UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

COLUMBIA INSURANCE COMPANY and MITEK INC.,

Plaintiffs,

v. Case No. 3:19-CV-04683-TSH

SIMPSON STRONG-TIE COMPANY, INC.,

Defendant.

DEPOSITION OF WILLIAM ANDREW FENNELL

DATE: Tuesday, April 15, 2025

TIME: 9:00 a.m.

LOCATION: Shartsis Friese, LLP
425 Market Street, 11th Floor
San Francisco, CA 94105

OFFICIATED BY: Ariana Crisafulli

JOB NO.: 7228504

APPEARANCES

ON BEHALF OF PLAINTIFFS COLUMBIA INSURANCE COMPANY AND MITEK INC.:

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PROCEEDINGS

THE OFFICER: Good morning. My name is Ariana Crisafulli. I am the reporter assigned by Veritext to take the record of this proceeding. We are now on the record at 9:00 a.m.

This is the -- this is the deposition of Andrew Fennell, taken in the matter of Columbia Insurance Company and MiTek Inc. versus Simpson Strong-Tie Company, Inc. on April 15h, 2025, at San Francisco, California 94105.

I am a notary authorized to take acknowledgements and administer oaths in California.

Additionally, absent an objection on the record before the witness is sworn, all parties and the witness understand and agree that any certified transcript produced from the recording of this proceeding:

- is intended for all uses permitted under applicable procedural and evidentiary rules and laws in the same manner as a deposition recorded by stenographic means; and
- shall constitute written stipulation of such.

At this time, will everyone in attendance

please identify yourself for the record, beginning from my right.

MR. EIDSON: Scott Eidson, Stinson LLP, on behalf of MiTek and Columbia Insurance, the plaintiffs.

MR. MAUCH: Joseph Mauch of Shartsis Friese on behalf of Defendant Simpson Strong-Tie Company, Incorporated.

MR. FENNELL: And William Andrew Fennel, F for Fred, E-N-N-E-L-L, and I am the deponent.

THE OFFICER: Thank you. Hearing no objection, I will now swear in the witness. Please raise your right hand.

WHEREUPON,

WILLIAM ANDREW FENNELL,

called as a witness and having been first duly sworn to tell the truth, the whole truth, and nothing but the truth, was examined and testified as follows:

THE OFFICER: Thank you.

You may proceed.

EXAMINATION

BY MR. EIDSON:

Q Good morning, Mr. Fennell. How are you?

A I'm very well, Counsel.

Q Is this your first time giving an in-person

deposition?

A No.

Q Okay. First time in the Simpson versus MiTek war saga; is that fair to say?

A Yes.

Q Okay. Very good. How many times have you been deposed in person?

A Approaching 50.

Q Very good. All right. So I'm not going to belabor the rules of the deposition process with you. You understand how we're to proceed here today; fair to say?

A I do.

Q Okay. I'll make a couple stipulations with you. We will go at your pace today. If you want a break, let me know, and we will take one. The only stipulation I'll make with you is that if a question is pending on the table, we wrap up that question before we take a break. Does that sound fair?

A That's fine.

Q Okay. If I ask you a question, and you don't understand it, let me know, and I'll rephrase. But if you answer a question that I've asked, I'm going to assume that you understood it and that the answer you gave was both truthful and accurate. Does that sound

fair?

A It does.

Q Okay. Very good. Are you on any medication that would affect your ability to testify truthfully or accurately today?

A No.

Q All right. Do you have a medical condition that would affect your ability to testify truthfully or accurately today?

A No.

Q All right. So you've been retained by Simpson Strong-Tie to render opinions on the validity of various MiTek firewall hanger patents; correct?

A Yes.

Q All right. And as it pertains to this case, you have rendered an opinion as to Claim 40 of the 510 Patent; correct?

A Yes.

Q All right. And you prepared one initial report, dated February 14th; correct?

A Yes.

Q And then you prepared a supplemental report, dated March 7, 2025; correct?

A Yes.

Q All right. And all of the opinions you plan

on offering in this case are in that March 7, 2025, report; correct?

A Largely. I -- the opinions, primary opinions are -- are in that supplemental report that we just discussed. However, I have subsequently had the opportunity to review Professor Serrette's rebuttal report and also just recently received a draft deposition transcript of Dr. Serrette's deposition taken just recently.

And from those extra documents, I have formed some rebuttal-type opinions that we can offer today. I suspect they'll come out. As we discuss each of the sections in my supplemental report, we can identify those additional rebuttal-type opinions as we go.

Q Did you understand that you were under an obligation to provide any rebuttal opinions in writing?

A No. No. It's just a --

Q Okay. Yeah. So the time for rebutting anything has passed in this case. Do you understand that?

A Okay. If you say so.

Q Okay. So we're going to focus on the opinions that you have in your reports today. And so my question, then, is, setting aside any non-disclosed rebuttal opinions, are all of your opinions on the

validity of the 510 Patent contained in your March 7, 2025, report?
A The primary ones, yes.
Q What's not contained in there?
A Well, if we are having a detailed discussion of my opinions, and there may be some sub-opinion or some minor-type opinion offered that -- in response to a question you ask, but the primary opinions that I -- Intend to testify to are in that report.
Q Do you understand it was your obligation to disclose all of your opinions in that March 7, 2025, report?
MR. MAUCH: Objection. Lacks foundation. Seeks a legal conclusion.
MR. EIDSON: You can answer, Mr. Fennell.
THE WITNESS: Yes, I'm -- I'm comfortable with what's in my binder there. As I say, I mean, if -- if you ask me a question, and it gets into the weeds, there may be a sub-opinion that's not written down currently.
BY MR. EIDSON:
Q What sub-opinion that's not written down pertaining to the validity of Claim 40 do you have that is not in your report?
A As I sit here right now, I have no idea what

that would be.
Q Okay.
A Maybe in the next seven hours.
Q As it pertains to the validity of the 510 Patent, is it fair to say that everything is in your report?
MR. MAUCH: Asked and answered.
THE WITNESS: Yeah, I'd just refer you to my previous answers.
BY MR. EIDSON:
Q Are you prepared to talk about all of your expert opinions today?
A In this matter, yes.
Q Okay. All the documents and information that you relied on in coming up with your opinions are cited in your report on March 7th; correct?
A Yes.
Q Okay. And when we talk about your report and your opinions, I'm focusing on the March 7th report. I understand there are different variations and an earlier one and a supplement, but it's fair to say that the March 7th report replaced your February 14th report; correct?
A Yes.
Q All right. And so when I say, "your report,"

that's the one I'm referring to. Does that sound fair?
A It does.
Q All right. There's nothing that you forgot to cite in your report when you were rendering your opinions in this matter?
A Not that I'm aware of.
Q And to the best of your recollection, your report is both complete and accurate?
A Yes.
Q Did you have access to all the information you needed to form your opinions in this case?
A I believe so.
Q You had access to Simpson's counsel; correct?
A I did, yes.
Q Okay. You had access to Simpson's documents if you wanted them; correct?
A Yes.
Q You had access to Simpson personnel if you wanted it; correct?
A Yes.
Q You had access to MiTek's documents if you wanted them; correct?
A Yes.
Q All right. Did anyone restrict access to the information available to you when rendering your

opinions in this matter?
A No.
Q All right. Did you speak with any Simpson personnel in rendering your opinions in this matter, outside of counsel?
A No.
Q You mentioned Dr. Serrette's rebuttal report to your opinions. Did you read his initial report on infringement?
A I did not.
Q Why not?
A I was not asked to, and the deposition I was offering today was based on my report.
Q But it's not also based on rebutting Dr. Serrette's rebuttal report either, is it? But you read that one; right?
A That was only just provided to me recently, and I did read it, yes.
Q Did anyone provide the infringement report of Dr. Serrette to you?
A No.
Q Would you have wanted to read it if you had it?
MR. MAUCH: Objection. Vague.
THE WITNESS: I'm not sure. I mean, if

that was the only version of Dr. Serrette's opinions, possibly, likely, yes. But once I was given his rebuttal report, that seemed like a far more on-point discussion of particularly my opinions.
BY MR. EIDSON:
Q You're not offering any opinions on infringement in this case; correct?
A There are none currently involved in my report.
Q So you don't have an opinion one way or another or whether Claim 40 is infringed; fair to say?
A I -- I was going today to discuss some of the rebuttal testimony in Dr. Serrette's draft deposition, and that would've had a -- an opinion on infringement.
Q But you haven't rendered any infringement or non-infringement opinions in this matter, have you?
A No. My -- my opinions in this report are on invalidity.
Q Okay. So you don't know one way or another whether Claim 40 is infringed; is that fair to say?
MR. MAUCH: Objection. Vague.
THE WITNESS: My opinions are limited to invalidity.
BY MR. EIDSON:
Q Are you aware of whether Simpson has conceded

infringement in this case?
A No.
Q You don't know one way or another?
A I don't know one way or the other.
Q And in a nutshell, your opinions in this matter are that Claim 40 of the 510 is invalid as both anticipated and obvious; correct?
A That's correct.
Q And you've been obtained to opine on invalidity and other related MiTek proceedings; correct?
A Yes.
Q You've rendered expert opinion testimony against the 867 and the 626; correct?
A Yes.
Q And against the 339; correct?
A Yes.
Q All right. And you understand the distinctions between all those patents?
MR. MAUCH: Objection. Vague.
THE WITNESS: I do.
BY MR. EIDSON:
Q And the latest testimony, I think, right before your March opinions in this case that you offered was your direct evidence in the 339 PGR; is that right?
A Probably.

Q Did you confer with anyone at Simpson in formulating your opinions in this matter, outside of counsel?
A Well, there was a co-consultant, Sherwin, if that fits.
Q Serwin?
A Serwin.
Q Dr. Serwin, the economist?
A Yes.
Q Okay.
A But I believe that's it from Team Simpson.
Q When you've rendered any opinions in any of the matters, have you spoken with anyone at Simpson?
A Don't believe so, no.
THE OFFICER: Did you say -- sorry. "Don't -- don't believe so"?
THE WITNESS: I don't believe so, no.
BY MR. EIDSON:
Q Do you know who Sam Hensen is?
A I've read that name in places. I don't recall his actual title at Simpson.
Q Have you read his deposition transcript?
A I have not.
Q Or multiple transcripts, I should say.
A I have not read any of them.

Q Do you know who Mr. Wert is, Bryan Wert?
A No.
Q Fair to say you haven't read his deposition transcript?
A That's correct.
Q Have you read any deposition transcripts from any Simpson personnel?
A I have not.
Q At any time, not just -- at any time?
A In this matter?
Q In any matter.
A I don't believe I've read any Simpson transcripts related to these patent cases.
Q Other than what is listed in your report, did you consider any Simpson documents in rendering your opinion?
A Well, what's in my file is what I considered, and what I drew from for opinions are -- are listed in the materials, listed as exhibits.
Q Did you look at any Simpson emails when rendering your opinions in this case?
A No.
Q Did you look at any MiTek emails when rendering your opinions in this case?
A No.

Q Other than Dr. Serwin, is there anyone else outside of counsel that you've conferred with in rendering your opinions?
A Just focused on my stuff.
Q Did you talk to Mr. Hoffman? Do you know who that is?
A No.
Q Okay. I'll represent to you that Simpson has retained an expert in this case, Nathan Hoffman, to render opinions. Have you read any of those opinions or read his report?
A Not that I recall.
Q And so when did you speak with Dr. Serwin?
A Oh, I list the date in my report.
Q It was February 13th. Was the date listed in your report, was that the only time?
A Yes.
Q So you just had one conversation with him?
A Yes.
Q How long did that last?
A It wasn't very long. It was 15, 20 minutes perhaps.
Q What did you discuss?
A I can look up what I wrote. But just from memory, it was my views of Claim 40.

Q And what specific views did you convey to him?
A What is disclosed by Claim 40.
Q And what did you tell him was disclosed by Claim 40?
A The -- the various limitations of Claim 40 as written.
Q Did you tell him what was not disclosed by Claim 40?
A No, I don't recall.
Q Did you show him a draft of your report?
A I did not.
Q Did he send you a draft of his report?
A No.
Q So you didn't send him a draft of your report, and he didn't send you a draft of his; is that fair to say?
A From memory, yes.
Q What else did you and Mr. Fennell discuss?
A I have a lot of discussions with Mr. Fennell.
Q I'm sorry. Mr. Serwin. Dr. Serwin. I'll get it right eventually. Third time's a charm.
A From memory again, it was just a -- a discussion of the POSITA-type aspects of Claim 40.
Q Why did you need to have that conversation with Dr. Serwin?

A It was requested that I have that for the purposes of coordination.
Q By who?
A By counsel.
Q So counsel set up the call?
A Yes.
Q Have you consulted with any other third parties outside of Simpson personnel in rendering your opinions for any matter?
MR. MAUCH: Objection. Vague.
BY MR. EIDSON:
Q For any of the firewall matters. If it's difficult for you to remember if that was for the PGR or for the litigation, because I do understand there's some overlap. That's why I'm asking broadly, and if we need to parse it, we can.
A Oh no. It's just simply when you say, "matters," it's like I'm working on --
Q Yeah, no, I get that,
A -- a hundred matters in at any time. So for the purposes of these patent matters, I have not consulted with others not identified to date. As I mentioned before, I have worked with folks on my staff to discuss and develop these opinions in a committee-like environment.

Ultimately, the opinions are -- are mine, but that's it.
Q When it came to preparing your opinions, who was your main point of contact from an attorney perspective?
A Counsel Mauch.
Q If Dr. Serwin in his report mentions getting a draft of your report before February 14th, would that be accurate or no?
MR. MAUCH: Objection. Lacks foundation assumes facts not in evidence.
THE WITNESS: I -- I don't honestly know.
BY MR. EIDSON:
Q Okay. As you sit here today, you just don't remember one way or another whether you sent him a draft, or is it your affirmative memory that you didn't send him a draft? That's my question.
A The former. I just don't recall.
Q You don't recall one way or another?
A Correct.
Q Got it. Probably should have asked that first. It's a little easier to answer. And you mentioned that you've, both in this case and other cases, read the reports of Dr. Serrette; correct?
A I have.

Q All right. You don't take any issue with his qualifications, do you?
MR. MAUCH: Objection. Vague.
THE WITNESS: Oh, no. I -- I have a lot of respect for Dr. Serrette.
BY MR. EIDSON:
Q Agreed that he fits the parties' agreed-upon definition of a person of ordinary skill in the art?
A I do.
Q You mentioned earlier that you had, you know, 50 other matters that you're working on. What percentage of your professional work is litigation-related?
A If you're talking about me personally, more than three quarters of my work is -- involves some type of active litigation. The balance of my work is for primarily assisting builders with new construction matters.
Q Working on these firewall patent disputes, is this the first time you've worked for Simpson?
A No. I've done several small matters for Simpson over the years, but they were primarily associated with materials testing and laboratory services with my previous company, Scientific Construction Laboratories, listed on my resume

somewhere.
Q Any other litigation matters for Simpson?
A The matter I was -- matters I was thinking of, none of them were litigation-based for Simpson. This is the first time I've been retained in a litigation consultant role.
Q Have you worked with attorneys at the Shartsis firm before?
A I don't believe so.
Q In your report, you mentioned in an offhand manner, or maybe not offhand -- I certainly don't mean to be pejorative -- that you had considered Mr. Lyman's deposition testimony. Do you recall that?
A Not at this time.
Q Okay. Do you know who Mr. Lyman is?
A Honestly blanking on him. If you can direct me to a page or a paragraph, I can.
Q He was MiTek's expert on some estoppel issues. Are you familiar with those issues in this case?
A No.
Q Okay. So it's fair to say that you haven't read any of the parties' estoppel briefing in this case?
A Not that I'm aware of.
Q All right. And you haven't reviewed any of the expert testimony or transcripts from Simpson's

estoppel expert in this case; correct?
A Again, yeah, I don't recall. Don't think so.
Q And you have no opinions pertaining to estoppel in this matter; right?
A I don't.
Q Mr. Fennell, I've handed you what we have marked as Fennell Exhibit 1. It is a copy of objections and responses to a subpoena served on you and your firm from MiTek. Do you recall getting that subpoena?
(Fennell Exhibit 1 was marked for identification.)
A I do.
Q Okay. And you recall working with counsel to prepare these objections; correct?
A Well, I worked to prepare documents that were responsive to this subpoena, but the actual objections are -- are legal, not from me.
Q Okay. So you gathered documents in response to the subpoena, but you had no participation in these objections in this formal document that's Exhibit 1. Is that fair to say?
A Yes.
Q Okay. And as it pertains to all of the categories of information in these objections in which you say you will produce all non-privileged documents,

is it fair to say that you produced everything you had in response to the subpoena?
A I believe so, yes.
Q You're not holding anything back or anything like that?
A No.
Q One of the items requested was an engagement letter. Do you have an engagement letter for this matter or any of the matters related to the firewall patents?
A I seem to remember signing something way back in the day, 2020-ish. There was a -- some sort of blurb from Simpson or the counsel for Simpson. So yes, there there is one. It should be in my -- my heap.
Q Okay. I didn't see that, but we can talk about that at a break.
A Okay.
MR. MAUCH: I believe it was produced.
MR. EIDSON: Was it? And if I missed it, I'll certainly own that. I just didn't see it. Okay.
BY MR. EIDSON:
Q Thank you, Mr. Fennell. So, actually, you can keep all the exhibits. This is a little bit different, but you're going to keep all the exhibits in front of you, and we'll just make a stack as the day goes on.

A Right you are.
Q Yeah. And, Mr. Fennell, just to clarify on the record, I'll hand you a series of exhibits today. Just keep them in front of you. Try to do your best to keep them organized. I will tell you there will be a portion of the day where we come back and flip back and forth between different exhibits, so --
A No problem.
Q All right. I've handed you what we have marked as Fennell Exhibit 2. It's a document Bates labeled Fennell 1, and it is an invoice dated January 31, 2025, from Engineered Research Group. You recognize this exhibit; correct?
(Fennell Exhibit 2 was marked for identification.)
A Yes.
Q All right. What is it?
A It's an invoice for professional services on this matter from my office to the Shartsis firm.
Q And when you submit invoices for payment, you make sure you review them to make sure they're accurate; correct?
A Yes, I -- I review all the invoices that go out of our office or direct them to the staff that are in charge of them. But I reviewed this one, yes.

