UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY

EAGLEVIEW TECHNOLOGIES, INC., and PICTOMETRY INTERNATIONAL CORP.,

Plaintiff,

v.

XACTWARE SOLUTIONS, INC., and VERISK ANALYTICS, INC.,

Defendant.

CIVIL ACTION NUMBER:

1:15-CV-07025-RMB

Jury Trial

Pages 1230 to 1583
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Mitchell H. Cohen Building & U.S. Courthouse
4th & Cooper Streets
Camden, New Jersey 08101
September 13, 2019

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IPR2023-00437

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THE DEPUTY CLERK: All rise.

THE COURT: Please be seated.

Okay. Good morning.

ALL COUNSEL: Good morning.

09:06AM THE COURT: Thank you. This is off the record.

(Discussion held off the record)

THE COURT: Okay, back on the record.

Somebody needed me? Objections, I thought.

MS. PROCTOR: Your Honor --

09:07AM THE COURT: Yes, Ms. Proctor?

MS. PROCTOR: Good morning, your Honor. There are a handful of objections, but it's not to the witness that's currently on the stand and it's also not to the next witness. We think it can be decided later.

09:07AM (**ROBERT STEVENSON**, HAVING BEEN PREVIOUSLY DULY SWORN AS A WITNESS, TESTIFIED AS FOLLOWS:)

THE COURT: Okay, great. Thank you.

Okay. So Dr. Stevenson is here. Oh, I had a question for you. You had homework last night. Yes.

09:07AM Good morning.

THE WITNESS: Good morning.

THE COURT: Please remember you're still under oath, and then let me -- you can have a seat -- conclude the 104 hearing that I commenced yesterday afternoon.

09:07AM The question was whether or not in your expert report

you had opined as to the fact that the reports were to be made for the use and repair of roofs or construction. The patent, just, Mr. Brown, the patent language is which patent?

MR. BROWN: It is the '376, your Honor, the last element includes the phrase "provided for repair and/or constructing the roof structure."

THE COURT: '376, yes. Okay. And so I had asked you to go through your expert report to see if you so rendered an opinion, and you have found what?

09:08AM THE WITNESS: Yes. So this particular element is addressed at paragraph starting at 1723.

THE COURT: Okay. And do you have those pertinent pages for my review? Because I don't have his report.

MR. BROWN: Yes, your Honor. Would you like it on the ELMO or...

THE COURT: The ELMO is fine. Thank you.

THE WITNESS: I guess if you look at the previous page at the bottom you can see this was the section that starts with the analysis of that element that ends with the "for repair and constructing the roof structure of the building." At 1723 I state my opinion. And I would draw your attention to the last two sentences: It is my opinion that this roof estimate report can be provided for repairing or constructing the roof structure of a building with a roof. So there's the basic opinion, and I say I explain this in further

detail below.

In terms of the two exhibits that were on the slide, one is cited in 1724, at the end of the first sentence you see a couple of cites, it's the second cite, Bates number EV031992.

09:09AM

THE COURT: One second. And the slide number is what, Mr. Brown?

MR. BROWN: It is -- the exhibit is PTX-411.

THE COURT: Yeah, but the --

09:10AM

THE WITNESS: This is what took me a little bit of time last night to figure out the Bates number versus --

THE COURT: Matching the Bates number to the exhibit number.

THE WITNESS: Yes.

09:10AM

THE COURT: Okay.

MR. BROWN: It is slide PDX-5.151. So that particular cite is the bottom excerpt I have there in that slide.

THE COURT: So EV03199 is the slide on the bottom

09:10AM

PTX-411?

THE WITNESS: Yes.

THE COURT: All right. The objection is overruled.

MR. SEEVE: Your Honor --

THE COURT: Yes.

09:10AM

MR. SEEVE: May we briefly be heard on this?

THE COURT: Okay.

MR. SEEVE: To be clear, the objection wasn't to these particular exhibits, nor was the objection to this demonstrative, the objection was to Dr. Stevenson's testimony on this point at all. And if we look at the cites to the expert report that Mr. Brown just had on the ELMO, you can see -- so on the previous page that Dr. Stevenson showed your Honor, that's just a heading that reproduces the claim language verbatim.

09:11AM And then if you look at the next page, what Dr. Stevenson pointed to, this too is just a recitation of claim language: It is my opinion that the roof estimate can be provided, not if, but can be provided for repairing or constructing the roof. I explain this in further detail below.

There's no such explanation. And if you look at the exhibit that's highlighted there in the Paragraph 1724, that exhibit is cited for an entirely different proposition, the proposition that users of Xactware's Xactimate software may request a Roof InSight or Property InSight data package. Nothing about repair or construction.

And Rule 26, as your Honor knows, requires that all of Dr. Stevenson's opinions be set out fully in his expert report. And if this is the entirety of the opinion regarding repair and/or construction of the roof, we feel that

Dr. Stevenson's testimony on this issue that he gave yesterday, and all future testimony on this issue should be excluded.

THE COURT: Okay. So, my ruling is as follows, as I think I understand the objection. The objection is that there were -- sort of two, one is that the defendants did not have notice that this expert would opine that the element of the claim for repair and/or constructing the roof structure of the building was in his report. It clearly is. He has satisfied me that it is. He says it in his report, we've gone over it. And one of the documents that he relies upon is 411, I think it was, that indicates that the reports are for repair or constructing the roof materials of the defendant, number one.

Number two, there is no legitimate dispute in this case from what I can see that the only reason these reports are prepared are for repair and constructing the roof structure of a building. I mean, they're not being prepared for -- to pave highways, for example. There is just no genuine dispute. So, it seems to me that the witness, even if he -- if he were told to assume that the evidence is undisputed that these reports were prepared for repair and constructing a roof structure, he can take that assumption and rely upon it in rendering his expert opinion.

So, my point is is that he doesn't have to have -- he wouldn't even have to have these reports if he were told to

assume the fact that is not in dispute is that this is why these reports were prepared. And the parties don't -- do you agree that there is no genuine disagreement that this is the reason why these reports were prepared?

09:14AM MR. SEEVE: We agree that this is one reason that these reports can be prepared. There are others. For example --

THE COURT: But the one reason, that's the end of the story, because that's the claim, that's the element of the

09:14AM claim, that's the language of the claim. So if you agree that one of the reasons these reports are prepared, then that really is the end of the story and you can't allege any prejudice or surprise because, as I said, Mr. Brown could have, in rendering -- this expert in rendering his opinion

09:14AM could have said assume there is no dispute, that the parties agree that one of the reasons these reports are prepared is to repair or construct roofs. He can rely upon that assumption in rendering his opinion, so... but here he's done more than that, he has relied upon publications by the defendant, and

09:14AM his report so states.

Okay. Have we closed this issue?

MS. PROCTOR: Just --

THE COURT: We have. That's my ruling. Okay.

MS. PROCTOR: Your Honor, whether or not some reports

09:15AM fall within the claims and other reports do not fall within

the claims is an issue for damages.

THE COURT: Okay.

MS. PROCTOR: We can only get damages that fall within the claims.

09:15AM THE COURT: Okay.

MS. PROCTOR: Thank you.

THE COURT: Okay. We'll bring the jury in.

And I have read the submissions of the defendants from last night, so if we have time, if we end early today, 09:15AM maybe we can go over those. It might be helpful in preparing for the witnesses for next week. Okay? Assuming there are any.

THE DEPUTY CLERK: All rise.

(Jury enters courtroom.)

09:16AM THE COURT: Good morning, ladies and gentlemen.

THE JURORS: Good morning.

THE COURT: I hope you had a good night. Thanks. Welcome.

Okay. We are here to continue with the direct 09:16AM examination of Dr. Stevenson. So give the ladies and gentlemen one second to get their notebooks ready.

Okay.

(**ROBERT STEVENSON**, HAVING BEEN PREVIOUSLY DULY SWORN AS A WITNESS, TESTIFIED AS FOLLOWS:)

09:16AM (CONTINUED DIRECT EXAMINATION OF MR. STEVENSON BY MR. BROWN:)

MR. BROWN: Thank you, your Honor.

BY MR. BROWN:

Q. Welcome back, Professor Stevenson.

A. Good morning.

09:16AM Q. When we left, we were moving on to the last of the infringement analyses, the '454 claim 26 and the '770 claim 12 for Aerial Sketch. If we go to your next slide, the element of the '454 patent and the '770 patent are that computer implemented process of roof estimation. Have you concluded

09:17AM that Aerial Sketch has those elements?

A. Yes, for the same reasons we've been talking about all day yesterday. This is a computer system that generates roof reports.

Q. Let's go on to the next element. This is the displaying

09:17AM of first aerial image. Where do you see the first aerial image in the Aerial Sketch product?

A. You can see it in that main window I've highlighted in blue.

Q. And where is the single display that the claims require?

09:17AM A. That's that graphical window, so what's outlined in kind of pink there.

Q. Now, Aerial Sketch is different in that it has those thumbnails on the left. Where do you find the second aerial image on that same display in the accused Aerial Sketch

09:18AM property?

A. Well, those thumbnails are also -- you can see if you look at them closely, they're other aerial images that are smaller.
Q. So these thumbnails right here?
09:18AM A. Correct.
Q. Okay. And is that the same analysis for the '770 patent?
A. Yes.
Q. And let's move on to the line drawing elements. There's a requirement that the '454 patent, if we remember, has a
09:18AM first line drawing and a first aerial image. And maybe if we can just -- and I probably should have started with this. Do you want to just reset to what these patents are about? Because I think after the break we might have forgotten.
A. Yes. These two patents are the ones I referred to as the
09:18AM corresponding changes patents, the patents that require that your change in line drawing in one image and the corresponding change also happens over a second aerial image.
Q. So where do we find that first line drawing that the user moves in the Aerial Sketch property?
09:19AM A. Well, I've highlighted in purple there the -- that first line drawing. If you remember from the video of this product yesterday, it was something that was drawn by me over the roof.
Q. Okay. And if we go to the second line drawing. Now,
09:19AM there's only one line drawing on the screen at a time, so how

does that affect your opinion?
A. Well, if you read the claim language closely, you see that they don't have to be simultaneously on the screen at the same time. As long as you have that second line drawing that can be placed over the second image, that actually meets the language. So we have a second image, we have a second line drawing that's on top of that second image, so it meets the language.
Q. Okay. So why don't we see how this works in practice. This is the user input element. To reframe, this is where, correct me if I have this wrong, where you move the line drawing in one image and it gets moved in the other; is that right?
A. Correct.
Q. Okay. So why don't I play the video, and if you would explain to the jury what you are doing.
A. Yeah. So this is -- I think you'll see me grab the ridge of the roof and move it up, obviously making a very exaggerated move to make it very easily visible. But you can see how the line drawing moves and moves to a new location.
Q. Okay. And if we go to the next element, this is the element that -- in the '454 patent and the '770 patent that requires changing or displaying the location of the second visual marker. How does the Aerial Sketch product meet that requirement?

A. Well, what you see in this video is the same as -- the first part is the very same as what we just saw. I moved the line drawing in one image, now I zoom in so we can actually see some details of it. But when I switch to the other image you'll see that the line has changed in a corresponding fashion. So as I switch to a different image you see that has also been extremely extended up, even though the computer did that, I didn't do that. I did that in the first line drawing in the first aerial image, but here's the second aerial image, the second line drawing also moved.

Q. Let's just watch that one more time and make sure that it's clear. So this is the first aerial image that you're looking at right now, right?

A. Right. And this is me manually adjusting the line drawing in that first aerial image.

Q. And then you're switching here?

A. I select one of the other thumbnails to show what that view looks like now. And if you look at that other view you can see that that line drawing has moved in a corresponding fashion.

Q. And how does that compare to what we saw earlier in the Mass Production Tool where we had actually both images up on the same screen and we could see them moving at the same time?

A. I mean, it's -- there are obviously different implementations of the same idea. And if you read the claim

language you can see both of them are covered. While the Mass Production Tool does do it simultaneously, there is not a requirement in the claim language that it be done simultaneously on the screen at the same time.

09:22AM Q. And is this a functionality that you just sort of found on your own, or did you see material that this is exactly how defendants want their customers to use their software?

A. No, it was pretty laid out pretty clearly in the manuals and in their training videos. Here's an example of one of

09:22AM their training videos.

Q. And this is PTX-215 at 250 to 331. I'll hit play.

Could you just explain what's happening in the training video?

A. They're adjusting the line drawing to match up with a

09:22AM particular roof here in one aerial image, and you see when you switch to another one, this, we're actually still doing the correlation step here getting everything to line up at this point.

Q. And then what's going to happen? What should the jury be

09:23AM watching for after this step is completed in the training video?

A. So after the -- this is the part where you're registering images up after -- once the images are registered, that's when you start doing the corresponding changes type things here.

09:23AM Once you say, okay, these are all connected I can see

movement.
Q. Okay. All right. And let's go to the roof report element, the generating and outputting a roof report. Again, we've talked about the roof reports, we're in Aerial Sketch, these are the Aerial Sketch roof reports. Did you find the generating element of the '454 patent and the generating claim of the '770 patent in the Aerial Sketch roof report?
A. Yes. Not too surprising at this point, I hope that this generates a roof report, this document that's provided back to the requester. This roof report has the necessary aspects that's required by the claim, it has the top plan view, it has lengths of edges shown on the top plan view.
Q. And then what about the other elements of the generating -- the other words and requirements of the generating claim?
A. Yeah. So some of the other elements we've seen before, were slope and area, it's laid out a little bit different than other reports, but you can see that the roof is labeled with this notation of F7, and then a table provides the square feet and the pitch elsewhere in the report.
Q. Okay. And there is that last element of the '770 patent that requires the wireframe model construction that we spoke about yesterday. Can you just remind us what that means?
A. Well, what you have to do at the end of the day, right, is generate this three-dimensional model. So the

three-dimensional model is a wireframe model of the roof structure. So think of the lines interconnecting all the interesting points in the roof to give you all the sections and details.

09:25AM And so going through all these steps of, you know, making the corresponding changes, all that stuff is going to result in the fact that at the end of the day we've modified our initial model to a final model that accurately reflects the roof.

09:25AM Q. Okay. And have you seen any evidence that defendants call what's in the Aerial Sketch product a wireframe?

A. Yes.

Q. And I'll just play the video here, if you'll walk us through what you're showing.

09:25AM A. Well, what I'm showing is kind of a -- this is at the end of the process after we've generated the model by doing all the lining up of the edges in the various images I can then select kind of a model view. And this gives me this three-dimensional representation that I can kind of twist and

09:25AM turn around and see different aspects of the roof, and how I want to view it.

Q. And did you also rely on code for this element in your general review the Aerial Sketch product?

A. Well, I think I've said before, the code is nice, and for

09:26AM someone like me these elements are simple enough, you can see

exactly what's going on, but I did take that extra step of going and reviewing the code and verifying that the code operated as I knew it was going to operate based on my use of the software.

09:26AM Q. And did you, for this element did you look at PTX-419 at XWSC 193 to 195 and PTX-420 at XWSC 306 to 308 and 325?

A. That's part of the code I looked at, certainly.

Q. All right. So on Aerial Sketch, the '454 patent claim 26 and the '770 patent claim 12, have you rendered an opinion on

09:26AM that?

A. Yes. So, as we've done multiple times now, we went through each and every claim element for this particular product, you know, each of the concepts, each of the requirements that are outlined in those claims or -- in those

09:27AM claims, found them in the accused product, and so I reached the conclusion that that product was infringing.

Q. Okay. Now, I want to switch gears for a second and focus on some of the other evidence that you've seen.

Did you have an opportunity to review some of the

09:27AM defendants' internal e-mails and presentations that relate to the accused products that you say infringe?

A. Yes.

Q. And did you see anything in there that supported your opinion, or that supported your opinions of infringement?

09:27AM A. Yes. There was numerous internal documents that they had

that talk about the development and the process they went through in some of the implementation aspects.

MR. BROWN: Mr. Thomas, can you switch to Slide 83, please.

09:27AM BY MR. BROWN:

Q. Okay. Now, on Slide 83 you have an excerpt of PTX-617 and a deposition quote from Mr. Webeke. Can you explain to us what you're showing here on the top of the screen?

MR. SEEVE: Your Honor, we do object to the use of

09:28AM this demonstrative, this type of evidence.

THE COURT: Basis?

MR. SEEVE: The basis is this is more a business document that we saw yesterday with other witnesses, but Dr. Stevenson is a non-infringement expert, and this does not

09:28AM go to non-infringement.

THE COURT: Can you say that again, please, the basis of your objection.

MR. SEEVE: The basis of our objection is specifically rooted in the top document cited on that slide

09:28AM that's there, the one that states the basic initial workflow that we are targeting, we don't see that this is relevant to infringement and we don't see that this is a proper topic for a non-infringement expert.

THE COURT: This document you relied upon to render

09:28AM what part of your opinion? Explain your answer to me, please.

THE WITNESS: Sure. So part of my understanding I gained by looking at how they built the actual system. They're talking up here in this e-mail about how they were trying to mimic the EagleView workflow.

09:29AM THE COURT: And that's how you understood the document?

THE WITNESS: Yes.

THE COURT: Okay. I'll permit it. It goes to the weight of the evidence.

09:29AM MR. SEEVE: Thank you, your Honor.

