UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

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| COLUMBIA INSURANCE CO., et al.,<br>Plaintiffs,<br>v.<br>SIMPSON STRONG-TIE COMPANY INC,<br>Defendant. | Case No. 19-cv-04683-TSH<br><br>**ORDER DENYING PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION**<br><br>Re: Dkt. No. 3 |

## I. INTRODUCTION

Plaintiffs Columbia Insurance Co. and MiTek Inc. bring this motion for a preliminary injunction seeking to enjoin Defendant Simpson Strong-Tie Company Inc. from "making, using, offering to sell, or selling in the United States, or importing into the United States" Simpson's DGF, DGHF, and DGBF Fire Wall Hangers or "colorable variations thereof" because these products infringe Columbia's U.S. Patent No. 10,316,510 (the "'510 patent"). Mot. for Preliminary Injunction, ECF No. 3. Simpson filed an Opposition (ECF No. 24) and Plaintiffs filed a Reply (ECF No. 29). Having considered the parties' positions, relevant legal authority, and the record in this case, the Court **DENIES** Plaintiffs' motion for the following reasons.

## II. BACKGROUND

MiTek is a global supplier of products and services for use in the residential construction industry. Decl. of Mark Lee ¶ 2, ECF No. 3-1. After acquiring USP Structural Connectors in 2011, MiTek entered the business of selling framing hardware products. *Id.* ¶ 5. Among other products, MiTek manufactures and sells hangers used in the construction of buildings for connecting structural components such as trusses or joists to wall structures. Compl. ¶ 11. Simpson is a direct competitor of MiTek in selling framing hardware used in the construction of

buildings, including hangers.

Ordinarily in structures such as multifamily housing, fire separation sheathing is required to run continuously along walls to prevent fires from spreading between adjoining units. Typically, two layers of fire-retardant sheathing are used along the face of these separation walls to improve the walls' resistance to fire. Trusses and joints, structural components that often run horizontal to the ground, must also be hung from walls. Because sheathing cannot bear the load of trusses and joists, the components must be directly attached to and hung from the wall framing. Hangers are devices used for securing these structural components to walls. Traditional hangers require cutouts to be made in sheathing as large as the cross-sections of the trusses or joints, through which those components can extend to secure to the wall framing. These large cutouts create a discontinuity in the sheathing, exposing the wall framing (often wood), and weakening the walls' fire resistance. This impairs the walls' fire resistance ratings, which must maintain a certain level under building codes. The interruptions in fire-retardant sheathing caused by the use of traditional hangers was a problem that Plaintiffs' patent sought to address.

**A. The Technology**

Columbia owns the '510 patent (Brekke), entitled "Hanger for Fire Separation Wall", which issued from U.S. Patent Application No. 16/225,517 (the "'517 application")[1]:

FIG. 1

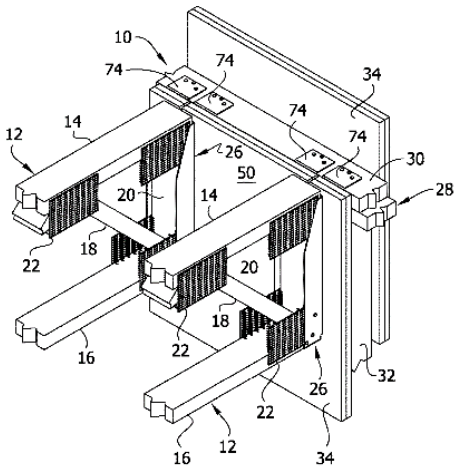



FIG. 2

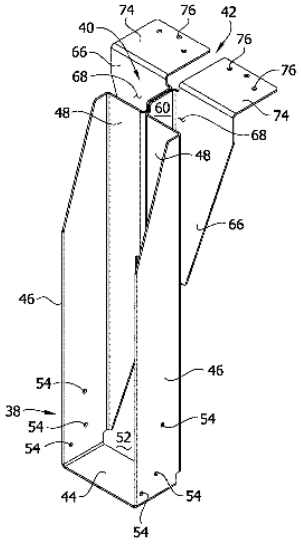
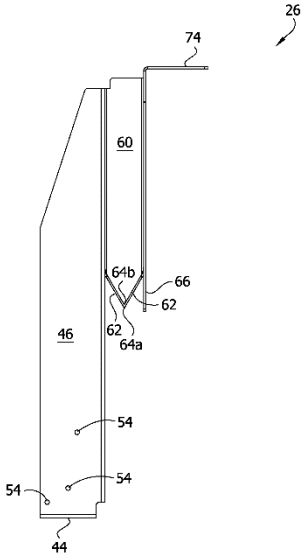



FIG. 4

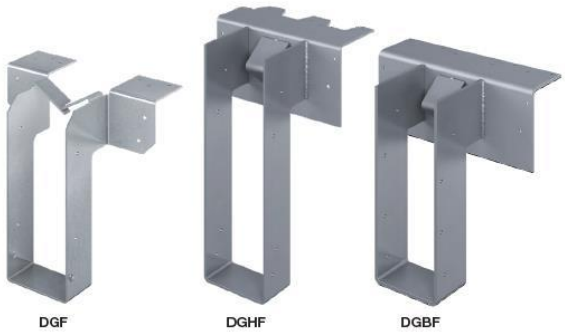



[1] Columbia is the owner of the '510 patent and MiTek is the exclusive licensee. Compl. ¶¶ 9-10.

The ’517 Application was filed on December 19, 2018, and the patent issued on June 11, 2019. Its parent application, Patent Application No. 15/675,409 was filed on August 11, 2017, and the parent of that application, was filed on December 31, 2013, U.S. Provisional Application No. 61/922,531.