Q Okay. And you review it to make sure that it's an accurate reflection of your work that you've provided in the case; correct?
A Yes.
Q Let's look at this invoice, which looks like it has work for two people. There's WAF, which is you; is that right?
A Yes.
Q And then there is GRT. Who is GRT?
A That's Glenn, G-L-E-N-N, Taylor, T-A-Y-L-O-R.
Q And who is Mr. Taylor?
A He is a specialty consultant that works with me in the committee that I've created, as described previously, to help work through the various technical issues in this matter. His background is that of a California licensed general contractor, B Class. He's also a chartered quantity surveyor from England, and he is very knowledgeable about all things construction.
Q Okay. Looking at your invoices, there's an entry that says, "Webinar working session." What is that?
A I am based in the North Napa Valley these days, and Glenn is still based down here in the Bay Area. So a lot of our work is performed over a -- a Zoom conference or webinar where we can discuss

documents and matters as needed.
Q Are you doing any drafting of the report during these working sessions?
A We can be. The documents are -- sorry to cut you off.
Q No, no.
A The -- the documents are a living document. It evolves over time until it becomes the final version.
Q And when did you start drafting your report that you submitted on March 14th?
MR. MAUCH: Objection.
Scott, I think you've ventured into non-discoverable material.
MR. EIDSON: I don't think when he started is off limits. You're going to have to instruct him not to answer, and I'll take that up with the court.
I'm going to ask you to answer, and if your attorney instructs you not to answer, that's on him.
MR. MAUCH: I will allow the answer to the question of when, but we're not going to get into any details about the drafting of the report.
You can go ahead and answer, Andy.
THE WITNESS: I -- I believe the first time we started developing material for this current

report was on the January 3rd. I'm sorry. The -- I'm sorry. The -- the telephone call from the counsel came on December 17th. It's the first line item on this invoice we're discussing in -- in Exhibit 2.
And then it looks like we -- we -- Glenn Taylor and I started actually pushing pieces around on January 3rd.
BY MR. EIDSON:
Q So your testimony is that January 3rd is when you started drafting the report?
A Yes.
Q Did you do all of the drafting of your report?
MR. MAUCH: Objection.
You're instructed not to answer.
That's clearly non-discoverable, and you know that.
MR. EIDSON: Are you going to follow your attorney's direction?
THE WITNESS: Yes.
BY MR. EIDSON:
Q And it looks like you spent a little under eight hours after that initial call with counsel in preparing your March 14th, or your February 14th report. Is that fair to say?
MR. MAUCH: Objection. Misstates

document.
THE WITNESS: No, no. This -- this invoice runs through the end of January. There would be quite a heavy and intense period of work in early February, the first half of February, in getting to that February 14th date.
BY MR. EIDSON:
Q Do you submit invoices on a monthly basis?
A Yes.
Q And before we move on, the counsel that you spoke with on, looks like, December 17th for your telephone call, who was that?
A Counsel Mauch, from memory.
Q Mr. Fennell, I've handed you a document that we have marked as Fennell Exhibit 3. It's Bates labeled Fennell 2271 through 2272. Do you recognize this document?
(Fennell Exhibit 3 was marked for identification.)
A I do.
Q This is your March 31st invoice for work in this matter; correct?
A It is.
Q And this invoice looks like it has an additional timekeeper, MAM. Who is that?

A That's my researcher. Max Mclean, M-A-X M-C-L-E-A-N.
Q And and do you mean just internet researcher or --
A Oh, it's, any -- any odd job I assigned him, if it's particular to this matter. I mean, he has wider duties within my company.
Q This invoice and the last one as well say, "19071 Simpson/MiTek PGR." Do you see that?
A Yes.
Q Is the time that you've spent on this invoice for both PGR-related efforts and litigation- related efforts?
A Yes. That one project number captures any of the -- the patent related cases. If I'm looking at just this invoice here, I believe it's all related to this 510 federal action.
Q And you understand that MiTek submitted its rebuttal report to you on March 21st; correct?
MR. MAUCH: Objection. Vague.
BY MR. EIDSON:
Q You've got it. You can look at the date in one of your binders right in front of you. It says March 21st; right?
A Yes, that's the date of the rebuttal report

from Dr. Serrette.
Q Okay. And looking at your time entries, fair to say you at least took a look at that report on March 21st, when it was submitted?
A I -- I actually don't recall when I first looked at the rebuttal report. I see a -- a line item from Glenn Taylor working on his own, that he was looking at it on the 24th. I don't recall when it hit my office, and I don't recall when I first looked at it, but it was -- it was around that time period, within a -- a day or two.
And you've identified an issue that I have in my office, that we don't always capture every bit of our professional time like we should.
Q You can set those aside for now, Mr. Fennell.
MR. EIDSON: Going to mark three exhibits.
THE OFFICER: Okay.
BY MR. EIDSON:
Q Mr. Fennell, I've handed you three documents, we've marked them as Fennell 4, 5, and Fennell Exhibit 6. Fennell 4 is a copy of your initial report, dated February 14, 2025. Fennell Exhibit 5 is a copy of your March 7, 2025, report. And then Fennell 6 is a redline that we received, comparing your March 4th and March 5

versions of your report.
Do you recognize and agree with my characterization characterizations of Fennell Exhibits 4, 5, and 6?
(Fennell Exhibit 4, Exhibit 5, and Exhibit 6 were marked for identification.)
A I do.
Q Okay. On Exhibit 6, did you prepare that redline?
A Yes.
Q Okay.
MR. MAUCH: To be clear, Scott, are you asking the report, or the running of the redline?
MR. EIDSON: Just the running of the red line.
BY MR. EIDSON:
Q Did you have somebody else run the redline? I understand you prepared the report, Mr. Fennell. Did someone else run the redline?
A No, it was -- it was me, in front of me.
Q Okay. Let's look at your report, and you can look at Fennell Exhibit 5 if you want. And this is your report without exhibits, of course. In Paragraph 4 on pages 6 and 7, you identify materials considered, 55

items.
MR. MAUCH: I'm sorry. You said Paragraph 4?
MR. EIDSON: It's Heading 4. Sorry.
MR. MAUCH: Okay.
MR. EIDSON: I meant Section 4, if I said paragraph.
BY MR. EIDSON:
Q Paragraph 22, it starts on page 6 of your March 7th report.
A Yes.
Q Okay. Did you read each of the items that you have in this section of materials considered?
A Yes.
Q The invalidity contentions that you reviewed, were those something that you prepared initially in this case or something that you received from counsel that they prepared?
MR. MAUCH: Objection. Vague.
BY MR. EIDSON:
Q If you look at Items 12 through 17 --
MR. MAUCH: And I'll instruct you not to answer regarding the preparation of draft reports. It's not discoverable.
//

BY MR. EIDSON:
Q I guess there are claim charts referenced in there. Do you see those?
A Yes. The Exhibits 12 through 17.
Q And you considered those claim charts; right? In rendering your opinions?
A Yes.
Q Okay. Did you prepare those claim charts?
MR. MAUCH: Objection. Non-discoverable material pursuant to Rule 26.
THE OFFICER: I'm sorry. What did you -- what did you say after "non-discoverable material"?
MR. MAUCH: Pursuant to Rule 26(b)(4)(b). You're instructed not to answer, Mr. Fennell.
THE OFFICER: Actually, could you move your microphone up a little bit, because you're --
MR. MAUCH: Oh, sorry. Sorry. I just won't have my arm over there.
THE OFFICER: Okay. Thank you.
BY MR. EIDSON:
Q Earlier, we were talking about Simpson and MiTek depositions and documents, and if I asked this I already, I apologize. Did you consider any Simpson design or testing documents in rendering your opinions?

MR. MAUCH: Objection. Vague.
THE WITNESS: Possibly. I mean, if we're talking about catalog information, stuff that's publicly available to design professionals and specifiers, yes. But internal testing documentation, no.
BY MR. EIDSON:
Q And the latter was my question. Mr. Fennell, I've handed you what we have marked as Fennell Exhibit 7. I'll represent this as a copy of your resume that was attached to your expert report. You've seen this exhibit before; correct?
(Fennell Exhibit 7 was marked for identification.)
A Yes.
Q Everything on your resume current?
A Yes.
Q No new education, certifications to add?
A No.
Q Speaking of the firewall hangers that are at issue in these proceedings, whether it's MiTek's or Simpson's, have you ever installed one of them?
A No. Not of these, no.
Q Have you ever physically held one of the MiTek firewall hangers?
A I have not.

Q Have you ever physically held any of the accused Simpson firewall hangers?
A I have not.
Q Have you ever installed sheet rock at a job site after a firewall hanger has been hung up?
A Not personally.
Q Have you done it in a lab or any other setting?
A No, no. I -- I've always been an observer to work in progress.
Q As it pertains to firewall certification and testing, are you familiar with that process?
A I -- I am.
Q Have you ever conducted or been responsible for -- well, let me back up. Have you ever been responsible for conducting a test to ensure that a firewall maintains a certain rating when used with a structural connector product?
MR. MAUCH: Objection. Vague.
THE WITNESS: I have conducted firewall testing and been in charge of specifying and observing tests. And those tests contained structural connectors, just not the species of hangers that we're talking about here, the FWH and the Simpson ones.
//

BY MR. EIDSON:
Q So set aside observing. Have you ever been responsible for running a firewall test for a structural connector such to give it the stamp of approval of whether it passes a two-hour or three-hour rating, et cetera?
MR. MAUCH: Objection. Vague.
THE WITNESS: If you mean running, twiddling the knobs and actually running the furnace, no, but I can go broader than that and say I -- I have not had experience yet with even commissioning firewall testing that involved hangers such as the FWH.
BY MR. EIDSON:
Q What firewall test commissioning experience -- and by "commissioning," you mean just hiring it and getting it started? Is that what you mean by "commissioning"?
A Yes.
Q If you wanted to firewall test a particular product, what would you do?
MR. MAUCH: Objection. Vague. Assumes facts not in evidence. Incomplete hypothetical.
THE WITNESS: Well, in the hypothetical, if I had a product or an installation that I was trying to document for a building official or some other

authority having jurisdiction, I would look at the intended purpose and the specific application for the -- for the usage.
And I would design a test to gather that information using relevant standards and test it in a setting or agency that would be accepted by those reviewing the information, say a building official.
BY MR. EIDSON:
Q Have you ever done that before?
A Yes.
Q For which products?
MR. MAUCH: Objection. Vague.
THE WITNESS: My work obtaining test results for the purposes of engineering reports for building officials has varied over the years. If we're talking about fire, I have determined representative as-built construction from existing projects that might not have originally met plan compliance or code compliance to evaluate actual endurance of the represented as-built construction.
THE OFFICER: And I'm sorry. You said, "code compliance," but there was another kind of compliance before that that I didn't hear the word.
THE WITNESS: Construction compliance.
THE OFFICER: Thank you.

BY MR. EIDSON:
Q Were you done with your answer, Mr. Fennell?
A I think so.
Q Okay. So I'm drawing a distinct -- I want to first draw a distinction between you hiring it out or directing that and sending it to a lab on behalf of a client versus you actually doing the testing and certification yourself. Does that make sense?
A Yes.
Q Okay. And so when it comes to you actually doing the testing and certification yourself, how many times have you done that for a structural connector product and a firewall?
MR. MAUCH: Objection. Vague.
THE WITNESS: I'm not aware of any instances where I did the testing for a firewall-related connector other than fasteners.
BY MR. EIDSON:
Q And by "fasteners," you mean screws?
A Screws, nails, adhesives, coatings.
Q Anything else that you think of that falls under the definition of fasteners as you've just given it to me?
A No, I -- I think that's it. I mean, I would also point out that what I'm testing is an entire

assembly. It's -- it takes many components to create an assembly that then gets a fire rating such as those listed in building codes.
Q And now, when it comes to coordinating testing with a third party, what type of structural connector products have you coordinated testing on behalf of clients with a third-party lab?
MR. MAUCH: Objection. Vague
THE WITNESS: Lots over the years, looked at all sorts of products used in hospitals for structural and non-structural bracing. I headed a research project on anchor bolts.
BY MR. EIDSON:
Q Related to firewall maintenance of an anchor bolt?
A Not of the fire endurance, but anchor bolts are in many firewall assemblies.
Q Yeah. And let me clarify my question a little bit, and I didn't mean to cut you off, Mr. Fennell. I'm interested in testing you've coordinated on behalf of clients with third-party labs that relates specifically to maintenance of a firewall assembly using a connector product.
MR. MAUCH: Objection. Vague.
MR. EIDSON: Do you not understand what I

mean by that?
THE WITNESS: Oh, no. I was just racking my memory for how many times I've been standing there breathing in the smoke. I believe just once that I've actually -- no, just once that we got it all the way to the lab and conducting the tests. There's been a number of other times where we got to the proposal stage, but for one reason or another, testing did not go forward.
BY MR. EIDSON:
Q And what was that product?
A The products I were testing was --
Q The one you just mentioned that went to the lab, that's one?
A Yeah, there was -- there was firewall-rated party walls for a project in Southern California.
Q Party walls?
A Firewalls.
Q And what was the connector product that was involved in that?
A Well, there were all sorts of penetrations through the wall, but there were clips and nail plates and fasteners.
Q And is it fair to say that you don't have any experience with firewall testing as it pertains to joist hangers?

MR. MAUCH: Objection. Vague.
THE WITNESS: No, not firsthand as either a commissioner or a observer. I -- I haven't seen any firewall hanger testing other than, you know, the research way, looking at videos on the internet.
BY MR. EIDSON:
Q Do you know the procedure or protocol that is utilized by a certifying lab for testing a joist hanger that is being marketed as having a two-hour firewall rating?
MR. MAUCH: Objection. Vague.
THE WITNESS: Generally, yes.
BY MR. EIDSON:
Q And what is your general understanding?
MR. MAUCH: Same objection.
THE WITNESS: Oh, it's one of the ASTM consensus standards. I think it's -- 814 is for penetrations through rated assemblies, and it's exposed to a -- a fire curve prescribed by another ASTM. I believe it's E1119, generally.
BY MR. EIDSON:
Q Anything else? You recited some specific provisions of standards, and I thank you for that. Do you have any other details about your general understanding of how that testing is done?

A Well, there'll be a -- an accredited laboratory to run those tests and probably a box of matches somewhere along the line.
Q Fair enough. Anything else?
A Time for a Red Bull.
MR. EIDSON: Let's take a break.
THE OFFICER: Okay. We are now off the record at 10:08 a.m.
(Off the record.)
THE OFFICER: We are now back on the record at 10:22 a.m.
BY MR. EIDSON:
Q Mr. Fennell, which labs are you familiar with that do firewall testing on structural connector products for certification purposes?
MR. MAUCH: Objection. Vague. Misstates prior testimony.
THE WITNESS: I have worked with Intertek and their -- back in history, the -- the Warnock Hersey -- Warnock Hersey firm, but I believe they were purchased by Intertek. I've also seen some wildfire structure testing at Forest Products Lab out at the Richmond Field Station here in the Bay Area.
And I've also reviewed as a -- an engineer or a specifier tests from the Insurance

Institute back in one of the Carolinas.
BY MR. EIDSON:
Q The Insurance Institute is a lab?
A Yes.
Q Okay.
A That's not -- not their full acronym. It's the Insurance Institute of Building Science or some combination of that, but Intertek would be my go-to one if I was to fire up, unintended, a -- a new program.
Q I'll take it. Joe and I like good dad jokes. Are you aware of professional certifications that you can get pertaining to firewall and fire safety?
MR. MAUCH: Objection. Vague.
THE WITNESS: Not specifically.
BY MR. EIDSON:
Q It's fair to say you don't have any of those certifications?
A Oh, I -- you know, I don't know about the ones I don't know about, but I do have -- I was a certified building inspector for 30-odd years, which involved a heavy dose of fire-resistive construction knowledge. My practice as an engineer takes me deep into fire-resistive assemblies, as far as a certification or a licensure goes.
I have other experience, but that's it for as

far as licensure, and in addition to being a -- a licensed building general contractor here in the State of California.

Q Are you familiar with the IFC?

A Yes.

Q International Firestop Council?

A Yes.

Q Do you know what the NFPA is?

A Yes.

Q Okay. You don't have any certifications from the IFC or the NFPA; correct?

A I don't.

Q All right. OSHA offers fire safety certifications; correct?

A Yes.

Q All right. And you don't have any of those certifications; correct?

A No.

Q Are you familiar with the Fire Protection Research Foundation?

A Not from memory.

Q Are you familiar with the Society of Fire Protection Engineers?

A I am.

Q Are you a member?

A I am not.

Q And do you have any specialized training outside of, you know, being a general building contractor, specifically related to fire protection engineering?

A I have 30 years of experience evaluating as-built structures that have a wide array of fire protection systems, passive or active.

Q Anything else outside of your experience that you just mentioned?

A I -- as the head of my engineering company, also co-consult with subject matter specialists as necessary if it's outside, too much for us to handle on any given project. So if necessary, on fire projects we'll consult with additional experts, coordinate their findings or recommendations into our work.

Q Who have you consulted with in the past in that regard?

A National Engineering Firm GHD. I have co-consulted with Wiss, Janie, Elsner, WJE; Simpson Gumphertz & Heger, SGH; other materials specialists that might be for corrosion or for materials-compatibility within a fire assembly. And then I've also -- actually, there's a NDA in place for that, a non-disclosure agreement, so I can't talk about that one.

Q Did you consult with any of these fire protection specialists in rendering your opinions in this case?

A No.

Q You agree with me that the definition of one of ordinary skill in the art that the parties have agreed to in this case doesn't necessarily require any specialized knowledge about firewall construction or testing?

MR. MAUCH: Objection. Lacks foundation. Assumes facts not in evidence.

THE WITNESS: I believe it was generally accepted by the -- everybody, including the patent board, about what the definition of a POSITA or a POSA is, and that's scribbled down in my report.

BY MR. EIDSON:

Q Okay. Do you recall what that definition was?