MR. BROWN: For the record, Dr. Stevenson is an infringement expert, not a non-infringement expert.

BY MR. BROWN:

Q. So, on the top of the slide you have an e-mail there from

09:29AM Mr. Jeff Taylor. Can you explain -- and this is June 30, 2010, and he's sending this e-mail to Jim Loveland and Edmund Webeke I believe is how you pronounce that.

Can you explain, or maybe start by just reading the document for the jury and then explain what you understand it

09:29AM to be saying.

A. So, this is an e-mail from -- you know, internal to Xactware and Verisk that talks about the development of the product that is accused here, one of the products that's accused here. You know, this is before they came out with

09:30AM their software and released it to the world. And they're

talking about the development process.

The top e-mail reads: For your information, more to come, but I wanted you to have the basic initial workflow we are targeting. This is absolutely on track with everything that EagleView and others are doing now, and we'd obviously plug in to so much more in our full circle workflow.

So they're talking about this process of accepting the request, the workflow to -- all the steps you need to do in order to generate the final report. That's what they refer to as the workflow. And clearly they're kind of targeting the system they understand as EagleView's system.

Q. How does the workflow relate to the claims of the patents that we just walked through to show infringement of defendants' software?

09:31AM A. Well, we went through a lot of the workflow in terms of looking at individual claim elements. You know, the grabbing of aerial images is part of the workflow, the generation of the model, the getting it to be accurately matching the roof, the generation of a final report, although that's the workflow. And obviously we hit a lot of those topics when we went through the infringement analysis.

Q. And when Mr. Taylor says that the workflow -- actually, let me set context first. Wednesday, June, 30, 2010, is that before or after defendants actually released their accused product?

A. Before.
Q. So they're working on it here?
A. Correct.
Q. Okay. And when he says that what he's working on is absolutely on track with everything that EagleView is doing, does that line up with the evidence that you saw for infringement, or do you disagree with that assertion?
A. No, it definitely lines up.
Q. Now, Mr. -- there's a quote on the bottom from Mr. Webeke. And who is Mr. Webeke?
A. He's a president at one of the co-defendants.
Q. And why are you relying on his testimony here as part of your opinion?
A. Well, I believed -- just the e-mail wasn't clear exactly which of the two products they were talking about, and I basically agree with him that given the time frame, this seems to be talking about the Aerial Sketch product.
Q. Now, it looks like Mr. Taylor here has attached a document called Roof Pictometry Internal Design.pptx. Have you had an opportunity to review that document that was attached?
A. Yes.
Q. Let's go to the next slide, this is PTX-617. And first of all, what are we looking at here? What is this presentation?

A. This appears to be an internal presentation about this workflow that they're developing. This is a set of slides that was attached to that previous e-mail, you know, that was talking about the workflow they were working on. So there is a couple slides we'll go through that, you know, you'll see that they're doing the sort of things that we are accusing here.

Q. Okay. And so this slide, looks like it's kind of an introductory slide, and it's talking about two different kinds of images, they're thinking about using two different kinds of images. How does that relate to the patent claims that you spent time walking through with the jury yesterday?

A. Well, if you recall that the patents are using aerial images, and some of the patents have a requirement that you have a top down view and an oblique or perspective view. This slide points out the fact that that's what they're looking at also.

Q. Okay. And it says oblique and orthogonal. Is orthogonal one of the images that Mr. Pershing says you should use for his patents?

A. Yes. Orthogonal is just another word for the top down view. It means essentially near vertical.

Q. And what are they noting about particularly the oblique view image? Why is that advantageous for Xactware to use EagleView's workflow on that point?

A. Well, you know, the -- part of Mr. Pershing's innovation was not only using this top down view, but then adding these oblique views so that you could determine things like the slope of the roof. And that's exactly what is being said in this slide, that they're going to use the oblique and it can be used to determine pitch.

Q. Let me go to the next slide. This is 617 at -- PTX-617 at Page 11. What are you showing on this slide, Professor Stevenson? Or let me rephrase my question. What is Xactware's document showing on this slide?

A. Yeah. So this is another slide from that same presentation that was attached to the e-mail. So it's a further discussion of the workflow that they're working on. And it just kind of details some of the things that were in my video. A user will click on the end points of the valley and snap lines to these points. The user will choose valley points in the main roof. So that outlining the roof, drawing in the important aspects of the ridges and the valleys is all part of the workflow.

Q. And that screenshot on the slide, how does that compare to what you saw in the Aerial Sketch product that's been actually released that we just looked through?

A. It looks very similar. The colored lines, the things that are being outlined, it's all similar to what we saw on the actual eventual product.

MR. BROWN: And Mr. Thomas, let's go to Slide 81.

BY MR. BROWN:

Q. Now, Slide 81 has another e-mail chain, PTX-613, and it looks like on the top -- do you want to kind of orient us, the top e-mail, what is the top e-mail showing in this thread?

09:36AM

A. This is an e-mail from one of the executives at Xactware, so this Kevin Crandall, he's asking about some of the technology. Jeff Taylor in the bottom e-mail responds, another executive at Xactware, and so if we kind of read through that you can see what they're talking about.

09:36AM

Q. Okay. And so Mr. Crandall is asking Mr. Taylor, who on your team would be the best one to talk to about how to come up with a slope with only the aerial photos available. What is Mr. Crandall asking from a technical basis there?

A. Well, he doesn't have the -- he hasn't gained the insight that Mr. Pershing had in terms of using these multiple images to be able to determine pitch, he's not understanding technically how to do that. He knows that's part of what they want to do, but he doesn't know technically how he's going to go about doing that.

09:37AM

09:37AM

Q. And how does Mr. Crandall's question to another executive at Xactware about coming up with slope with only the aerial photos available relate to some of the patents that we showed earlier?

A. Well, it kind of indicates that, you know, this was not

09:37AM

known, this was -- you know, the people didn't know how to do this. Mr. Pershing came up with an invention, he saw the idea and, you know, made people aware of it in the industry.

Q. Are there any of the five patents in particular that you think this relates to?

09:37AM

A. It really relates to at least the correlation patents and the pitch determination marker patents.

Q. And then Mr. Crandall isn't asking Mr. Taylor, hey, do you know how to do this, he's actually saying do you know how

09:38AM

EagleView or Pictometry are coming up with slope. How does that affect your opinion?

A. Well, he's aware that, you know, EagleView knows how to do it, it's in their product already. He doesn't know how to do it himself, so he's asking someone else, you know, has

09:38AM

anyone looked into them close enough to understand this process.

Q. And then he says: I know having the actual data is the Holy Grail. From a technical perspective, what is he talking about?

09:38AM

A. This is a -- the idea that the metadata can be used. It's not used because the metadata is not accurate enough. So when he says actual data, he's basically saying if we had accurate metadata, maybe I know how to do this, that would be the Holy Grail. But he also recognizes the fact that that

09:39AM

doesn't exist. And so that's where he's -- he's at that next

step of what do you do when you don't have this accurate data that we need, how do we go about doing this.

Q. And what does Mr. Taylor respond, or how does Mr. Taylor respond to Mr. Crandall?

09:39AM A. Well, you can see if you look at the e-mail chain, you know, 20 minutes later, so he says talk to me in the morning when I return and I will show you. So he has an understanding of how this process is done and he's going to explain it to him.

09:39AM Q. Did you see any evidence -- or, well, let me withdraw that.

You were here for Mr. Pershing's testimony, right?

A. Yes.

Q. What is your understanding of Mr. Jeff Taylor's role in

09:40AM working with EagleView?

A. Well, Mr. Taylor was one of those people who went and visited EagleView, walked through their workflow with them, you know, spent the day kind of talking technically about what EagleView is doing, what they can provide, how they went about

09:40AM providing it, saw all the technicians generate roof reports and things like that.

Q. And do you know what Mr. Taylor's responsibilities were at Xactware with regard to the accused products?

MR. BROWN: And if we switch to Slide 79.

09:40AM THE WITNESS: He was part of the development team.

BY MR. BROWN:

Q. And was he, Mr. Taylor, part of the development team or did -- is it more than that?

A. Well, he was the main -- he was the one responsible for the development of this initial Aerial Sketch product.

MR. SEEVE: Objection, your Honor. Yesterday I made an objection about the use of Mr. Taylor's deposition testimony and your Honor overruled that, I understand. But this is actually the deposition testimony of someone else, who will also testify live at trial, who's explaining someone else's job responsibilities when that person, Mr. Jeff Taylor, is also going to testify live. If his own deposition testimony explains this, then I understand if Mr. Stevenson might have relied on it, but this is someone else's deposition testimony.

THE COURT: So the objection is overruled again, that goes to the weight, and you can explore that on cross.

MR. SEEVE: I understand, your Honor.

BY MR. BROWN:

Q. Now, did you also render opinions about, and this is a bit of a legal phrase, the secondary considerations of nonobviousness?

A. Yes.

Q. Okay. And can you just explain at a high level what that is?

A. Well, we're going to get to a phase of the trial where we're talking about the validity of the patents. One of the things you take into consideration about whether something is invalid is whether it would be obvious to someone of ordinary skill in the art. You know, maybe no one wrote down, but it's so clear, it's so easy, it's obvious that they would do it.

One of the things I took into consideration was called secondary considerations of nonobviousness. So what are some factors that show that it wasn't completely obvious to someone of ordinary skill in the art. Those are called the secondary considerations of nonobviousness.

Q. And have we already seen some of the evidence that you considered in coming to that conclusion?

A. Yes.

Q. And let's just go through a little bit more, if we can go to Slide 67. And on this slide, and I'll blow up what you've highlighted there on this slide it's PTX-630. What are you showing in this slide that impacted your opinions about why the asserted patents are valid and not obvious?

A. Well, one of the things you take into consideration is whether or not people who were working on the problem didn't really know the solution, it was something that they thought would be good. And if there's evidence of that happening, well, that clearly makes it -- it wasn't obvious. People were trying to do it, they weren't succeeding, it's not obvious.

So, here's an e-mail from Mr. Jeff Taylor who was leading the development, as we saw, of Aerial Sketch. And he says: We have reviewed many of these types of companies over the past ten years, and EagleView/Pictometry combination is the first that is even close to something that we feel is a potential winning solution. So he says people have been trying this for ten years, no one's come up with a solution, here's a company that has.

09:43AM

09:43AM

09:44AM

09:44AM

09:45AM

MR. SEEVE: Your Honor, I apologize. It's not my intention to interrupt plaintiff's flow here, but I must object to this. This point and I think some points that perhaps plaintiffs are planning to make in the near future relate not to technology, not to patents, but to EagleView as a company. And as we've discussed earlier at this trial, your Honor, one of the things that relates to secondary considerations of nonobviousness is whether the success of a particular company is due to patented technology. Here there's none of that.

THE COURT: Let me see you at sidebar.

(Sidebar)

THE COURT: May I see the slide, please.

MR. ALPER: Yes.

THE COURT: Okay. Your objection?

MR. SEEVE: This slide and a number of other slides that are in the plaintiff's presentation seem to go to this

notion that because the merger was successful and because EagleView was a successful company, therefore the patents are not obvious. And that is misleading, we feel, to the jury because what's really at issue here when it comes to secondary considerations of nonobviousness is whether the patents are responsible for that success.

09:45AM

THE COURT: So they're not connecting the dots.

MR. SEEVE: They're not connecting the dots.

THE COURT: So would that not go to the weight of -- wouldn't that not go to cross-examination? In other words, the expert has rendered an opinion that EagleView was successful, and therefore that's evidence of commercial success. That's one of the secondary considerations. And wouldn't the cross go something like this: But you can't attribute the success of EagleView to the patented technology at issue here, so wouldn't that be ripe for cross?

09:45AM

09:45AM

MR. SEEVE: I think it's in part ripe for cross, your Honor, but I also think that hearing this testimony and seeing these demonstratives with millions of dollars and dollar signs all over the place, I feel that could prejudice the jury, even, even before there's an opportunity to get this issue across.

09:46AM

THE COURT: But it seems to me that if you got up on cross-examination and said, but there is no evidence that you can point to that the reason EagleView was so successful was

09:46AM

due to the patents-at-issue here, I mean if the answer the witness says is yes, then your point is well-taken and you have established a flaw in the expert's opinion.

So, it seems to me that the point you are making really does go to the weight of his testimony and it's proper on cross-examination, and of course I would permit it.

09:46AM

MR. SEEVE: Okay. We were worried about prejudice, but if this is an issue more appropriate for cross --

THE COURT: Well, I guess --

09:47AM

MR. SEEVE: -- then we understand.

THE COURT: I guess it works both ways, because if the plaintiff can't connect the dots, then they're going to get burned by your strategic cross-examination.

(Laughter.)

09:47AM

MR. SEEVE: Hope springs eternal, your Honor.

(Open Court)

THE COURT: Okay.

MR. BROWN: Thank you, your Honor.

BY MR. BROWN:

09:47AM

Q. All right. Back to your slide here, PTX-630, the slide, the e-mail from Mr. Taylor indicates that they have reviewed a number of these companies over the past 10 years and that EagleView Pictometry is the first that's even close to something that they think is a winning solution. How do you

09:48AM

know that they're talking about the technology that's at issue

in this case?

A. Well, I mean, EagleView built this entire company around their patented technology. You know, it starts with the patents. You heard Mr. Pershing testify about how he had an invention and he started documenting, he started building something diligently to reduce it to practice and to bring it to the marketplace. So, the entire company, certainly in this time frame of May 2008, was about these patents and bringing that technology to the market.

09:48AM Q. I apologize for clearing my throat.

Move on to slide 69 which shows PTX-615. This looks like it's another e-mail from Mr. Jeff Taylor in May of 2008. And what is it about Mr. Taylor's e-mail here that strikes you as relevant to your technical analysis?

09:49AM A. Well, similarly to, you know, internally to Xactware, they're recognizing this was something, this was something really noteworthy. They were getting comments from their customers about how this new service was something that they wanted to see. This is an internal e-mail, but it's discussing comments they received from Liberty Mutual which is one of the bigger insurance companies.

It says, "We have received comments from Liberty Mutual about EagleView and I know that Larry Bishop, Juan and others have researched them and would like to see potential success with roofs and this type of technology. State Farm has pushed

us in this direction for the last two to three years, but we did not have anything that emerged as possible."

Q. So, let's break that down a little bit. You mentioned that Liberty Mutual is a customer of Xactware. And when they write or when Mr. Taylor writes that Liberty Mutual is asking him that they would like to see potential success with roofs and this type of technology, in the context of this case, what do you think that's referring to?

A. Well --

THE COURT: What did you understand it to be referring to?

MR. BROWN: Yes, your Honor.

THE COURT: Okay.

THE WITNESS: I understood that what they were talking about is this, what EagleView was selling, these roof reports, the amount of accuracy they had, the ease of use, that sort of technology they thought would really work well for them. So, they wanted to see that sort of technology be available to them.

BY MR. BROWN:

Q. And in 2008 was there any other technology that EagleView had other than the products and patents in this case?

A. No. This was, this solely was their product base at that point. They had just gotten to the point of developing and releasing their first product.

Q. And so let me direct you to that last sentence or the last sentence you highlighted there. "State Farm has pushed us in this direction for the last two to three years, but we did not have anything that emerged as possible." How does that impact your opinion about whether or not this was something that was obvious to people in the art?

09:51AM

A. Well, it's basically saying, you know, people were talking about, and State Farm in particular in this case, is pushing for them to release some sort of technology that would ease this kind of getting a roof estimate report so they could more quickly turn around claims and things like that. So, they're pushing them towards that sort of thing for a couple of years. Nothing emerged as possible. They had no ideas of how to address this request. So, now they see this potential connection that EagleView has started providing this service, how are they going to build that in, you might say.

09:51AM

09:51AM

Q. Okay. Let me switch to slide 73. Now, we just saw that Liberty Mutual, a customer of Xactware, was pressuring Xactware to have this kind of technology. Did anybody else ask for it as well?

09:52AM

A. This is another comment they appear to have gotten, at this time from a Bryan Silveira, but he's at Farmers Insurance, another big insurance company. And this e-mail says he is interested in a company called EagleView. "Bryan would love to see this technology integrated into Sketch,"

09:52AM

which is Xactware's product, "and would be the first to pilot this technology if we went that route."

Q. Okay. And this is PTX-631 at page 2. Let's break that down a little bit, too. So, he says that they're interested in a company called EagleView, but then that next sentence we didn't read, it says, "EagleView takes an aerial picture of a roof and creates a drawing." How does that description of what EagleView does relate to the patents in this case?

A. Well, that's the patented technology. Right? We went through the patents. You start with aerial images. You have these tools now to draw accurate roof reports. So, that's exactly what they're talking about.

Q. Okay. And when he says, "Bryan would love to see this technology integrated into Sketch," what is Sketch?

A. Well, the Aerial Sketch product that we just went through the infringement analysis of, there was a version of that that existed actually before this time. It was just called Aerial Sketch or Sketch here. It wasn't until version 2 which came out later that -- so, Aerial Sketch version 2 is a product that integrated the technology from EagleView.

Q. So, when he's saying he wants to see this technology integrated into Sketch, he's saying -- well, what does that tell you about whether or not Xactware even had this technology?

