails Re: FWH Fire Wall Hanger for 2 Hour Envelope
2120	MiTek Emails Re: Fire Wall Hanger – UFP
2121	MiTek Emails Re: Fire Wall Hanger
2122	MiTek Emails Re: Question? FWH Series – Fire Wall Hangers
2123	MiTek Emails Re: FWH3518
2124	Simpson Emails Re: New Fire Wall Hanger
2125	MiTek Emails Re: Standard Pricing – Reliable- Los Angeles Apts – Laurence Hovenier 1-27-15.xlsx
2126	Simpson Emails Re: Rumbings
2127	Simpson Emails Re: Top Flange Hanger Over 2 Layers of Gypsum Board
2128	Simpson Emails Re: B/HB Style Hanger for Wall with 2-Layers of Gyp
2129	Simpson Emails Re: FWH USP (3/4)
2130	Simpson Emails Re: FWH USP (4/4)

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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
2137	Simpson Emails Re: Firewall Hanger (2/2)
2138	Simpson Cantilever Drywall Hanger Testing
2139	Mitek Emails Re: Revised Firewall Hanger Sales Sheet – Correction to Narrower Width Allowable Loads
2140	Simpson Emails Re: MiTek USP FWH Fire Wall Hanger
2141	Simpson Emails Re: USP Gypsum Hanger (4/4)
2142	Curriculum Vitae of Paul Tucker
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

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2150	Performance Standard for Wood-Based Structural-Use Panels
2151	April 17, 2025 Deposition of Kenneth Serwin
2152	The Evolution of Engineered Wood I-Joists
2153	Performance Standard Considerations for I-Joists Used in Residential Floor Construction
2154	Fire Rated Systems
2155	ICC-ES Evaluation Report: ESR-3444
2156	ICC-ES Evaluation Report: ESR-4464
2157	ASTM E814
2158	FWH Fire Wall Hanger Installation Instructions
2159	Simpson Emails Re: USP – FWH Fire Wall Hanger
2160	File History of U.S. Application No. 17/235,349
2161	File History of U.S. Application No. 16/433,799
2162	File History of U.S. Application No. 16/225,517
2163	File History of U.S. Application No. 15/675,409
2164	File History of U.S. Application No. 14/555,049
2165	Simpson Emails Re: Do You Have a Match for This?
2166	Simpson’s February 14, 2025 Expert Disclosure Pursuant to Federal Rule of Civil Procedure Rule 26 (served only)
2167	Plaintiffs’ November 11, 2024 Notice of Rule 30(B)(6) Deposition of Simpson Strong-Tie Company, Inc. (served only)
2168	ESI Order (served only)

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2169	January 28, 2025 Deposition of Tom Evans (served only)
2170	March 17, 2025 Deposition of Sam Hensen Exhibit 2 (served only)
2171	March 17, 2025 Deposition of Sam Hensen Exhibit 11 (served only)
2172	January 29, 2025 Deposition of Bryan Wert Exhibit 11 (served only)
2173	January 29, 2025 Deposition of Sam Hensen Exhibit 30 (served only)
2174	March 17, 2025 Deposition of Sam Hensen Exhibit 23 (served only)
2175	January 29, 2025 Deposition of Bryan Wert Exhibit 10 (served only)
2176	January 29, 2025 Deposition of Bryan Wert Exhibit 12 (served only)
2177	January 27, 2025 Deposition of Roger Dankel Exhibit 12 (served only)
2178	January 29, 2025 Deposition of Bryan Wert Exhibit 6 (served only)
2179	January 28, 2025 Deposition of Tom Evans Exhibit 21 (served only)
2180	January 28, 2025 Deposition of Tom Evans Exhibit 23 (served only)
2181	January 28, 2025 Deposition of Tom Evans Exhibit 17 (served only)
2182	January 29, 2025 Deposition of Steve Rotzin Exhibit 9 (served only)