A A science-based degree and four years of experience.

Q And it doesn't necessarily require any specialized experience or certifications as it pertains to firewall construction or testing; correct?

A I don't recall seeing that, but one of the things about particularly engineering licensure here in the U.S. is that you operate within your area of

competency, and so both for California and Nevada and Hawaii, where I'm registered, yeah, you practice within your lane.

So the fire-resistive elements of building structures is well within my area of competency.

Q How so?

A He says confidently. Well, as I was describing before, I run an engineering company. My clients historically have been multi-residential home builders, primarily here on the West coast. And I have literally investigated the as-built construction at firewalls of various endurances as well as the assemblies, either side of it, hundreds of times.

So I've crawled in attics and crawl spaces and in people's living rooms, cutting holes in fire-resistive assemblies to compare those with what's on the plans and the building codes, looking for all of the associated requirements such as fire-stopping, draft-stopping, detailing at penetrations, acoustic requirements, structural requirements, to say I -- I feel very confident evaluating fire-resistive construction and what was required.

Q By a code?

A By a code or a listed assembly, an evaluation report.

Q You mentioned cutting holes in fire-resistive assembly. For a firewall in multi-family residential construction of the kind that is being constructed with the firewall hangers in this case, how big of a hole can you cut and maintain a two-hour firewall assembly?

MR. MAUCH: Objection. Incomplete hypothetical.

THE WITNESS: It depends, is the short answer. There's a very, very long answer, but as long as the hole or the penetration can be addressed in a way that satisfies the building official, jurisdiction having control, the designer of record, and more importantly, the fire, if it occurs, into not finding that as a -- a weak link, then the hole is not defined.

The bigger the hole, the more creative the designer needs to be at selecting the correct fire-stopping or equivalent fire-resistive materials.

BY MR. EIDSON:

Q And the only way to kind of figure that out would be, when it comes to figuring out the size of the hole and whether it would satisfy the two-hour fire testing would be to do the actual testing; right?

A That's the most proof-positive way. If there is a prescriptive way that appears to meet the need, or the building official accepts it as presented, as

specified, that's also acceptable. Building code's very generic in its nature and does accept alternate means of compliance for establishing code compliance.

Q All right. Let's switch gears for a minute and talk about a couple items in your report. And I want to start just generally with, we talked about Claim 40 of the 510 Patent, and do you want me to give you a copy of that?

A Please.

Q You got it.

MR. MAUCH: Thank you.

BY MR. EIDSON:

Q Mr. Fennell, I've handed you what we have marked as Fennell Exhibit 8. Its a copy of the 510 Patent, and if you look toward the back, you'll see Claim 40 on the last page.

(Fennell Exhibit 8 was marked for identification.)

A Yes.

Q Fair to say you've seen this before; correct?

A I have.

Q Okay. What is the invention claimed by the 510 Patent? And, Mr. Fennell, I'll let you know, I'm not looking for you to read. Well, it is a hanger. Just in your own words, what is your understanding of

the invention claim?

A The top line description is it's a hanger for a fire separation wall.

Q And what is the alleged unique features of this hanger?

MR. MAUCH: Objection. Vague. Calls for a legal conclusion.

THE WITNESS: I would just read the abstract into the record.

BY MR. EIDSON:

Q You don't have an understanding outside of reading the abstract into the record?

A My understanding right now is that it's -- it's what's contained within Claim 40 that is unique to this invention.

Q And are you able to articulate that in your own words?

A Oh, I can. I mean, it's a hanger that has a -- a channel-shape portion, an extension portion, and a -- a top plate connector that there's spacing for drywall. It permits drywall, and it's sized large enough to permit the drywall to be received between the channel-shaped portion and the back flange plane.

Q And what is your understanding of what this invention is used for on a job site?

MR. MAUCH: Objection. Vague.

THE WITNESS: It's a hanger to be used on a fire separation wall or, you know, walls of other configurations.

BY MR. EIDSON:

Q What are the benefits of utilizing a hanger like this versus -- well, let me back up. Are you familiar with Simpson's DU hanger?

A I am.

Q Okay. Just so we're on the same page, what is that?

A I'd refer to that as the -- the Bundy hanger.

Q And how is that attached?

A It too is attached to a top plate and provides for a channel to receive a structural component with a gap sufficient for drywall. There are various embodiments of the Bundy hanger. Most involve attachment to the top plate. I believe there's one or two embodiments that are face-mounted to the wall.

Q And you understand the DU hanger to be installed after the sheet rock is home; correct?

A Well, not necessarily. I mean, the way Bundy is configured, drywall could come before or after the hanger.

Q Have you read the Simpson catalog or other

materials about how to install the DU hanger?
A Oh, I have.
Q Have you seen anything in there that says you install the hanger before the drywall?
A Well, for the embodiment -- well, do you have a copy of the DU literature that I can refresh my memory?
Q Yeah. Have you looked at the catalog?
A Yeah. Multiple times over the years, but I -- I'm just not recalling specific language right now.
Q Okay. And we'll come back to this. So as you sit here right now, you can't really recall how Simpson instructs the end user to install the DU hanger, whether it's before or after the drywall; is that fair to say?
A Well, I can break it down for you. The -- the embodiments that don't have the top flange hanger and that are face-mounted, those will be installed after whatever sheathing is on the face of wall, 'cause those are face-mounted, that they will, by necessity, come after the fact.
Q And when did Simpson first introduce that face-mount version of the hanger?
A Oh, I believe that was in 2013 timeframe. I would, again, have to look at the literature to see the -- the actual dates, the reference dates.

Q Looking, go back to Claim 40 now, if you will. One of the elements of Claim 40 that was allegedly novel or unique was the extension portion that extends from the channel-shaped portion to the back flange that creates the space for the drywall that extends through the drywall; right?
MR. MAUCH: Objection. Lacks foundation. Assumes facts not in evidence.
THE WITNESS: I -- I -- by the extension portion, I don't know what you're talking about there.
MR. EIDSON: Yes.
THE WITNESS: And I have throughout my report, identified prior art where I find the extension portion.
BY MR. EIDSON:
Q Not quite my question. I understand that you have found things that you say can go through drywall. We'll get to all those. I'm talking about in a product that is designed for firewall applications, this MiTek product was the first one that had an extension portion that extended through the drywall that you're familiar with; correct?
MR. MAUCH: Objection. Vague.
THE WITNESS: Yeah. I am not sure how to help you there. I mean, just say I've got a -- a whole

report here that's based on Claim 40 and where I find prior art.
BY MR. EIDSON:
Q And I'm talking about a product. We're talking about Simpson's products now; right? And I understand your position that you cobbled together or put together three pieces of prior art. Obvious, I understand all that, and we're going to get to all that.
I'm asking about products that you were aware of in the marketplace. Before the MiTek firewall hanger, were you aware of any firewall hanger product that had an extension portion that would extend through the firewall barrier?
MR. MAUCH: Objection. Vague.
THE WITNESS: Well, as in we've been evaluating this hanger and some of the other patent numbers for some period of time now. And so I had prior reports written on the Gilb 155 hanger, for example, where I saw no problem integrating firewall around the hanger on a rated wall assembly.
So both things might be true. You -- you might be correct that this 510 is the first time where it says, "Hanger for fire separation wall." But it's also equally true that firewalls were being constructed with hangers before this invention that were acceptable

and practical.
BY MR. EIDSON:
Q And that doesn't quite answer my question, Mr. Fennell. I appreciate that. As you sit here today, are you aware of any firewall joist hanger product where an extension portion extended through the firewall?
MR. MAUCH: Objection. Vague.
THE WITNESS: Well, I refer you to my previous answer, the binder full of prior art over here. But the -- as far as the title goes, as far as, "Hanger for separation wall, fire separation wall, the 510 might've been the first time that that existed.
BY MR. EIDSON:
Q Do you agree with me that one of the benefits of the 510 Patent is the sequencing of installation of a joist hanger versus drywall?
MR. MAUCH: Objection. Vague.
THE WITNESS: Two parts to that, in my mind. One is looking through the lens of Claim 40, I don't see a limitation regarding sequence or the benefits of sequence in Claim 40, one part. The second part is that as the 510 document in its entirety is written here, I recognize that it is possible to install a 510 hanger before or after drywall is sequenced on the wall.

BY MR. EIDSON:
Q And we're going to talk about sequencing a little bit today. And rather than me say, "install the joist hanger before the drywall and do the drywall after can I just say, "sequencing," and you and I be on the same page? Does that sound fair?
A Sure.
Q Okay. You agree with me that the apparatus that is claimed in Claim 40 naturally allows for the preferred sequencing; correct?
MR. MAUCH: Objection. Vague. Ambiguous.
THE WITNESS: Yeah. I'm not sure what you mean by who's preferring the sequence in this case.
BY MR. EIDSON:
Q Well, let me ask you. As you sit here today, do you understand that the building industry has -- well, I guess what is your understanding of what builders in the industry want from a firewall hanger as it allows for sequencing of installation between drywall and the hanger?
A Well, they're going to have a couple of preferences. Comply with the plans first so that they pass inspections by the building department, any other quality-control firms. And two, they're going to want

to be efficient on site and make money.
Q And so with those considerations, the plans are what they are. It's going to be specified how it's specified. What is your understanding of what builders prefer in an installation sequence?
MR. MAUCH: Objection. Incomplete hypothetical.
THE WITNESS: I -- I think without -- I think most builders want to get the sequencing of construction as efficient as possible. And so when it comes to fire-resistive wall assemblies, they would like their framing crew to pass through, then get utilities roughed in, walls insulated, and get any fire-stopping, draft-stopping, acoustic assemblies installed.
The rest of the structural load path installed, and then put on the sheet rock with -- with a separate trade, usually the -- the sheet rocker there. You've got to have a wall there to get the sheet rock. I mean, you can't attach sheet rock to fresh air.
As far as how much framing is constructed before the drywall has come through, that's builder's choice. But the -- ideally they'd like to dry the building in before they start putting sheet rock in, unless they're using a -- you know, a more moisture resistant drywall product.

BY MR. EIDSON:
Q Which is more expensive; right?
A Yeah, generally. Yes.
Q So, I mean, you agree with me that the general industry preference nowadays is to frame everything up, install the joist hanger first, and then come back and do the drywall second or third after utilities or whatever it might be; right?
A That's one way to do it. And it may be, in fact, the most common way currently, but it's not necessarily the only way. Builders are forced to deal with what architects and, you know, folks want in the -- the layout of their building, dropped ceilings, chasers, that's -- that's primarily it.
Drop ceilings and chasers in -- in kitchens and bathrooms and whatnot sometimes require out-of-sequence or a modified sequence to occur. And at that point, you have to also deal with fire-resistive garbage chutes and stairwells, have to accommodate interruptions and out-of-sequence work for drywall and fire-resistivity.
But if it was a -- just a -- a series of plain walls, yeah, sure. You would frame them, hang repetitive framing that supports the next level above, and then roll through with the drywall crew.

Q And that would be what builders would generally prefer; right? The method of installation?
A In a simplistic way, yes. It just doesn't recognize, though, that there are going to be penetrations in every wall as part of a -- a modern multi-residential structure. Outlets, ducts, what happens in corridors, fire sprinkler systems, all of the mechanical, electrical, plumbing subsystems that go into a -- a structure.
Q Have you seen any sort of data or evidence in this case or in your work from Simpson, MiTek, or anywhere else where customers have indicated a preference for this installation sequence where the joist goes up first and the drywall goes second?
A I -- I've seen the anecdotal stuff at the back of Dr. Serrette's rebuttal report, but I -- I'm not relying on any of that for my report.
Q And then looking back at Claim 40, you agree with me that the apparatus, the hanger claimed here, allows for the preferred sequencing of installation; correct?
A No. I don't see anything in here regarding sequence.
Q You're looking at the claim language. I'm asking you about the structure, Mr. Fennell, the

structure that is claimed there. Do you understand the structure that's claimed by Claim 40?
A Generally, yes.
Q You understand --
A It's a wall adapted to have drywall, permitted to have drywall.
Q It's a hanger; right? And do you understand what it looks like, what's claimed by Claim 40?
A I do.
Q Okay. And you understand that that apparatus as claimed by Claim 40 allows for the preferred method of installation; right?
A Well it allows for drywall to come before or after the hanger installation.
Q It allows it to come after, though, which is the preferred method; right?
A Are you saying after the drywall installation?
Q The hanger comes first. The drywall comes after.
A Okay. Yes, it allows for that. I just don't see it.
Q You just don't see the specific language in the claims. That's what you're taking issue with; right?
A That's what I was trying to say, yes.

Q Okay. And you agree with me that the feature of the product that's claimed here that allows for that preferred installation would be the extension portion providing that spacing; correct?
A Sorry. Same answer as before. I mean, I -- I just don't see it in Claim 40, but I recognize that it is possible to create the sequence where hanger first, drywall later.
Q And the actual structure of the apparatus claim allows for that; right?
A Yeah, I -- I think we're saying the same thing, but it's --
Q Let's jump into some specifics in your report, and we'll probably come back to that patent and a few others in a bit. Okay?
A Certainly.
Q All right. And feel free to follow along in Fennell Exhibit 5 if you want. I'll do my very best to direct you to any section that needs specific directing. But in your report, you list certain legal standards for obviousness and anticipation. Is it fair to say that all the legal standards you considered in rendering your opinions are in your report?
A Yes.
Q So there's no other legal standard that you

considered or relied upon informing your opinions that is not listed in your report; right?
A That's right. I've -- I've written out my understanding of legal concepts as taught to me by the counsel.
Q And that was my next question. All of the legal standards that you relied on to frame your opinions were given to you by counsel; right?
A In a way that I could understand them as an engineer and then write them back in my own words. And the other thing I would point out is that as matters have progressed and patent board or other triers of facts have established what the new claim constructions or legal standards are, I've just adopted those going forward. I've tried to capture them here in my report.
Q And you mentioned this before. You're not a lawyer; correct?
A No.
Q Not an expert in patent law or anything like that; right?
A I'll leave the lawyering to you fellas.
Q Did you do any independent research to determine whether the legal standards you were relying on were the correct ones?
A No, no. I've just applied the standards as

explained to me.
Q Did you do any legal research to determine whether the standards you relied on were complete?
MR. MAUCH: Objection. Vague.
THE WITNESS: You know, at some point, I've looked up the various legal terms on Google, patent, to check that Section 103 is, in fact, Section 103, all of the wordy bits. And I felt pretty comfortable that you folks know what you're talking about.
BY MR. EIDSON:
Q So it's fair to say that you didn't do any independent legal research to determine whether there were additional legal principles you should have considered informing your opinions?
A I wouldn't say that. I -- because in prior declarations, I've applied other standards for other grounds for unpatentability that just didn't seem relevant to this Claim 40 analysis.
Q So any of those additional standards that might not be in here, you would've deemed just not relevant to your analysis; is that fair to say?
A That's right. You were talking about indefiniteness, or enablement, or some of the other ones that we've -- that I've studied previously. This time,

it's anticipation and obviousness.
Q As you sit here today, are you aware of any additional legal principles that you needed to consider when forming your opinions?
A Same answer as before. I don't know if it was just one of the ones in a previous declaration development, no.
Q I want to get your understanding of a couple concepts, and what is your understanding of what -- let me start over. What is your understanding of "anticipation" that you applied to your analysis in this case?
A If you turn to my report, starting at Paragraph 33 and rolling through to Paragraph 38, I could read -- read that into the record. I don't think I could improve on that language at this time.
Q No. And I understand the language that's on the page, and I appreciate you not reading it into the record. What is your understanding of what it means to be anticipated?
A Did I find in the claim being evaluated, just using a single prior art reference, if I can find all the elements and limitations of the claim.
Q And then what is your understanding of "inherent anticipation" as you've applied it in this

matter? If you look at Paragraph 36. And, Mr. Fennell, I'm not trying to turn this into a legal quiz for you, but I do want to get your understanding of the principles that you applied as you did it.
And in Paragraph 36, you say, "The reference must disclose," which I think is what you just testified about, "or inherently include all of the structural elements." And so as the expert here, what do you mean when something "inherently" includes all the elements?
A Whether it's specifically disclosed.
Q If it's not specifically disclosed, does that mean it is not anticipated?
A No, no. I mean, it's -- it's through the eyes of the POSITA, and in this case, I'm doing a POSITA analysis, that I'm looking at both the -- the written descriptions, the claims, and the prior art to see whether I inherently can observe the -- the elements of the -- the claimed limitations.
Q And your opinions for anticipation in this case as it relates to Yamaguchi, Cullen, and Chapin, are that the references inherently anticipate Claim 40; right?
A Yes.
Q Okay. And so you agree that there are certain elements of Yamaguchi, Cullen, and Chapin that are not

explicitly found in Claim 40; correct? Or in those prior art references? Let me back up. I think I got it backwards. You agree with me that there are certain elements of Claim 40 that are not explicitly found in those prior art references; correct?
MR. MAUCH: Objection. Compound.
THE WITNESS: I think I disagree, in that, whilst each of these prior arts likely don't mention drywall, when I observe the art, it is immediately apparent to me that each of the three I've selected permit drywall as described in Claim -- Claim 40.
And I -- I see equivalency, direct equivalency, in those prior art references just standing on their own.
BY MR. EIDSON:
Q And I think we're saying the same thing, but I want to make sure. My question is versus an explicit disclosure versus an inherent disclosure for anticipation purposes. All right?
A Yes.
Q And you agree with me that for each of Yamaguchi, Cullen, and Chapin, there are certain elements of Claim 40 that are not explicitly disclosed in each of those references; correct?