A. Well, it's clear they didn't. This first version of

Aerial Sketch, the old version of Aerial Sketch did not have this technology. He is essentially saying I would like to see this sort of technology put into Aerial Sketch.

Q. Okay. And let me go back to slide 71, please. Now, I think we saw this slide during the opening. This is PTX-269 at page 2 to 3, and it's an e-mail from Mr. Bill Loveland at Xactware to Matt Weir, an associate vice president at Xactware, sent in July of 2008. Why are you emphasizing this e-mail from Mr. Loveland?

A. Well, this is pointing out why this became so desirable so quickly. Mr. Loveland was talking to a customer, Charles Norton. He was a roofing contractor and was now an insurance adjuster. And kind of the second highlighted section reads, "He tells me that EagleView system is working very well and they are finding it to be a desirable service, particularly on complex roofs. He gave an example of a seriously cut up roof on a large claim that he had recently. He said that EagleView and the roofer within two squares of each other on a 68 square roof. He felt the accuracy was very impressive when he has seen a manual calculation comparing it with EagleView's math."

So, what he is impressed by and what he is noticing and makes it desirable is the accuracy, the fact that you could so easily get this accurate measurement of a complex roof was -- that ends up being a very desirable thing. So, the technology is about making these accurate roof estimates. He is saying

in this marketplace, you know, accurate roof estimates are important and highly desirable.

Q. Okay. And what does it -- how does it affect your analysis that Mr. Charles Norton, a longtime customer of Xactware, was using the EagleView system to measure roofs?

A. Well, it is certainly, you know, as kind of was testified about, there was some buzz out there that people were paying attention and started looking at EagleView pretty quickly. And so, you know, the fact that he -- someone like this so quickly went over and tried it out, you might say, and was impressed is noteworthy.

MR. BROWN: And, Mr. Thomas, can we pull up PTX-269? And go to the second page -- third page, sorry. And I want to zoom in on right, this section right here, Mr. Thomas. It's another part of the e-mail that I don't think we can see on your slide.

BY MR. BROWN:

Q. But I want to ask you how it affects your opinion that Mr. Loveland, a manager at Xactware, said, "my personal skepticism," and he's talking about the EagleView approach, "my personal skepticism was about the accuracy, but apparently it is working better than I anticipated." What does -- how does skepticism come into play in your conclusions of whether something is non-obvious?

A. Well, you know, that's basically saying it's not obvious.

Right? He didn't think it could be done. He is surprised. His initial -- when someone told him they were measuring roofs from aerial, it seemed like he was skeptical of that idea, that that could be done accurately. So, the fact that he is surprised just goes to the fact that it wasn't obvious to those working in this industry.

MR. BROWN: And if we'll go back to the slides, Mr. Thomas, and go to slide 74.

BY MR. BROWN:

09:58AM Q. One last point to emphasize on this e-mail, on PTX-269 at page 3, what are you pointing out here is the conclusion that Mr. Bill Loveland drew after all the other statements you just made?

A. Well, you know, at the end of the day, he basically 09:58AM reached this conclusion, "I guess this is a confirmation that we should be either adopt it ourselves," meaning we're going to use EagleView's technology, "or work with EagleView." You know, work to, you know, partner maybe with EagleView.

Q. Okay. And he expresses a concern just before that. He 09:58AM says, "If it is accurate, it will be important from a competitive standpoint since this service has the potential to displace a high number of Xactimate estimates." What does -- what is your understanding of what that means?

A. He is worried that that's serious competition, it's not 09:59AM something to be taken lightly, and they've got to do something

about it.
Q. And so you put two options up there. What do you understand him to mean when he said we could work with EagleView?
09:59AM A. Typically, I think that would mean something like building a partnership where they work together to service the marketplace.
Q. And is that how -- is that what they did in terms of the integration initially?
09:59AM A. That's part of what they did, yeah.
Q. And I want to get to what you mean by in part, but did the fact that EagleView and EagleView sold its roof reports through Xactimate, in your opinion did that allow Xactware to infringe the patents at suit here?
09:59AM A. No. As long as they were selling EagleView products through their platform, they were not infringing. That's reasonable business practices.
Q. So, what was the problem? What does make them infringing?
10:00AM A. Well, the problem is they developed their own product that utilized EagleView's technology.
Q. And is that what you meant by in part that's what they did?
A. Yes.
10:00AM Q. Okay. And I want to take you briefly to slide 75. What

are you showing on slide 75 which shows PTX-310 at pages 11 to 13?

A. Well, this is a presentation by EagleView but found within Xactware's files. So, when this discovery process we talked about yesterday, when discovery produced the documents they had related to this case, this presentation was found in those documents.

Q. And if we go to slide 94 -- there we go. Did you come to a conclusion as to whether or not defendants ultimately copied what they were learning and seeing from EagleView?

A. Yes. As we walked through all the infringement analysis, you could see there's a lot of similarities between what EagleView developed and what eventually ended up in defendants' roof report. What I'm showing here is a screen shot of EagleView's, one of EagleView's products. We're going to go through those in a moment. It's called their Twister software. You can see the same sort of interface that we've been -- and below is the defendants' screen shot. You see the same sort of interface, two aerials being shown, a bunch of drawing tools, very much mimicking what EagleView had done.

Q. Okay. Let me take you to two more slides about what Xactware and Verisk are doing, and then we'll move on to describing quickly what EagleView's technology is doing.

MR. BROWN: So, if we go to slide 288, Mr. Thomas.

BY MR. BROWN:

Q. What are you showing on this slide on the left in PTX-525? Is that a user manual and why are you highlighting it?

A. Yes. This is -- you remember Aerial Sketch is this do-it-yourself type sketching tool. So, it's for the customers to generate their own roof reports by sketching out the roofs. And they are teaching a customer how to use EagleView and use the tools -- excuse me, how to use Aerial Sketch and use the tools that, you know, I point out as the infringing tools. So, they're teaching their users how to use these tools in an infringing manner.

Q. And did you see any evidence in this case that Xactware's customers used the tools in an infringing way?

A. Yes.

Q. And what was some of that evidence you saw?

A. Well, on the right is an example. This gentleman was deposed. He's a claims service manager at USAA, one of the big insurance companies, and he was asked, when you were using the Aerial Sketch, did you use the set slope feature? And he said yes.

Q. And so how did that affect your opinion about whether defendants' customers are using Aerial Sketch? Do you have any doubts about whether they are?

A. No, clearly they are.

Q. And one more slide. We haven't spoken much about Verisk.

What is Verisk, the other defendant in this case?
A. Verisk is a company that owns a bunch of companies, subsidiaries, of which Xactware is one of.
Q. Okay. And what are you highlighting on this slide about what Verisk is doing in partnership with Xactware?
A. Well, they appear to be, you know, pushing for this idea of getting into this marketplace and, you know, competing on these aerial -- on these roof estimates.
Q. And PTX-423 is what's on the slide, and particularly it indicates that "Verisk is reaching long-term agreements with a range of leading U.S. aerial imagery and data capturing firms to accelerate the collection of high quality imagery and data for Property InSight." What are we talking about there with imagery and data for Property InSight?
A. Well, Property InSight is one of the products that's accused here of infringing the EagleView patents. They use that to generate the roof report. They buy the images from someone else, and so he's talking here about how they're working hard to get high quality images in so that it can be effectively used to generate these reports with the Xactware product.
Q. Okay. Now, let's switch gears and talk about EagleView. And go to slide 26. Have you come to any conclusion about when Mr. Pershing first conceived the ideas that are found in the patents in this case?

A. Well, for the initial patents, it was back in that December 2nd, 2006, the notebooks we looked at in his testimony about how he came up with his invention. That was the date where I saw evidence that corroborated his testimony.

10:05AM Q. Okay. Let me take you to your slide 20, please, sir. And what was some of the evidence that you saw of your testimony just now?

A. Well, certainly Mr. Pershing's testimony, but then to support that, he kept very detailed notebooks, many of them,

10:06AM in fact.

Q. And did you review these notebooks?

A. Yes, I had maybe 20, 15 to 20, something like that, notebooks that I looked through.

Q. Okay. And did you just take Mr. Pershing's word for it,

10:06AM or did you do a deeper analysis into the material in the notebooks?

A. No, I looked through the entire notebook collection I had, tried to trace out the various things he -- you know, some of them were dead ends, not everything you see in the

10:06AM eventual product, but the important part is the key ideas of his invention are, you know, are disclosed at certain dates, and so you can say that, well, he had that idea in mind at that date.

Q. Okay. And let's go to -- we'll show on the slide, you're

10:06AM showing PTX-457, and you have highlighted something that you

thought was relevant in there, if we can blow it out there. What are you showing here in Mr. Pershing's notebook?

A. Yeah, so, Mr. Pershing testified he kind of had this basic idea of multiple aerial images a little earlier than this, but this is the documented evidence of when he had it. November 14th, 2006, he wrote this notebook page that, you know, is laying out this basic idea of using different views of the roof in order to be able to pick out the three-dimensional information.

10:07AM Q. Now, see, earlier you said that he conceived of his invention December 2nd, but you just referenced something in November there. Are you saying that he hasn't conceived the invention quite yet at this point?

A. There's not evidence here. That evidence of the actual 10:07AM invention is a little bit later. So, it's -- I'm not only listening to Mr. Pershing, I'm looking at the evidence, what the evidence says and how it supports it. And so the evidence I found was that he had the complete invention was on December 6th. This shows he had at least part of the idea by November 10:08AM 14th, but the stuff on December 6 -- December 2nd, excuse me, really shows he had the complete idea.

Q. Got it. Okay. And if we go to the other side of the page that you are showing, you have blown up this material in Mr. Pershing's notebook. What are you seeing in Mr. 10:08AM Pershing's notebook here?

A. Well, here he's laying out this work flow that we've talked about. He starts off with a stick figure requesting a report. He talks about the various structures and steps you need to do in terms of a server that's going to acquire the satellite images or the aerial images, a drawing tool that's going to allow you to model and come up with the measurements, and then how you're going to use that information to generate a roof report.

Q. And how does Mr. Pershing's notes here relate to what you ultimately see in the patents?

A. It very much lines up with and supports the patent.

Q. And we'll go to one more page, PTX-457 at page 19. What are you emphasizing on this slide?

A. Well, this is, you know, a piece of the invention, and it's the first disclosure. I found it in the notebooks, December 2nd. This is, he is essentially walking through the inside technology of how you use these multiple images to extract the 3D information, what sort of steps you need to do based on the images that are out there, the fact that you need to do this correlation step in order to register the images because the data available with them wasn't accurate enough. So, he is solving that -- he's showing his solution to that problem and that solution is the one that ends up in the patent.

Q. Okay. And if I just go back to your timeline, your next

date there is April 17, 2007, the '436 072 provisional was filed. What's a provisional?

A. A provisional, it's one of the things you can file with the Patent Office to preserve some rights. You can file this provisional and you can lay out the basics of a patented idea, and that gives you kind of a document at the Patent Office, that gives you -- allows you to preserve a date of this is when I had something. It's not an actual patent application. So, it's not like you're actually asking for a patent at that point. You're just saying here's my ideas, you know, kind of hold on to them for me. The reason people like to do that is it's much cheaper, and then they work on it to see if the ideas are complete enough and ready enough to file for a full patent.

Q. And on January 1st, 2008, you've got that Mr. Pershing reduced -- I'm sorry, Mr. Pershing's invention was reduced to practice. What does that mean?

A. Well, that's when they started selling their roof reports. So, that's when they actually had a working system that practiced the patent.

Q. And so let me go forward. What was that system that Mr. Pershing completed in January of 2008?

A. It's a -- it was his entire work flow from ordering to generation of a roof report, and it included this modeling piece of software that was called Render House.

Q. Okay. And did Render House output the roof reports that you see in the patent claims?
A. This work flow, this system generated these roof reports that were provided by -- that are required by the claim, yes.
10:11AM MR. BROWN: Can we go to slide 207, please, Mr. Thomas?
BY MR. BROWN:
Q. I'd like you to walk through, and we'll do this expeditiously because we've covered these patents a lot
10:11AM already, but walk through that, how EagleView's products, including the Render House product, meet the patent claims. Okay? So, is Render House the only product that EagleView has that covers the claims of the patent?
A. Render House was their first product. They continued
10:11AM development and released a second product called Twister a couple of years later.
Q. Okay. And did you review the Twister and Render House programs?
A. Yes.
10:12AM Q. And what did you do with them?
A. Well, I did the steps of, you know, requesting a report through the portal, you know, did the steps of working with the Twister software to build a three-dimensional model using the tools they provided and then ultimately generated a roof
10:12AM report.

Q. Okay. So, let's jump forward. Did you come to a conclusion about whether both Twister and Render House practice the '436 patent asserted claims 2 and 36?
A. Yes, they both practice the so-called correlation patents.
Q. Okay. So, let's just go through that. We've already talked about those first elements in great detail. Did you find that Twister and Render House have the memory and a roof estimation model and operate on a computer system?
A. Yes, these are computer implemented software that, you know, produce this product. They have computers with memory, software, they have processors, all the normal stuff you find in a computer.
Q. Okay. And then let's move forward to the elements of the aerial image. Do you find that Twister and Render House receive two, at least two aerial images, one that's a top plan, one that's like a top view and one that's a perspective view just like the patents require?
A. Yes.
Q. And what are you showing here in PTX-299 at 54?
A. Here is the Twister user interface. You can see both images here, a top down view on the left and a perspective view on the right.
Q. Okay. And likewise, what are you showing here for Render House in PTX-301?

A. This is the other product, Render House, different interface, similar, you know, implementation, though, but the interface looks different. You see a top down view. Unfortunately, it looks to be a little bit covered by me, but it's being displayed in the bottom right-hand corner there. And then the other views, including the bigger one on the top left, is a perspective view.

Q. And I know we have to go through this, but were you surprised at all that EagleView's products practice the patents that they have in suit?

A. No. Clearly they were all about this invention and trying to build a product that met that invention.

Q. Let's go to the next claim of the '436, the correlate elements. We talked about them at length, so I won't reread the elements, but did you find the correlate functionality in EagleView's Twister product?

A. Yes. So, in Twister, you did an initial drawing on something like a top down view and the vertices were numbered. You can see the drawing there and you can see the little numbers on them. This is a video and I'm showing as I move around. And what I'm doing is I could select a number, and in the image on the right, you will see the numbers aren't lined up currently with the same features, they're kind of scattered around. Some of them are a little bit close, but as I select the number on the left, I go to the right and select in that

spot where that number should be. I'm generating that correspondence to register the two images to give me the necessary three-dimensional information.

Q. And how does that relate to the point-to-point correlation that we've been talking about in this case?

10:15AM

A. That's a clear example of that point-to-point correlation process that's required by the claims.

Q. And what about Render House, does Render House also have the correlation element?

10:15AM

A. Yes, there's kind of two versions of Render House we have to talk about here, the kind of current version and then the initial version. The current version is built into Twister. It's kind of an option to instead of using the Twister tools to draw, you can go draw with Render House. Some people like

10:15AM

the older interface, and so they kind of kept it as an option. So, the current version of Render House uses the correlation provided by Twister. So, you do the same, the same correlation we just showed in Twister in order with the modern version of Render House.

10:16AM

Q. Okay. And did you also review any of the Render House documents that showed you how the earlier version worked?

A. Yes. So, here's a manual about the earlier version of Render House which wasn't integrated with Twister, so it was not using that correlation process of Twister as they do

10:16AM

today. In the earlier version of Render House, they talk

about setting a reference plane. And the idea, what they talk about here is you're going to select three points on the image all at the same play, they basically say to, you know, suggest to point -- select three corners of the roof. So, it's all three co-planar points.

10:16AM

Q. And this is PTX-452 for the record that you're looking at on the slide. I'm going to move forward a bit to the generating, based at least in part on that correlation, the 3D model elements that we talked about. Did you see that Twister generated the 3D models at issue?

10:17AM

A. Yes. So, once you do the correlation, you do the rest of your drawing, you modify it, you get it to line up with multiple images. The way you get the 3D information out correctly is through that correlation process. You don't have the 3D information without having done this correlation. Here I'm showing the, kind of the final visualization of that wireframe model. It's 3D. I can rotate it and see it from multiple perspectives.

10:17AM

Q. Okay. And what about Render House, does Render House have the 3D model of the '436 patent claims?

10:17AM

A. Yes. Here is an example of -- I selected the view of the model at this point. The model now, after you do the correlation, can now have accurate roof slopes and three-dimensional information.

Q. Okay. And then what about the roof report elements, do

10:18AM

the Twister and Render House products output the roof report required by the claims?

A. Yes.

Q. Okay. And let's do this. Actually, let me just do that. Go to this slide. How do you know that the Twister and Render House products create a roof report and how does it do it?

A. Well, keep in mind this is part of an overall system, you know, this piece of software that's Twister and Render House is the modeling software that generates the three-dimensional model. It works very similar to what Xactware does, that modeling software. It outputs a file. It's somewhat readable, but it's not really meant for a person to read. It's meant for another computer system. It's designed for another computer system to integrate in. And they have another piece of software that -- that's part of the computer system called the House Report that takes that computer readable file and generates that final House Report that we keep on seeing examples of.

Q. Okay. And for the record you're showing a screen shot of PTX-299 at 2130. And if we jump forward -- well, actually, what are you showing here?