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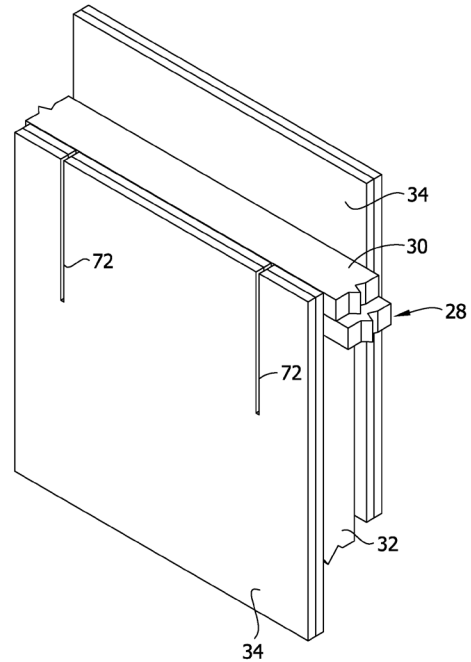
2183	January 29, 2025 Deposition of Steve Rotzin (served only)
2184	January 29, 2025 Deposition of Steve Rotzin Exhibit 11 (served only)
2185	January 29, 2025 Deposition of Bryan Wert Exhibit 7 (served only)
2186	January 27, 2025 Deposition of Roger Dankel Exhibit 2 (served only)
2187	January 28, 2025 Deposition of Tom Evans Exhibit 7 (served only)
2188	January 29, 2025 Deposition of Bryan Wert Exhibit 8 (served only)
2189	Declaration of John R. Schroeder (served only)
2190	U.S. Patent No. 6,658,806
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
2197	September 18, 2025 Deposition of William Andrew Fennell
2198	Third Declaration of Richard Kaczowski
2199	September 16, 2025 Deposition of Sam Hensen

Emphasis Added Throughout Unless Indicated Otherwise

I. “OPENING” HAS WRITTENT DESCRIPTION SUPPORT

FIG. 9

The ‘339 Patent reasonably conveys to the person of skill in the art (POSA) possession of an “opening” in the fire-retardant sheathing. EX2198: ¶¶7-11. For example, the POSA understands Fig. 9 shows an opening (72) in the sheathing (34). EX2198: ¶12. While the specification uses the term “slot,” controlling authority is clear claim terms need not match “word-for-word” or “*ipsis verbis*” with the



specification. *Kaneka Corp. v. Xiamen Kingdomway Group Co.*, 790 F.3d 1298, 1305 (Fed. Cir. 2015); *Fujikawa v. Wattanasin*, 93 F.3d 1559, 1571 (Fed. Cir. 1996); EX2198: ¶13.

Further, the specification is not limited to only a “narrow slot” as asserted by Simpson (Opp. 1), but describes the slot (72) more generally, explaining:

1. “cutting the slot 72 in the sheathing 34 to a size configured to receive the extension flanges 60 of the truss hanger 26.” EX1001: 6:15-17;
2. “the slot has an area less than or equal to 6 square inches, and the gap between the extension flanges 60 and the edge of the slot 72 is less than or equal to 1/8”.” EX1001: 5:37-39;
3. “cutting the slot 72 to receive the truss hanger 26.” EX1001: 5:54-55;
4. “a drywall cutout tool with a 1/8” or 1/4” spiral bit is used to cut the slot 72, although other cutting tools are within the scope of the present invention.” EX1001: 6:34-37;

5. “The slot can be any suitable length.” EX1001: 7:33; and
6. “gypsum board included a slot to accommodate the hanger.” EX1001: 11:54-55; and
7. “all matter contained in the [‘339 Patent’s] description and shown in the accompanying drawings shall be *interpreted as illustrative and not in a limiting sense*.” EX1001: 12:17-19; EX2198: ¶¶14-15.

As the Board noted in the Preliminary Guidance, the POSA would recognize the terms “slot” and “opening” can be used interchangeably. Paper 51: 6. For example, Simpson has interchangeably used the terms “slot” and “opening” in their own patent. EX2190: 1:11 (“opening or slot”). And other references in the same general CPC Classification Field (E04B) as the ‘339 Patent use the terms “slot” and “opening” interchangeably. EX2191: 4:68 (“opening or slot”); EX2192 (entitled: Fireproof Wall or Partition Construction): 1:90 (“slot or opening”); EX2193: 3:35-36 (“opening or slot”); EX2194: 6:28-29 (“opening or slot”); EX2198: ¶16. For these reasons, Columbia was in possession of “opening.” EX2198: ¶17.