Columbia sought the ’510 patent as protection for its line of FWH Fire Walls Hangers (the “FWH Hangers”). The patent pertains to a design improvement in traditional hangers. The three main components of the ’510 hanger are (1) a channel-shaped portion configured to receive the structural component (the truss or the joist), (2) an extension portion extending from the channel shaped portion and configured to extend through sheathing, and (3) a connection portion configured to attach to the top surface of a wall structure. Compl. ¶ 17. The extension portion of the hanger spaces the channel-shaped portion and the connection portion apart by a distance large enough to permit two layers of fire-retardant sheathing to be received between the channel-shaped portion and the connection portion. *Id.* ¶ 18. Because the relatively thin extension portion extends through sheathing as opposed to the whole of the hanger, use of the hanger does not require large cutouts in the sheathing that compromise the walls’ fire resistance, as the use of traditional hangers did. See Figure 1 above.

Simpson also produces and offers for sale within the United States a line of three fire wall hangers, the DGF/DGHF/DGBF Fire Wall Hangers (the “Simpson Hangers”):




Simpson announced this line of hangers on April 1, 2019. Mem. of Points and Authorities in Opp’n to Mot. for Prelim. Inj. (“Opp’n”) at 6, ECF No. 24. In a May 28, 2019 letter, Columbia’s counsel notified Simpson that the ’517 application had been allowed and that the Simpson Hangers fell within the scope of allowed claims. Plaintiffs allege that Simpson has been on notice

that the ’510 patent would grant no later than when it received the May 28 letter.

Plaintiffs initiated this patent infringement suit on August 12, 2019. ECF No. 1. They brought the instant motion for preliminary injunction the same day. ECF No. 3.

**B. The ’510 Patent Claims**

Plaintiffs assert that the Simpson Hangers infringe claims 1, 13 and 20, the three independent claims of the ’510 patent.

Independent claim 1 reads as follows:

> 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, the channel-shaped portion including a base sized and shaped for receiving an end of the structural component thereon to support the structural component, and side panels extending upward from the base generally perpendicular to the base, the side panels having rearward edges lying in a rear edge plane;
> 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 back flange having a front surface lying in a back flange plane, 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.

Independent claim 13 reads as follows:

> 13. A hanger for connecting a structural component to a wall adapted to have fire resistant sheathing mounted thereon, the hanger comprising:
> a channel-shaped portion configured to receive the structural component, the channel-shaped portion including a base sized and shaped for receiving an end portion of the structural component thereon and side panels extending upward from the base;
> an extension portion extending from the channel-shaped portion and configured to extend through the fire resistant 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 by a distance sized large enough to permit two layers of 5/8 inch thick sheathing to be received in a space bounded by the side panels and the back flange, but too small to permit three layers of 5/8 inch thick sheathing to be received in the space bounded by the side panels and

the back flange.

Independent claim 20 reads as follows:

> 20. A hanger for connecting a structural component to a wall adapted to have drywall 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 drywall; and
> a connection portion including a top flange configured for attachment to a top surface of a top plate of the wall and a back flange extending from an edge of the top flange, the back flange having a front surface lying in a back flange plane, 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.

Plaintiffs also assert that the Simpson Hangers infringe dependent claims 2, 3, 4, 6, 7, 8, 9, 12, 14, 15, and 19.[2]

## III. LEGAL STANDARD

"A preliminary injunction is a 'drastic remedy that is not to be routinely granted.'" *Nat'l Steel Car, Ltd. v. Canadian Pac. Ry., Ltd.*, 357 F.3d 1319, 1324 (Fed. Cir. 2004) (quoting *Intel Corp. v. ULSI Sys. Tech., Inc.*, 995 F.2d 1566, 1568 (Fed. Cir. 1993)). "To obtain a preliminary injunction in the district court, the moving party must demonstrate a reasonable likelihood of success on the merits, irreparable harm in the absence of a preliminary injunction, a balance of hardships tipping in its favor, and the injunction's favorable impact on the public interest." *Nat'l Steel Car*, 357 F.3d at 1325 (citing *Jack Guttman, Inc. v. Kopykake Enters., Inc.*, 302 F.3d 1352, 1356 (Fed. Cir. 2002)). The first two factors are paramount, and "a movant cannot be granted a preliminary injunction unless it establishes both of the first two factors, i.e., likelihood of success on the merits and irreparable harm." *Amazon.com, Inc. v. Barnesandnoble.com, Inc.*, 239 F.3d 1343, 1350 (Fed. Cir. 2001) ("Our case law and logic both require that a movant cannot be granted a preliminary injunction unless it establishes both of the first two factors[.]") (citing *Vehicular Techs. Corp. v. Titan Wheel Int'l, Inc.*, 141 F.3d 1084, 1088 (Fed. Cir. 1998)).

To establish a likelihood of success on the merits, a patentee must show that "in light of the presumptions and burdens that will inhere at trial on the merits," *Amazon.com*, 239 F.3d at

[2] For purposes of this motion for a preliminary injunction, there are no material disputes of claim construction. *See* Declaration of W. Andrew Fennell, ¶¶ 19-25, ECF No. 25.

1350, "it will likely prove infringement of the asserted claims and that its infringement claim will likely withstand the alleged infringer's challenges to patent validity and enforceability," *Metalcraft of Mayville, Inc. v. Toro Co.*, 848 F.3d 1358, 1364 (Fed. Cir. 2017) (citing *Sciele Pharma, Inc. v. Lupin Ltd.*, 684 F.3d 1253, 1259 (Fed. Cir. 2012)). If the alleged infringer "raises a substantial question concerning either infringement or validity, *i.e.*, asserts an infringement or invalidity defense that the patentee cannot prove 'lacks substantial merit,' the preliminary junction should not issue." *Amazon.com*, 239 F.3d at 1350-51 (citing *Genentech, Inc. v. Novo Nordisk, A/S*, 108 F.3d 1361, 1364 (Fed. Cir. 1997)).