MR. MAUCH: Objection. Compound.
THE WITNESS: In my prior answer, I gave the example of say, drywall usage that's not explicitly listed in the prior art. It's -- I had pointed out about the POSITA aspect of it, but also with -- it's with a lot of product literature and specifications, if something is merely silent on a subject, it doesn't mean it can't be used.
So I didn't see anything in those prior arts that said, "Thou shalt not use it with drywall," for example. So back to POSITA mode, I -- I think we're -- I'm agreeing with you that it's -- there are explicit aspects of Claim 40 that I don't see yet.
BY MR. EIDSON:
Q And for each of those references, your opinion is that, for instance, there would need to be some modifications made, for instance, to space the channel-shaped portion from the back flange large enough to permit drywall to be installed; right?
MR. MAUCH: Objection. Misstates prior testimony. Vague and ambiguous.
THE WITNESS: No. From a anticipation standpoint, I see in each of the three prior arts that I've referenced, Yamaguchi, Cullen, and Chapin, I see sufficient space to permit drywall per Claim 40. Later,

when we talk obviousness, I've included the teachings of Bundy in there and, in fact, have annotated images throughout the report showing how two layers of drywall could be incorporated into a -- a modified adaptation.

But that's all obviousness. I mean, right now, for anticipation, I was just thinking about a singular layer of drywall and the minimum commercially-available thickness is generally one-quarter inch or three-eighth inch thickness of drywall.

BY MR. EIDSON:

Q And we're going to jump into those in just a second. Let's start generally with each of these references. Yamaguchi, what application is Yamaguchi for? Do you need a copy? I'm happy to get you one.

A Sure. Yeah. Thank you.

Q Yeah, let's just do -- Mr. Fennell, sometimes Mr. Mauch and I think that everybody has all of these things memorized to the excruciating degree that a lot of the attorneys in this case do. So okay.

All right. Mr. Fennell, I have handed you three exhibits. I handed you Fennell Exhibit 9, which is a copy of Yamaguchi with some big graphic data on the front and translated. It was also Martin Exhibit 23. I've handed you a copy of Fennell Exhibit 10, which is

the Chapin -- not the Chapin reference, excuse me. The Cullen reference, which was also Martin Exhibit 12. Great Britain Publication 2451853.

And I've handed you a copy of Fennell Exhibit number 11, which is the Chapin reference, U.S. Patent 1792815. So you recognize Exhibits 9, 10, and 11; correct?

(Fennell Exhibit 9, Exhibit 10, and Exhibit 11 were marked for identification.)

A I do.

Q Okay. Very good. And we will talk about Yamaguchi, Cullen, and Chapin. So you've got the copies in front of you now. Feel free to refer to them as you need. All right?

A If I can interrupt, is now a natural time for a very short break or --

Q Sure.

A Do you have a bunch of stuff you want get through?

MR. EIDSON: Let's take a break.

THE OFFICER: We are now off the record at 11:18 a.m.

(Off the record.)

THE OFFICER: We are now back on the

record at 11:25 a.m.

BY MR. EIDSON:

Q Mr. Fennell, we've marked Yamaguchi, Cullen,, and Chapin, and I believe the question I had for you was, what is the application that Yamaguchi is intended to be used for?

A Well, if I look at the artwork and the translated limited information, down at translated Item 55 on the first page, simply says, "The description of the article of design is a joist bracket that is attached to sills and bears a joist bridging the sills."

Q And what is a sill plate?

A Sill is usually a member, generally continuous, generally at the bottom of a wall. That was it.

Q Okay. And how does a -- a sill differ, for instance, from a top plate of wood frames whenever you're framing up a multi-level, multi-family construction?

A Well, a sill plate or a sole plate will be at the bottom of the assembly and the top plate or top plates will be at the top of the -- in this case, in my mind, a wall assembly.

Q And so a better question, then, is it just the location of a top plate versus a sill that is the only

distinction, or are they constructed differently?

A It really depends on the site-by-site application about whether there's nuances to the construction.

Q Is there any distinction between a hanger that would be used for sill plate purposes versus a hanger, and generally speaking, that would be used for top plate purposes?

A Not necessarily.

Q Then why would they say that this hanger is used for sills and joists bridging sills? Why wouldn't it just be, generally speaking, used for joists in any application?

MR. MAUCH: Objection. Calls for speculation.

THE WITNESS: And I -- I see no specific reason why this would be sill-specific. The artwork shown on page 5 shows what could be timber framed materials, both for the supported structural component coming in perpendicular to the support conditions, as well as the material that the hanger is attached to.

That style of crosshatching most likely is timber. Also, looking at the type of fasteners lends a POSITA to start thinking timber. The supporting structure underneath it could be anything. Indeed, from

my analysis, I've assumed it's wood frame wall that has no offset, as shown with this artwork.

But the hanger in this case supports the offset between face of supporting wall and face -- vertical face of the sill, if that makes sense.

BY MR. EIDSON:

Q Let's look at Cullen.

THE OFFICER: Sorry. Look at what?

MR. EIDSON: Cullen, it's C-U-L-L-E-N, also known as Fennell Exhibit 10.

BY MR. EIDSON:

Q What is the intended application for Cullen?

A Again, looking at the artwork and the available written portions, I can see that the abstract title says, "A bracket for use in decking and other timber constructions." They say "bracket." Could also -- yeah, I also read "and hanger."

Q So how is this used in decking applications?

A The -- their hanger is -- receives a structural component, and when we get into my report, you'll see what I've annotated as the channel portion for receiving the structural component. How far it goes back into the hanger or bracket is open to interpretation, in my opinion.

On page -- on Figure 3, to use this with, say,

decking, it shows the joist going all the way back to the support condition, and there's a little -- little tab of material of some size in other figures, such as Figure 2. It's called out as "Tab 84."

That would help locate top of supported member with top of wall framing beyond.

Q And that also would suggest that the support member goes all the way to the back, to the back plate; right?

A In that application. I -- in my full analysis, I take into account, say, the barbs in Figure 1 that are called out as "Items 31." Those would also suggest a member going all the way back to the wall. But elsewhere in the document, there's discussion of an optional seat.

There's the pictorially-shown fastener holes in what I've annotated as the channel section, channel portion. That makes it apparent to me that the -- the joist does not need to go all the way back, and for the sake of the purposes of anticipation, permits that drywall to be squeezed in.

Q You agree with me that nothing in Cullen explicitly teaches leaving a space between that support member, 96, and the back wall?

A Correct. And as discussed before, it's silent

on it, or "it," the space and --

THE OFFICER: Sorry. What was that?

THE WITNESS: "It," the space between the end of the supported joist and the wall, but in that silence, it also does not exclude the ability for a designer to leave a space in this application.

BY MR. EIDSON:

Q When you're looking, it looks like, at Figure 3 of Cullen, when you are nailing a structural support member into the side as is depicted in this Figure 3, using, it looks like, bolts, 100. Do you see that? Are you with me so far?

A Yes.

Q Okay. How much space do you need to leave between the end of that support member and where you are putting the holes for structural support? Is there a rule of thumb?

A There are better than rules of thumbs. There are prescriptive. In that case, it would be end distances, but there's also limits on edge distances. They travel with the diameter of the fastener and so, like, a common end distance might be four diameters of the fastener or seven fastener diameters.

It really depends on what the direction of loading is, easily found in the NDS, which is the

National Design Spec referenced by all the model codes and including International Building Code, California Building Code.

Q And so if we were going to use, here, I'm just looking at Figure 3. If I was to slide this decking structural support member out to leave space, how far away from those fasteners, 100, must the edge, 104, be to comply with those rules?

A I think a good -- and this, now, we are reverting to rule of thumb that if we were looking at this isometric in Figure 3, I really wouldn't want to bring the end of joist any further forward to the left than the vertical portion shown to the right of fasteners, 100.

Because I'm also looking at -- I'd want to have enough bearing length, and it also presumes that I'm using the alternate seat detail to support supported member, 96.

Q And the seat detail, that means essentially you're putting a bottom on the channel-shaped portion; right?

A I would be, yeah.

Q Yeah. So that'd be an additional modification you'd have to make.

A I -- I don't see it as a modification. I just

simply see as not running the joist all the way to face of framing.

Q And so from an inch perspective, how much space would that be? You said -- I heard your testimony. I don't need you to repeat it. How much space would be the minimum amount you could leave between that edge, 104, and then 100, where you're securing it with bolts?

MR. MAUCH: Objection. Vague.

THE WITNESS: It would be in the order of a half an inch, three-eighths of an inch. It really depends on the scale of what's going on here. And if I'm simply trying to permit drywall, permit drywall Claim 40-style, I might be able to leave the joist further past the channel portion.

But if I did have it stopping hard in line with the vertical line there just beyond Fastener 100, yeah, I'd look from the center of fastener to the edge of the vertical on the area of half an inch. Most --

BY MR. EIDSON:

Q And -- oh, go ahead. Sorry.

A Yeah, no, it's just -- it's the want to be teacher in me that says that the -- the length of the seat, the -- the length of bearing is going to be in the

order of an inch and a quarter, an inch and a half. So now, between -- if these fasteners were near the center of that channel-shaped portion, back to the vertical edge, it's it's likely five-eights, three-quarters of an inch available.

And that would be more than enough to satisfy end distance requirements to the end of the joist.

Q And the end distance requirements are the ones you talked about that were found in NDS and other places; correct?

A Yes.

Q And what is the purpose of an end distance requirement?

A It's to -- of the various different limit states or loading scenarios that govern a particular design, the end distance prevents the tear out of a fastener from the end of a member in connection design.

Q And that's because the closer the connection member is to the end, the less stability it has within the member it's trying to support; is that fair to say?

A The less load capacity it has.

Q Yes. And let's look at Chapin, which is Fennell Exhibit number 11. What application is Chapin intended to be used for?

A Chapin is a -- a hanger that is described as

an extension hanger, that if a -- as shown in, say, Figure 6 has a perpendicular member coming up short of a -- a supporting wall, then the Chapin extension hanger can be used to bridge the gap, so to speak.

Q Okay. How is this installed? Walk me through it. I'm on the job site. I need to use this. What's the problem I have, and then how do I install this?

A Well, if you look at Figure 6 again, it's a isometric. The supporting joist, 12, has been inadvertently cut short by someone for various reasons. The -- the Chapin hanger would be taken off the shelf. It would be installed in such a way that supporting channel, 9, cradles the underside of the joist that it was short.

The sidebars or extension portions, 8, would run along the -- the top surfaces, outer surfaces of now supported member, 12, through the channel section, 9. And those extension portions are terminated at collar, 10, a three-sided collar, the left of the image closest to the reader.

And then there's a connection assembly on the right-hand side, featuring another column -- collar, 11, and a -- a top flange, 16. So 16 would be arranged on the wall, supported bearing on the top of wall. And then the key element here would be that channel section,

9, would just need to capture and support the -- end of the -- the short joist.

Q Okay. So I've got some questions about that. Look at -- so one end has got to be attached to the wall, essentially, and that's the end with the collar, 11, and the portion labeled 16; correct?

A Yes.

Q How is that attached to the wall? Is it just resting on top?

A As a POSITA or an engineer, I -- I'd look for a mechanical connection. There isn't one diagrammatically or pictorially shown here, but a POSITA would look to create something beyond just gravity bearing support.

Q And is that what this design in Chapin is for, gravity bearing support?

MR. MAUCH: Objection. Vague.

THE WITNESS: Well, gravity is the -- the first load case that engineers and POSITAs and designers look to satisfy. I mean, that's a permanent load condition, but I -- I see no reason why there couldn't be some loadings in other directions to -- to be accommodated, sort of out-of-plane lateral loading.

BY MR. EIDSON:

Q And I'm asking about just not how you'd modify

Chapin. We're going to get into all of that. I'm asking about specifically what you see here and what's disclosed and how this invention is used. Okay? Does that make sense?

A Sure.

Q All right. And so with what's disclosed in Chapin, the portion that connects, so to speak, onto the wall, arguably on a top plate, it just rests on top of it; right? What's labeled 16?

A Yeah, I -- it appears to just bear on top of the wall, yes.

Q Okay. And, I mean, it's got a little bit of a height to it; correct? It's not flat or flush with that top plate; correct?

A Correct. There's -- there's a depth to 16.

Q Yeah. Thank you. And then the other end, is it attached to a wall anywhere, or does it rely on the physics between the channel-shaped portion, 9, and the extension portion, as you called it, 8?

A Right. The -- the mechanics of this hanger would have -- as weight is pushed down into the channel at 9, it would then also create a vertical force downwards at Item 10 that positively grips the top of supported member, 12.

Q Which is supported at the other end,

presumably by a joist or some other structural connector member; right?

A Right. Twelve presumably makes it all the way to the wall at the other end, with any luck. I don't see an application where this would be a -- a cantilever. I just don't think the free-body physics would work out.

Q So it's fair to say that with this particular application, it's the physics and/or the mechanics of the design that would secure the hanger to the top of the wall and keep everything in place with the structural support member?

A Yes, I think -- I think it would be in equilibrium, and it would sit there quite happily under gravity loads.

Q Do you see any use of fasteners disclosed in Chapin?

A Other than the four little circular elements on the top of flat plate, 17, I do not.

Q Looking at Paragraph 44 of your report, Fennell 5, are you there?

A I am.

Q Okay. One of the legal principles that you received from counsel was that, in making a determination of whether something's obvious, you were

to consider whether there were any objective indicia of non-obviousness to support validity; correct?

A Yes.

Q And in your understanding, that was something that must be considered in connection with the prior art disclosures that you considered; correct?

A Well, I said I should -- should consider it rather than must. At least in code language, that has a different level of obligation.

Q But in Paragraph 44, you said you're not aware of any objective indicia that changed your opinion regarding Claim 40 of the 510 Patent. Do you see that?

A I do.

Q Okay. Did you do anything to attempt to make yourself aware of any objective indicia of non-obviousness regarding Claim 40 when you formed your opinions?

MR. MAUCH: Objection. Vague.

THE WITNESS: No. As -- as in this Claim 40 analysis, as with prior reports, I haven't been persuaded by or taken on board such as the emails and writings of various salespeople from either Simpson or MiTek, just outside of my scope of really looking at these claims as a POSITA.

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BY MR. EIDSON:

Q And so when you say at the time you rendered your opinions, you were not aware of any objective indicia that changed your opinions regarding Claim 40 of the 510 Patent, was that the result of a research effort that you had undertaken, or was that just an assumption that you made in forming your opinions?

MR. MAUCH: Objection. Vague.

THE WITNESS: It was a combination of -- I hadn't been directed by counsel to, you know, look at a pile of material and factor it into my analysis. I was also looking for in the past, perhaps, testing or research performed by Professor Surrette that might be persuasive or that might change my mind.

I hadn't seen anything there in that space. No. I'd say I just kept looking back through the eyes of a POSITA at, you know, these artwork and the various descriptions and to see whether I could see equivalency under both anticipation or obviousness with prior art.

BY MR. EIDSON:

Q Fair to say, your focus was strictly on analyzing the prior art?

A Yes, through the eyes of a POSITA. I'm hoping my prior -- prior answer -- sorry to continue. I'm --

I'm hoping with my prior answer, you meant not just the pictures, but also all the written "bumph" that goes with it.

THE OFFICER: Sorry. Written what?

THE WITNESS: "Bumph," B-U-M-P-H.

BY MR. EIDSON:

Q Sure. I don't know what "bumph" is, but I'll -- the pictures and --

A The "non-picturey" bits.

Q Oh, the specifications. Sure.

A And the claims.

Q And the claims. Yeah. We'll adopt that as a new technical lingo in this case, "bumph."

MR. EIDSON: Joe, I'm going to transition to another topic. It's almost noon.

Mr. Fennell, I can keep going. In two minutes, we're going to have a little bit of a party.

MR. MAUCH: Let's do what everyone wants to do, including the witness and the reporter. We should not do things based on what's happening next door. I was merely just wanting to let us know that it might get a little commotion.

MR. EIDSON: That's fine. Want to take a lunch break?

THE WITNESS: I -- I'm fine. I mean, I

can go another half an hour or so. I mean, if it means there's going to be no sandwiches left, Joe, then that's a practical --

MR. MAUCH: I fear I've inadvertently made this more complicated than I was trying. We have our own lunch. It's separate. We're good. We should break whenever we want to break.

THE WITNESS: Okay. I -- I leave it up to the counsel.

THE OFFICER: I'm -- I'm fine whenever.

MR. EIDSON: Well, I'm on Central time. I'm always hungry, so if it was up to me, I would take a lunch break right now.

THE WITNESS: All right. Let's take a lunch break then, please.

MR. EIDSON: Is that all right?

THE WITNESS: Yes. Oh, yep. Yeah.

MR. EIDSON: And then we'll get back after it after lunch.

THE OFFICER: We are now off the record at 11:59 a.m.

(Off the record.)

THE OFFICER: We are now back on the record at 12:39 p.m.

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BY MR. EIDSON:

Q All right. Mr. Fennell, did you discuss the substance of your testimony with counsel at any time during any of the breaks today?

A I did not.

Q Okay. We were talking about your report, if you want to grab Fennell Exhibit 5, and if you would like to turn to page 70. And while you're getting there, you agree with me that your assignment here was to provide objective opinions in this case; correct?

A Yes.

Q All right. And if you look at page 70, Heading D, your opinion is that "An overwhelming majority of the 867 patent claims were invalid." Do you see that?

A I do.

Q What is "an overwhelming majority"?

A Well, well past 50 percent and on their way to what I would describe as most of them. In the case you see here, that it was only six of the claims survived.

Q Do you think that that is objective terminology befitting of an expert?

MR. MAUCH: Objection. Argumentative.

THE WITNESS: Yes is the -- the short answer, although I -- I try not to use adjectives,

but --

BY MR. EIDSON:

Q Are you going to tell the jury that "an overwhelming majority" were invalid?

A Yes.

Q Does this mean that Simpson's challenge at the PTAB was an overwhelming success?

THE OFFICER: Did you say "PTAB"?

MR. EIDSON: P-T-A-B, yes.

MR. MAUCH: Objection. Vague. Argumentative.

THE WITNESS: I actually don't know how Simpson feels about any of these results.

BY MR. EIDSON:

Q Do you know whether the challenge was an overwhelming success yourself?

A Again, I -- I just look at it on a -- a go, no go, or pass, no pass basis, and then that the -- the overwhelming majority of the claims were -- were deemed invalid, and therefore my opinions presented must have been persuasive. But whether that translates into success, I'm not really sure how to think of it then.

Q And I'm concerned about the use of the word "overwhelming," as it describes the majority of the claims. And so let me continue to ask you about that.