II. CLAIMS 44 AND 48: USE OF STANDARDS IN CLAIMS IS DEFINITE

The Preliminary Guidance’s determination claims 44 and 48 are indefinite for reciting “ASTM E814 and ASTM E119” standards because such standards “are subject to revision” (Paper 51: 8) incorrectly applies the law of indefiniteness. As stated by the Supreme Court, “definiteness is measured from the viewpoint of [the POSA] *at the time the patent was filed*.” *Nautilus, Inc. v. Biosig Instruments, Inc.*, 572 U.S. 898, 908 (2014) (emphasis in original); EX2198: ¶¶18-21.

Because definiteness is evaluated as of the effective filing date, the use of

standards in claims is definite—even if the standards change—because the POSA uses the standard in effect as of the effective filing date. *Ex parte McClary*, Appeal No. 2009-001300, 2010 Pat. App. LEXIS 16107, pg. 4-5 (P.T.A.B. May 17, 2010) (“[the POSA], with reference to the standard in effect as of the filing date of Appellant's application, would readily be able to determine the metes and bounds of this element”); *Ex parte Falk*, Appeal No. 2012-000335, 2015 Pat. App. LEXIS 4271, pg. 6 (P.T.A.B. May 8, 2015) (“[t]he meaning of such a claim, as understood by [a POSA] at the time of the invention, is tied to the version of the protocol-defining standard in effect at the time of the invention , and is, therefore, not indefinite”); *Ex parte Ly*, Appeal No. 2009-000357, 2009 Pat. App. LEXIS 8630, pg. 17-18 (P.T.A.B. Jun. 16, 2009) (“should the French standard ... change over time, the scope of the claims remains tied to the standard in effect at the time the application was filed”); EX2198: ¶21. There is no dispute ASTM E814 and E119 were known to the POSA. EX1068: ¶184; EX2195; EX2196; EX2198: ¶¶22-23.

Simpson’s saying other factors can influence if a wall assembly has the “2-hour fire resistance rating as determined per ASTM E814 and ASTM E119” are of no consequence because the POSA can test any wall assembly (including any inconsistencies and deviations) constructed based on the claims to determine if the constructed wall assembly has the 2-hour fire resistance rating. EX2198: ¶¶24-25, 27. And the ASTM standards are developed to minimize inconsistencies, deviations,

and irregularities. EX2198: ¶¶26-28.

III. SIMPSON’S PRIOR ART GROUNDS FAIL

Simpson’s obviousness grounds are essentially the same as presented in the Petition, but with different hanger references—Kanai (EX1071) and Tsukamoto (EX1008). However, these new hanger references do not cure the deficiencies of Simpson’s obviousness grounds for the same reasons stated in Columbia’s Response (POR: 21-49, 56-68, 74-101) and Sur-Reply. EX2198: ¶29.

A. The POSA Would Not Have Been Motivated to Make Simpson’s Bundy Combinations (MTA Grounds 3-6)

1. The POSA Would Not Have Been Motivated or Held a Reasonable Expectation of Success to Modify Bundy’s Method of Constructing the Fire Wall by Installing the Hanger First or Penetrating the Fire-retardant Sheathing

Simpson starts with the false premise that it would have already been known to use specific hangers to practice the method claimed by the ‘339 Patent. But neither Kanai nor Tsukamoto suggest building a wall with sheathing, let alone a fire wall with sheathing that must retain its ability to block the passage of fire through the wall. EX2198: ¶30.

Simpson’s obviousness grounds all rely on Bundy’s teaching regarding the construction of fire walls employing joist hangers. But Bundy teaches installing the hanger over the fire-rated sheathing—without “alteration” of the sheathing—after the sheathing had already been mounted. EX1005: 2:18-25, 4:17-20, 5:14-25, 5:42-57, 6:14-17, Fig. 2; EX2001: ¶¶236-237; EX2051: ¶¶126.