A. This is my final part of the process. I'm logging back into my EagleView account after I've done all these steps and once I get logged in -- well, once after I enter the password correctly and get logged in, I will -- I get a -- my screen, I

think I need to scroll down -- oh, I have to hit the button, and you will see where I now have a Roof Report available to me. So, this is how it's transmitted back to the user, and the user has access to the Roof Report.

10:20AM Q. Okay. It looks like you're pulling it up now. Sorry that we included the clip of you getting the password wrong. Okay. And so what are you showing there in the video?

A. This is the Roof Report that was delivered to me based on my drawing, and has, you know, it's a PDF file that I can

10:20AM print out.

Q. And does that Roof Report that you generated, PTX-454, meet all the elements of the Roof Report claims of the '436?

A. Yes, it has all those necessary elements. It has the top plan view. It has things like slope, area, length of the

10:20AM edges, all those requirements that we saw.

Q. And so is your conclusion -- withdrawn.

What's your conclusion about whether Twister and Render House practice claims 2 and 36 of the '436 patent?

A. Like we did with Xactware, we went through the product

10:20AM and each of the claim elements. Fortunately, we did it a little bit faster and found that each of those elements were met, and we were able to show that they do practice their own claim.

Q. And let's just do that briefly for the other remaining

10:21AM patents. For the '840 and '376, again, does Twister and

Render House meet the first few elements of a computing system, memory, and roof estimation module?

A. Yes, for the same reason, it's a computer system, it has software.

10:21AM Q. Okay. And what about the aerial images, the aerial image requirement, we saw that already?

A. Yes. This one only requires you to display one aerial image, but we display that one aerial image, certainly.

Q. And what about the pitch determination marker, how does

10:21AM that happen in the Twister product?

A. In the Twister product, you can see it's that wireframe that is being shown there. What I'm doing, kind of laid over the roof, what you see on the left image is I'm manipulating the pitch of the roof, I'm entering keyboard commands that's

10:22AM making that one roof section steeper, and you can see how the wireframe drawing is moving appropriately.

Now I'm making it worse, right? I'm moving it off the roof to show the impact, but you can see that I can change the pitch. The marker that I'm manipulating indicates that I'm

10:22AM changing the pitch. The video will show at times that the pitch is displayed up there. You can see the pitch highlighted in green up there on the top right-hand corner of the left-hand image.

Q. You're talking right here, and as you are using the pitch

10:22AM determination marker, it's changing the pitch?

A. Correct.
Q. Okay. And what about Render House, does Render House also have a pitch determination marker?
A. Yes. In a similar fashion, it's this wireframe that I can manipulate and adjust. Here I'm grabbing a part of the wireframe and dragging it around. A little harder to see that number there, but you can see at least visually how the -- I'm greatly exaggerating the pitch of the roof. In that red number, that's the pitch, is changing with my change -- with my manipulation of the pitch determination marker.
Q. Okay. And the next element is that -- and just to be clear, for Render House and Twister, did you find that that pitch determination marker was overlaid on the aerial image?
A. Yes.
Q. And so the next element is the receive element of the '840 patent. How do you know that the Twister and Render House products receive, based on that displayed pitch determination marker, an indication of the pitch?
A. Well, the system is clearly receiving it because the model is changing. You can see on the screen how the pitch is changing on the -- for Twister on the left, it shows it right on top of the corner of the screen. We saw it just move, change a moment ago. For Render House, it's shown on the roof itself, a little hard to read, given the size, but I've kind of highlighted it there to bring it out. It shows currently

that the pitch is a plus 4.

Q. And again for the record, you are pointing to PTX-299 and 301 for these elements of the Twister and Render House embodiment.

10:24AM We will move to the next element. How do you know that Twister and Render House modify a model of the roof based on the pitch determination marker?

A. Well, the model is clearly being changed through this manipulation of the wireframe. What you get out of the system

10:24AM at the end of the day is clearly a model based on what we do and how we manipulate the wireframe. So, that means the underlying data that's being stored for the model is changing. What I'm showing visually on the screen is the changing pitch and the 3D visualization of the model on the right showing

10:25AM that's also changing.

Q. Okay. And on the next slide, the Render House, for Render House, how does that -- how do you know that modifies a model of the roof?

A. A similar sort of thing. You can see that, you know,

10:25AM based on my manipulation of the wireframe, the underlying model changes, and so, you know, the roof becomes more steep in the image on the right versus the image on the left before I made the modification. That means the underlying data structure that stores the model has been updated and changed.

10:25AM Q. And when you say the underlying model, what are you

referring to?
A. If you remember, the actual model is these kind of set of numbers inside the data structure inside the computer. That's what the model is. That's how we represent it in a computer system. What we see on the screen is a visualization of the model, a more easily human digestible form of the model. So, but at the end of the day I care about the numbers on the computer.
Q. Okay. And then the last element of the pitch determination marker is providing roof information, including the pitch, and then the roof report element. How do you know that Twister and Render House provide roof information that includes a pitch?
A. You see it on the screen.
Q. And you're pointing again to PTX-299 and 301. And then do they output the Roof Report? You already opined on that.
A. Yes. So, also that information is also in the Roof Report.
Q. And the '376 has the additional requirement that the Roof Report be provided for repair and/or construction. What's your understanding of the purpose of the Roof Reports that EagleView puts out?
A. Well, I think it's been pretty clear based on the testimony you heard so far, that's what these things are used for. They're used for repair and construction.

Q. And we'll move on.

THE COURT: I just want to ask somewhat of a clarifying question. Did you find anything in the defendants' software that the wireframe was not operable to indicate pitch?

THE WITNESS: In the defendants' software? No. I found it was operable.

THE COURT: It was operable? Okay. Thank you.

BY MR. BROWN:

Q. Let's move on to claim 26 of the '454 and claim 12 of the '770, which are the last patent claims to walk through. That's the first element computer system, that's met, is that met by twist and Render House?

A. Yes, for the same reasons we've already stated.

Q. And then the aerial image, we have a first and second aerial image that we have to show for the '454. Does Twister have those?

A. Yes.

Q. And can you say -- just explain briefly how.

A. Well, here is Twister, the interface for Twister. You see the image on the left, the image on the right, they are two aerial images. That's all that's required.

Q. Okay. And how about for Render House?

A. Same, same thing, that Render House shows multiple aerial images on the screen and we have access to multiple aerial

images.
Q. Okay. And so we can skip through the second one because you pointed to that already. What about the line drawings, where are the line drawings in Twister?
10:28AM A. There's these -- these line drawings are these kind of wireframe line drawings that are overlaid over the aerial images. I've highlighted them on the left image, the first line drawing in purple. It's the same sort of thing we saw on the other products.
10:28AM Q. And what about in Render House?
A. Similar sort of thing, again, it's this, you know, projection of the underlying model on top of the -- on top of the roof as a line drawing, that's a second line drawing.
Q. And then do the other images on the screen in Twister
10:28AM also have line drawings?
A. Yes. When we look at the second image to the right, they also have a line drawing which I've highlighted in orange.
Q. And are the line drawings that we're talking about the same or different than the visual markers that we have for the
10:29AM claim, for the '770?
A. No, in this case the visual, the line markers act as visual markers. We can manipulate them and use them as a marker.
Q. Okay. Now let's go on to the user input. Can the user
10:29AM change the wireframes that you are identifying?

A. Yes. I think we have already seen how a user can grab sections and move them around using keyboard commands and mouse commands. Here I'm showing in Twister, I'm grabbing -- I'm moving the ridge line kind of over the garage there, I'm extending it upwards, and you can see that also happening in the image on the right.

Q. Okay. And then what about Render House?

A. Yes, a similar sort of thing with Render House, I'm manipulating that kind of back roof section, that back line, and you can -- as it moves, a line will move in other images.

Q. Okay. And then if we go to the next claims, we also have to show that that second line drawing gets updated as the first is being moved by the user. Can you explain how that happens?

A. Yes. So, remember this claim is the one that requires me to, you know, manually move one -- the one image, but then the computer to move in a corresponding fashion a line in -- the same lines in the other image. And you can see here as I extend the peak above the garage in the left image, the computer is changing the lines in a corresponding fashion in the right image.

Q. Okay. And what about for Render House?

A. Similar, similar sort of thing where I am changing the line along the back edge of the roof there and you can see a change, also, in the other images. It's a little bit, the

detail is pretty small, so I put a green arrow down there to point you to where it's actually changing.

Q. And then the Roof Report element, I think you've already covered.

10:31AM A. Yes, same sort of requirements, the Roof Report generates and has all those elements.

Q. Okay. And finally, the wireframe construction, wireframe model construction element of the '770, how does that happen in Twister?

10:31AM A. Once you have completed all the drawings and, you know, modified it above all the aerial images, that is what generates that final model. Here is the visualization of that model. You can see it's a wireframe. It's a bunch of edges connecting together that give you the view of what the roof

10:31AM structure looks like.

Q. Okay. And how about Render House, does Render House have the wireframe auto construction element?

A. Yes, same sort of thing. Once you have modified and got the lines the way you like them, it provides a view of the

10:31AM wireframe. I show it down in the bottom right-hand corner. You can see all the important roof structures delineated.

Q. Okay. Can we go to slide 278, please? And is it -- have you come to a conclusion about whether EagleView's products embody the asserted claims in this case?

10:32AM A. Yes. I came to the conclusion that all the products,

both products practice all the claims.
Q. Okay. The homestretch, last three slides of your presentation. If we go to slide 297. There's been an allegation in this case that EagleView's technology can be
10:32AM replaced by a Google Earth modeling tool. Do you have an opinion on that?
A. Yes. I'd have great doubts that you can actually ever use this in an effective way.
Q. And why does what Google Earth does in their tool differ
10:32AM from what EagleView's patents provide?
A. Well, Google Earth, if you have used it, you can look at scenes and you can navigate around and find your house and things like that, and it has some 3D dimensional aspects to it. It's not particularly accurate in terms of that 3D model.
10:33AM You see a lot of strange things, especially with trees and things like that, that are clearly not modeled very accurately. And so you see a lot of distortions there. That's just going to really kill any sort of accuracy you might be able to get out of that product.
10:33AM Q. Okay. And what about GeoEstimator, who is -- well, did you review a company's products from GeoEstimator?
A. Yes.
Q. And what do you think about their products? Can they replace what EagleView's patents do?
10:33AM A. No, they also had accuracy problems. That seemed to be

very desirable in the marketplace, that accuracy was critically important. So, they were not accurate.

Q. Okay. And finally, there were a number of other companies that defendants thought had roof reports. Let me ask you very quickly, what is your opinion about whether Symbility, RoofLogic, Autodesk, AppliCad, Blom, Microsoft Bing, Cyclomedia, Digital Globe, Astrium, Planet Labs or Google Earth were non-fringing alternatives to EagleView's patents?

10:34AM

A. I think if I followed your reading correctly, all of those that you mentioned don't produce any sort of roof report.

Q. Okay. And what about iBuild Imagery, SkyRoof, ConnectRoof, ConnectPoint, RoofShots, SkyTek, and GeoEstimator?

10:34AM

A. They all had problems with accuracy. So, this was a key step that made EagleView successful. It came out of this correlation that Mr. Pershing developed. These other companies were not using that, and they just had very inaccurate reports for what they did.

10:35AM

Q. And I unintentionally left out Precigeo and Sungevity. Does that fall into that same answer?

A. Correct.

Q. Okay. And then what about CoreLogic and SkyMeasure, have you seen any evidence that those companies were non-infringing

10:35AM

alternatives?
A. No. I think it's possible that CoreLogic may be actually an infringing product.
Q. And let me end on Aerialogic and RoofWalk. I think we heard about those in the opening. What happened with Aerialogics and RoofWalk?
A. Well, they were a product at one point that offered a roof report. EagleView believed they were infringing. They sued them. And, you know, they settled by Aerialogics going out of business. They kind of did the right thing. They found out they were infringing. They no longer offered the product, and so they're out of business. So, clearly they're not a non-infringing alternative.
Q. Thank you, Professor Stevenson.
MR. BROWN: Your Honor, we have a number of exhibits that are unobjected to that we would like to move in.
THE COURT: Go ahead.
MR. BROWN: So, the unobjected to exhibits from Professor Stevenson are PTX-193, 246, 269, 317, 322, 341, 343, 344, 370, 388, 403, 404, 406, 411, 419, 420, 421, 423, 452, 517, 525, 557, 612, and 925.
THE COURT: Okay. No objection?
MR. SEEVE: We have no objection, your Honor, except to the extent, as we discussed yesterday, we object to any exhibits not yet entered into evidence that will be entered

later, as we understand it, through the plaintiffs' proffer through read-ins.

THE COURT: That's my subject-to ruling?

MR. SEEVE: Yes.

10:37AM MR. BROWN: Those were the unobjected. Those are not the exhibits that were the subject of that.

THE COURT: Okay.

MR. BROWN: Those were the ones that no objection was rendered.

10:37AM THE COURT: So those that you have just identified are in evidence.

MR. BROWN: Thank you.

THE COURT: The ones that I have allowed subject to, you're not moving in.

10:37AM MR. BROWN: That's correct.

THE COURT: Okay. Understood.

(PLAINTIFF EXHIBITS PTX-193, PTX-246, PTX-269, PTX-317, PTX-322, PTX-341, PTX-343, PTX-344, PTX-370, PTX-388, PTX-403, PTX-404, PTX-406, PTX-411, PTX-419, PTX-420, PTX-421, PTX-423, 10:36AM PTX-452, PTX-517, PTX-525, PTX-557, PTX-612, and PTX-925 WERE RECEIVED IN EVIDENCE.)

THE COURT: You are concluding?

MR. BROWN: I am passing the witness, yes, your Honor.

10:37AM THE COURT: Cross?

Everybody good over there or should we break? Might be a good time to break, yeah? Yes.

Okay. Ten-minute break.

THE DEPUTY CLERK: All rise.

10:38AM (The Jury left the courtroom at 10:38 a.m.)

THE COURT: Okay. See you all in ten minutes.

(A recess was taken at 10:38 a.m.)

THE DEPUTY CLERK: All rise.

THE COURT: Okay. All set?

10:54AM Bring the jury in.

THE DEPUTY CLERK: All rise.

(The Jury entered the courtroom at 10:55 a.m.)

THE COURT: Okey-doke. You can have a seat. Thank you.

10:55AM Okay. Cross-examination, Mr. Seeve.

MR. SEEVE: Thank you, your Honor.

BY MR. SEEVE:

Q. Good morning, ladies and gentleman of the jury. Good morning, Dr. Stevenson. My name is Brian Seeve, for

10:56AM defendants, Xactware and Verisk. And I'm going to be asking Dr. Stevenson about his testimony. I'm going to try to be as brief as I possibly can.

I understand that life threw you a curve ball on Monday and this might not be your favorite week ever, but I'll try to

10:56AM be as quick as I can.

(CROSS EXAMINATION OF ROBERT STEVENSON BY MR. SEEVE:)

Q. Dr. Stevenson, your testimony yesterday and earlier today involved a lot of videos and images showing you and others dragging a wireframe model around an aerial image to make it line up with the roof; is that right?

10:56AM

A. I mean, it certainly shows more detail than that, but I accept your characterization.

Q. Thank you, Dr. Stevenson.

And just so I understand your noninfringement arguments -- or, I'm sorry -- your infringement arguments in this case, your testimony is that dragging a wireframe model around the screen and lining it up with an image, broadly speaking, satisfies the correlation requirement of the '436 patent; is that right?

10:56AM

10:57AM

A. No, I don't think that's accurate.

Q. So it doesn't satisfy the correlation requirement of the '436 patent?

A. Well, I mean, I went through detailed analysis of how I did correlation. You know, your characterization seems to include a lot of other things that could possibly not infringe, but, you know, the detail analysis I did, how exactly how they showed it certainly is what I did to show infringement.

10:57AM

Q. And you also showed -- I think this was also dragging a wireframe around the screen -- you showed moving a ridge line

10:57AM

from one part of an aerial image to another part of an aerial image. And I believe your testimony was that this satisfies the roof -- the pitch determination marker of the '840 patent. Isn't it?

10:57AM A. That's a way you can change the pitch in using the marker provided in the software.

Q. And you also testified that the same thing satisfies modifying a model based on the pitch that's in the '376 patent claim at issue, right?

10:58AM A. Which one is the '376? Can you --

Q. The '376 is another pitch determination claim.

A. Yes, okay, the second pitch determination.

Q. Yeah.

A. I mean, you could use this wireframe, you could operate

10:58AM the wireframe, and at the end of the day, when you're done, you've modified a preliminary model to generate this final model.

Q. And your theory of infringement -- your argument for why the '770 patent is infringed also involves dragging a

10:58AM wireframe around an aerial image, right?

A. Well, it's a separate tool on a separate part of the operation, but the operation itself is manipulating a wireframe.

Q. So, but it is the case that something you identified as

10:58AM satisfying the claim terms of the '770 patent could also, in

your view, satisfy the correlation requirement of the '436 patent, right?

A. You're jumping back to the correlation. I mean, there is parts of the correlation analysis we did that didn't really involve dragging a wireframe model around, so I guess I'm confused by your question.

Q. Basically, what I'm asking here, Dr. Stevenson, is we saw a lot of dragging a wireframe model around an aerial image, and it seemed like that satisfied, in your view, the requirements of the claims of all five of the patents in suit, and I just want to make sure that that's a correct understanding of your testimony?