The burden is on the accused infringer to show a substantial question of invalidity at the preliminary injunction stage. The burden is "lower than what is required to prove invalidity at trial." *Altana Pharma AG v. Teva Pharms. USA, Inc.*, 566 F.3d 999, 1006 (Fed. Cir. 2009). "'Vulnerability is the issue at the preliminary injunction stage, while validity is the issue at trial.'" *Tinnus Enters*, 848 F.3d at 1205 (quoting *Amazon.com*, 239 F.3d at 1359). "The showing of a substantial question as to invalidity thus requires less proof than the clear and convincing showing necessary at trial." *Abbott Labs. v. Andrx Pharms., Inc.*, 452 F.3d 1331, 1335 (quoting *id.* at 1359). At the same time, while the patentee "need not establish the validity of a patent beyond doubt" when moving for a preliminary injunction, the patentee must "present a clear case supporting the validity of the patent in suit." *Amazon.com*, 239 F.3d at 1359 (citations omitted).

## IV. DISCUSSION

Simpson challenges the validity of the '510 patent based on anticipation and obviousness grounds. *See* 35 U.S.C. §§ 102 (anticipation/novelty), 103 (obviousness).

### A. Asserted Anticipation of the '510 Patent

"A rejection for 'anticipation' means that the invention is not new." *In re Skvorecz*, 580 F.3d 1262, 1266 (Fed. Cir. 2009). A patent is anticipated "if a single prior art reference discloses each and every limitation of the claimed invention." *Schering Corp. v. Geneva Pharms.*, 339 F.3d 1373, 1377 (Fed. Cir. 2003) (citing *Lewmar Marine, Inc. v. Barient, Inc.*, 827 F.2d 744, 747 (Fed. Cir. 1987)). "The disclosure need not be express, but may anticipate by inherency where it would be appreciated by one of ordinary skill in the art." *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043,

1047 (Fed. Cir. 1995) (citing *Continental Can Co. USA Inc. v. Monsanto Co.*, 948 F.2d 1264, 1268 (Fed. Cir. 1991)). Anticipation is a question of fact reviewed for substantial evidence. *In re Rambus, Inc.*, 753 F.3d 1253, 1256 (Fed. Cir. 2014) (citing *In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991)). "Substantial evidence is more than a 'mere scintilla of evidence' but something less than the 'weight of the evidence.'" *Rambus*, 753 F.3d at 1256 (citing *In re Kotzab*, 217 F.3d 1365, 1369 (Fed. Cir. 2000)).

Simpson asserts (at least in a section heading) that the '510 patent is anticipated by the prior art, but it does not assert which, if any, single prior reference discloses each and every limitation of the patent. To the contrary, in the course of setting forth an obviousness opinion, Simpson's expert's declaration effectively explains that no single piece of the referenced prior art discloses each and every limitation of the patent. *See* Decl. of W. Andrew Fennell ("Fennell Decl."), ECF No. 25. Accordingly, Simpson has not presented an anticipation defense that has substantial merit.

**B. Asserted Obviousness of the '510 Patent**

The requirement that an invention not have been obvious "'is distinct from novelty in the sense that an invention may be obvious even though it is not identically disclosed anywhere in the prior art.'" *Amphenol v. Maxconn*, 2000 U.S. Dist. LEXIS 20221, *37 (N.D. Cal. Mar. 7, 2000) (quoting 2 Donald S. Chisum, Chisum on Patents ("Chisum"), § 5.01 (1994)). "A patent is obvious 'if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.'" *Arendi S.A.R.L. v. Apple Inc.*, 832 F.3d 1355, 1361 (Fed. Cir. 2016) (quoting 35 U.S.C. § 103(a)). The Supreme Court has said of the obviousness inquiry:

> Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

*Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966). "[T]o find a combination obvious there must be some teaching, suggestion, or motivation in the prior art to select the teachings of separate references and combine them to produce the claimed combination." *In re Johnston*, 435 F.3d 1381, 1384 (Fed. Cir. 2006) (citing *Karsten Mfg. Corp. v. Cleveland Golf Co.*, 242 F.3d 1376, 1385 (Fed. Cir. 2001)). However, the Supreme Court has made clear that "[t]he obviousness analysis cannot be confined by a formalistic conception of the words teaching, suggestion, and motivation, or by overemphasis on the importance of published articles and the explicit content of issued patents." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 419 (2007). "The obviousness analysis entails 'an expansive and flexible approach.'" *Sciele Pharma, Inc. v. Lupin Ltd.*, 684 F.3d 1253, 1259 (Fed. Cir. 2012) (quoting *KSR Int'l Co.*, 550 U.S. at 415). "Though less common, in appropriate circumstances, a patent can be obvious in light of a single prior art reference if it would have been obvious to modify that reference to arrive at the patented invention." *Arendi S.A.R.L.*, 832 F.3d at 1361 (citing *Takeda Chem. Indus., Ltd. v. Alphapharm Pty, Ltd.*, 492 F.3d 1350, 1357 (Fed. Cir. 2007); *SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1356 (Fed. Cir. 2000)).

**1. Personal of Ordinary Skill in the Art**

"The *Graham* analysis includes a factual determination of the level of ordinary skill in the art." *Custom Accessories, Inc. v. Jeffrey-Allan Indus.*, 807 F.2d 955, 962 (Fed. Cir. 1986). "The important consideration is 'the need to adhere to the statute, *i.e.*, to hold that an invention would or would not have been obvious, as a whole, when it was made, to a person of "ordinary skill in the art" – not to the judge, or to a layman, or to those skilled in remote arts, or to geniuses in the art.'" *Id.* (quoting *Envtl. Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 697 (Fed. Cir. 1983)). Plaintiffs have not provided a definition of a person of ordinary skill in the art. Simpson's expert, W. Andrew Fennell,[3] has, and Plaintiffs have not taken issue with that definition. Fennell defined a

[3] Fennell disclosed that he is a Registered Professional Engineer (Civil) in California, Hawaii, and Nevada; a Chartered Professional Engineer (Civil, Structural) in Australia; a Licensed General Contractor (B License) in California; an ICC-Certified Building Inspector; and a construction consultant. Fennell has more than 25 years of experience in design, construction, and construction administration, and is a Lecturer at the University of California at Berkeley, in a course on "Structural Design in Timber" in the Department of Civil and Environmental Engineering.

person of ordinary skill for purposes of this case as someone with "an education background of, or practical experience providing an equivalent to, a Bachelor of Science in Mechanical Engineering, Structural Engineering, or a related/equivalent field and at least four years of work experience in construction connector design/development." Fennell Decl. ¶ 13, ECF No. 25. The Court finds that level of skill to be an appropriate guide.