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Simpson knows the POSA would not have expected to be successful at installing the fire-retardant sheathing after the hanger because [REDACTED]. EX2086: SST0105115 ([REDACTED]); EX2050: ¶¶78-81, 108-112; EX2051: ¶¶127, 153, 160, 164, 171; EX2086: SST0105127; EX2086: SST0105129.

Further, each of Simpson's combinations require cutting openings in the fire-retardant sheathing to extend the hanger through the sheathing. But the POSA would not have had a reasonable expectation of success in maintaining the fire-resistance of the fire wall after cutting openings in the fire-retardant sheathing. EX2050: ¶¶85-92, 115-120, 129-134; EX2051: ¶¶131-136; EX2052: ¶¶34-35; EX2053: ¶16. As recognized by Simpson's own engineers, the POSA would not have made a modification that requires cutting an opening in fire-retardant sheathing. EX2050: ¶¶90, 119, 132; EX2051: ¶¶135, 143; EX2087: SST0077466 ([REDACTED]); EX2088: SST0087824 ([REDACTED]); EX2089: SST0087749 ([REDACTED]); EX2092: SST0087800 ([REDACTED]); EX2065: 168:23-

170:13 ([REDACTED]
 [REDACTED]); EX2065: 107:20-108:23 ([REDACTED]
 [REDACTED]); EX2090
 ([REDACTED]
 [REDACTED]
 [REDACTED]).

This is why Bundy extends its hanger over—not through—the fire-retardant sheathing. Bundy was filed weeks before the priority date of the ‘339 Patent, demonstrating the POSA’s (and Simpson’s) understanding not to cut an opening in fire-retardant sheathing at the time of the ‘339 Patent. EX2001: ¶¶96, 126.

2. Allan Fails to Support a Motivation or Reasonable Expectation of Success to Modify Bundy’s Method of Constructing the Fire Wall

Simpson was unable to cite a single prior art reference disclosing a joist hanger extending through sheathing, such as drywall in the construction of a fire wall. EX2077; EX2050: ¶¶139-140; EX2051: ¶¶175-176; EX2198: ¶30. Instead, Simpson relies on Allan, a reference directed to a wall anchor used to tie a masonry veneer wall to a wall structure. EX2001: ¶¶273-274; EX1006: Fig. 1, Abstract, 3:12-20; EX2001: ¶274; EX2051: ¶177. But Allan explains slots may be cut into an *insulation* layer, not a fire barrier. EX2050: ¶¶142-144; EX2051: ¶178. Where cutting a hole in insulation results in a lesser degree of insulation provided, cutting

a hole in a fire barrier can provide a path for fires to spread. EX2043: 22-23, 122; EX2001: ¶280; EX2050: ¶¶143-144; EX2051: ¶¶179-180.

Simpson's contemporaneous internal documents demonstrate this distinction. As discussed in Section III(A)(1) above, the conventional wisdom within the art—as acknowledged by Simpson's corporate representatives and contemporaneous communications—was to avoid disruptions in the fire-resistant sheathing of fire-resistant wall assemblies. EX2050: ¶145; EX2051: ¶180; EX2087: SST0077466; EX2088: SST0087824; EX2088: SST0087749; EX2092: SST0087800; EX2065: 168:23-170:13; EX2065: 107:20-108:23; EX2090. As Allan is only concerned with insulation, not fire protection, Allan does not teach that a POSA would overlook the conventional wisdom to avoid disruptions in the *fire-retardant sheathing* for a hanger to passing through the sheathing. EX2050: ¶¶142-146; EX2051: ¶181.

B. Simpson's Opposition Fails to Establish That Multiple Steps of the Method Recited in the Independent Claims Are Obvious

Within Simpson's limitation-by-limitation obviousness analysis, Simpson *repeatedly* fails to identify or provide *any citation* to where claim limitations are actually taught within the asserted prior art. Simpson never cites to any particular teaching within the prior for the following independent claim limitations pertaining to installing the fire-retardant sheathing: [32.c.1]/[47.c.1], [32.c.2]/[47.c.2], [32.c.3]/[47.c.3]—e.g., the specific order of installation (installing the sheathing *after* mounting the fire wall hanger).