THE COURT: Are you limiting your question to the wireframe, I think is the witness's question?

MR. SEEVE: Yes, I am limiting my question, in this particular question, to dragging a wireframe model around the screen.

THE COURT: As opposed to a line drawing, et cetera?

MR. SEEVE: Well, the difference between a wireframe and a line drawing is something we are going to get into.

THE COURT: Which is why I think the witness is asking for clarification. Are you limiting your question to wireframe only?

MR. SEEVE: Yes, your Honor.

THE COURT: Okay.

MR. SEEVE: This question is limited to wireframe only.

THE COURT: Okay.

THE WITNESS: Well, the -- there is no doubt that the wireframe model that's generated on the computer is at the core of this -- core of this invention and at the core of my analysis. The visualizations that show up on the screen, the tools that the software provides for manipulating that data model are certainly also core to the separate analysis. The different -- the reason I broke it up into kind of three different groups is because how you go about operating it, when you go about operating it, what tools are available changes as you go through the stages of modeling. So, yes, the underlying wireframe model is certainly central to my analysis. How you operate it at different times satisfied different elements of the different claims.

Q. Now, when you say core to the invention, does this case involve only one invention, Dr. Stevenson?

A. No, there is six separate claims, so there is six separate inventions.

Q. So this same wireframe and dragging it around the screen is core -- part of the core of all six of these different inventions?

A. Maybe I misspoke. The inventions are the inventions.

In terms of my analysis, the wireframe and how the

wireframe is being used within the Xactware systems is certainly core to my analysis.

MR. SEEVE: Could we put up, Mr. Frasier, Slide 127 from plaintiffs' demonstratives?

11:01AM (Document was published.)

BY MR. SEEVE:

Q. Dr. Stevenson, this is one of the slides that you prepared in connection with this litigation, isn't it?

A. Yes.

11:01AM Q. Now, going back to the correlation requirement of the '436 patent, I believe you identified two different things that you say meet that requirement. There is epipolar movement and there is aerotriangulation; isn't that right?

A. Right, two separate ways which they practice that claim.

11:02AM Q. And this slide here, this slide is about one of those things, epipolar movement, isn't it?

A. Correct.

Q. And your point in bringing up this slide was to show that epipolar movement is used a lot, right?

11:02AM A. Yes, it's clearly used a lot. And it's needed to be used in most of the models.

Q. Do you have a slide that shows how often aerotriangulation is used?

A. I don't know if I generated a slide like that.

11:02AM Q. Did you examine how often aerotriangulation is used as

part of your analysis?
A. Yes, I did.
Q. But you didn't include a slide, right?
A. I didn't put a slide in front of the jury yesterday.
11:02AM Q. Why not?
A. This was making the point that I was trying to make, which is they needed to do this correlation stop almost every time they want to generate a Roof Report.
Q. Is it because aerotriangulation isn't actually used that
11:02AM often?
A. Well, if you look at the similar sort of data for aerotriangulation, early on, it was used a lot. These days, it's used much less.
Interesting note, if you kind of add up the two
11:03AM numbers, they add up to over a hundred percent. So that might suggest that absolutely every single time, they have to do either aerotriangulation or this Edit Property type correlation.
Q. Is it your testimony that correlation is performed more
11:03AM than a hundred percent of the time?
A. No. It's -- the evidence shows that it may be presented a hundred percent of the time because they do this 99 percent of the time. And while I don't remember the exact number, it's certainly more than one percent of the time they're doing
11:03AM aerotriangulation. So I don't have the cross analysis to know

exactly if it's a hundred percent. It may be. It's certainly more than 99 percent and 98 percent, in those years.

Q. So this is about epipolar movement as we just discussed. But you also walked the jury through some steps involving aerotriangulation yesterday, didn't you?

11:03AM

A. Yes.

MR. SEEVE: And, Mr. Frasier, if we could go to Slide 108.

THE COURT: Just -- just briefly describe the difference between the two for the jury's benefit, would you please, and the Court's? Thank you.

11:04AM

THE WITNESS: Sure.

This is talking about the Mass Production Tool, which was the very first product we looked at in great detail. And there was two different ways you could do aerotriangulation -- excuse me -- this correlation step.

11:04AM

There is one called aerotriangulation. It involved me -- the video showed me drawing an outline, six sides of around the house, and then when I moved to other images, there was a white box that, you know, had that outline and I moved that around. That was aerotriangulation.

11:04AM

The other way was through this Edit Properties tool. Edit Properties, you drew a preliminary model of the roof. I drew the hip roof, and then when I moved into another image, that hip roof wasn't sitting on the roof, and I did this

11:04AM

epipolar movement thing that allowed me to move it down to the roof.

THE COURT: Thank you. Okay.

BY MR. SEEVE:

11:05AM Q. Thank you, Dr. Stevenson.

This set of slides relates specifically to aerotriangulation, doesn't it?

A. Correct. That's part of the presentation I did on aerotriangulation.

11:05AM Q. And I think yesterday you told the jury that you prepared this sequence of slides to walk them through the steps of what you believe constitutes infringement in this case, right?

A. Yes, that's what I attempted to do.

Q. Now, if you look closely at this, and here, I will use

11:05AM this laser pointer. Ah, it works.

If you look closely at this time down here, can you read what that time says right here?

A. It looks like it's 1:21 p.m. on March 15th, 2018.

Q. Thank you.

11:05AM Now, if we advance a few slides further to plaintiffs' Slide 111, this is further in the process that you were walking the jury through yesterday. If you could read the time stamp there.

A. Well, this is actually not further along in the process.

11:06AM This is showing the other type of correlation. This is not

showing aerotriangulation.

Q. Sorry.

This is 12:53 p.m. here, is this correct, Dr. Stevenson?

11:06AM A. Well, yes. This is not an aerotriangulation slide, but, yes, it does say 12:53.

Q. And if we move even further in this sequence of slides to Plaintiffs' Exhibit 113, now, it's -- suddenly it's 1:41 p.m., right, Dr. Stevenson?

11:06AM A. It's 1:41 p.m. on the slide, yes.

MR. SEEVE: And if we advance one more slide, please.

BY MR. SEEVE:

Q. Now, we are back to 1:26 p.m., right, Dr. Stevenson?

A. I see it. It's at 1:26.

11:06AM Q. Now, this sequence of slides, you testified yesterday, was walking the jury through the steps of how you would use the accused software to infringe the patents supposedly. Why did you have to jump around so much, Dr. Stevenson?

A. Well, I don't believe I jumped around. I believe if you

11:07AM watch the entire video, you'll see the entire sequence. We showed snippets of the video, but we provided the entire video. The video is over a half hour. I did not think the jury would want to sit through a half-hour video of me moving a mouse around the screen, and so to make the points, I used

11:07AM the clips as I discussed about each element, but I'm walking

through the claims and how you operate the software.
Q. I understand that you didn't want to play the entire video for the jury. It's long and their time is valuable. But it's not just that you cut out portions of the video, is it, Dr. Stevenson? You skipped ahead and then back and then ahead and then back in your presentation of how supposedly the accused products infringe the patents in suit, right?
A. I sat in front of the computer and operated and did various tools -- used the various tools in the way that I found infringement. I wasn't skipping ahead and skipping back. I presented it in the order going -- walking through the claims.
MR. SEEVE: Mr. Frasier, could we go to Plaintiffs' Exhibit -- or Plaintiffs' Demonstrative 46, if you wouldn't mind.
(Document was published.)
BY MR. SEEVE:
Q. Now, this is another one of the slides you presented to the jury yesterday, right, Dr. Stevenson?
A. Yes.
Q. And you can see the title here is Wireframe Correlation; is that right?
A. Yes.
Q. Does that term appear anywhere in the claims of the patents at issue here?

A. I would probably have to review, but I don't know off the top of my head. Good chance it does not.
Q. So you don't -- I mean, these are the claims. There is only six of them in the case. These are the claims you
11:08AM testified at length about yesterday and today. You don't know off the top of your head whether "wireframe correlation" appears in those claims?
A. Oh, in the claims. I thought you said in the patents.
In the claims, I don't believe it appears in the
11:09AM claims, no.
Q. Is this a term that appears in the patents? I think you might have just answered my question. You don't know off the top of your head; is that right?
A. Yeah.
11:09AM Q. And is it a term that appears anywhere in your report that details your opinions of infringement in this case?
A. I don't know. I mean, I'd have to do a search on the report.
Q. It probably wouldn't surprise you to learn that we looked
11:09AM it up last night, would it, Dr. Stevenson?
A. Well, if you're asking the question, I guess you prepared to ask the question.
Q. The term "wireframe correlation" doesn't appear in the claims at issue; the term "wireframe correlation" doesn't
11:09AM appear in the patents in suit; and the term "wireframe

correlation," at least to your recollection, doesn't appear in the report that you prepared detailing your opinions in this case; isn't that right?

A. You might be right. I'm not disagreeing with you.

11:09AM MR. SEEVE: If we could bring up Claims 1 and 2 of the '436 patent, Mr. Frasier.

(Document was published.)

BY MR. SEEVE:

Q. We can see Claim 2 on the right there. You recognize

11:10AM Claim 2, Dr. Stevenson?

A. Yes.

Q. You can see here that correlating involves receiving an indication of one or more corresponding points on the images. Do you see that, Dr. Stevenson?

11:10AM A. Yes.

Q. Doesn't say anything about wireframes, does it?

A. No.

MR. SEEVE: So if we could go back to Slide 46.

(Document was published.)

11:10AM BY MR. SEEVE:

Q. I understand that your contention is that the wireframes in the accused products satisfy the correlation limitation, but there is no such thing as wireframe correlation, is there?

A. Well, I'm sorry you found the phrase confusing. That was

11:10AM not my intention.

What I was just trying to get across to the jury was there are multiple ways in which you can do correlation, and, in particular, you can do this point-to-point correlation, one of which is through using the important features of a wireframe, the corners and the ridge lines, as important features and using that to create the point-to-point correspondence. That's what I was trying to explain with this slide.

THE COURT: So is another way of saying it is that the wireframe contains the points?

THE WITNESS: Certainly, the wireframe contains the points, and particularly when you -- when you drag the wireframe, what you're dragging is those corners and those points and trying to line them up with the other features so...

BY MR. SEEVE:

Q. So, just to clarify, Dr. Stevenson, once the wireframe already exists, and the wireframe already exists in these images, and you line it up with the house, that's what you're calling correlation in this instance, in response to the judge's question just now?

A. Well, the -- the wireframe, we have some sort of preliminary sketch at this point before you do correlation. Before you do correlation, you certainly don't have the final wireframe model because none of the measurements are

necessarily right. So the -- the wireframe you have in this sketch, this preliminary model, you use that as part of correlating the multiple images.

Q. A preliminary model, Dr. Stevenson, you used that term yesterday too. That's a model, isn't it, Dr. Stevenson?

A. Well, it's just referring to this idea that, you know, the way the patents teach someone to build a model is to, you know, start with a model and modify it, right? You start with some preliminary model and you modify it, you make changes, make tweaks, to make these alignments come up, and, at the end of the day you have, finally, the roof model. Before then, you have, you might say, drafts of the roof model or preliminary models.

Q. So when you generate a preliminary model, does that satisfy the "generate a model" limitation of Claim 1 of the '436 patent?

A. The preliminary model by itself would not, no. It's -- you have to -- the model you have to generate in the '436 is the one that ends up in the report.

Q. So are you saying that the '436 patent, when it talks about generating a model, isn't talking about generating a preliminary model; it's talking about generating some other kind of model?

A. Well, I think if you bring up the language of the '436, it's actually pretty clear that the model that's being

discussed in the '436 is the model that is going to end up in the Roof Report.

Q. Let's do that.

MR. SEEVE: Let's bring up Figure 9 of the '436 patent.

(Document was published.)

THE COURT: Now, you're going to refer to a figure as opposed to the language in the claim, which is what the witness's testimony was, just so we're clear.

MR. SEEVE: So, I believe the witness asked if we could bring up the language of the patent. We are happy to bring up the language of --

THE COURT: Of the claim. His answer was the claim.

MR. SEEVE: We can go to the claim in just a moment, your Honor, if that's okay.

THE COURT: Okay.

BY MR. SEEVE:

Q. So here --

MR. SEEVE: If you can blow up Box 902, Mr. Frasier. Sorry to give you an on-the-fly request here.

BY MR. SEEVE:

Q. So here we see generate a preliminary model of the roof based on the received image. So that's what the patent is talking about, isn't it, Dr. Stevenson?

A. Yeah. I think that's exactly what I just testified to.

MR. SEEVE: And now if we could go to the claim.

(Document was published.)

BY MR. SEEVE:

Q. Here we see generate based, at least in part, on the correlation of three-dimensional model. Is there any reason you have to believe that this claim isn't talking about a preliminary model here?

A. Sure. If you look at the next element, it says, generate and transmit a roof estimate report that includes -- and I will skip some language -- views of the three-dimensional model. So what ends up in the report is the model.

The generate step that you're talking about that is talking about generating the model generates this preliminary model, which you then modify. The model that ends up in the report is the final model, not this preliminary model.

THE COURT: And that's the language that's in the claim, the final model?

THE WITNESS: Yes.

THE COURT: Yes. Okay. Next question.

BY MR. SEEVE:

Q. So, just to be clear, the language that's in the claim doesn't include the word "modify," does it, Dr. Stevenson? It just includes the word "generate"?

A. Yeah, I see the word "generate."

Q. So if you generate a preliminary model and then you

modify that preliminary model, is your testimony that suddenly you've created a different model, the model that's in the claim, just by modifying it?

A. Well, I guess I'm disagreeing with -- I never point to the preliminary model as satisfying this element. The -- what I point to is the final model that is used to generate the report. The steps for generating that final model includes everything from, you know, grabbing the aerial images to, you know, generating the preliminary model if you do it as taught by the patent, modifying it, any of those steps, until I get to a final model. So to generate the model that's being talked about is all of those steps. That's how you do generate the model there.

Q. So your testimony, just to be absolutely clear, is that you haven't generated a model until you have a totally final model that you're ready to print into a Roof Report; is that correct?

A. You haven't generated the model required by Claim 1 until you have the model that you put into the Roof Report.

Q. So let's talk a little more about models and wireframes.

MR. SEEVE: If we could jump to Demonstrative Number 147, Mr. Frasier.

(Document was published.)

BY MR. SEEVE:

Q. So, I believe yesterday you testified that you can't use

a top-down view to calculate the pitch of a roof model; isn't that right?

A. Not by itself. You have to do these other steps in order to be able to find the pitched.

11:17AM Q. Now, this -- this wireframe that you see here on the left overlaid on an aerial image, you identified that yesterday as a pitch determination marker, didn't you?

A. Yes.

Q. And it's on a top plane view of the roof, isn't it?

11:17AM A. This is -- this is further in the process, after we have done the correlation between the various images. So it's -- I'm not doing it based on that image alone, I'm determining the pitch. It's -- I'm basing it on all of the steps I did before, which required something other than a top-down view.

11:17AM Q. But you agree that this is a top-down view, don't you, Dr. Stevenson?

A. It's a top-down view and, by itself, it would not be able to determine --

Q. And you did call that wireframe --

11:17AM THE COURT: Hang on one second. Let him finish, please.

THE WITNESS: And, by itself, I agree with you, it would not be able to determine a pitch.

BY MR. SEEVE:

11:17AM Q. And you did call that wireframe a pitch determination

marker though; you just admitted that a second ago, right, Dr. Stevenson?

A. It is a pitch determination marker, yes.

Q. So what you're calling a pitch determination marker isn't able to determine the pitch; isn't that right?

11:18AM

A. It is because we did walk -- we did all those processes leading up to here, where we took the images and correlated them between each other by either aerotriangulation or the edit properties. After that, the ones I have that, these line drawings over any of the images can be used and manipulated to determine the pitch.

11:18AM

MR. SEEVE: Could we go forward one slide, Mr. Frasier, to Slide Number 148?

(Document was published.)

BY MR. SEEVE:

11:18AM

Q. Now, here, on Slide 148, we have some wireframes that are shown up top there, right, Dr. Stevenson?

A. Yes. Those are those visualizations of the wireframe I talked about.

Q. And then we have some boxes with numbers in them down below that you have labeled Roof Models, haven't you, Dr. Stevenson?

11:18AM

A. Yes.

Q. So are these two different things, in your view? Is the wireframe a different thing from the roof model?

11:19AM

A. Well, I hopefully explained this, I tried to be clear about this point, because I understand how it could be confusing.

The model is really a collection of data that's stored inside the computer. We do all this stuff to generate the model so that we have data that we can then interpret and understand and utilize. So the model is this collection of numbers. All these tools in, you know, I have even developed tools like this myself, that data is hard to read. While it's readable, it's kind of not very friendly, so we built tools to visualize the model.

So what's shown above them is a visualization of the model. The computer goes in, looks at all those numbers, understands -- you know, understands how it's supposed to look, what it's trying to represent, and draws a picture that is much easier for a human to interpret.

Q. So, I just want to make sure that I fully understand this distinction that you're drawing, Dr. Stevenson. The wireframe is a projection of something and it's distinct from the underlying roof model; is that correct?