**2. Prior Art and Analysis**

Simpson's argument concerns four combinations of prior art. Specifically, Simpson argues that patent '510 is obvious over Japanese Publication No. 1991/014482 (Tsukamoto), U.S. Patent No. 4,261,155 (Gilb '155), U.S. Patent No. 4,422,792 (Gilb '792), and U.S. Publication No. 2005/0155307 A1 (Timony), each in view of U.S. Patent No. 9,394,680 (Bundy). With each of the prior art references except for Bundy, Simpson asserts that each teaches nearly[4] every element of the asserted claims except for the exact spacing dimensions of the extension portion of Brekke. Simpson argues that Bundy teaches and supplies that dimension. Plaintiffs do not dispute that the references are prior art. In their reply brief, Plaintiffs for the most part[5] do not dispute Simpson's characterization of what the prior art discloses, except for Simpson's contention that Bundy teaches the spacing dimension.

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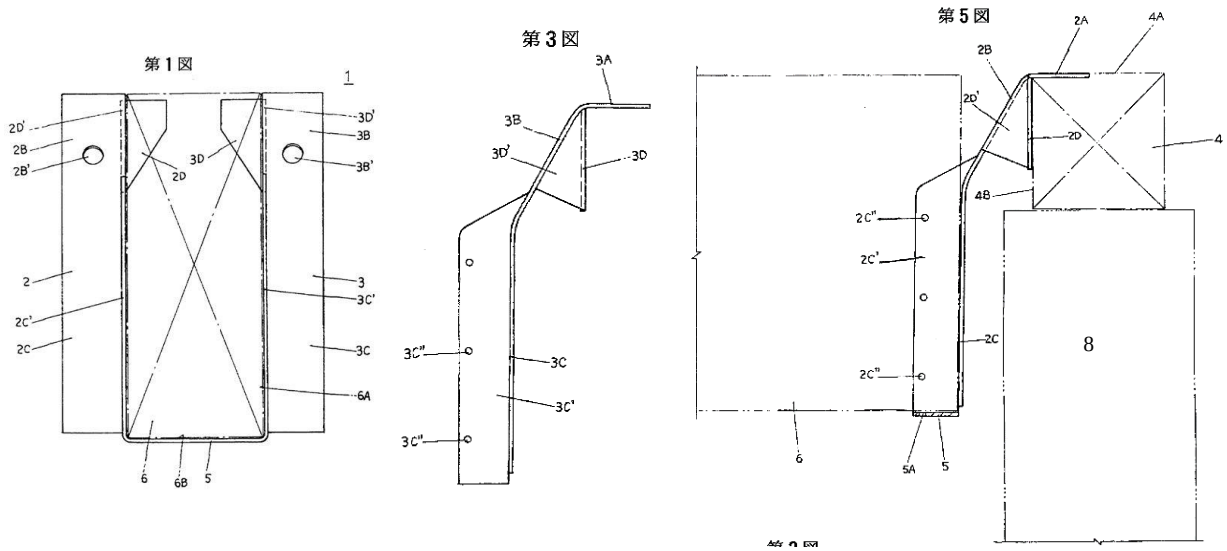
Fennell Decl. ¶ 2.

[4] For some of the claims (in particular for the dependent claims), Simpson argues that the additional claim limitations are disclosed by other combinations of these five patents. *See, e.g.*, Fennell Decl. ¶¶ 82, 83, 93-95, 104, 137, 140, 141, 149, 151, 152, 161-64, 175, 176, 191, 192, 196, 207, 219, 228, 230, 235, 245. In their reply brief, Plaintiffs do not respond, citing page limitations. ECF No. 29 at 6, n.5.

[5] Plaintiffs' reply brief states in a footnote that none of the prior art references discloses an extension portion configured to extend through fire-resistant sheathing. ECF No. 29 at 4, n.3. However, that argument is conclusory and unexplained and does not address Fennell's explanation that they do.

**a. Tsukamoto**

Japanese Publication No. 1991/014482 (filed Apr. 3, 1986) (published Mar. 29, 1991) (Tsukamoto) discloses a connector in the form of a "beam hanger":




Tsukamoto teaches a hanger with two vertical plates 2C', 3C' together with a "receiving plate" 5 which receive and hold a beam. The beam hanger can be attached to one side of a "base" 4. Tsukamoto teaches that the beam hanger can be used regardless of the thickness of the foundation 8 and without having to form notches in the foundation 8. Simpson's expert, Fennell, identifies three portions of Tsukamoto that are like Brekke: a channel-shaped portion for receiving an end of a structural component, a connection portion, and an extension portion. Fennell Decl. ¶¶ 62, 64, ECF No. 25. Fennell opines that Tsukamoto can be used with sheathing, and that the extension portion of the hanger is configured such that it would extend through sheathing. *Id.* ¶¶ 69, 70. The only aspect not disclosed is the precise distance between the hanger and the wall, though Fennell argues that is explicitly taught in the prior art. *Id.* ¶ 62. Simpson argues that Tsukamoto also discloses the additional elements of the dependent claims, "except for claim 3 (which requires a skewed hanger, i.e., one that receives a joist at an angle other than 90°) and claims 9 and 15 (which require a "stop")." Opp'n at 15.