MR. MAUCH: I'm sorry, Scott. I'm interrupting. Where in the report does it say overwhelming majority items?
MR. EIDSON: I was -- I'm sorry.
MR. MAUCH: In the title. In the title.
MR. EIDSON: Seventy.
MR. MAUCH: In the title?
MR. EIDSON: In the title I was reading, yes.
MR. MAUCH: Thank you.
BY MR. EIDSON:
Q Mr. Fennell, based on the latest statistics from the Patent Trial And Appeal Board, what percentage of a time does a patent challenger succeed in showing that all of the claims are un-patentable when a final written decision is reached?
A I have no idea.
Q Wouldn't you need to know those baseline statistics before you make a determination that Simpson's patent challenge was an "overwhelming success"?
MR. MAUCH: Objection. Misstates prior testimony. Misstates his report.
THE WITNESS: Yeah, no. I -- I didn't weigh in on the success side of things. I have no idea

what Simpson thinks or how that result is deemed. All I know is that all but six of the claims were deemed invalid, and that's an overwhelming majority. If I had to live without adjectives, I would have simply said majority.
BY MR. EIDSON:
Q And that's probably, given your lack of knowledge on the context of success and PTAB challenges, that's probably the more appropriate way to think of it; right? Just simple majority rather than overwhelming?
MR. MAUCH: Objection. Vague. Argumentative.
THE WITNESS: From a purely -- purely numerical standpoint, majority would be sufficient. I wasn't aiming to be tabloid by calling it overwhelming, but that is also a correct statement that only six survived.
BY MR. EIDSON:
Q Out of how many?
A I believe this was the -- this was the one with -- no, I don't actually remember the total number. It was, like -- it was either in the high forties or the low fifties.
Q Twenty-three.
A Twenty-three? Oh, okay. Well --

MR. MAUCH: Objection. Misstates -- lacks foundation.
THE WITNESS: Then if it was the 23 one, then I still feel good that I need -- I was able to persuade on all but six.
BY MR. EIDSON:
Q Are you familiar with any statistics at the PTAB for success rates on challenge patent claims?
A As I just mentioned, I -- I do not. I have no idea.
Q Let's talk about Yamaguchi, and if you want to follow along, I'm around pages 98 to 99 of your report. We'll certainly look at some of your annotated figures in this section as well, which are on some of the preceding pages, 96, 97. I think I might go on to 101. Are you there?
A I am.
Q Okay. Very good. You say in Paragraph 169 that "a POSITA would've understood that Yamaguchi's extension portion," which you've colored green, "is configured to extend into one side of drywall and out the other side of drywall." Do you see that? It's in Paragraph 169?
A Yes. Yes.
Q What about that green extension portion that

you've got highlighted on page 99 of your report makes it configured to extend into one side of drywall and out the other?
A Well, if you flip the page to page 100 and look at the top annotated image, there's a Yamaguchi plan view, where I show, in this case, two layers of drywall between the channel-shaped portion and the back flange plane. Recalling that for Claim 40, I simply need to permit drywall, which would be a singular layer, but in this case I've shown it with two layers.
But that shows drywall where the green extends through the drywall in one side, out the other.
Q And, Mr. Fennell, here's my question. I'm going to ask it one more time. What makes that green extension portion that you have highlighted configured to extend into one side of the drywall and out the other? You told me the result.
My question is, what about Yamaguchi makes it configured to extend as you've opined on in this Paragraph 169?
MR. MAUCH: Objection. Asked and answered.
THE WITNESS: Well, what I'm looking for is a space that permits drywall, and so I see where the red shading ends at the channel portion, and I see where

the blue shading starts at the connection portion, and the space available between, shaded green, is the answer to your question.
BY MR. EIDSON:
Q That space allows for the drywall to be received, but what in particular about the construction of the green extension portion makes it configured to extend into drywall and out, into one side and out the other?
A The geometry is depicted in the artwork here. If I look at the side view, annotated at the bottom of page 99, I can see connection portion on one side of the drywall and I can see channel portion on the other side and drywall in between, with the extension portion passing in and out of the drywall.
Q So it's the geometry of the green extension portion that you have that makes it continue to extend through the drywall?
A Yes.
Q So by that rationale, is any piece of metal that is perpendicular to drywall configured to extend through the drywall?
MR. MAUCH: Objection. Vague. Incomplete hypothetical.
THE WITNESS: I don't see the

perpendicularity part of the puzzle as essential or limiting to me. Here, I have a hanger that is, in this case, on a wall, and I'm now looking to permit drywall between the back of a supported member and the back flange plane.
Everything I've annotated in green there, I've now called extension portion, and that -- that permits for a sheet of drywall to be installed on the wall.
BY MR. EIDSON:
Q Is there anything specific about that extension portion that allows it to extend into one side of drywall and out the other?
MR. MAUCH: Objection. Vague.
THE WITNESS: Maybe I'm not appreciating your question, but, again, I refer you back to top of page 100. It's within Paragraph 169. I see a sheet of drywall, which is most likely a four-by-eight, four-foot by eight-foot sheet of drywall. And I have it annotated in a way that it's -- the green section traverses through that sheet of drywall.
BY MR. EIDSON:
Q Mr. Fennell, I'm going to hand you a -- do you have a pencil on you or a pen over there?
A I do.

Q All right. I'm going to hand you a blank piece of paper. For Yamaguchi, draw the cutout that would have to be done in order to hang drywall as you have it in your report. Pretend that that piece of paper is a sheet of drywall. What would the cutout have to look like? Or you can draw a square inside of it. I don't care. Do whatever is comfortable for you.
A Well, in that case --
Q Are you having a problem, or is there --
A Dr. Serrette had done a nice job of clipping in an isometric view of Yamaguchi with drywall that I believe illustrates the answer to your question.
Q Well, I would like to know if you know how to cut it out.
A Oh, I do.
Q Okay. So I see you looking at what may be his report. So now, on that piece of paper that I gave you, pretend that you're a sheet rock installer and you're going to install that. How would you? What would you cut out of that drywall to install it. Okay.
And on that picture, will you just write "Yamaguchi" somewhere, or "Yamaguchi cutout," whatever you prefer, and then initial and date it.
MR. MAUCH: Do we want to mark this?
MR. EIDSON: That's where I'm heading.

MR. MAUCH: I assumed.
(Fennell Exhibit 12 was marked for identification.)
BY MR. EIDSON:
Q So I see what you've drawn there, Mr. Fennell, and I appreciate that. So now, you've got some slots in the drywall there that have some width to them. They're not just mere slots; correct?
A So they represent a thickness of drywall.
Q And that thickness corresponds to the thickness of the extension portion that you have highlighted green in Yamaguchi; correct?
MR. MAUCH: Objection. Vague.
THE WITNESS: No, no. If it's the Claim 40 version, then it's just simply permits drywall, one-quarter inch, three-eighths inch. If it's looking at the annotated version, the top of page 100, I actually called out that it was two layers of five-eighth inch drywall.
BY MR. EIDSON:
Q Yeah. My question was -- I'm sorry. I think I said the wrong thing and I apologize. Looking at your Exhibit 12, which is the drawing that you just did, when you are installing drywall using Yamaguchi, the cutouts that you would have would have two slots in them for

installing one Yamaguchi hanger, and those slots would be the width of each of the respective extension portions from Yamaguchi; correct?

A Yes.

Q That's what I meant to ask the first time, and something tells me I didn't, so all right. So we're tracking so far. And then in between those two slots there, there's a single piece of a sheet rock that pops up. It's like a tab. Is that fair to say?

A Yes. If -- if we're talking about the single layer application, yes, there's a single, you know, crenelated portion of --

Q Can we write "tab" on that, just so we know we're both talking about the same thing? I'm talking about that right here, if that's what you're talking about.

A Done.

Q Very good. All right. This will help keep our terminology straight as we talk about this. All right. So then looking at your picture now, on page 100, which is the one you referred me to, on top of the extension portions for Yamaguchi, there would be no sheet rock; correct?

A Oh, yeah. In facing the -- the blue back flanges, there would be no drywall. Correct.

Q And so if we're looking, for instance, top down, as you are on page 100 of your report, there is a depth for each of the slot cutouts in the sheet rock for which there will be no fire barrier; correct?

A Well, I wouldn't say that. I mean what there isn't is any residual from the original sheet of drywall. What there would be would be other typical fire-resistive materials that go into penetrations and openings in rated walls.

Q Okay. Let's stick with the Yamaguchi example that we have here and the cutouts that you have in front of you in Exhibit 12. As you look at that, there is a depth, which is the length of the two slots that you have in Exhibit 12 for which there is no drywall filling that hole; correct?

A Yes.

Q And that is everything above where the extension portion would be; correct?

MR. MAUCH: Objection. Vague.

THE WITNESS: I think that's right, yes.

BY MR. EIDSON:

Q Have you -- now, we talked about the two slots. In an installation for firewall purposes, would someone have to fill in those two slots above the extension portion with some other fireproofing material

using Yamaguchi?

A Likely, yes.

Q Now let's talk about the tab as we've got it marked on your diagram. Have you seen any evidence in this case or otherwise where it is undesirable to have a tab in sheet rock for installing it after a firewall hanger is installed?

A No.

Q As you sit here as one of ordinary skill in the art, can you see any issues that creating a tab would have for an installer of sheet rock?

A The mind baffles. The mind boggles. I'm sorry. My concerns would be that any required fasteners have sufficient edge distance for attaching the -- the tab to the wall framing beyond, and that it would be a matter of integrating the other fire-resistive materials used to detail any edges or penetrations that may exist in the -- the field version of this.

Q Have you ever installed drywall?

A Yes.

Q Okay. Have you ever installed drywall in a firewall application?

A I have.

Q Have you ever installed drywall in an application utilizing any of the firewall hangers that

are involved in this lawsuit?

A I have not.

Q Okay. So what problems would a drywall installer have with the creation of a tab in the sheet rock?

A I don't envision too many. I mean, this is a fairly basic notching of the drywall that is similar to those around outlets, pipes, and any other penetration that might be required to pass through the resistive membrane.

Q Before I asked you today, have you ever considered why it might be undesirable to have a tab in the drywall?

A I -- I'm not aware of one. It just would require a certain care by the drywaller in executing the cuts. These are folks that sometimes make cuts with hammers. In this case, I'd rather see something more surgical, and I'm sure the inspectors would be looking in those locations as well. But the -- the only thing we really need here is the right tool and the right level of care.

Q So one problem that I think you just alluded to was making sure that the cuts would be accurate; is that fair?

A Yeah, the same level of neatness that would be

used at say a -- an electrical outlet that's further down on the wall.

Q And do you see that that tab portion presents a risk of breakage whenever you slide it up into the hanger, as you claim Yamaguchi would be modified to do?

MR. MAUCH: Objection. Misstates testimony.

THE WITNESS: I mean, any sheet of drywall is subject to breakage, as would the top edge or the tab here if the installers are not sufficiently careful.

BY MR. EIDSON:

Q I understand that any piece of sheet rock can break, but you understand and agree with me that creating a tab prevents a greater likelihood that something could break than not having the tab; right?

A Yes. Yes.

Q Okay. That's more fragile than just having a uniform piece of sheet rock with no slots on each side of the tab; right?

A Right. For the few moments of installation, that tab is unsupported on two sides, and there's a possibility of -- of snapping at the base of the tab.

Q How long is the back flange on Yamaguchi?

A It is depicted not to scale, but I would

estimate that it's on the order of an inch and a half or two-inches deep into the top plate.

Q And how long is the extension portion?

A Well, as I've drawn it here, it is diagrammatically just large enough to permit two layers of five-eighth drywall, or an inch and a quarter. That would be my estimate of depth of the extension portion, colored green.

Q Looking at the design of, of Yamaguchi, with your photos on page 99, or whichever you choose, or you can look over at page 101, if one was to use Yamaguchi to build and frame up, before drywall installation, multiple levels of a structure, would one of ordinary skill in the art have concerns about Yamaguchi's ability to maintain the gap for the drywall, if you completed that framing first?

MR. MAUCH: Objection. Incomplete hypothetical.

THE WITNESS: I -- I don't believe so.

BY MR. EIDSON:

Q So looking at page 101, putting a joist in the channel-shaped portion without anything behind that and then building on top of that and on top of that, one of ordinary skill in the art wouldn't be concerned about that channel-shaped portion sagging back into the space

created by the extension portion?

A Well, it would be a concern in that it would be a design element, but no. Put a joist in, support it at the other end, put in whatever sheathing or diaphragm is going to occur at the level directly above, and then continue framing walls above, who are almost certainly going to stack over the walls.

The actual weight on the joists supported there is just its own self-weight and maybe a -- a layer of sheathing. I don't know how quickly drywall trades would be coming in behind that, but under just self-weight, I don't see that supported joist rotating back in towards the wall.

That would be the concern, that -- that the supported joist heals its way back towards face of wall and pinches off that drywall gap that I'm looking for. Certainly for a -- a layer of -- one layer of Claim 40 drywall, no concerns.

But even in the two layer application here, I don't believe it would be a problem beyond what the designer's going to deal with.

Q What does that mean?

A The POSITA. I -- I -- your question was any worry about the drywall being pinched off by completing the framing prior to drywall? "No" is the short answer.

Q With Yamaguchi? That's my question.

A With Yamaguchi, correct.

Q And you don't have that concern, because you say there's not that much weight on it. It's just the weight of the joist?

A The joist and the decking above.

Q And so what if I go up five levels? You don't have any concern that the joist on the first level is going to pinch, as you said?

A Not if in, as in most cases, the wall that we're looking at stacks vertically up through the building. That wall -- weight of wall is just simply fully supported on the walls themselves. What's hanging and supporting in between doesn't -- does not factor in.

Q Looking at Cullen, if you want, or just recalling it, would you have to make any modifications to Cullen out of concerns for the ability to maintain a gap in the drywall if you completed framing first?

A I think we can insert the same discussion that we just had with Yamaguchi as for Cullen, remembering that I'm using the seat version of Cullen to support the supported joist. But otherwise, yes, frame your way up the building and come along later with drywall and carefully insert into the gap.

Q And what about for Chapin?

A Same. I just feel obligated to point out that this report is Claim 40, and the concerns we were just discussing are even less if we're just talking about a single layer of permitted drywall between back of supported joist and back flange plane.

Q And looking at Yamaguchi, there's nothing to prevent the joist or structural support member from sliding all the way back into the space created by the extension portion; correct?

A As initially drawn, there is no mechanical stop to the back of the channel-shaped portion, preventing the joists from sliding back. However, one of my assumptions in using this hanger is that the -- the supported framing member will be cut to the correct length to be drop -- dropped into the channel portion and not encroach into the drywall zone.

If talking in the obviousness and combination realm, simply cutting a notch in the side of the channel or the -- or the -- the perpendicular wings for that matter and folding in a mechanical stop would be an easy adaptation of this hanger. I hope that answers your question.

Q Let's look at Cullen, and we'll look around Paragraph 199, and you say the same thing here. You say that "Cullen's extension portion," which is green in

your annotated figure around page 110 -- or excuse me, around page 118.

You say that "the extension portion in green is configured to extend into one side of the drywall and out the other side of the drywall." Do you see that in Paragraph 199?

A I do.

Q Okay. And I have the same question that I had with Yamaguchi about this one. What specifically makes that green extension portion configured to extend into one side of drywall and out the other?

A Well, again, with the seat option of Cullen, where the supported joist does not extend back beyond the annotated red portion, to a POSITA, to me, I see ample opportunity to permit drywall between the red shading and the blue shading or the back flange plane.

I also -- in a moment we can talk about the little tab, the locator tab, 84, and how I've described that in Paragraph 199, but I think I've currently answered your question about drywall in the green zone.

Q And it's just that it's a piece of metal with a long enough space that allows it to go through the drywall. Is that it?

A Yes.

Q And you agree with me that there's nothing in

Cullen that teaches not putting the support member all the way against the back flange; correct?

MR. MAUCH: Objection. Vague.

THE WITNESS: Oh, I think we described that earlier, that the artwork only in one figure shows it going all the way, and yet another, I should be specific --

BY MR. EIDSON:

Q Exhibit 10, and I'm talking about the artwork and all the "brumph."

A The "bumph."

Q "Bumph."

MR. MAUCH: Well played.

THE WITNESS: Figure 3 in Fennell Exhibit 10 shows the joist going all the way to the supporting wall. However, the other figures leave it open to interpretation, depending on the application. I note that in Figure 1 there are the barbs, called out as Items 31.

I believe those are locator-type elements that, if the joist was rammed all the way to the back of the wall, it would engage those little barbs and hold the joist temporarily while fastening occurs.

BY MR. EIDSON:

Q Which suggests to one of ordinary skill in the

art that the joist goes all the way to the back plate; right?

A Where the barbs are present. It's Figure 2 where those barbs disappear. And when considering the optional seat, that I see that it's not excluded or it's silent on whether the joist goes anywhere beyond the -- the vertical portions out at what I've annotated as the channel portion.

Q But Figure 2 also has Tab 84.

A Right, and --

Q Okay. And let me follow up.

A Yes, sir.

Q Which suggests to you that the support member goes all the way back, otherwise there'd be no need for Tab 84.

A In the written specification, it talks about how Tab 84 could simply be bent down if needed. But I also see that it could also be extended out, lengthened, and possibly even extended out and then bent down in an application that would then provide a stop to a joist spaced away from the wall.

Q But you agree with me that Tab 84 suggests to one of ordinary skill in the art in Figure 2 that the joist goes all the way to the back wall?

A Not necessarily.