A. I find your -- sorry -- your language of wireframe as a projection, that doesn't quite make sense.

Q. A wireframe is not a projection of the roof model; is that correct?

A. Well, the way I would say it is we have the roof model.

The roof model is a wireframe. What we find useful is to project that onto a screen, and it's a line drawing that sometimes is referred to as, you know, the line drawing of the wireframe. It's quite often shorthand to the wireframe, but the wireframe model is the underlying data.

Q. So I guess maybe you're answering a question that I think is probably more complicated than the question I'm trying to ask.

I'm just asking you: Those wireframes we see at the top of that slide, in the, you know, grids and looks like a wireframe model of a roof, is that the roof model or is the roof model something else? It's just a -- just trying to get a sense of whether they are distinct in your view.

THE COURT: Do you understand the question?

THE WITNESS: I don't understand the -- saying they're distinct.

THE COURT: Okay. He doesn't understand the question.

BY MR. SEEVE:

Q. So I'm not sure sort of how I could be clearer, but I'm going to try, Dr. Stevenson.

You used the term "projection" yesterday. Do you remember using that term?

A. I don't have a specific recollection, but it would be a term I would normally use, so, sure.

Q. And I believe you referred to those images at the top that show, you know, wireframe representations of the roof as projections of a roof model. Is that not an accurate characterization of those pictures at the top?

11:21AM A. I'm trying to be clear. You know, the data is what I view as the roof model. It's what I view as the wireframe model that's talked about in the claims. The software generates a visualization of that data for human consumption. That's the drawing at the top.

11:22AM If I change a number at the bottom, I change the drawing -- it changes the drawing at the top because I've changed the wireframe, and my picture is going to change in a corresponding fashion.

Q. I think we are still talking --

11:22AM THE COURT: Mr. Seeve, do you have an example of where he used the term "projected" or "projection" yesterday that you are specifically asking him about? Because he did at times say what is projected on the screen for the ladies and gentleman of the jury, and, in fairness, I want to make sure

11:22AM that we're not confusing concepts.

MR. SEEVE: I don't have an example --

THE COURT: Do you have a specific question that you can refer him to from yesterday?

MR. SEEVE: I don't have an example right here, your

11:22AM Honor. We will, you know, work on that and clarify it.

THE COURT: Okay.

MR. SEEVE: I do see that the term "projection," I hadn't even considered that this is a projector and we're projecting stuff, so it is entirely possible that there might be confusion.

THE COURT: Which is why I have asked the question. Okay.

MR. SEEVE: Let me try to get at this question from an entirely different sort of way.

11:23AM BY MR. SEEVE:

Q. Can you have a roof model without a visual representation of the roof model, Dr. Stevenson? Is that possible?

A. Yes, in theory, you don't have to visualize it.

Q. And could you have one of those pictures up at the top of the screen that you can see that kind of looks like a wireframe roof, and could you have one of those things without an underlying roof model, just an image?

A. In these systems, no.

Q. But, in general, you could?

11:23AM A. Well, I guess I don't understand it. I could draw on a piece of paper something that looks like that. If that's what you mean, yes, you could do that. But in these systems, these systems don't provide that sort of mechanism to generate that sort of drawing without the underlying roof model.

11:23AM MR. SEEVE: If we could go to Page 1066 of

yesterday's transcript, Mr. Frasier.

(Document was published.)

BY MR. SEEVE:

Q. Here, we can see, at Lines 5 through 8, you can see you said, and I'm reading from your testimony, Dr. Stevenson --

11:24AM

THE COURT: Just give him a second, please, to read it.

THE WITNESS: Okay. I see that.

BY MR. SEEVE:

11:24AM Q. You can see you said: It's kind of -- it's a projection of the model that we can visualize, rotate around, and see, and we can kind of play with it and look at it.

You are referring to the wireframe in that, right?

A. I'm referring to that drawing that's this projection of

11:24AM the underlying roof model, that's a visualization of the underlying roof model.

Q. I see. So a visualization of the underlying roof model.

MR. SEEVE: And now, if we could turn to, if you wouldn't mind, Page 1152 of yesterday's transcript.

11:25AM (Document was published.)

BY MR. SEEVE:

Q. You see, at Line 16 is the testimony I'm going to ask you about. If you want to take a moment to read your entire answer.

11:25AM MR. SEEVE: Mr. Frasier, could you blow up Line 16

when you get a chance?

BY MR. SEEVE:

Q. Here you said the wireframe is the underlying model. And this is -- this is the confusion I think yesterday in your testimony that I'm trying to clear up today.

Is the wireframe a visualization of the underlying model or is the wireframe the underlying model? It seems like it could only be one or the other, right, Dr. Stevenson?

A. I guess I would disagree with your characterization, "it could only be one or the other."

Q. So, your testimony is that the wireframe can be the underlying model but also can be a projection of the underlying model, that those two things mean the same thing?

A. You've added words, so, no, they don't mean the same thing. I think the -- the underlying model, which is referred to as a wireframe by everyone here in these systems, that's the underlying model. You know, it's a wireframe model. As I said, a bunch of data, not easily -- while you could read it and interpret it -- they build these tools and it's very common practice to build these tools to visualize, to be able to see what that model looks like. That model is something that's shown on the screen, people refer to it as the wireframe model because -- so that's directly tied to the underlying data model that is the wireframe model.

So you change a number in the model, the projection on

the screen changes correspondingly, to still represent that same data model underneath.

MR. SEEVE: If we could go back to Slide 148, Mr. Frasier.

11:26AM (Document was published.)

BY MR. SEEVE:

Q. One of the things you have in this roof model, this little grid of numbers at the bottom, is this number called pitch. You see, on the left, you have a number, pitch, and

11:27AM the value is equal to 7, then the number its changed to 11 on the right. Do you see that, Dr. Stevenson?

A. Yes.

Q. Is pitch stored as part of the accused products' roof models?

11:27AM A. The -- it depends on the product, but I didn't see that as an important need -- that wasn't a need of the claim.

Q. So you don't know whether pitch is actually part of the model in the accused products; is that right?

A. My recollection is it is stored in -- in at least the

11:27AM Mass Production Tool. I don't remember Aerial Sketch. But like I said, I don't think there is a requirement in the claim for it to store, so -- to store the pitch in the model.

Q. There is a requirement that the model receive pitch, isn't there, Dr. Stevenson?

11:27AM A. Maybe you could refer me to the claim language you're

talking about.

MR. SEEVE: If you could please bring up Claim 10 of the '840 patent.

(Document was published.)

11:27AM BY MR. SEEVE:

Q. So, this is Claim 10 of the '840 patent. We can see at Line 52, it says: Receive based on the displayed pitch determination marker an indication of pitch. And then we can see at Line 55 it says: Modify a model of the roof based on

11:28AM the received indication of pitch. Don't you see that?

A. Yes. So that doesn't require that the model receive pitch. It requires that the model receive an indication of pitch.

Q. So, an indication of pitch, your testimony is that you

11:28AM can receive an indication of pitch without receiving the pitch at all?

A. Clearly. Yes.

Q. And do the roof models in the accused products actually receive the pitch? They don't, do they, Dr. Stevenson?

11:28AM A. Like I said, I don't see where that's a requirement of that. It doesn't say receive the pitch, as you are suggesting. It says receive an indication of the pitch.

Q. I'm just asking you about how the accused products work. And I'm asking you whether the roof models in the accused

11:28AM products receive pitch.

THE COURT: And his testimony was is that he does not see that in the claim language, and I think that was his answer.

Can you explain to the jury the difference between receiving pitch and receiving indication of pitch?

11:29AM

THE WITNESS: Yes.

So pitch is that number at the end of the day that -- in my example I think it was 7 changed to 11. So what I think is being suggested is you actually have to see that 7 become 11 somewhere. I don't see that in the claim languages. It doesn't say receive the pitch. That 7/11 is a pitch. What it says is receive an indication of the pitch.

11:29AM

I talked extensively about the line drawing and the nodes. We even looked at some of the code on this particular thing that was move vertex code, the move vertex -- move selected vertex code, I believe it was called, that that is -- I move something, I'm moving those nodes, that's the indication of pitch that I have identified as practicing this claim element.

11:29AM

We showed that the model receives that indication of the pitch. It receives that information about moving the nodes in that one example.

Q. So I'm just going to reask my question because I don't feel yet, Dr. Stevenson, that you've answered it.

11:30AM

My question isn't about the claim specifically. It's

about the accused products which you did investigate as part of your analysis here.

Do the accused products have roof models that receive pitch?

11:30AM THE COURT: And the question is, if it's not relevant to the claim language, what is it relevant to, Counsel.

MR. SEEVE: So it's not irrelevant to the claim language, Your Honor, the claim requires receiving an indication of pitch and I understand that you believe --

11:30AM THE COURT: Let me see counsel at sidebar.

(SIDEBAR AS FOLLOWS:)

THE COURT: So the witness has testified that the claim language requires to receive indication of pitch, not a pitch. So for you to continue to ask this witness about the

11:31AM accused products receiving pitch, he's testified that they receive an indication of pitch.

MR. SEEVE: I understand.

THE COURT: We're going round and round and I think the question is unfair.

11:31AM MR. SEEVE: So, Your Honor, I do think it's relevant.

THE COURT: Yes.

MR. SEEVE: First of all, if the witness doesn't know whether the accused products received a pitch because he hasn't investigated that, that wasn't part of his analysis,

11:31AM that's fine.

THE COURT: Then you need to establish that.

MR. SEEVE: Well, I'm asking him if he knows, Your Honor, and he's responding with the claim language. That's not a response.

11:31AM THE COURT: But I think you have to make it clear in your -- I think you need to set the question up, his testimony is that the claim requires receive indication of pitch.

MR. SEEVE: Mm-hmm.

THE COURT: Okay. Assume that the claim language 11:31AM requires receiving pitch, then you can ask your question, but I think otherwise, it's becoming very confusing to the jury, the pitch, the indication of pitch, when he's already testified that the accused product receives indication of pitch.

11:31AM So, I think you have to be careful on how you're questioning it.

MR. SEEVE: Thank you, Your Honor. I'll set up the question that way.

THE COURT: While we're all here, I am troubled by 11:32AM the first line of questioning, to somehow suggest that this witness has doctored, and I use that in quotes, the videos. I allowed those videos to be shown as demonstratives because I thought it would aid the jury, and the first line of questioning was, you went back and forth and back and forth 11:32AM and why did you do that, to somehow -- the impression that I

was left with, which the jury may very well have been as well, is that somehow he has doctored up or manufactured an infringement theory by going back and forth and back and forth.

11:32AM I don't know the answer to it. It may very well be that they're going to have to sit through hours of video testimony. I don't know.

I want counsel to think about it and we'll talk about it during the break, but I did not like the insinuation that 11:32AM somehow he has doctored these videos up, or doctored his presentation. I did not like that at all.

MR. CHRISTIE: Your Honor, isn't that a subject for redirect?

THE COURT: No. I allowed them to go in as 11:33AM demonstrative aids, not substantively.

MR. CHRISTIE: Understood.

THE COURT: And if there was an objection that somehow they're doctored up to get to a point, that objection should have been made before, before I allowed them to go.

11:33AM Now the jury is left with the impression, is that he called out what was favorable and left out what was unfavorable.

So if they did not fairly represent the analysis that he did, then I feel the defendants have somewhat sandbagged 11:33AM the plaintiffs by now suggesting that his demonstrative was

solely designed to mislead the jury. That's my problem, and it causes me some grave concern.

How I fix it, I don't know. So we're going to be thinking about that, okay?

11:33AM MR. CHRISTIE: Your Honor?

THE COURT: Yes.

MR. CHRISTIE: If the claim language requires an indication of pitch.

THE COURT: Yes.

11:34AM MR. CHRISTIE: Why should he be asking questions about alternative claim language, because it can be very confusing to the jury.

THE COURT: That's what I tried to get across to counsel for them. So I'm going to give him some leeway and

11:34AM we'll see. I mean, I only want to try the case that's here, but we'll see.

MR. CHRISTIE: Your Honor, quickly before you leave.

THE COURT: Yes.

MR. CHRISTIE: It appears from members of our team

11:34AM that Judge -- that Mr. Stevenson was speaking to members of the jury while we were here at sidebar. If Your Honor could inquire, we would appreciate that.

MR. BROWN: Just now?

MR. CHRISTIE: While we've been here at sidebar.

11:34AM THE COURT: I'm sure it was pleasantries. How would

you like me to handle it?

MR. BROMBERG: Just ask him, what did he say to the jury.

(END OF SIDEBAR.)

11:34AM THE COURT: Ladies and gentlemen, can I have a few minutes? Don't get too comfortable, please. Thank you.

THE DEPUTY CLERK: All rise.

(JURY EXITS; 11:34 a.m.)

THE COURT: Okay. You can have a seat. Thank you.

11:35AM Can we turn that off, please.

Dr. Stevenson, when we were at sidebar having our conversation about the line of questioning, and we'll continue on, did you have a conversation with any members of the jury?

THE WITNESS: No. I looked over at them. I

11:35AM certainly didn't say anything or hear anything from them.

THE COURT: Okay. I don't know where the suggestion came from, but we'll leave it at that.

Okay. Let's bring the jury in.

If at any time my exchanging of pleasantries with the

11:36AM jury becomes problematic, counsel will kindly inform me.

THE DEPUTY CLERK: All rise.

(JURY ENTERS; 11:37 a.m.)

THE COURT: You can have a seat. Thank you, ladies and gentlemen. And we will continue on with

11:37AM cross-examination.

BY MR. SEEVE:

Q. Now that we have had a chance to clear some issues up, I'm going to rephrase the question that I was asking you just before the sidebar, Dr. Stevenson.

11:37AM Let's assume for a moment, that we were talking about a claim that required receiving not just an indication of pitch, but pitch, and then modifying a model based on the received pitch.

Would the accused products infringe this claim?

11:37AM THE COURT: That newly constructed claim.

MR. SEEVE: That newly constructed claim.

THE COURT: That's not at issue in this case.

MR. SEEVE: And it's purely hypothetical, Your Honor.

THE COURT: Purely hypothetical. Okay.

11:37AM THE WITNESS: Okay. You know, typically, I would say that, you know, I would want to do more analysis potentially to address this. It's clear -- it's pretty clear that the pitch shows up when we draw the -- that visualization that we have been talking about, and so that's visualization of the

11:38AM data that's in the model.

So the data that is stored within the model certainly represents that pitch value accurately.

So my inclination is, yes, it probably would. If you want to know more details exactly how it was received, I'd

11:38AM probably look at some code.

THE COURT: We'll stick with the claim language at issue here.

Okay. Next question.

BY MR. SEEVE:

11:38AM Q. So let's actually go to some code, as you just suggested sticking to the claim language here, we're no longer talking about hypothetical claims. We're just talking about the actual claims at issue here just to make that absolutely clear.

11:39AM Yesterday, I believe, you brought up some source code that you had used in forming your opinions about the pitch determination marker.

Do you remember that, Dr. Stevenson?

A. Yes, I thought -- the term that we've been throwing around a lot, I thought it would be useful to see what some looked like.

Q. So this is that source code. I don't know if we can blow this up -- I mean, it might not help the jury. Sorry, I'm new to Elmo technology.

11:39AM This is that source code here. Do you recognize the source code, Dr. Stevenson?

A. Yes, that's a portion of the code I showed yesterday.

Q. And you explained yesterday that source code basically gives -- it's a programmer telling the computer what to do, that's how the software is written, is that right?

11:39AM

A. Yes. This is the -- this is the stuff that the programmers sit down when they're programming, they're writing this out, they're typing this into the computer system.
Q. And you also pointed out that even though this is incomprehensible to most of us, I'm sure you understand it, that it does have some English words in it, variable names and comments that were written by the programmer to help them and other programmers understand what's going on, is that right?
A. Yes, that's generally what you see.
Q. Do you see the word, "pitch," anywhere in the source code that you brought up yesterday and that you used to rely -- you used to form your opinions in this case?
A. I don't remember if it's in the code I showed yesterday. There's another section of this same code that I think sets -- says like, "set slope." Slope is another word for pitch as we discussed.
Q. Well, I'm asking about the code you showed yesterday, which is the code that you chose to use to explain to the jury how you reached your conclusions about the pitch determination marker, and I'm asking you about this code, is the word, "pitch," anywhere in this code?
A. Maybe I could look through it if you give me a paper copy, I could look through it more quickly.
Q. We do have a paper copy, Dr. Stevenson.
MR. SEEVE: May I approach the witness?

THE COURT: You may.

THE WITNESS: Yeah, it doesn't look like it's appeared in this code.

BY MR. SEEVE:

11:41AM Q. What about the word --

A. As I recall, the update roof model that I discussed yesterday. Go down a couple more levels, it calls this code I was referring to before as the set slope code, but it doesn't look like that's what I showed yesterday.

11:41AM Q. The word, "slope," I think you said yesterday is pretty much synonymous with the word, "pitch." It means the same thing, right?

A. It's the same sort of information.

Q. Is the word, "slope," in this code? I know you're

11:41AM referring to some other code that you didn't show to the jury that might use the word, "slope," but I'm asking you about this code that you did show to the jury.

Is the word, "slope," in this code?

A. I don't think -- a quick review, I don't see the word,

11:42AM "slope," regarding functions, or one of those functions there will call code that refers to the value, slope.