**b. Gilb '155**

U.S. Patent No. 4,261,155 (filed Nov. 16, 1979) (issued Apr. 14, 1981) (Gilb '155) discloses an "infinite skewered hanger":

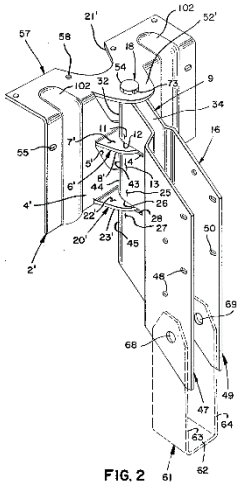


FIG. 2

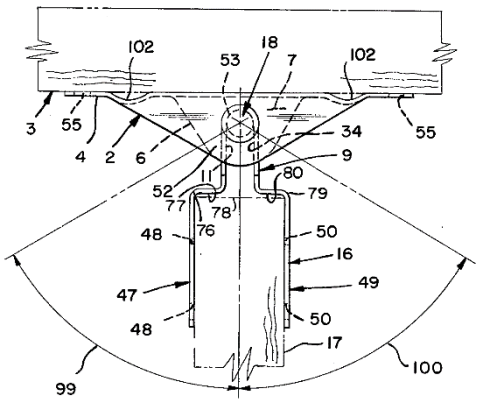


FIG. 5

Gilb '155 concerns:

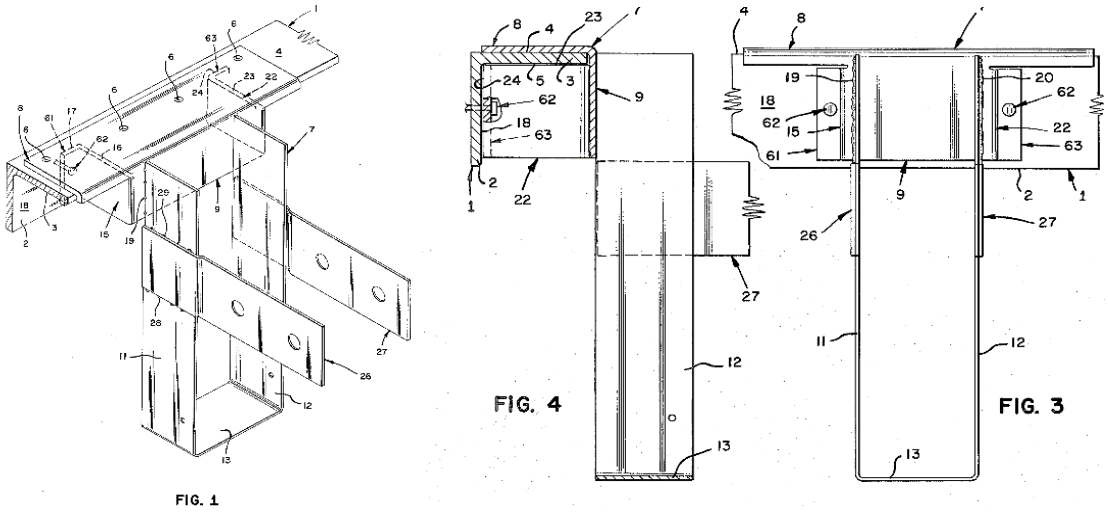
> An infinite skewed and sloped sheet metal hanger for holding a supported structure to a supporting structure. The hanger consists of a supporting member which is connected to the supporting structure, a pin and a supported gusset-like member. Load shear is carried to the face support; not through the pivot connecting pin. This is accomplished by closely holding tab members with the supported gusset-like member.

'155 patent, abstract. Gilb '155 teaches that the hanger "[p]rovides a hanger-like connection between a supporting member (beam) and a supported member (joint) so that the joist, in respect to the beam describes an angle of up to about sixty degrees (60°) in either direction from the perpendicular to the beam." 2:46-50. It teaches that it "relates to sheet metal connectors used in the construction of wood frame buildings. Specifically, the invention is a hanger intended to provide for any known intersection requirement to any amount of skew on any amount of slope." 1:5-10. The patent discloses a channel-shaped portion configured for receiving a structural component, and a connection portion with a top flange for attachment to the top plane of a supporting structure, and a back flange with a front surface lying in a plane opposite the back plane of the channel-shaped portion. Fennell surmised that Gilb '155 is able to receive sheathing between the connection portion and the channel-shaped portion, with the extension portion

extending through the sheathing. Fennell Decl. ¶ 117. As with Tsukamoto, Fennell opines that nearly the only aspect not disclosed in Gilb '155 is the precise distance between the hanger and the wall, though again he argues that is explicitly taught in the prior art. *Id.* ¶ 120.

**c. Gilb '792**

U.S. Patent No. 4,422,792 (filed Aug. 16, 1982) (issued Dec. 27, 1983) discloses a "Gusset Metal Ledger Hanger":

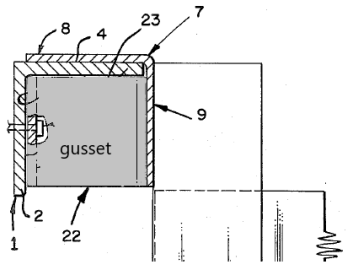



The patent Abstract describes:

> A gusset metal ledger hanger for attachment to metal ledgers wherein the hanger consists briefly of a top flange adapted for connection to the upper face of the outstanding ledger leg, a depending flange attached to the top flange and extending downwardly therefrom, first and second stirrup members attached to the depending flange and extending downwardly therefrom and adapted for holding a structural beam member[.]