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Simpson fails to provide prior art citations for these steps because each step is entirely absent from the references. 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, (Simpson’s expert 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); 67:10-68:9, 68:11-21, 68:22-69:3, 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); 80:4-10 (acknowledging that when he says a step was “partially disclosed” it means he did not find the entirety of the step disclosed); EX2197: 129:1-130:18, 133:7-11.

As with the original hanger references, the new hanger references—Kanai and Tsukamoto—provide absolutely no disclosure regarding the installation of sheathing. EX1071; EX1008; EX2197: 129:1-130:18, 133:7-11; EX2198: ¶30.

Bundy teaches mounting the sheathing *before* mounting the fire wall hanger on the frame wall. EX1005: Fig. 2, 2:20-25, 5:14-20; EX2001: ¶302; EX2051: ¶210. And Allan fails to teach inserting the sheathing *between* the frame wall and a component of the wall anchor already mounted on the frame wall as required by the “inserting” step of [32.c.1]/[47.c.1]. EX2001: ¶307; EX2051: ¶215.

Simpson relies on circular expert arguments to fill in these missing limitations, improperly treating the missing limitations as mere peripheral issues

filled in by the POSA’s common sense. But using common sense to supply a missing limitation is improper. *K/S Himpp v. Hear-Wear Technologies, LLC*, 751 F.3d 1362, 1366 (Fed. Cir. 2014). The missing limitations in the present case “play[] a major role in the subject matter claimed.” *Arendi S.A.R. v. Apple Inc.*, 832 F.3d 1355, 1361-62 (Fed. Cir. 2016). Specifically, the step of installing the fire-retardant sheathing specifically “**after** mounting the fire wall hanger on the frame wall” **wherein the step includes** “inserting the fire retardant sheathing between the channel-shaped portion of the fire wall hanger and the frame wall” is a **key** premise of the claimed method. EX2001: ¶311; EX2051: ¶219. This step is not peripheral as it goes to the heart of the **benefit** of the claimed method—mounting the fire-retardant sheathing after the hanger is mounted to the frame wall. EX2001: ¶¶28, 311-312; EX2051: ¶¶219-220; EX1001: 7:67-8:21.

C. Substitute Claims 44 and 48

The POSA would not have had a reasonable expectation of success of Simpson’s prior art combinations resulting in a method that constructs a wall assembly having “a 2-hour fire resistance rating as determined per ASTM E814 and ASTM E119” because Simpson’s combinations require multiple openings to be cut in the fire-retardant sheathing. EX2198: ¶¶31-32.

As explained in Section III(A)(1), the POSA would not have had a reasonable expectation of success in maintaining the fire-resistance of the fire wall after cutting

openings in the sheathing. EX2050: ¶¶85-92, 115-120, 129-134; EX2051: ¶¶131-136; EX2052: ¶¶ 34-35; EX2053: ¶16; EX2198: ¶¶33-34. As recognized by Simpson's own engineers, the POSA would not have a reasonable expectation that a wall assembly having multiple openings in the fire-retardant sheathing for a hanger to extend therethrough would have the required 2-hour fire resistance rating. EX2050: ¶¶90, 119, 132; EX2051: ¶¶135, 143; EX2087: SST0077466; EX2088: SST0087824; EX2089: SST0087749; EX2092: SST0087800; EX2064: 168:23-170:13; EX2065: 107:20-108:23; EX2090; EX2198: ¶¶34-35.

Simpson points to no evidence a POSA would expect a wall assembly with multiple openings cut therein for a hanger to meet the required 2-hour rating. Opp. 16-17. GypMan supports solid (e.g., unpenetrated) type-X gypsum wallboard meeting a 2-hour fire rating, not type-X gypsum wallboard having multiple openings meeting the fire rating. EX1017: 13-14, 88; EX2198: ¶36. And Simpson's expert just regurgitates what is in the Opposition. *Xerox Corp. v. Bytemark, Inc.*, IPR2022-00624, Paper 9 at 15 (P.T.A.B. Aug. 24, 2022) (little weight given to a declaration just restating what is in the briefing without more) (designated presidential).