Q So you just disagree with me on that; is that fair to say?
A I just think there's a difference between Figure 1 and Figure 2 where the -- the barbs disappear, and --
Q But the tab remains; right?
A The tab remains, but there's also literature that talks about the optional seat, and that's where, when I read this in its entirety, I obviously see the opportunity to permit drywall between the back of the joist and the back flange plane.
Q But you agree with me that the seat doesn't have anything to do with how far back you're pushing the support member. It just has to do with how you support the support member on the bottom; right?
A Yes-ish. I mean, I -- I think in concept I agree with you that I put it on the seat for support, but as I say, I don't see a necessity to drive it all the way back to the wall. I can leave it short sufficient to permit drywall, Claim 40-style.
Q But for Tab 84 being on Figure 2 -- and what's the purpose of Tab 84?
A I believe if it's in a decking application, it helps locate the top of a joist that is pushed all the way back to the wall. But it's not an essential part,

and the -- the written literature describes how it can be bent out of the way if needed for, as described in the -- the abstract, it says, "for other timber applications" -- "other timber constructions," I should say.
Q And by "bent out of the way," which way would you bend it?
A You could bend it straight down, cut it off, or as I suggested before in a combination adaptation, you could extend it further out over the drywall.
Q Well, we're talking about bending it, so let's stick with bending it. One of ordinary skill in the art who's going to bend Tab 84, which way would you bend it, up or down?
A Probably -- probably downwards.
Q Why is that?
A Get it out of the way if you didn't want it there.
Q Why wouldn't you bend it upwards?
A Depending on what other construction is going to occur, there may be horizontal sheathing being installed at that location. There could be other wall framing or beams above. It really depends on what the designer has in mind for that -- that application.
Q Bending it downward would put it in the space

that the support member's supposed to fill though; right?
A I still have plenty of room to stop my joist short in a very clear and practical way, permit my one layer of Claim 40 drywall, and have a bent tab. I -- I see no problem there.
Q Well, we're not talking about that. We're talking about what this teaches right now, not the installation of the drywall. We're talking about this teaching the support member going all the way to the back.
And you say, looking at Figure 2, "That's not the case, because I can bend 84." But if I bent 84 down, it would take up space that would be occupied by the support member; correct? It wouldn't sit flush with the back plate; right?
A It would be proud of the back plate by the thickness of the tab.
Q So then one of ordinary skill in the art, if you wanted to bend this and get it out of the way, wouldn't the optimal direction to go would be do a 180 with Tab 84?
A No, the -- when we look at the artwork for these drawings, and even with the 510 Patent, they're idealized. Lots of lines are straight and fit neatly

together, but the face of a light frame wall has quite a few little humps and bumps and imperfections.
So there will be furring strips. There will be nail plates. There will be other little bows and blemishes on the face of wall. If we're talking about just the thickness of Tab 84 folded downwards, I don't know whether the dry wall or the supported member that I've held away cares, and through the eyes of a POSITA, that's not a concern.
Q Mr. Fennell, I'm going to hand you another sheet of paper, and I'm going to ask you, if you don't mind, to kind of do the same thing that we did with Yamaguchi, and that is, pretend that you've -- with Exhibit 12.
Pretend that you've got a piece of sheet rock there and draw me the cutout that you would have to make in the drywall in order to utilize Cullen as a firewall hanger after you've installed the hanger first and then do the drywall second.
Just initial and date it, if you don't mind.
A Today's the 15th?
Q Happy tax day. And then that one --
THE WITNESS: Do you want to put the date on that, Joey?
//

BY MR. EIDSON:
Q Yeah, if you don't mind. You're going to write the date on Exhibit 12. I thought you did that already. Did you write five? I think it's four.
MR. MAUCH: No, he's got dots there. Oh, he did write five. I apologize.
BY MR. EIDSON:
Q Yeah, I --
A Oh, it's only April still?
Q Yeah.
A My bad.
Q It's all right. We do know it's tax day, so that -- there we go. Thank you. And I'll take the one that doesn't have an exhibit sticker on it. Yep. Yep. Mr. Fennell, we have labeled your Cullen drywall cutout drawing as Exhibit 13.
(Fennell Exhibit 13 was marked for identification.)
A You want me to add the wood tab on there as well?
Q If you don't mind. And you agree that that is Exhibit 13 is labeled correct?
A I do.
Q All right. And your Yamaguchi, just for the record, was Exhibit 12, your Yamaguchi drawing?

A Yes. Yes.
Q Okay. All right. So looking at the cutout that would be required by Cullen, this too would also create a tab in the drywall; correct?
A It would.
Q Now, looking at the two slots created by Cullen, would those slots require any additional fill for firewall purposes, or are they sufficiently thin such that they would not?
A Could probably go either way, but out of an abundance of conservatism, I would likely detail some additional fire-rated material in there.
Q Is that just a matter of personal preference?
A I would look the building official and maybe the designer, ultimate designer of record, whether they would want additional material there. I would, you know, belt and suspenders way, prescriptively specify some sort of fire-stopping material in the gap.
Q You don't know whether that's required by code. It's just a preference. Is that fair to say?
MR. MAUCH: Objection. Lacks foundation. Assumes facts not in evidence.
THE WITNESS: No. It was more of a preference that I'm specifying some supplemental treatment of the -- the slot created.

BY MR. EIDSON:
Q How long would the tab be in the Cullen drywall that has to be installed?
A What's the -- the dimension from the top of wall framing to the bottom of the green extension portion?
Q Are you able to approximate a distance or a length? Excuse me.
A Assuming the -- this is supporting a -- a two-by member joist coming in from the perpendicular structural component, the height of the green extension flange and then the blue back flange above that would be on the order of three, three and a half inches.
Q And how wide would the tab be?
A The tab's going to be on the same order as the width of the -- the two-by that I'm assuming is supported in the channel portion. So an inch and a half, normally.
Q You agree with me that the longer and thinner the tab is, the more fragile it would be for breakage; correct?
A I think that's -- yeah, it's practical to assume.
Q And from an installation purpose, what is the practical implication of an installer of drywall who has

made the cuts and then goes to install and has snapped off the tab? What does that mean?
MR. MAUCH: Objection. Vague. Incomplete hypothetical.
BY MR. EIDSON:
Q What do they have to do?
A In -- in that situation, they -- the first time they would do it, request for information from the designers, seeking guidance on the correct way to maintain the rating. In a -- in all likelihood, it would just be apply more fire-resistive material, intumescent mastics, or other fire-stopping, just to either on its own fill the gap, or to in some way adhere that piece of sheet rock back in place.
I'd have -- I'd rather have, once they broke it off, just to fill the gap with rated material.
Q So they'd have to get some additional material and fill a gap?
A As they're going to do many other places within eight feet of this location.
Q And that takes additional time; right?
A It's just part of building firewalls in multi-residential construction or commercial construction that's rated.
Q Another option would be they would go back and

make another cut and try it again; right?
A They could do that, yes.
Q Any other practical implications for snapping off the tab from a installation perspective that you can think of as one of ordinary skill in the art?
A On how to do it?
Q No, what you would have to do if you snapped it off.
A Okay.
Q We've talked about two things, I think.
A Yeah, no. Just find a way to fix it that is acceptable to the designers and to the building inspectors signing off this construction.
Q You mentioned that your application of Cullen or the modified Cullen that you would have would have the, I'll call it the bottom stirrup portion to the channel-shaped portion; correct?
A Yes.
Q For use with joist hangers and firewall assemblies?
A Yes.
Q Would you need to add more screws to hold the joist in as well?
A I don't think so. I mean, just the -- the ones that are depicted in Figure 1 or in my report, the

annotated Figure 1s, I believe, show sufficient fasteners to secure the joist in the -- the channel portion.
Q Let's look at Chapin next. I'm going to direct you to Paragraph 227, and it's the same question that I've had before. Mr. Fennell, in this paragraph, you opine that "a POSITA would've understood that Chapin's extension portion," which you've labeled "green," "is configured to extend into one side of the drywall and out the other side of the drywall." Do you see that, Paragraph 227?
A Yes.
Q And what makes that green extension portion configured to extend into one side of the drywall and out another side?
A As with the other references, I look at Claim 40 and look for the ability to permit drywall between the channel portion and the back flange plane. When I look at the artwork for Chapin at, say, Figure 6, that isometric, or Figure 3, a top view, I see no limitations on getting a piece of permitted drywall between the channel and the -- the back flange plane, other than a necessary cutout for the collar shape, 11.
Q So would your cutout in Chapin create a tab?
A No. It would be a -- just simply a -- a

notch.
Q Mr. Fennell, I'll hand you another blank piece of paper, if you don't mind. And just like you have with Yamaguchi and with Cullen, if you wouldn't mind drawing me the cutout that one of ordinary skill in the art would make with respect to Chapin using it in the manner you suggest. All done?
A I think so.
Q Let me take a look, and we'll get it marked as an exhibit. All right, Mr. Fennell, you agree that what we have labeled as Exhibit 14 is the cutout that would need to be made in the drywall using Chapin as you suggest in your report?
(Fennell Exhibit 14 was marked for identification.)
A Conceptually, yes. I would create something far more beautiful for construction.
THE OFFICER: Sorry. What was that?
THE WITNESS: I would create something far more beautiful for construction.
BY MR. EIDSON:
Q Let's look at your report around page 135 and 136, and we can look at page -- trying to find the best picture to ask you a question here. Look at 137 and 138. My questions are about the collar. Are the back

flanges of Chapin part of the collar?
A Yes.
Q So is the back flange merely just the surface facing the wall of the collar?
A What you see in annotated Figure 4 on page 137, you see blue shaded verticals on the collar? Yeah, those are the front face of the -- the back flange. The -- the flange continues perpendicular back into the page. And it is in fact the -- the full depth of Collar 11. But the -- the back flange face is that vertical that abuts the wall.
Q But the back flange itself then would be the full Collar 11.
MR. MAUCH: Objection. Misstates testimony.
MR. EIDSON: No?
THE WITNESS: No, I was talking about the verticals.
BY MR. EIDSON:
Q Okay.
A Yeah, yeah. Is what I meant to say. It's -- yeah. The -- the top and bottom, no, but the -- the two verticals, and then those cut edges at the end that abut the wall, those are the -- the faces of the flanges, and the flanges comes out perpendicular.

Q And then just to clarify, do you consider the entirety of the collar the back flange?
A I just corrected you to say that it was only the verticals that are the -- the back flange, and that the cut ends adjacent to the wall or abutting the wall, those are the front faces of the -- the flange that lay in that back flange plane.
Q So the verticals of Collar 11, they're perpendicular to the wall; right?
A Yes.
Q Okay. So in your cutout of the drywall, this particular one, it's just essentially a cutout that goes around the entirety of the collar of Chapin; correct?
A The depth and the width of Collar 11, yes.
Q Okay. And no tabs are created on this one; correct?
A Correct.
Q You want to take a break?
A Sorry about that.
Q No, that's all right.
A No, I'm good.
Q We've been going about an hour and a half. If you want to take five, we can.
A No, it's just lunch reminding me how good it was. Perhaps a five-minute break would be good.

THE OFFICER: We are now off record at 1:54 p.m.
(Off the record.)
THE OFFICER: We are now back on the record at 2:08 p.m.
MR. EIDSON: I wrote on yours on accident. Sorry.
MR. MAUCH: No problem.
MR. EIDSON: And if you, for some of these that have two stickers on them, just find another. Don't cover the old sticker, just find another place if you can.
THE OFFICER: Okay.
MR. EIDSON: I think we're on 15.
(Fennell Exhibit 15 was marked for identification.)
THE OFFICER: Yes.
BY MR. EIDSON:
Q Okay. Mr. Fennell, I've handed you what we have marked as Fennell Exhibit 15. It was also Hensen Deposition Exhibit 13, among others. It is a Simpson Wood Connectors catalog 2019/2020, Bates labeled Simpson 38533 through 4192. Have you seen this particular catalog before?
A Yes.

Q Have you reviewed it in considering any of your opinions in this matter?
A [No audible response.]
Q Mr. Fennell, we've had a bit of a pause and you've been doing some reading. Do you recall the question that I asked you?
A I do.
Q Okay. You still need some more time to figure it out?
A I think there's two parts to my answer. I've reviewed it at some stage during, as you referred to it, the patent war, but I don't believe I reviewed this edition for this current Claim 40 analysis.
Q It's fair to say you've seen this catalog in connection with your professional work outside of this case?
A Yes. Yes. As my life as a -- a specifier and a consultant, but also as a -- a lecturer.
Q So I -- I want you to turn to page 7 of the catalog, which is on Simpson 3859.
MR. MAUCH: That was 859, the last three digits?
MR. EIDSON: 3859, yes, sir. Page 7 of the catalog.
//

BY MR. EIDSON:
Q And do you see the color-coded category of products that is on page 7 on the right hand side?
A I do.
Q And if you look across to page 6, which is Simpson 3858, you'll see that that subject index has some specific products underneath it. Do you see that?
A I do.
Q Okay. Looking at whichever side you'd like, the color-coded side or not, I'm going to walk down each category of products and ask you a question about the category of products. Okay?
A Sure.
Q Just so we're tracking each other. All right. Now, Yamaguchi was to be used with a sill plate; correct?
A Yes.
Q Cullen was on decking application; right?
A Amongst other timber constructions, yes.
Q And then Chapin was an extension portion. What was the particular application for Chapin?
A It was an extension hanger in the event that a joist that required support was presumably cut short of a wall.
Q And it wasn't limited necessarily to timber or

any other particular application. Is that fair to say?
A Right. I mean, it could be other constructions, but most likely timber.
Q Okay. What, if any, area of connector products would you not look to in order to try to solve the problem that was attempting to be solved by the 510 Patent?
MR. MAUCH: Objection. Vague. Ambiguous. Incomplete hypothetical. Incomplete hypothetical.
THE WITNESS: It's a big question, and I'll break it down into bits about my thought process, if that's --
BY MR. EIDSON:
Q Sure. And if it's easier, I'm going to use these categories on the right-hand side of the page and walk through each one and ask you if that's an area that you would look to for what I'll call "analogous art" or not. Is that maybe an easier way to approach it?
A No. Let me take a stab at it first, and then we'll -- we'll see if your --
Q And then we'll go down. Okay.
A We'll see if your list version is needed. We are looking to support some structural component in a channel-shaped receptacle that is spaced away from a

wall sufficient enough to permit drywall and then is supported on a -- a supporting wall.
What I'm looking for is a structural connector, most likely a hanger, that then, as I say, permits this added layer or layers of sheathing on the face of wall. So any of the structural hangers here, whether they be for solid SA or for any of the engineered wood products, the I joists, the glulams, parallams, structure lams, or indeed a plated truss.
Those are all target-rich environments for finding a -- a structural connector that can work for the problem that you see, which is support framing that permit drywall between the channel and the back flange plane.
From memory, the -- the firewall hangers were emerging in this 2012, 2013 timeframe that coincided with, in my experience, in my opinion, the need for building frame solutions that accommodated taller wood buildings in the Type 3 class as opposed to what predated that in the -- the Type 5 construction.
So, yeah, as I said, I -- I looked to the -- the solid sill and joist hangers and the two categories directly below that until we come to this time period 2013, where the firewall hangers broke into their own clear water in the catalogs. But before that, there

were solutions created using the other ones.
Q Looking at these categories, you mentioned three. Were there other categories that you think in that timeframe you would look to for solutions?
A Well, if it came to structural connectors, in their broadest sense, structural connectors are about connecting components to form assemblies within systems. There's a whole section of my report that talks about what the POSITA knew and should have known pre the end of 2013.
And so we get to some of these hangers that pass through drywall, penetrate drywall, and still are able to transfer structural loads and serve as connectors. So things like the hold-downs and tension ties, those are often passing through rated assemblies, and I would look to them to be part of the field of research.
Yeah, the masonry connectors, I mean, similarly, have the ability to pass through sheathing and create load path structural connections. Straps and ties, we've already found one in -- in even a decking application that can transmit structural loads. Even the decorative hardware may ultimately be appropriate. So at 30,000 feet, I -- I think that answers your question.

Q Yeah. I think the only areas you said you wouldn't necessarily look to would be concrete connectors and anchors, bases and caps, and fasteners, leaving out miscellaneous and firewall hangers of course; is that right?
A Right.
Q Okay. So you agree with me that one of ordinary skill in the art wouldn't look to all types of structural connectors. It would be refined in some way when trying to solve the problem that the 510 Patent was tackling?
MR. MAUCH: Can you repeat that question or have it read back, one of the two?
MR. EIDSON: Sure.
BY MR. EIDSON:
Q I just said, you agree with me that one of ordinary skill in the art wouldn't look to all structural connectors when trying to solve the problem that the 510 Patent was solving. It would be refined in some way?
A Yes, it'd be some narrowing, just to try and find something that was off-the-shelf that best fit the application the -- the designer or the POSITA is trying to solve. If I didn't mention hold-downs and tension ties before, I meant to.

Q You did.
A Okay. Good.
Q I've got that checked off.
Mr. Fennell, I've handed you what has been marked as Exhibit 16 and 17. Fennell Exhibit 16 is excerpts from the 2000 IBC, and Exhibit 17 excerpts from the 2012 IBC. You recognize Exhibit 16 and 17; correct?
(Fennell Exhibit 16 and Exhibit 17 were marked for identification.)
A I do.
Q You're familiar with these excerpts as I've handed them to you?
A Yes.
Q Okay. Traditionally, for a standard wall that's not a firewall, the truss or joist is butted directly up against the wall or or the supporting member; right?
MR. MAUCH: Objection. Incomplete hypothetical.
THE WITNESS: If you're talking about where the support condition for the supported member is coming in perpendicular at an angle.
MR. EIDSON: Yes, sir.
THE WITNESS: To the supporting wall, then yes, it gets up close to and personal to the

supporting wall, whether it be in a hanger or whether it is supported on the top of the wall.
BY MR. EIDSON:
Q And then if you look at Exhibit 17, and let's look at page 118 of the exhibit, section 706.4.
MR. MAUCH: Can you repeat the page number of Exhibit 17?
MR. EIDSON: Yeah, it's 118.
MR. MAUCH: Thank you.
MR. EIDSON: And it's section 706.4
BY MR. EIDSON:
Q Let you know when you're there, Mr. Fennell.
A I am there.
Q Okay. You're familiar with this section; correct?
A I am.
Q All right. And this section specifies that the walls separating units of specific types of structures, like residential Group R-1 or Group R-2, which are apartment houses, et cetera, must meet a two-hour firewall rating; correct?
A Within this section, yes.
Q Okay. And this type of firewall requirement has been in existence since at least the 2000 IBC; correct?