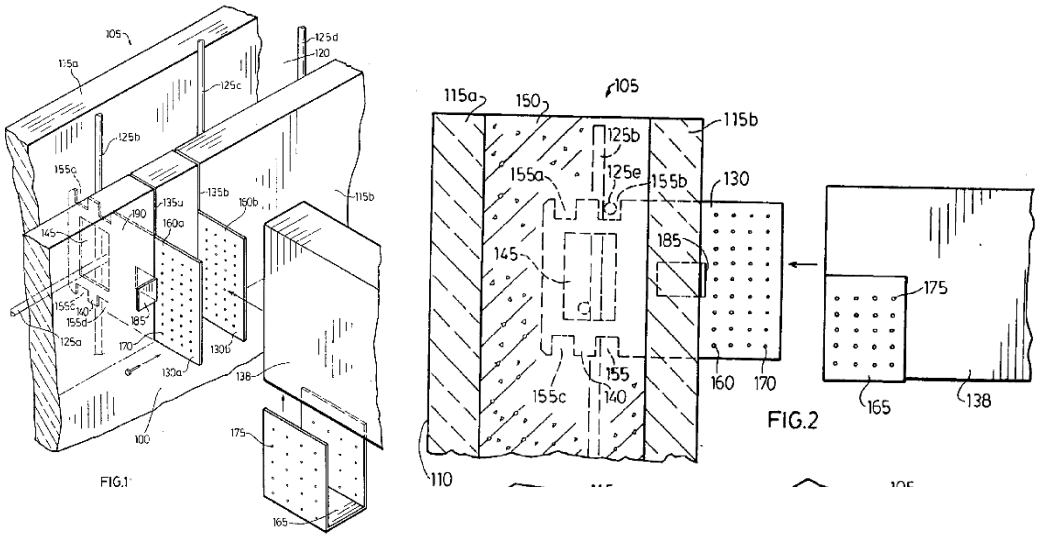
'792 patent, abstract. The hanger has a channel-shaped portion for receiving and holding a structural component, and a connection-portion that consists of a top flange adapted for connection to the upper face of a metal ledger. Fennell acknowledges that Gilb '792 is different from the '510 hanger in that Gilb '792 teaches a connection portion that attaches to a metal ledger, not a top plate on a wall like the '510 patent. Additionally, the patent discloses that the connection-portion of Gilb '792 attaches directly to the "depending flange," which forms the back of the channel-shaped portion designed for receiving the structural component. Extending from the depending

flange and under the metal ledger are two gusset members with a top edge that abuts the lower face of the metal ledger. Fennell asserts that these gusset members constitute an extension portion. Fennell Decl. ¶ 166. Fennell asserts that a person of ordinary skill in the art would have been motivated to lengthen the '792 top flange and attach it to a top plate instead of a ledger, particularly since ledgers had fallen out of favor by 2013 and attaching a hanger to a wood plate was more common. *Id.* ¶¶ 161-63. He asserts that if used by doing so in combination with sheathing, this would result in an extension portion extending from the channel-shaped portion through the sheathing. *Id.* ¶ 167. Fennell asserts that a person of ordinary skill in the art would have had a reasonable expectation of success in combining Gilb '792 with the spacing limitations of Bundy.




**d. Timony**

U.S. Patent Publication No. 2005/0155307 A1 (filed Jan. 19, 2005) (published Jul. 21, 2005) (Timony) discloses a hanger:

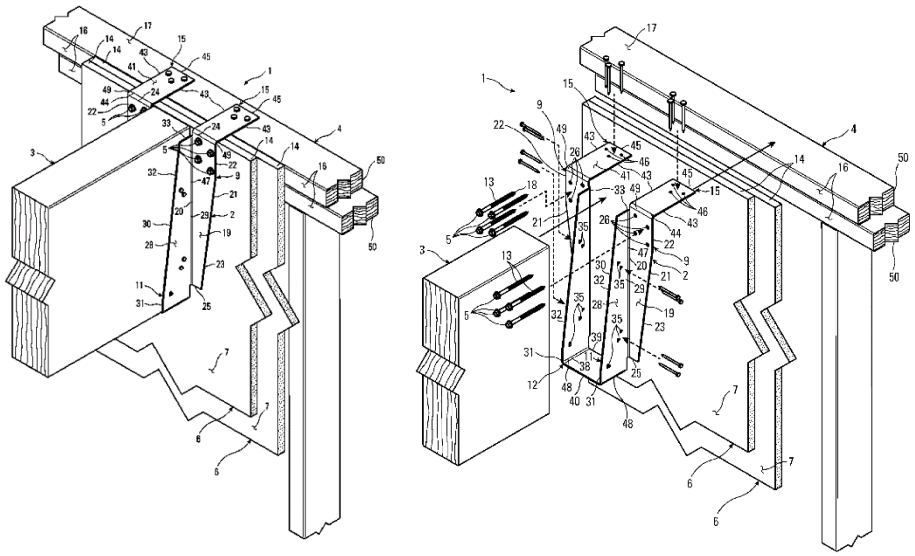



The abstract for Timony describes "a hanger for hanging an object from a composite wall . . . particularly well suited for hang [sic] a joist." As can be seen from the figures, Timony has "an embedded portion for retention within the concrete core and a hanging portion extending from the

foam outer wall for connection to the object." In the version depicted above, slits are cut into foam outer walls through which two sides arms 130a, 130b extend. When the structural component is placed in the hanger, the end of the component abuts the outer face of the foam walls and does not extend through it. Fennell acknowledges that Timony does not disclose a connection portion because Timony is not configured for attachment to the top surface of a top plate of a wall. Fennell Decl. ¶ 207. Fennell argues, however, that a person of ordinary skill in the art would have found it obvious to combine Timony with a top flange taught by Bundy because doing so would allow for quicker and easier hanger placement and would allow additional load support.

**e. Bundy**

Simpson argues that the spacing limitation is expressly taught by Bundy. U.S. Patent No. 9,394,680 B2 (filed Dec. 14, 2013) (issued July 19, 2016) (Bundy), a patent owned by Simpson, relates to a drywall joist hanger:



Bundy is described as "[a] connection utilizing a joist hanger to hang a generally horizontal joist or beam from a wood structural support member such as a top plate or header in cooperation with a first plurality of fasteners such as screws and one or more generally vertical drywall panels." '680 patent, abstract. The summary of the invention states that "[t]he present invention provides a connection that allows a joist hanger to be attached to a supporting structural member with drywall

panels interposed between them without damaging the drywall panels or compromising the strength of the connection." 2:37-41. While the Bundy claims also reference "one or more drywall panels," the claims themselves do not disclose an exact spacing limitation.