Simpson's statement the IBC "require[s] such [] wall assemblies with through penetrations to [] satisfy both ASTM E119 and E814" (Opp. 17) does not mean the POSA would have a reasonable expectation of success of having a 2-hour fire rating per ASTM E119 and E814 after cutting openings in the fire-resistant sheathing for

the hanger. EX2198: ¶37. Just because a code requires something to be the case does not mean anything a person does would satisfy the code. EX2198: ¶¶37-38.

D. Secondary Considerations

As the substitute claims include the limitations of the original claims, the secondary considerations evidence presented in the Response further establishes the non-obviousness of the substitute claims. POR: 74-101. The substitute claims also have a nexus with the secondary consideration evidence for the same reasons as the original claims. POR: 93-101; EX2198: ¶¶39-40. The referenced MiTek and Simpson products embody and are coextensive with the invention claimed in at least substitute claim 32, for the same reasons as claim 1. EX2050: ¶¶200, 357-360, Appendix A-Appendix D; EX2051: ¶¶226-227, Appendix A-Appendix D; EX2198: ¶41. These products also employ the features added by amendments to substitute claim 32—e.g., exterior perimeter edge extending from front face to rear face, and front/rear face of sheathing facing forward/rearward. EX2198: ¶¶42-45. And the secondary consideration evidence is still a direct result of the unique characteristics of the method claimed by the substitute claims (e.g., order of installation). POR: 97-101; EX2198: ¶¶46-48.

The secondary consideration evidence demonstrates the non-obviousness of the substitute claims for the same reasons as the original claims. POR: 75-93. MiTek's FWH and Simpson's DG/DGB/DGH, DGF/DGBF/DGHF, and DGT

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achieved significant commercial success. POR: 75-83. Customers strongly desired the FWH 's ability to be installed prior to drywall, and urged Simpson to bring a similar product to market. EX2050: ¶¶222-238; EX2051: ¶¶249-267; EX2068: 34:11-35:4, 35:18-36:11, 69:4-21, 91:3-24; EX2100; EX2102; EX2103: SST0050380; EX2104: SST0021892; EX2066: 120:15-121:8; EX2065: 45:14-23, 56:15-57:3, 162:17-164:17; EX2199: 46:8-21. Because of the FWH's success, Simpson copied its ability to be installed prior to drywall. POR: 83-88; EX2055: ¶¶27-36; EX2109: SST0068521; EX2112: SST0044960; EX2050: ¶¶258-264; EX2051: ¶¶284-290; EX2111; EX2065: 70:15-74:22; EX2065: 199:16-201:25. And MiTek received industry praise for the FWH. POR: 88-89; EX2050: ¶¶283-300; EX2051: ¶¶308-326; EX2118-2125; EX2102-2106; EX2108; EX2094; EX2126.

As demonstrated in Section III(A)(1), there was significant industry skepticism the FWH would even work. POR: 89-91; EX2050: ¶¶332-334; EX2051: ¶¶358-373; EX2087: SST0077466; EX2088: SST0087749; EX2090. And the FWH succeeded where Simpson initial (DU) attempt struggled. POR: 91-93; EX2086: SST0105115, SST0105129; EX2050: ¶¶315-329; EX2051: ¶¶340-357; EX2118; EX2104; EX2103; EX2108; EX2094.

Dated: October 20, 2025

Respectfully submitted,

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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 REPLY IN SUPPORT OF ITS CONTINGENT MOTION TO AMEND UNDER 37 C.F.R. § 42.221, 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'S REPLY IN SUPPORT OF ITS CONTINGENT MOTION TO AMEND UNDER 37 C.F.R. § 42.221 complies with the type-volume limitation of § 42.24(c)(3) because it contains no more than 12 pages.

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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