MR. MAUCH: Objection. Vague.
THE WITNESS: Certainly, since year 2000, there have been two-hour rated walls prescriptively specified in the model codes.
BY MR. EIDSON:
Q Well, let's look at it. Let's go to Fennel Exhibit 16, which is the 2000 code. And if you want to look at page 98, and there I'm in section 705.4
A Okay.
Q And so you agree with me that since at least 2000, the IBC has required this same sort of firewall construction for the type of constructions that we saw in the 2012 code since at least 2000; correct?
A Yes.
Q And do you agree with me that prior to the 2000 IBC, that -- well, let me ask you this. Are you familiar with other national building codes, like the UBC, or the SBC, or the NBC?
A I am.
Q Okay. Or, or even the NFPA has their own code, I think.
A They tried, if you're referring to NFPA 5,000.
Q But prior to this 2000 code, you agree with me that the UBC, the SBC, and at least the NBC all had similar fire-resistant rating separation requirements as

seen here in this 2000 IBC?
A Yes. It's important you use the word "separation" there, 'cause that's a concept in fire codes that if you have a number of units connected above the second floor, once you get above a certain area, you're required to have a separation wall.
And that's where these two-hour rated walls would traditionally come into play, would be to fool the building into thinking it's two separate structures, and that you -- you have the concept of fire separation in Type 5 and then looking forward into Type 3 as that became more popular.
Yeah, the -- the two-hour-rated separation wall was, yeah, more common in multi-residential construction.
Q And the method of using two layers of drywall, especially two layers of five-eighths drywall as a way of constructing that two-hour rating was something that was common in the 2000 IBC and mentioned in the 2000 IBC; right?
If you look at page 126, looking in the table on the bottom of page 126, talks about using two layers of five-eights Type X gypsum wallboard on each side of the studs. It's mentioned in other places as well.
A Right. And these listed assemblies and the

ones in the gypsum manuals and other places that designers would look to, POSITAs would look to for solutions, generally two layers of five-eights to get to the two layer -- to the two-hour endurance.

But there's -- there's a number of different listings here that would get you to a prescriptive two-hours that was tested somewhere since the 1950s.

Q You agree with me that the using five-eighths drywall to achieve that rating was also found in the 2012 IBC?

A Yes.

Q Page 157 if you want to look, or you probably have it memorized, but --

A No. I'm good. I think what is the footnote that's missing at the bottom here is that most of the practice leading up to 2010, or at least after the credit crisis put a halt on construction here in the United States, most fire construction had repetitive framing running parallel to the common walls and the area separation walls.

The need to go perpendicular wasn't that frequent, but as the allowable height of light frame construction changed to beyond 50 feet to 65 feet, that's when designers really felt this need to start changing up the directionality of their repetitive

framing, and a lot more perpendicular construction emerged.

Q And when did that allowable height of wood frame construction change?

A Well, here in California, it came in with adoption of -- ultimately adoption of CBC 2009, I believe. California didn't adopt the IBC as its State code for a while. We missed a few cycles, but once we did pick up that IBC as part of the California code, then that was attractive to start building 60-foot-high wood frame structures.

And we see the need to solve the problem, as you say, that had framing coming in perpendicular to walls with drywall on it.

Q And you said in California that was adopted in 2009; is that correct?

A I believe it was the 2009 IBC.

Q Was it adopted in other jurisdictions before that?

A It varied state by state, and some states did actually adopt IBC 2000, but anywhere in high seismic, we're trying to figure out how to get the loading code reconfigured for this IBC world, it -- it took a while, took a few code cycles.

Q So in some states, the allowable height of

light frame construction code changed in the 2000s. In other places, like California, it was a little more of a gradual process and didn't take effect till 2009; is that correct?

A That's correct. So when -- by the time designers, and this is my own personal experience, started feeling the need to solve a different problem in the direction of framing, it really wasn't until 2011, 2012 that those plans that make it -- made it to construction, and they'd been permitted and were ready to build.

Q But that's your experience here in California; right?

A Right. But I was also on other light frame committees and writing papers around the country that you just hear the practitioners moaning and groaning about what they can and cannot do with the newer codes.

Q How many projects -- or I guess your licensures are on your resume; correct?

A They are.

Q All right. Are you licensed anywhere in the Midwest?

A Not beyond Nevada, no.

Q Licensed anywhere on the East Coast?

A No.

Q Okay. And when I said Midwest, I was going to go across the state, but is Nevada the furthest east that your licensures take you?

A For my engineering licenses. So as I say, I've had this building inspectors certificate for 30 years, and that was national, and it involved all the codes, but again, it was always -- I always sort of stayed with the West Coast practice.

Q And that's predominant? A predominant amount of your experience has been obtained; is that fair to say?

A Yes.

Q If you look back at the 2000 IBC, look at page 98. You agree that in -- I'll let you get there. I'm sorry. And I'm going to look at Paragraph 705.6.

A Yes.

Q You agree that in 2000, the IBC specified that fire-resistant partitions must have vertical continuity extending from the foundation to the roof of the structure?

A That's what part of the paragraph says. But as with all things wood frame, it tends to be the -- the code by footnote, code by exception. So you know here, it's -- in 705.6, it's talking about firewalls extending from the foundation to a point 30 inches above the roof.

So we used to see parapets, little fins sticking up above the roof line wherever there was a area separation wall that was breaking the building up into separate parts.

But there was also down in the exceptions, you can see there are different ways of preventing the fire from jumping from one unit to the next by jumping over at the roof line. If you create returns that are horizontal returns, either at ceiling line, underside of rough sheathing, or at what would be called the floor of an attic, that you can create a -- a return to stop fire from jumping across a -- a fictitious property line.

Q And you agree with me that, since at least 2000, for fire separation walls, it was common for a double layer of five-inch thick drywall installed on a wood frame wall from the floor to either the next level subfloor or to the top level of the structure?

A That was a very common adaptation. But as I say, further back in time, there was also the recognition that building officials look for partial collapse to be accommodated on the burn side of the wall.

And hence, most designers ran their framing parallel to wall. It wasn't until, as the practice evolved and changed in that, as I said, 2009, 2010, 2011

timeframe, that design started to incorporate more perpendicular framing.

Q So thinking about how this was done, 2000, 2005, California or otherwise that you're familiar with -- if you're not familiar with other locations, that's fine too. But in installing firewalls as prescribed by the 2000 IBC code with the tools that were available to one of ordinary skill in the art at the time, would've required using one, a hanger that just goes over the drywall; right? That's one option for a joist hanger.

A Uh-huh.

Q Or --

THE OFFICER: Sorry. Is that a yes or no?

MR. MAUCH: Just let him ask the question, then that answer.

THE OFFICER: Okay.

BY MR. EIDSON:

Q Did you say "yes" to that?

A It was an "uh-huh" --

Q I'm going to take that as --

A -- part way through, but let me let you complete the question. I apologize.

Q I'll stop there. That's one way; correct?

A Yes. One solution would be to install a

hanger over whatever sheet rock is on the wall for fire-resistivity.

Q And another method would've been using some sort of other type of hanger, whether it was custom or for a different application, that was hung and then someone would cut around the drywall; is that right?

A Yes. To use another hanger that pre-existed to accommodate the sheet rock required and to make sure that any supplemental detailing was affected, just like you would at a penetration for an outlet, a duct, or a -- a pipe penetration.

Q So look at Fennell Exhibit 15, which is the Simpson Strong-Tie catalog. Thinking about this 2000 to 2009, '10, '11 timeframe, what type of hanger, just as an example, would've been used instead of what we now have as firewall hangers for this particular type of construction?

And if just for ease, there's a table of contents at the front and a product index. I don't know if that helps or not, on page 4 and 5.

A To answer your question, I've gone to my actual report, where within the technology sections, I identify hangers that a POSITA might have turned to -- to solve this issue of existing drywall on a framed wall that now needs drywall. And I have drawn reference to a

-- a Simpson technical bulletin that was put out.

It's what I've referred to as Exhibit 45 in my report. Now, those style of hangers that are there were being used by designers in the 2012 timeframe to figure out the -- the drywall problem, as you describe it.

Q What hanger was it?

A This is described as the -- the MIT or the LBV.

Q And is that a hanger that goes over the drywall after the drywall is hung?

A It -- it definitely goes over the drywall. Whether it -- the drywall is there or not is installer choice.

Q So then the MIT is on page 160 of the catalog, just to help you out, 159, 160.

A Right.

Q So you were familiar with this particular product being used in the 2000 to 2011 timeframe for installing firewalls and hanging joists?

A No. My -- my recollection is -- is specific to either late 2012, during 2013. I specifically recall being in light frame committee meetings where practitioners, colleagues of mine, were bemoaning that they were using these -- these hangers, but because they were having to poke them out over multiple layers of

sheathing and wood structural panel, they weren't getting the full value of their top plate nails.

So that's where I believe this bulletin was published, to give design guide guidance with the tested capacities to designers to help them over this period.

Q Do you have any experience utilizing or specifying these products for particular firewall application?

A Only in a retrofit application, but yes.

Q And then that was in the 2000-what timeframe, your experience?

A Well, I've been fixing drywalls since the late '90s, but for all sorts of penetrations and lack of nails or the wrong size nails.

Q And I'm talking about dealing with firewall construction, as we've been talking about in the code here, for multi-level wood frame that has the new requirement that lets you build up another level or two. That's the type of construction I'm talking about.

A Right. The recollections I have where beams would be coming in perpendicular to the wall at, say, a -- a stairwell with rated walls, and there's either insufficient something to maintain the rating, and a retrofit has been required. That's my experience.

Q And what timeframe was that?

A Primarily with the -- the beams, I mean, that could be any way back to, you know, late '90s, but the older and grayer I get the -- the more I get sucked into that work. But definitely pre the end of 2013. And that's what I -- the basis for my POSITA opinions are, is, you know, what were -- what did folks know who were going to seminars, going to committees, you know, learning how to detail rated walls?

What was -- what was there in the literature and in the -- in the practice?

Q So we've talked a little bit about the code change in 2000. We looked at the IBC, and I want to know what knowledge you have, and I'll just break it down from 2000 to 2005, about how building professionals were utilizing connector products to take advantage of this code change and make the firewall construction as required.

A Yeah, I'm not aware that anybody was actually doing it here in the Western United States.

Q Okay. But you don't know about the rest of the United States?

A I don't.

Q Okay. From '05 to '10, same answer?

A It's getting blurry now, but that coincides with all light frame construction virtually coming to a

halt after the credit crash of 2008-ish. So, you know, as you come out of that, and builders start constructing again, yeah, then -- then we're right there in that 2010, 2011 timeframe.

Q Got it.

A It's hard for me to blow my own trumpet, but I should point out that, you know, even though I'm -- my licenses are all West Coast-centric, all the timber magazines, they're all national. You read all these, the literature, and you see what the practice is going on in the balance of the country. But I -- I just didn't see that issue emerging elsewhere.

Q You mentioned some frustrations of, I think, maybe peer groups or industry groups that you were a part of. Was part of that frustration because there was no product in the marketplace that let them take advantage of the construction and the new construction codes, or not so new, pertaining to multi-family wood frame builds that required firewalls?

A No. It was more downstream from that. It was the -- the adaptive solutions or what was happening was working on paper in their offices, was working in plan check, and was working in contracting. It was -- maybe, again, it's a West Coast thing, but the forensic litigation that follows West Coast construction was

manufacturing an issue, a perceived issue with the solutions that were being used by designers.

And again, case by case, construction by construction, one of the issues that was frustrating the designers was that they were being dragged into these alleged claims.

Q Are you aware of Simpson customers requesting a firewall hanger that could be hung over two layers of drywall before the drywall was installed?

A I'm not aware of what those customers were asking of the salespeople. Yeah, that's -- that's not me. But I believe my own personal belief that the -- the top flange bulletin was issued to provide designers relief with tabulated design values for -- as the title of that document said, it was for hangers over drywall.

MR. MAUCH: Mr. Fennell, I know it's getting late in the day. Don't forget to pause before you begin your answers so that I can, if need be, posit an objection.

Because I do want to object. Vague to the last question.

BY MR. EIDSON:

Q It's fair to say that you didn't consider any of Simpson's design or development documentation when it came up with the DU product in reaching your opinion in

this case?
A No, I think you asked me that this morning, and I said no.
Q Okay. And I apologize if I repeat the question. Just hang in there. I'm trying not to. In your professional opinion, when did you perceive that there was a need in the industry for a firewall hanger that could be hung -- well, let me back up. I'll ask generally, and then we'll go specific.
When did you see there was a need in the industry for a firewall hanger, a specific firewall hanger?
MR. MAUCH: Objection.
BY MR. EIDSON:
Q Regardless of its construction.
MR. EIDSON: Sorry, John.
MR. MAUCH: Objection. Vague.
THE WITNESS: As I mentioned before, after the credit crunch, after California adopted provisions for light frame construction that permitted 65-foot-tall wood frame buildings, that's when I saw a need in the practice for hangers that were more specific to that usage that would avoid the plaintiff lawyers out in the business and their structural experts.
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BY MR. EIDSON:
Q You're familiar with Simpson's line of firewall hanger products; correct?
A Yes.
Q And it's the DU, the DG, the DGF and the DGT, which is the current product?
A Yes.
Q Okay. You agree with me that all of those products have some sort of an extension portion that goes through drywall except the the DU, obviously? So let me ask a better question. You agree with me that the DG, the DGF, and the DGT all have some sort of an extension portion that goes through drywall?
And you've got the catalog if you want to look at them in the catalog. I can point you to pages if you want, except the DGT. That's not in this catalog.
MR. MAUCH: It's a 2019 catalog.
MR. EIDSON: So much for that.
BY MR. EIDSON:
Q I can get you some pictures if you need, Mr. Fennell. Just let me know.
A That would be helpful. Thank you.
Q Okay. Yep. Again, like I said, some of the attorneys in this case have memories about all these things, and I don't mean to give you a memory test at

all. You know what? All right.
All right. Just so we can have a little more of an easy conversation about these products, Mr. Fennell, I've handed you what we have marked as Fennell Exhibit 18, which is also Hensen Exhibit 9. It is a DG product flyer from Simpson Strong-Tie. It's Bates labeled SST 31977 through 978.
And then I have also handed you what we have marked as Fennell Exhibit 19, which is the DGT product literature, copyrighted 2023 from Simpson, and it's Bates labeled SST 2_793 through 796.
And then first of all, you recognize do those documents as I've described them as Exhibits 18 and 19?
(Fennell Exhibit 18 and Exhibit 19 were marked for identification.)
A I do.
Q Okay. You've seen those before?
A Yes.
Q Okay. And then if you want to look at the DGF, look at Fennell Exhibit 15, which is the catalog, and you can go to page 229 of the catalog. All right. The DU is also in the catalog. If you want, I can give you that page number, but we'll save that question for now.
So now that you've got the DG, the DGF, and

the DGT in front of you to hopefully help refresh your recollection about those products, my question to you was, you agree with me that the DG, the DGF, and the DGT all have an extension portion that goes through the drywall?
A Generally, yes. In my mind, I'm taking this back to the -- the lens of Claim 40, where it's just permit drywall. But that's an easy yes. So, so far, I agree with you.
Q You agree with me that the DG, the DGF, and the DGT all allow for installation of drywall after the hanger is hung?
A Well, it could be either way. It could be after, or it could be before.
Q My question was does it allow for it?
A Yes, that's one of the possibilities.
Q And then looking at the Bundy product, if you would like, page 223, do you see the DU product there? Look at page 232. I may have said the wrong page, and I'm so sorry, Mr. Fennell. 232 of the catalog, which is page 4084 of the Bates number. You see the DU there?
A I do.
Q Okay. Very good. And you agree with me that this product was designed exclusively to have the drywall installed first; correct?

A Well, certainly the face-mounted ones do, but the --
Q Do you see the installation instructions for the DU? What is the third bullet point down on installation?
A Well, it says they're mounted with top flange --
Q Third bullet. It's the one above that.
A Yeah. Drywall is installed first.
Q Okay. So you agree with me that Simpson instructs the users of the DU to install the drywall first; right?
A That's what's written there, yes.
Q Okay. And you have not seen any instruction from Simpson or otherwise that allows the DU to be installed before the drywall; right?
A I haven't seen anything, no.
MR. EIDSON: Okay. For a half second, Joe, I thought I misplaced that.
MR. MAUCH: I wouldn't have made another copy for you.
MR. EIDSON: Nor should you have.
BY MR. EIDSON:
Q Mr. Fennell, I have handed you what we have marked as Fennell Exhibit 20. It is Bates labeled

Fennell 22269 through 2270. This is the February invoice for your work in this matter; correct?
(Fennell Exhibit 20 was marked for identification.)
A It is.
Q Okay. And it looks like all of the time entries on this invoice are essentially up to February 13th, which is the day before your expert report was due; correct?
A Yes.
Q So if I looked at Fennell Exhibits 1 and 2, which were the January and March invoice, and then put in this Fennell Exhibit 20, which is the February invoice, I would have an accurate capture of all of the time that you spent working on your opinions in this matter; correct?
MR. MAUCH: And just to be clear for the record, I think it's Fennell Exhibits 2 and 3. The subpoena was Exhibit 1.
MR. EIDSON: I will take that correction. Thank you. The objections were Exhibit 1. Yep.
BY MR. EIDSON:
Q So Fennell Exhibits 2 and 3 plus Exhibit 20.
A Yes. This gets real close to capturing the amount of effort in an hourly-basis on this thing. May

have left a few hours on the -- on the floor, but this is the ballpark.
Q Why would you leave a few hours on the floor?
A There's times where I just don't capture my time or I get interrupted doing something else.
Q Do you know who Charlie Cypher is?
A I do not.
Q Do you know who Roger Dankel is?
A I do not.
Q Do you who Steve Rotzin is?
A I do not.
Q It's fair to say if I ask if you know who these people are and you don't that you have never spoken with them; correct?
A Highly unlikely.
Q Right. You have experience designing wood frame connectors; is that right?
A I do.
Q Okay. Do you have experience designing pre-engineered structural connectors?
A Yes. My old office at Scientific Construction Labs, we provided laboratory testing and design services to help folks creating structural and non-structural connectors and bracing for hospitals applications. We would test out new products for the clients, break them,

figure out how to improve them. Get to the --
Q Sorry. I thought you were done.
A No, we can get to the point where we could write an engineering report that would be submitted to OSHPODS -- OSHPODS, the California folks that govern construction out here. Quite rigorous in their job.
Q And just so we're on the same page, when I say, "pre-engineered structural connector products," what do you mean by that?
A Again, products that transfer loads from a wall or a ceiling to a supported element that have to have a particular structural capacity at both gravity and under seismic loads. I have tested, for example, in support of product development and design development, things like patient lift systems in hospitals.
Quite a bit of science that goes into attaching to a structural element of a hospital where no yielding is allowed to occur within the connection, and all of the action needs to happen within -- within the extension portion. It'll come down through a rated ceiling and then accept a -- a load, whether it be a -- a bed with a patient on it or a member or a piece of equipment.
Q Now, I'm not sure we're on the same page. So let me ask. If I say, "one-off connector," have you

designed a one-off connector before?
A Yes. Specialty connectors, yeah.
Q A specialty connector; right?
A Yes.
Q Specific use for a specific application for a specific customer. Does that sound fair?
A Or for our own designs that -- yeah, for example, retrofitting balcony decks, trying to figure out how to attach a guardrail that's over here that's now been strengthened to then pass through some sheathing and attach to a wall beyond.
There may not be a specialty. I mean, there may not be an off-the-shelf connector to take one, adapt it for use, and therefore, it becomes a specialty structural connector for that particular design.
Q And I contrast that type of structural connector design with a pre-engineered design as something different. Do you?
A Not really. I mean, if you're talking about going into mass production, and -- yeah. Then, you know, manufacturing them for the general public to be sold at a big box store, and so far none of my designs have been picked up for that.
Q Okay. And that's kind of what I was getting at. Have you done any designs that are outside of the

one-off application or the very specific application?
A Other than my structural connectors for anchor bolts and rod tiedowns. Those tend to be featuring in virtually every building now, where a research project that I led reestablished code values for anchor bolts to be used in a code change proposal. Those things ubiquitous.
Q Did you design the bolt itself?
A We used an existing bolt and then went through the code change proposal to adjust the values back to where they'd been previously in the face of new code provisions.
Q And so my question relates to product design specifically. Have you done any specific product design and development beyond a one-off or specialty connector?
A When I say one-off, there might have been -- for that project, there might have been hundreds of locations where it was used or retrofitted. But I think generally, no.
Q Do you have any patent applications?
A I do not.
Q Or issued patents?
A That's not me.
Q What did you do to prepare for your deposition today?