**3. The Obviousness Assessment**

Plaintiffs argue that Bundy does not teach the spacing limitation of two layers of 5/8" sheathing. Plaintiffs point to Bundy's abstract, which describes the invention as a joist hanger to be used "in cooperation . . . with . . . one or more generally vertical drywall panels." ECF No. 25-3. Bundy's claims also refer to "one or more" drywall panels or panels between the joist hanger and structural support member, instead of a specific number or measurement. Plaintiffs argue that since Bundy does not disclose the spacing requirement of the asserted claims, and since each of Simpson's proffered combinations rely on Bundy to disclose the spacing limitations of the '510 patent, Simpson has failed to establish obviousness. However, Bundy does disclose in its description of the preferred embodiment that common panel thicknesses in the United States are 1/2" and 5/8" and that "[i]n the present invention, two layers of 5/8" drywall is preferred." 5:14-18. Additionally, multiple patent figures show two sheets of vertical drywall panels between the back plate of the channel-shaped portion and the front face of the structural support member, with no apparent additional room for a third[6]:

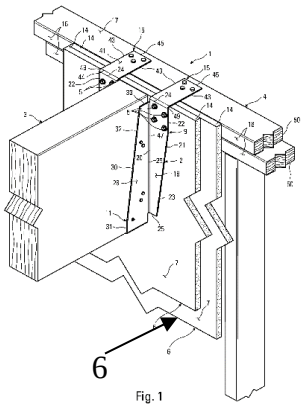


Fig. 1

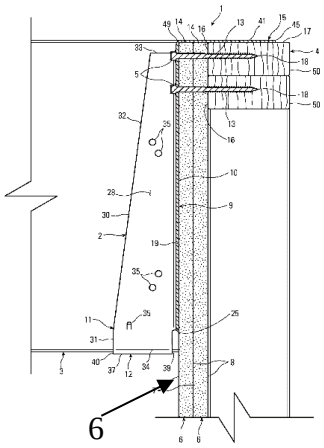


Fig. 3

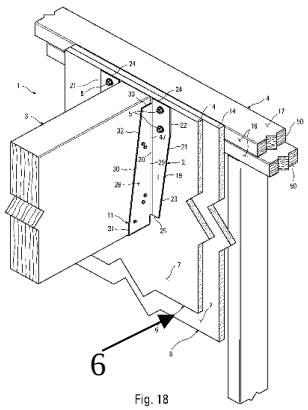


Fig. 18

[6] Plaintiffs complain that Simpson "goes so far as to include artistic renderings" in its brief to try to demonstrate how the prior art references could be used with two layers of sheathing, but Plaintiffs then use a rendering in their own brief (p.6) to try to show that Bundy could be used with three layers of sheathing, when the figures in the patent clearly show it being used with (and apparently able to accommodate) only two.

Plaintiffs presumably agree these figures are instructive: in arguing that the spacing limitation in their own claims has written description support, they point to figures from the '510 patent showing two layers of sheathing with no apparent room for a third. "As is evident from these figures," they conclude, "the disclosed hanger could not possibly receive a third layer of sheathing within the fixed space." Reply 2. That is the case with Bundy as well.[7] As Plaintiffs note, the Federal Circuit has concluded that "drawings alone *may* be sufficient to provide the 'written description of the invention' required by § 112, first paragraph." *Vas-Cath Inc. v. Sakharam D. Mahurkar*, 935 F.2d 1555, 1564 (Fed. Cir. 1991).

Furthermore, MiTek's president, Mark Lee, states in his declaration that typically a double layer of 5/8" sheathing is used along the face of fire separation walls. Decl. of Mike Lee ¶ 10. This is consistent with Simpson's expert's declaration, in which Fennell opines that the mounting of two layers of 5/8" think drywall on walls was a well-known and common practice before 2013. Fennell Decl. ¶ 76. Fennell also asserts that mounting two layers of 5/8" thick drywall is the most common method of complying with 2-hour rated wall requirement codes throughout the country. *Id.* Fennell convincingly argues that a person of ordinary skill in the art would have been motivated to combine the teachings of the prior art with Bundy in order to optimize the spacing of the extension portion such that two layers of 5/8" thick sheathing could be received between the rear edge plane and the back flange plane. He opines that the person would have a reasonable expectation of success in doing so. *Id.* ¶ 77. The Court finds it would have been obvious for a person skilled in the field to modify an existing hanger or design a new one with an extension portion spaced wide enough for two layers of 5/8" thick drywall. Indeed, if the standard in the field was to use two layers of 5/8" thick sheathing to meet building codes, it is common sense that the '510 patent, or any hanger, would reflect that spacing. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 405 ("When there . . . there are a finite number of identified, predictable solutions, a person of ordinary skill in the art has good reason to pursue the known options. . . . If this leads to the

[7] In their reply, Plaintiffs rely on one figure from the Bundy patent, a figure showing a side-view of the hanger alone without any other references. However, other figures, including those shown above, clearly show the hanger being used over two layers of sheathing, with no apparent room for a third.

anticipated success, it is likely the product not of innovation but of ordinary skill and common sense.").

Regarding the other prior art references, Plaintiffs argue that Tsukamoto, Gilb '792, Timony were designed for securing objects to foundation or masonry walls, that those types of walls do not require fire-resistant sheathing, and thus that a person would have not been motivated to modify those inventions to meet the exact spacing limitations of the asserted claims. That argument is not convincing. The relevant inquiry is whether a person skilled in the relevant field would feel motivated to *combine elements* known in the prior art. "A prior art reference is analogous and thus can be used in an obviousness combination if it 'is from the same field of endeavor, regardless of the problem addressed' or 'is reasonably pertinent to the particular problem with which the inventor is involved,' even if it is not within the inventor's field of endeavor." *Tinnus Enters*, 846 F.3d at 1207 (quoting *Unwired Planet, LLC v. Google, Inc.*, 841 F.3d 995, 1000-01 (Fed. Cir. 2016)). "The field of endeavor is determined 'by reference to explanations of the invention's subject matter in the patent application, including the embodiments, function, and structure of the claimed invention.'" *Apple Inc. v. Samsung Elecs. Co.*, 816 F.3d 788, 802 (Fed. Cir. 2016) (quoting *In re Bigio*, 381 F.3d 1320, 1325 (Fed. Cir. 2004) and citing *In re Deminski*, 796 F.2d 436, 442 (Fed. Cir. 1986) (finding that if a prior art reference discloses essentially the same structure and function as the invention, it is likely in the same field of endeavor))). Multiple of the prior art references, especially Tsukamoto, disclose a similar structure and function as Brekke—multi-component hangers with channel-like portions, designed to hang structural components from walls. The prior art references, even if designed for holding a truss up onto a masonry wall, are in the same field of endeavor as a hanger designed for holding a truss up onto a wooden wall. The intuitive leap that gets one to using a hanger designed for a masonry wall on a wooden wall frame is not great, even for a non-expert. An ordinary person skilled in the art would have been motivated to modify—if necessary—such a hanger for use on a wooden wall and would have a good expectation of that modification being successful. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007) ("If a person of ordinary skill can implement a predictable variation, § 103 likely bars its patentability.").