Q. Can you point to a word or a line in this code that you showed to the jury yesterday, not elsewhere, but this code here, that is basically the programmer telling the software to

11:42AM receive an indication of pitch as required by the claim?

A. Sure.
Q. A line, a portion, anything?
A. Sure. If you go to the second page, as I mentioned, 92 and 94 is, update the roof model. That's where the
11:42AM information is going to get passed to the roof model.
Q. So just, update roof model, and I see roof model and maps on those lines, I'm not sure exactly what this means, but you're saying that those two lines represent the software programmer telling the computer somehow to update the model
11:43AM based on a received indication of pitch?
A. Well, as we talked about yesterday, that code gets executed. If you go up a little further to Line 83, it says, "else if move nodes," so this code is going to be called when you grab one of these nodes, these vertexes and move it.
11:43AM So that's the indication of pitch that I identify in my testimony.
So I've moved a node and now I'm going to update the model.
Q. So your testimony, to make sure I understand, is that
11:43AM whatever is shown on the screen right here, even though it doesn't use the word, "pitch," even though it doesn't use the word, "slope," somehow satisfies a claim limitation about receiving an indication of pitch modifying a model based on it.
11:44AM Is that your testimony, Dr. Stevenson?

A. Well, I relied on a lot of other evidence than just this.

I talked about a bunch of different other things and showed videos of how the code, how the system receives an indication of pitch and uses that pitch.

11:44AM I didn't want to try to walk through all the code. We would literally be here another couple days walking through the various steps. There's hundreds of thousands of lines of code like this. I showed this as I think the clearest example of how the code implements some of the processes that I was

11:44AM talking about.

Q. And there's some other code that you mentioned just earlier today, some other code I think that gets called by this code or is -- this code calls or something that you also think is relevant to the pitch limitation, is that right,

11:44AM Dr. Stevenson?

A. I thought this was the most relevant. I thought it was relevant to your question, which was, is there the word, "slope," in the code, and yes, there's other code that's actually called by this code that uses the word, "slope," so I

11:45AM don't think it's needed for my analysis. I was just trying to answer your question.

Q. I understand. Have you reviewed all of the source code in the accused products, or that makes up the accused products? I'm not sure what the right term is. Have you

11:45AM reviewed all of it?

A. There's lots of code, a lot of tools that I wasn't particularly interested in, so I can't say I reviewed all of it. I believe I reviewed all of the relevant sections of the tools I was talking about and testified about.

11:45AM Q. I understand. Sorry, I didn't mean to cut you off, Dr. Stevenson.

Defendants provided the source code on a computer specifically for you to look at, right, Dr. Stevenson?

A. Correct.

11:45AM Q. Did you rely on anyone else in forming your opinions of the source code and infringement, based on the source code in this case?

A. I didn't rely on anyone else, no.

Q. You didn't rely on a Dr. Ben Goldberg to tell you about

11:45AM the structure of the source code in this case? That's how you testified at your deposition, isn't it?

A. You just said "rely." I had some assistance. I gave him some directions to find the code related to various tools that I was interested in.

11:46AM So -- but at the end of the day, I didn't rely on him at all because I went and looked at a code and looked at that software for the tools that I was interested in.

THE COURT: Do the codes have to use the same words for there to be infringement?

11:46AM THE WITNESS: No, not at all. These are words that

the programmer just happened to choose.

THE COURT: Okay. So yesterday, I asked you the question of whether or not the source codes of the accused products, the defendants' product, whether their source codes have to match the source codes of EagleView's program in order for there to be infringement, and you said, no.

That was your testimony, am I correct?

THE WITNESS: Yes.

THE COURT: So a further clarifying question is, does the software program of the defendants have to use the same words that are in the claim language in order for there to be infringement, in their source code?

THE WITNESS: Definitely not.

THE COURT: Okay.

11:47AM BY MR. SEEVE:

Q. Now, Dr. Stevenson, you brought up I believe it was called the set slope code earlier as another piece of code that you thought was relevant to this question that's handled here?

11:47AM A. Well, it was relevant to your question.

Q. My question being, does slope appear in the code?

A. Correct.

Q. And so set slope is another part of this program, is that your testimony, that has to do with pitch?

11:47AM A. Well, it's -- it was in answer to your question, is slope

-- the word, "slope," appear in the code.

Q. The set slope tool is actually part of a different product from the product that this is the source code for, isn't it? I asked --

11:47AM A. Then maybe I'm confusing the code a little bit.

The -- I was just trying to answer your question, which was, does the word, "slope," appear in the code.

Q. This code here relates to the Mass Production Tool, doesn't it, Dr. Stevenson?

11:48AM A. Yes.

Q. And the set slope code is part of the Aerial Sketch product, right, Dr. Stevenson?

A. If you can show me the code, I could answer that more clearly.

11:48AM Q. Unfortunately, we don't have a printout of the code, but you did just bring it up. You don't remember what part of -- what accused product that code relates to, the code that you just brought up?

A. I was trying to --

11:48AM THE COURT: He doesn't have it. He's asked for the code. If you don't have it, then I think it's unfair to ask him to speculate.

MR. SEEVE: I understand.

BY MR. SEEVE:

11:48AM Q. So we were talking about the source code review a moment

ago, and you were saying that you personally reviewed the code. You didn't rely on anyone else in your analysis of the code?

A. Correct.

11:48AM Q. Here, I have some logs from that source code.

MR. SEEVE: May I approach the witness and give this to him?

THE COURT: Yes.

BY MR. SEEVE:

11:49AM Q. The document that I just handed to you, Dr. Stevenson, details when various people entered the source code room where the source code was held for the purposes of reviewing the source code.

Do you see your name in that document?

11:49AM I'll save time, your name appears at the very end of that document.

Do you see how many times it appears?

THE COURT: Could you -- it may seem logical, a source code room is?

11:49AM THE WITNESS: They just don't e-mail me the source code, give me free access to it. I actually had to visit law offices in Newark, New Jersey, a room that they allowed me to have access to the code.

So I would go to that room, they had a computer set up.

11:50AM I was able to use and view the computer -- view their code in

this office in New Jersey.

THE COURT: Okay. And your question, Counsel, was?

BY MR. SEEVE:

Q. How many times did you visit the source code room where the source code was kept in order to examine the source code, Dr. Stevenson?

A. It looks like twice.

Q. Twice.

And Dr. Ben Goldberg, who assisted you in your review of the source code, can you give me times, did he visit the source code room to examine the source code?

A. I didn't count them up, but he was working -- I don't know what all the issues he was addressing. I think he was actually addressing other issues, maybe in other cases, I'm not sure. I asked him specifically -- I don't know how much time, how much time he spent finding me the stuff that I asked him to find.

Q. So, Doctor, -- or Mr. Goldberg, I don't know, do you know Dr. Goldberg's credentials?

A. I believe he has his Ph.D. in computer science.

Q. Did you examine his credentials before he was hired on this case?

A. I did look at his credentials, but he was hired on this case before I was.

Q. And from the source code logs, you can see that he began

visiting the source code room in May 11th -- or on May 11th of 2016.

Do you see that?

A. Yes, I see that first entry, yes.

11:51AM Q. And you visited the source code room for the first time on January 11th, 2018, which was more than a year-and-a-half later.

Do you see that?

A. Yes.

11:51AM Q. And then you visited the source code room for the final time on January 18th of 2018.

Do you see that?

A. Yes.

Q. Do you recall when you were engaged by EagleView's

11:51AM attorneys to examine the issue of infringement for this case?

A. I looked this up, because I was asked that in deposition and I didn't remember then. But it was December 11th, 2017.

Q. December 11th, 2017.

So that's approximately a month, in fact, exactly a

11:52AM month after you were engaged for this case, you visited the source code once, correct?

A. Yes.

Q. And then a week later, you visited the source code again, is that correct?

11:52AM A. Yes.

Q. And that concluded your analysis of the source code for this case, is that right?
A. No.
Q. Can you explain how you analyzed the source code, if you
11:52AM weren't actually examining the source code, Dr. Stevenson?
A. Sure. Part of that process of allowing me into that room, and allowing Mr. Goldberg and others into that room is we could print out sections of the source code that we find are relevant.
11:52AM And so I think in all, close to a thousand pages were printed out, I'm not sure, and I had access to all those printouts. So those printouts were given to me to actually review off -- outside that room.
Q. Did you print out a significant percentage of the source
11:52AM code that was available on the source code computer, Dr. Stevenson?
A. Given that it's only something on the order of a thousand pages, I would say probably not. If you print out all that code, I'm sure it would be much more than that.
11:53AM Q. And who selected the source code to be printed, was that Dr. Goldberg or was that you, Dr. Stevenson?
A. Both.
Q. So Dr. Goldberg selected the source code that he felt was relevant for you to review in this case?
11:53AM A. No, I asked him to find -- I asked him to find code

related to specific tools on the computer application. He printed out some of that software. I had reviewed that before I had gone in, so some of that was code I was interested in, some of it wasn't.

11:53AM I went in and attempted to fill in some of the gaps, you might say, that I thought, based on what he had done.

Q. So I'm going to ask you for a quick off-the-cuff estimation, Dr. Stevenson. How much of the source code that was on the source code computer would you estimate you looked at in forming your opinions?

11:54AM A. Boy, that's -- even an off-the-cuff would be hard to understand.

Q. Less than 10 percent, Dr. Stevenson?

A. Well, the problem is, you have hundreds of files and you see a file, maybe that's a hundred lines worth of code, maybe that's 10,000 lines of code. Until I look at every single file, I wouldn't know what percentage of code -- and counted up all the lines and then compared -- I just don't know.

Q. So maybe less than 10 percent, is that right?

11:54AM A. I believe I looked at all the code that was relevant to my analysis.

Q. Yesterday, Dr. Stevenson, we talked a little bit about metadata.

Do you remember that?

11:54AM A. Yes.

Q. And metadata is data that's about an image that's not actually the image itself, right?
A. That's a fair characterization.
Q. One example of metadata that you brought up, I believe, when the Court asked you about it, was the address associated with a particular house or roof, right?
A. That could be an example. I'm not saying that all these images have an address associated with them, but they have data like that.
Q. Other metadata that's relevant to this case involves the exact position and the angle from which an aerial image was taken. You agree with that, Dr. Stevenson?
A. Well, that would be relevant if you had exact data. You do not have exact data.
Q. I'm glad you brought that up, because that was actually the subject of my next question.

How exact does metadata have to be in order to use it to make an accurate model of the roof?
A. Well, I mean, the -- in order to get to the sort of accuracy we're talking about here, 1 to 2 percent, 1 to 3 percent I think is what I heard. You'd have to be able to measure the roof down to that sort of percentage of distance.

These -- it depends on exactly the sensor, but the sensors themselves are down to the four-inch -- each piece of data in the image is about typically three to four inches.

High quality sensor, could be lower. There's plenty of examples of much lower than that, but a very high quality source would be something on the order of that.

So you have to be able to register those images, at least until that sort of precision of -- down to two or three inches.

Q. Uh-huh. And if you have metadata that's accurate enough, I believe you testified, you don't have to correlate two aerial images, isn't that right, Dr. Stevenson?

11:56AM A. Well, I could imagine processes that maybe you can build that. What I see and what my own experience is, metadata is just -- I've never yet to see that sort of accuracy, and I certainly understand that based on how we capture the data.

Imagine we're on a plane at 10,000 feet, you know, a 11:57AM mile away from a house and we have to say exactly where that camera is down to the inch or two. That data is just not easy -- easy to generate.

Q. Yesterday, when you were shown a video that demonstrates what you say is correlation, the Court asked you, well, why 11:57AM isn't the model lined up with the house to begin with, and you said, well, the metadata simply isn't accurate, and you proceeded to explain that you had to fix that by what you call correlation.

Do you recall that, Dr. Stevenson?

11:57AM A. Yes, I was using that to show that -- that's why you

needed correlation.

Q. How accurate is the metadata that's associated with the images in the accused product, do you know?

A. It depends -- it depends on the actual image. It could vary from image to image. From the examples I saw, it's off by tens of feet.

11:57AM

Q. It's off by tens of feet.

So if you were to learn that the metadata in the accused product is accurate down to the foot, would that change your opinions in this case?

11:58AM

A. No, because, you know, this gets a little legalistic, but the claims are about the system. As long as the tool still exists in the system, you technically don't have to actually use it to infringe.

The fact is, they do use it almost all the time, so it's an important tool to them, but you still infringe the claim, even if you had accurate data because of what the tool is.

11:58AM

Q. But your testimony, to be clear, is that if you had accurate enough metadata, you wouldn't need to correlate, is that correct?

Now, whether it infringes the claims, that's a separate question. I'm asking you about whether you would need to correlate, and it sounds like your answer is, no, isn't that right, Dr. Stevenson?

11:58AM

A. It's -- your hypothetical is too incomplete. I would need to know a lot more about what do you mean by accurate metadata. There's a lot --

THE COURT: I wanted to ask that clarifying question. How would you determine if the metadata were accurate enough, to use Counsel's terminology?

THE WITNESS: You would have to look at the type of data that was being provided and that varies from different image sources, and you would have to look at how -- what happened at the projection of a point on the roof and you would want that to be accurate from image to image within an inch or two.

THE COURT: Okay. Here's -- just to help understand this. You know how when you use your GPS system to get to an address and sometimes it sort of takes you to the neighbor's house.

THE WITNESS: Sure.

THE COURT: Is that because the metadata is inaccurate?

THE WITNESS: It's because the system there that collects the metadata is inaccurate.

THE COURT: Thank you. Okay. Next question.

MR. SEEVE: So if we could go, Mr. Frasier, to -- I think it's Demonstrative 289.

BY MR. SEEVE:

Q. I'm going to highlight -- first of all, I need to establish, Mr. Stevenson, this is one of the slides that you prepared for your testimony today, right?

A. Correct.

12:00PM Q. Now, if you look at the highlighted passage from the top e-mail that's shown here, or I guess it's a press release or something like that.

It says, that Verisk, which is one of the defendants in this case, is accelerating the collection of high-quality

12:00PM imagery and data for Property Insight and that's one of the accused products in this case, isn't it?

A. Yes.

Q. And this is back in 2015.

A. Yes.

12:00PM Q. And you don't know exactly how accurate the metadata in the accused products is, is that correct?

A. I know it's -- it's clearly inaccurate.

Q. Your evidence for that is merely the fact that the model doesn't line up with the house, is that right, Dr. Stevenson?

12:00PM A. No. My -- part of my evidence is that at least 98 percent of the time in, I forget what year that was, maybe 2017, your operators had to do this correlation process in order -- because the metadata was so inaccurate that it couldn't be used as it was.

12:01PM Q. I noticed you used the past tense there, Dr. Stevenson.

Is your testimony that this was something that happened in the past and that we no longer have to use the correlation process?

A. As far as I know, no one has put up any evidence that you suddenly have a different new data source. If you do, I would love to know about it, because getting resolution metadata that accurately, I would love to be able to use in my own work.

Q. You know, you did put up evidence that's right here, says, accelerate the collection of high-quality imagery and data. That sounds like evidence that someone is and, in fact, defendants are seeking higher quality metadata. And this was four years ago, wasn't it, Dr. Stevenson?

A. It doesn't say high-quality metadata. And there's no doubt in my -- I guess, I'm not sure I agree with your characterization of the document. It would not surprise me at all that they are seeking better data.

MR. SEEVE: Could we go, Mr. Frasier, to Slide 81 of plaintiff's demonstratives.

BY MR. SEEVE:

Q. Now, here, I believe you testified earlier this morning about this top e-mail.

And I -- you testified in particular about the sentence, "I know having the actual data is the Holy Grail."

MR. SEEVE: Mr. Frasier, if we could highlight that,

that would be great. If we can't highlight that, that's great, too.

BY MR. SEEVE:

Q. You said, "I know having the actual data is the Holy Grail."

Now, you testified this morning that that was referring to metadata, didn't you?

A. I'm not sure exactly what the testimony was. That doesn't surprise me, that -- I mean, I think that is part of what they're talking about there.

MR. SEEVE: Now, could we go back to demonstrative number 289?

BY MR. SEEVE:

Q. Now, here we see the same word "data," and suddenly you're not so sure whether that refers to metadata; is that right, Dr. Stevenson?

A. Well, to me that actually seems to be referring to the roof modeling type processing they're trying to implement. They want the high quality imagery in roof models. The word data is very generic, it's all about context. That's the type of data they want for Property InSights.

Q. Thank you, Dr. Stevenson.

MR. SEEVE: Now, if we could put up claims 1 and 2 of the '436 patent, Mr. Fraiser. Thank you.

BY MR. SEEVE:

Q. And we're all familiar with these claims, I think by this point maybe too familiar to some of us, but I'm just going to point out some of the limitations or requirements of claim 1. You see how claim 1 requires correlating the first aerial image with the second aerial image. You see that, Dr. Stevenson?

12:04PM

A. I think you read it wrong, but I think I know which passage you're talking about.

Q. Oh, I'm sorry if I read it wrong. Just for the record, let me just say do you see, Dr. Stevenson, that the claim requires "correlate the first aerial image with the second aerial image"?

12:04PM

A. Yes, I see that.

Q. And then just the next limitation down you see the claim requires "generate based at least in part on the correlation, a three-dimensional model of the roof." Do you see that?