A I prepared these reports, and I have been reading back these things into short-term memory. I have met with Counselor Mauch. I think that's it. I mean, I mentioned I had read rebuttal materials from Professor Serrette and read his draft deposition transcript. I think that's all I can think of right now.
Q Did you meet with anybody else other than Mr. Mauch in preparing for your deposition today?
A I've been in webinar with Glenn Taylor, my colleague in committee.
Q Anything else?
A No. I -- I think that's it.
MR. EIDSON: All right. Why don't we do this? I seem to be missing something, but I'm also almost near the end. Can we take five minutes? And I believe with that five minutes, we might be done before four o'clock, thus upholding my promise. Does that work?
MR. MAUCH: That works for me.
MR. EIDSON: All right.
THE OFFICER: We are now off the record at 3:24 p.m.
(Off the record.)
THE OFFICER: We are now back on the

record at 3:30 p.m.
BY MR. EIDSON:
Q All right. Mr. Fennell, we're going to talk a little bit about the 510, if you want to pull that out. It was Exhibit 8 if you want to reference it, and we're going to talk a little bit about Dr. Serwin. All right.
So you're obviously familiar with MiTek's 339 patent; correct?
A I am.
Q All right. And that particular patent covers a method of installation; correct?
A From memory, yes.
Q And looking at Claim 40, your opinion is that "because Claim 40 does not claim a sequence of installation, there can be no commercial success attributed to the claimed invention." Is that your opinion?
MR. MAUCH: Objection. Misstates prior testimony
MR. EIDSON: And if that's not your opinion, let me know.
THE WITNESS: No, I'm deferring opinions on commercial success evaluation to this Dr. Serwin fellow.
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BY MR. EIDSON:
Q You chatted with him the day before each of your reports were due; correct? You mentioned that in your report?
A Yes. Can you direct me to my paragraph that gives that date?
Q You bet. It's -- give me a second. Got you.
MR. MAUCH: It's 46.
MR. EIDSON: Thank you. I had to cross-reference it, because I made notes in the old version and then -- thank you Joe. I was going to say mid-forties, but 46 is spot on.
BY MR. EIDSON:
Q Do you see that there, where you say, "On February 13, 2025, I had a brief phone conversation with Ken Serwin"?
A Yes.
Q And you conveyed to him that the capability of installing the claim hanger before the drywall is not a patented feature of Claim 40. Do you see that?
A That's correct.
Q Did you read his report?
A I did not.
Q Did you tell him that the geometry of the hanger in Claim 40 allowed for the preferred sequencing

of installation?
A I merely confirmed that it permitted drywall between the channel-shaped portion and the back flange plane.
Q You didn't discuss any other attributes or limitations of the claim with him?
MR. MAUCH: Objection. Vague.
THE WITNESS: I mean, short of reading you in Paragraph 46, that's what I did do with Dr. Serwin at the time.
BY MR. EIDSON:
Q Did he tell you that economic success was attributable to something other than what's found in Claim 40?
A He must have. That's what I've written there, but as I say, I don't have a recollection of it, and I've deferred that evaluation economic success analysis to -- to him.
Q What did he tell you that the success was attributable to of the MiTek firewall hanger?
A I -- I don't recall any specific attributes here. It just says, "With a result of economic attributes other than the patented feature." So I -- I don't know.
Q Did you work with them to make any effort to

determine what those attributes were that were a result or were attributable to the commercial success?
A No, no. I -- I just gave him my thoughts as a POSITA and my understanding of Claim 40 limitations.
Q Did you talk to him about the extension portion found in Claim 40?
A I -- I, yeah, described the actual language and how I understood it that's in Claim 40.
Q Did you describe methods of installation of the hanger and drywall to Mr. Serwin?
MR. MAUCH: Hold on.
Objection. Vague.
You may answer.
THE WITNESS: Nothing but what -- beyond what I've already told you.
BY MR. EIDSON:
Q And I'm looking for the full I spectrum of specific information that you conveyed to Mr. Serwin, so I apologize that I'm gilding the lily a bit here. But so far, your testimony is that you told him, and please correct me if I'm wrong, that the ability of installing the hanger before drywall is not a patented feature of Claim 40; correct?
A Correct.
Q Okay. What else did you tell him about Claim

40?
A Everything that's in Paragraph 46 and no more. It was a brief discussion, just 15 minutes, tops.
Q Did Mr. Serwin convey to you the basis for his opinion that the success achieved by the products embodied by the patented feature were not attributable to Claim 40?
A He mentioned it, but I didn't ask or inquire why there were the basis for his opinions.
Q Did he just tell you at a high level that it's something else, or did he give you specifics of what it might be?
A As I just told you, it was at a high level. He just said something other than the patented feature or the -- the sequencing that, in my opinion, is not a patented feature.
Q Did he tell you that the sequencing was driving success of the product?
A I don't recall him telling me that.
Q Did he ask you specifically if sequencing was covered by the claims of the patent?
A In my positive way, I would've told him that it's -- whilst it's possible to do before or after installations with this patent, Claim 40 is silent on sequence.

Q And my question is, did he ask you?
A In my positive way, I explained it to him. He did not ask. I did the telling, and that was the end of the discussion on sequencing.
Q He did not ask. You just did the telling?
A Yeah.
Q And I am sorry to be particular here, but how does this conversation come up? Counsel arranges a call, and then what's the first question? Other than, "Hi, how are you," of course.
A Yeah. I don't think they were pleasantries. He -- I believe he led off by just asking about the Claim 40 features that involved the connection portion, what happened in the extension portion, and then what happened at the channel portion.
I gave my analysis of that, as described here in Paragraph 46, and he just said that he was handling the -- the other aspects of the product, as far as commercial success or other non-POSITA aspects, and it was like, fine, but that's outside of my scope. And that was the end of the discussion.
Q Did you walk through the entirety of Claim 40 with him so he could understand all of the elements of the claim?
A I believe so. We went through Claim 40. I

mean, there's -- there's not that many bits and pieces, and it was to make sure that -- I believe, to make sure that he fully understood what Claim 40 does and does not do from a POSITA standpoint.
Q I apologize if I asked this already. You have not read his opinions in this matter; is that right?
A I have not.
Q Okay. Are you aware of what they are one way or another?
A I do not, other than he felt that there were economic attributes beyond the -- outside of Claim 40.
Q Did you --and I appreciate that you say the entirety of what you've discussed is here in Paragraph 46. Did you discuss anything else with Mr. Serwin about the code, changes in the code, how multi-family timber wood frame construction is typically done? Anything like that?
A No.
Q No background material?
A Not that I'm aware of.
MR. EIDSON: Mr. Fennell, I don't have any additional questions so I don't think -- I don't. Hold on just a second. Make sure I haven't left an exhibit in the dark. I have not. Thank you very much.
THE WITNESS: No problem.

MR. EIDSON: Your counsel may have some questions, may not.
MR. MAUCH: I have just a few questions.
MR. EIDSON: All right.
MR. MAUCH: It should not take long.
EXAMINATION
BY MR. MAUCH:
Q But let's look right at that same Paragraph 46 that we were just focused on, Mr. Fennell. In that last sentence of Paragraph 46, are you looking at that, Mr. Fennell?
A I am.
Q It refers to the relative sales success achieved by products that embodied the patented feature inclusive of MiTek's FWH line of products and Simpson's, DG and DGF line of products. Do you see that?
A I do.
Q Was it your understanding that Simpson's DGT product embodied the patented feature of Claim 40?
A Yes.
Q Simpson's DGT embodies Claim 40?
MR. EIDSON: Objection. Asked and answered.
THE WITNESS: No as to sequence, yes as to extension size to -- to permit drywall.

BY MR. MAUCH:
Q Sorry. I frankly don't understand your answer.
MR. EIDSON: Object to the form of the question.
MR. MAUCH: Fair enough.
BY MR. MAUCH:
Q Can you look at Exhibit 8? It's the 510 Patent. Yeah. Okay. So looking at the limitations of Claim 40 at the end of the 510 Patent, Exhibit 8, the question, so does Simpson's DGT product embody each of the limitations of Claim 40?
A No.
Q Okay. Why? Which limitation or limitations, plural, does it not embody?
A The DGT has a back flange that does not extend down from an edge of the top flange.
Q Okay. We can move on now. Mr. Fennell, do you recall Mr. Eidson asking you questions about how the various prior art references disclose an extension portion configured to extend through the drywall?
A I do.
Q Could you take a look at Paragraphs 27 and 28 of your report?
A Okay. I'm there.

Q And once you've reviewed 27 and 28, my question will be if you agree with me that those paragraphs contain information regarding the construction of a number of claim terms, including the claim term "configured to extend through the drywall." Do you agree with that?

A Yes. These are the claim constructions that I have adopted for the purpose of this analysis, yes.

Q Okay. So my question goes to that, but it's more particular. The construction of "configured to extend through the drywall" that's contained in Paragraph 27 and paragraph 28, is that the construction that you applied in forming your opinion in this case?

A Yes.

Q Okay. Last set of couple questions. Do you recall Mr. Eidson asking you earlier today to draw the drywall cutouts that would be required if the Yamaguchi hanger were installed with drywall?

A I do.

Q Do you recall in the course of making that drawing for Mr. Eidson that you referred to an annotated figure from Dr. Serrette's rebuttal report regarding validity?

A I did.

Q And you testified today that you reviewed

Dr. Serrette's rebuttal report; correct?

A I did.

Q Do you recall Dr. Serrette providing an opinion regarding whether, based on that drywall cutout for Yamaguchi, the extension portion of Yamaguchi extended through the drywall and was sized to permit drywall between the channel-shaped portion and the back flange plane?

A That's my recollection, that if -- if we were talking about a singular layer of drywall, per Claim 40, that Dr. Serrette was on board that the extension portion extended through that drywall.

Q That was what you understood from Dr. Serrette's report?

A Both his report and his deposition. I believe there was further disagreement from Dr. Serrette about whether, in fact, if you added the second layer of drywall, whether all of that was in front of a -- a back flange plane, but as far as a singular layer, that it was all in that area that was permitted to -- to permit drywall per Claim 40.

MR. EIDSON: Objection. Move to strike. Beyond the scope of expert reports, Rule 26, and beyond the scope of cross-examination.

//

BY MR. MAUCH:

Q As to, when you refer to Dr. Serrette's opinion in connection with use of the Yamaguchi hanger with two sheets of drywall, did you agree with his position?

A I recognize --

MR. EIDSON: Same objections.

THE WITNESS: I recognize that the second layer of drywall would conform around the hanger and would, in fact, contact the face of framing and would dip behind the thickness of the back flange and the -- the front of the back flange where I've established the back flange plane.

But that's equally true of even the 510 Patent, where the second you leave the back flange of the hanger, the drywall, by attachment to the framing, bends back behind the front face of the back flange where the plane is.

MR. MAUCH: I have no further questions.

MR. EIDSON: One follow-up.

EXAMINATION

BY MR. EIDSON:

Q Mr. Fennell, every time you used the word "configured to," or the phrase "configured to" in your report, were you intending to apply the construction of

the PTAB?

THE OFFICER: Of the what? I'm sorry.

MR. EIDSON: Of the PTAB?

THE WITNESS: Yes, as written out here in Paragraph 27.

BY MR. EIDSON:

Q So every time those words appear in your report, you're intending to apply PTAB's construction?

A Yes, Counsel.

MR. EIDSON: Thank you.

THE OFFICER: Okay. And then before we go off the record, would you like to order a copy of the transcripts?

MR. MAUCH: Yes.

THE WITNESS: No.

THE OFFICER: Okay. We are now off the record at 3:51 p.m.

(Signature reserved.)

(Whereupon, at 3:51 p.m., the proceeding was concluded.)

CERTIFICATE OF DEPOSITION OFFICER

I, ARIANA CRISAFULLI, the officer before whom the foregoing proceedings were taken, do hereby certify that any witness(es) in the foregoing proceedings, prior to testifying, were duly sworn; that the proceedings were recorded by me and thereafter reduced to typewriting by a qualified transcriptionist; that said digital audio recording of said proceedings are a true and accurate record to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

<%31894,Signature%>

ARIANA CRISAFULLI

Notary Public in and for the

State of California

[X] Review of the transcript was requested.

Veritext Legal Solutions
1100 Superior Ave
Suite 1820
Cleveland, Ohio 44114
Phone: 216-523-1313

April 25, 2025

To: JOSEPH V. MAUCH

Case Name: Columbia Insurance Company, Et Al. v. Simpson Strong-Tie Company, Inc.

Veritext Reference Number: 7228504

Witness: Andrew Fennell Deposition Date: 4/15/2025

Dear Sir/Madam:

Enclosed please find a deposition transcript. Please have the witness review the transcript and note any changes or corrections on the included errata sheet, indicating the page, line number, change, and the reason for the change. Have the witness' signature notarized and forward the completed page(s) back to us at the Production address shown above, or email to production-midwest@veritext.com.

If the errata is not returned within thirty days of your receipt of this letter, the reading and signing will be deemed waived.

Sincerely,

Production Department

NO NOTARY REQUIRED IN CA

CERTIFICATE OF TRANSCRIBER

I, AMANDA DERBY, do hereby certify that this transcript was prepared from the digital audio recording of the foregoing proceeding, that said transcript is a true and accurate record of the proceedings to the best of my knowledge, skills, and ability; that I am neither counsel for, related to, nor employed by any of the parties to the action in which this was taken; and, further, that I am not a relative or employee of any counsel or attorney employed by the parties hereto, nor financially or otherwise interested in the outcome of this action.

<%29988,Signature%>

AMANDA DERBY

DEPOSITION REVIEW
CERTIFICATION OF WITNESS

ASSIGNMENT REFERENCE NO: 7228504
CASE NAME: Columbia Insurance Company, Et Al. v. Simpson Strong-Tie Company, Inc.
DATE OF DEPOSITION: 4/15/2025
WITNESS' NAME: Andrew Fennell
In accordance with the Rules of Civil Procedure, I have read the entire transcript of my testimony or it has been read to me.
I have made no changes to the testimony as transcribed by the court reporter.

_____ _____
Date Andrew Fennell

Sworn to and subscribed before me, a Notary Public in and for the State and County, the referenced witness did personally appear and acknowledge that:

They have read the transcript;
They signed the foregoing Sworn Statement; and
Their execution of this Statement is of their free act and deed.

I have affixed my name and official seal

this _____ day of_____, 20____.

_____
Notary Public

_____
Commission Expiration Date

DEPOSITION REVIEW
CERTIFICATION OF WITNESS

ASSIGNMENT REFERENCE NO: 7228504
CASE NAME: Columbia Insurance Company, Et Al. v. Simpson Strong-Tie Company, Inc.
DATE OF DEPOSITION: 4/15/2025
WITNESS' NAME: Andrew Fennell
In accordance with the Rules of Civil Procedure, I have read the entire transcript of my testimony or it has been read to me.
I have listed my changes on the attached Errata Sheet, listing page and line numbers as well as the reason(s) for the change(s).
I request that these changes be entered as part of the record of my testimony.

I have executed the Errata Sheet, as well as this Certificate, and request and authorize that both be appended to the transcript of my testimony and be incorporated therein.

_____ _____
Date Andrew Fennell

Sworn to and subscribed before me, a Notary Public in and for the State and County, the referenced witness did personally appear and acknowledge that:
They have read the transcript;
They have listed all of their corrections in the appended Errata Sheet;
They signed the foregoing Sworn Statement; and
Their execution of this Statement is of their free act and deed.
I have affixed my name and official seal this _____ day of_____, 20____.

_____
Notary Public

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Commission Expiration Date

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Date Andrew Fennell
SUBSCRIBED AND SWORN TO BEFORE ME THIS _____
DAY OF _____, 20_____ .

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Commission Expiration Date