Finally, with regard to Gilb '155, Plaintiffs argue that modifying it to be able to receive two layers of 5/8" sheathing would vitiate the purpose of that patent. They point out that Gilb '155 was designed to allow for installations of structural components where the components do not run perpendicular to the wall. They argue that using the hanger with two layers of sheathing would obstruct and eliminate the ability of the channel-portion to pivot. Thus, they argue, one skilled in the art would not have been motivated to modify the hanger for use with two layers of sheathing. It may be true that Gilb '155, as depicted in the patent, would not be able to receive two layers of 5/8" sheathing and pivot within the full expected range of pivot (Fennell disagrees with this conclusion). However, the relevant inquiry is whether one skilled in the art would have been motivated to *modify* Gilb '155 or combine elements of it with other prior art, in order to achieve a desired result, and have a reasonable expectation of success in doing so, and the Court concludes that he or she would have been.

The Court finds that an ordinary person skilled in the art would have found it obvious to combine the prior art to arrive at the '510 patent. This is true particularly with Tsukamoto and Bundy, since both could apparently already be used unmodified in combination with sheathing. Fennell Decl. ¶ 70. Since it was normal practice in the field to use two layers of 5/8" sheathing, a person skilled in the art would have been motivated to combine the teachings of those patents with a spacing limitation equal to two layers of 5/8" sheathing. *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 417 (2007) ("The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results."). Therefore, Simpson has raised a substantial question as to whether the '510 patent was obvious over the prior art.

**4. Secondary Considerations**

Although Simpson has established a prima facie case of obviousness, "as a check against hindsight bias," *Eurand, Inc. v. Mylan Pharms., Inc. (In re Cyclobenzaprine Hydrochloride Extended-Release Capsule Patent Litig.)*, 676 F.3d 1063, 1079 (Fed. Cir. 2012), the Court must weigh any secondary considerations. Secondary considerations are objective evidence that may weigh against a finding or presumption of obviousness. They can include the invention's commercial success, long felt but unresolved needs, the failure of others to make the invention,

praise by others, teaching away by others, and copying of the invention by competitors. *Blackberry Ltd. v. Typo Prods. LLC*, 2014 WL 1318689, at *9 (N.D. Cal. Mar. 28, 2014) (citing *Ecolochem, Inc. v. S. California Edison Co.*, 227 F.3d 1361, 1380 (Fed. Cir. 2000)). Plaintiffs give weight to a statement of Sam Hansen, Vice President and General Manager of Connectors and Lateral Systems at Simpson, in which Hansen acknowledged an unmet demand for firewall hangers that maintained fire resistance and could be installed after sheathing is applied. *See* Hansen Decl. ¶ 11. However, Hansen also provided a reason for that unmet demand that wasn't a failure of inventiveness. He explained that:

> In 2013, building codes changed, allowing for wood structures to be built taller and more dense, leading to increased demand for hangers that would allow larger wood-framed structures to meet the new fire-resistance regulations. Hangers sold at the time could not be installed after drywall (because doing so would crush the drywall), so it was common to install the hangers before the drywall, which required cutting "Notches" or "cutouts" around the hangers. However, these large cutouts exposed the wood framing and impaired the fire-resistance rating. To solve this problem, Simpson developed a new hanger that was installed over the typical two layers of 5/8 inch drywall without damaging the wall.

*Id.* ¶ 9. Hansen asserted that the new hangers Simpson developed after the code changes were successful, but that customers wanted a hanger that could be installed before sheathing. *Id.* ¶ 11. This is the statement Plaintiffs point to as showing unmet demand. But that one remark doesn't suggest that there was a "long felt but unresolved" need for a hanger that didn't require a large cutout in sheathing and could be applied before sheathing. At most, it speaks to a need that went unresolved for at most a year, as building codes changed in 2013 and Bundy and Brekke were filed in December of that year. And Hansen did not assert (nor have Plaintiffs) that anyone in the industry tried repeatedly but failed to create a hanger like Brekke.

Also, the Court is not persuaded by Plaintiffs' assertion that Bundy teaches away from hangers that incorporate a fixed spacing. "A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant." *In re Gurley*, 27 F.3d 551, 553 (Fed. Cir. 1994); *Teach*, Black's Law Dictionary (11th ed. 2019) ("prior art that discourages an inventor from pursuing an invention 'teaches away from'

that invention"). As discussed above, Bundy discloses in its preferred embodiment that "[i]n the present invention, two layers of 5/8" drywall is preferred," and figures in the patent clearly show two layers of sheathing between the hanger and the wall. If anything, Bundy left bread crumbs for the path taken by Plaintiffs.

There are no secondary considerations that significantly weigh on the Court's findings. Simpson has met its burden of raising a substantial question of invalidity, *i.e.*, that the '510 is vulnerable. Plaintiffs are therefore not able to meet the threshold of showing a likelihood of success on the merits. The motion for preliminary injunction is denied.

## V. CONCLUSION

For the reasons stated above, the Court **DENIES** Plaintiffs' Motion for Preliminary Injunction, ECF No. 3.

**IT IS SO ORDERED.**

Dated: October 4, 2019

THOMAS S. HIXSON
United States Magistrate Judge