12:04PM

A. Yes.

Q. Now, where in the claim does it say exactly how you generate the three-dimensional model of the roof? Is that claimed?

12:04PM

A. The exact steps, it's not claimed, you don't have to follow the same exact steps here.

Q. So that's not part of the invention here, right? How you generate the 3D model of the roof, that's not part of the claimed invention in this case?

12:05PM

A. Well, no, you have to generate it based at least in part on the correlation. So, any generation of a 3D model will not meet the limitation, but a generation as long as it's at least in part on the correlation between the first and second aerial images can, at least in theory.

Q. But if I were a programmer, let's say, and I just had this one claim, just this claim text right here, and I wanted to generate my very own three-dimensional models, I would be out of luck because this claim doesn't tell me how. Is that right?

A. Well, the teaching of how you do a claim is the rest of the patent, that's the body of the patent. So, if you want to understand how to meet the claim elements and how to build a system that's going to practice the claim, one embodiment is at least shown in the body of the text.

Q. I understand. So let's go to the text of the patent.

MR. SEEVE: Let's bring up Column 7 of the '436 patent, if we could do that, top of Column 7.

Sorry, we're having slight technical difficulties, ladies and gentlemen of the jury, I'll ask you to bear with me for just a second. It's going to be worth it.

Thank you, Mr. Fraiser.

BY MR. SEEVE:

Q. So if we look at the Column 7, at the very top of Column 7, we can see the optimal choice of reconstruction

algorithms depends on a number of factors, such as the spatial relationships between the photographs and a number of other things, and I want to focus on that last sentence. "Several such algorithms are described in detail in textbooks, trade journals and academic publications."

Do you see that, Dr. Stevenson?

A. I see that.

Q. Now, this is talking about generating a 3D model, right?

A. Maybe if I could see the rest of the patent. It doesn't strike me as that's what they're talking about there, but...

MR. SEEVE: Do we have a copy of the patent we can give to the witness?

A SPEAKER: He might have it up here.

MR. SEEVE: PTX-2, it's possible that it's in your binder.

BY MR. SEEVE:

Q. The question is this is talking about constructing a 3D model, right, Dr. Stevenson?

A. I understand your question, I'm just not sure --

Q. I understand, take your time. Sorry, I didn't mean to rush you.

A. Yes, it's part of the teaching that, you know, from starting out with nothing, you know, building this preliminary model and how to do the correlation is part of all that teaching how you end up with this accurate 3D roof model.

Q. So going back to my hypothetical situation where I'm a programmer or a roofer or someone who wants a 3D model of a roof, basically what the patent is saying here is, you know, if you want to build a 3D model of the roof, look in textbooks and trade journals and academic publications because that's not part of the invention, is it, Dr. Stevenson?

A. No, I disagree with that characterization completely.

Q. I'm just trying to break down your testimony from before. It's several such algorithms, which refer, as you testified, to constructing 3D models of the roof. Right?

A. Look, the discussion here goes on for -- of how to generate a 3D model goes on for looks like approximately 15 columns of text like this. This is one step that they're talking about that they say you can go and look at for this particular step in this process, how you might go about looking for more information.

Q. The step that it's talking about right here, looking at the top of the paragraph, is the spatial relationships between the photographs. Isn't that central to building a 3D model from aerial images, Dr. Stevenson?

A. Understanding the math, which is -- you know, that relates the various images together is, you know, something one needs to understand. The basic mathematics -- I mean, look, all engineers do are -- we take kind of known math and physics and apply it to solve and build tools and systems to

solve problems in the world. What this seems to be saying here is, you know, the math of the geometry of this setup you could refer to algorithms, but that's certainly not everything you need to do in order to generate a 3D model based on the teachings of the patent.

Q. But this passage isn't just talking about math textbooks, is it, Dr. Stevenson? It's talking about trade journals, it's talking about how to apply this mathematics to the very problem that this patent is about, constructing a 3D model of a roof, isn't it?

A. Like I said, this is talking about one of the steps you go through in this process. You know, the patent has a lot of details, a lot more description about what you need to do in order to practice the claims of the patents, or how to build a system that would practice the claims of the patents. I agree that some of the basic math that you need, you know, like I said, that's what engineering is, it's about applying these maths and sciences to solve these problems. I certainly understood, and you can find out about.

MR. SEEVE: Could we turn, please, Mr. Fraiser, to claim 10 of the '840 patent.

BY MR. SEEVE:

Q. Now, here I'm going to highlight a couple limitations for you. We've got received based -- receive, I'm sorry, based on displayed pitch in its determination marker and indication of

the pitch. This is the limitation that we were jousting about earlier, if you'll remember.

A. Sure.

Q. And then suddenly the next limitation is: Modify a model of the roof based on the received indication of pitch. Do you see that, Dr. Stevenson?

A. I see that that's in the next element.

Q. The next element. So we suddenly have a model of the roof after receiving an indication of pitch, right, Dr. Stevenson?

A. I don't know what you mean by suddenly.

Q. You're right. I withdraw that question. That was a bad question. Let me ask a different question that sort of gets to the point I'm trying to make here.

This claim doesn't tell you anything about how to build or exactly how to modify a model of the roof, right? It just says do it; isn't that right, Dr. Stevenson?

A. No, not at all. I mean this is -- you know, you read the teachings of the patent, they talk about how you're going to go about in building this 3D model. What the claims are about is a particular tool that you -- that the inventor came up with in order to help you build these 3D models. So the teachings of the patent certainly go through in great detail how you go about building a model. The claims are about some of these individual tools that the inventor has invented that

are useful for that entire process.

Q. Dr. Stevenson, I don't know if you heard EagleView's lawyers during the opening -- excuse me, I'm sorry. There's something in my throat. I don't know if you heard EagleView's lawyers during the opening liken a patent claim to a piece of property that you own. Did you hear that analogy?

A. Yes, I did.

Q. And they explained that what's in the four corners of that patent claim, it's this patent claim that defines what the invention is, not the description in the patent itself, not where it tells you to go look at textbooks, none of that. What this patent claims and what this case is about is what this claim says; isn't that right?

A. That's correct, all of my analysis is about the language in this claim.

Q. And this claim doesn't tell you how to make a model of a roof, does it, Dr. Stevenson? That's not what the invention in this case is?

A. I mean, there is not a requirement for a claim to tell you how to make a model of a roof, that's not a requirement of a claim, this claim is about -- and I thought I've been trying to explain this, that it's about tools that are useful in that process and going from, you know, nothing to an accurate model of the roof. This particular one is about the pitch determination marker, and it's talking about how this is a

useful tool in these sort of systems to be able to manipulate the model so that you can get an accurate roof report.

MR. SEEVE: Mr. Fraiser, could we --

(Short pause.)

12:14PM BY MR. SEEVE:

Q. Sorry, I just want to, before moving on, I just want to establish -- I understand that your view is that this claim is about a tool that relates to modifying a model of the roof, but just to clarify, this claim doesn't say anything about how

12:15PM you make the model, right, Dr. Stevenson?

A. It does seem to be -- I'm not sure I understand your characterization of the claim, because it certainly does seem to be about how one would go about using this tool to build a model of the roof. So I'm not sure when you say it's not

12:15PM related --

THE COURT: Are you asking him to generally describe the claim --

MR. SEEVE: No, your Honor.

THE COURT: -- that's at issue in this case? What is

12:15PM your question?

BY MR. SEEVE:

Q. So my question, Dr. Stevenson, is intended here to get a clear line between what is at issue, what is the invention at issue in this case, and a whole bunch of things that aren't.

12:15PM This claim, and I think we're in agreement here, and I just

want you to confirm this, this claim is about a very narrow slice of invention, this claim is about a particular tool that can be used in a particular way, that once you have a model of a roof you can use this particular tool in a particular way to change the slope of the roof. That's what this claim is about, isn't it, Dr. Stevenson?

THE COURT: This particular claim.

MR. SEEVE: This particular claim.

THE COURT: Because the jury has been instructed that there are only certain claims that are at issue in this case. Not all of the claims in all of the patents are at issue.

And so with that, the jury's been so instructed. Your question is?

MR. SEEVE: The question I just asked, your Honor, let me rephrase the question.

BY MR. SEEVE:

Q. All I'm trying to do, Dr. Stevenson, is get clarification that this particular claim in this particular patent, which is one of the six claims that's at issue in this case, is just about a particular tool that can be used in a particular way, that once you have a model of the roof already you can use this particular tool in a particular way to change the pitch of the roof; is that right, Dr. Stevenson?

A. I'm trying -- you're characterizing you have a model already, and I guess I never thought about that before. I

mean, it certainly requires more than that, because you have to display the aerial images and things like that, but this particular claim seems to be about, you know, this tool that is useful to generating this accurate roof report. So, I agree with you in terms of it's about a particular tool, it's this pitch determination marker and how that is useful in this process of generating a roof report.

Q. So, the claim doesn't require creating a model, right? The claim just requires modifying an existing model, correct, Dr. Stevenson?

A. I think you might be right. Like I said, I never really thought about it. I mean, clearly all these products start with nothing and they create and modify the model. But I guess there's a -- maybe a hypothetical system out there that you could say there's a model and then you're just modifying it this way and it would practice this claim, I guess -- I mean, I guess that's your question, is there something else other than the accused products which do start with nothing and build a model?

Q. That's not quite my question, Dr. Stevenson, my question is simpler than that. My question is just this claim doesn't require creating a model; isn't that right?

A. I agree with you, it appears there may be some sort of other -- I'm sorry, I just -- all the products do that, so I hadn't really thought about whether that claim requires it. I

think you're probably right, that I don't see a requirement of starting from scratch, you might say, here.

Q. So it does require modifying a model, though, right, Doctor? We're in agreement on that, it requires modifying a model?

A. Correct.

Q. Now, earlier we were talking about the distinction between a preliminary model and a final model. Do you recall that, Dr. Stevenson?

A. Yes.

Q. This claim talks about modifying a model, not creating a model as you've admitted, modifying an existing model. Now, isn't it the case that generating a model and modifying a model are two different things?

A. Well, I probably would think normally, you know, you modify a model to generate one. So I would think of modifying as probably some sort of subset of generating.

Q. Well, we just agreed and you just testified, Dr. Stevenson, that this claim doesn't require generating a model, this claim only requires modifying a model, right?

A. I don't believe that was what I testified. I --

THE COURT: Your testimony was from scratch.

THE WITNESS: Correct.

THE COURT: His testimony was generating a model from scratch.

MR. SEEVE: Okay.

BY MR. SEEVE:

Q. So modifying a model and generating a model from scratch, we can agree those are different things?

12:19PM A. Modifying a model, you know, I think of as -- you're right, that I have a model, I've changed it somehow. When I use the word -- when you use the word generating, it sounds like you're starting from nothing and you're getting to a model. I think commonly, and I think the way this patent

12:19PM teaches is the way you generate a model for the roof estimate is you do a sequence of modifications. So you modify the model several times to generate the final model that's going to end up in the report.

Q. But the distinction here, and I think we're in agreement

12:20PM as you testified, generation is from scratch, modification is not. Right, Dr. Stevenson?

A. I think that's probably right, I hadn't really thought about it that way before. I mean, all these systems generate from scratch a model, they do that through a sequence of

12:20PM building a preliminary model and then modifying it. So, you know, I guess you're talking about some hypothetical.

THE COURT: And so your testimony is that the language of claim 10 does not require that you generate a model from scratch?

12:20PM THE WITNESS: Correct.

MR. SEEVE: Could we go, Mr. Fraiser, to plaintiff's demonstrative number 24?

BY MR. SEEVE:

Q. Now, this is a page, or this is -- let me first establish, this is one of the demonstratives that you prepared for this trial, right, Dr. Stevenson?

A. Yes.

Q. And what it shows, I believe you testified earlier, is a page from one of Mr. Pershing's inventor notebooks, right?

12:21PM A. Correct.

Q. And here what it appears to show, and I believe you testified to this effect, is you have a customer who's a little stick figure, he's obviously very happy. He's in the upper left, and he's using a laptop that's much bigger than

12:21PM him to use the internet to order a roof model. Do you see that, Dr. Stevenson?

A. That's the type of idea he's depicting, at least along the top line there.

Q. Now, this, this process of ordering using the internet a

12:21PM roof model by a customer, is that in any of the claims at issue in this case?

A. No, there's no requirement that you order a roof model through the internet in any of the claims.

Q. So this particular page of the inventor notebook,

12:22PM especially the stuff at the top, that's not really relevant to

this case, is it, Dr. Stevenson?
A. Is it relevant? I mean, I think it's relevant to the inventor and collaborating, you know, the evidence of what he says about how he came up with the invention. So I do think it's relevant.
Q. I'm going to ask you a little more about Mr. Pershing and his invention. You described it yesterday as a breakthrough, didn't you, Dr. Stevenson?
A. Yes.
Q. Where were you when you first heard about this breakthrough in the field of 3D models?
A. Probably in my office at Notre Dame.
Q. Did you hear about it for the first time in connection with this case?
A. Yes.
Q. Now, Mr. Pershing filed his patent application back in 2008, didn't he?
A. Yes.
Q. And you are an expert in the field of 3D modeling, aren't you?
A. Yes.
Q. You're an expert in the field of software, right?
A. Yes.
Q. You typically discuss breakthroughs at academic conferences, don't you?

A. Sure, we do at times.
Q. And you listed yesterday a number of journals that I believe you edit in the field of software and 3D modeling, didn't you, Dr. Stevenson?
12:23PM A. Yes.
Q. And you read those journals as part of the practice of editing them, right?
A. Yes.
Q. Was this breakthrough of Mr. Pershing's ever discussed in
12:23PM any of those journals that you edit on this topic?
A. The breakthrough was for this particular industry, not in these other aspects that we're talking about.
Q. I'm talking about technology here, Dr. Stevenson, I'm not talking about how much money EagleView made, I'm talking about
12:23PM technology. And from a technological perspective, was Mr. Pershing's patent application back in 2008, did that actually represent a technological breakthrough?
A. Yes.
Q. But you didn't discuss it, right?
12:24PM A. I didn't discuss what?
Q. I'm sorry. Sorry, the question was very vague.
You didn't discuss it back at the time in academic conferences with your colleagues, did you?
A. No, I wouldn't expect that sort of thing to be discussed
12:24PM there.

Q. And you didn't discuss this technological breakthrough in academic journals, did you, Dr. Stevenson?

A. I wouldn't expect this sort of thing to be discussed there.

12:24PM THE COURT: Because why?

THE WITNESS: Most of what you see in academic conferences and academic journals are about kind of the theory and not tools. So you spend a lot of time talking about the theory and how one might design something, and talk a lot 12:24PM about applying the math and physics. The actual tool and how you might want to use it in a particular application is not so much discussed.

BY MR. SEEVE:

Q. I understand. So you heard about this technology for the 12:24PM first time from EagleView's lawyers when they hired you for this case, right?

A. I believe that's probably true, right.

Q. When did you decide that it was a breakthrough, Dr. Stevenson?

12:25PM A. Through reading the various pieces of evidence, some of which I talked about, some of which were talked about by others, and also realizing the impact it had on that particular industry. And I could see, technology speaking wise, why it was a big step forward.

12:25PM Q. Now, I'm going to ask you a little bit about the

reexamination procedure that you testified about yesterday. Do you remember testifying about that, Dr. Stevenson?

A. Yes.

Q. Just to recap for the jury, reexamination is when a patent was issued and then the Patent Office has to reconsider the claims it had already issued in light of new information that it has; is that right, Dr. Stevenson?

A. I think that's a fair characterization.

Q. Now, the '436 patent, which is one of the patents-at-issue in this case, issued, and it had 56 claims when it issued. And then it entered this reexamination process because new information had come to light, and the Patent Office wasn't sure whether those initial 56 claims, whether they should be allowed, whether they were patentable, right?

A. Yeah, my understanding and what I saw in the file history was that EagleView brought forth some new information and basically asked: We want to make sure our patent is valid, please look at this stuff.

Q. Okay. And in fact the Patent Office during that reexamination procedure determined that all 56 of those claims weren't patentable. It rejected them, didn't it?

A. There was a -- you've shown numerous times this nonfinal rejection that they -- that they issued.

Q. The Patent Office didn't change its mind about those

original claims, did it, during the re-exam?
A. I don't remember. I haven't compared everything to the original claims to know if any of them are the same, exactly the same. I know at least for some of the claims, through
12:27PM discussing with the EagleView inventors, they added words.
Q. EagleView had to add a number of words to the claims in order to get those claims that the Patent Office had reconsidered and rejected in order to get those claims allowed, didn't they?
12:27PM A. I mean, I don't think it's clear from the file history that they had to. I think they were willing to because they were just trying to more clearly define what their invention was. The language that was added about non-stereoscopic images, that was clearly one of Mr. Pershing's original
12:27PM thoughts. He didn't want to use stereoscopic images, he was looking at the image datasets that were out there readily available in the world, they were not stereoscopic. So probably through the discussion, you know, I don't -- those details aren't readily apparent. You know, the claims were
12:28PM clarified.
Q. So you think that they just added that language to the claims because they thought the claims weren't clear enough and they wanted clearer claims; is that your testimony, Dr. Stevenson?
12:28PM A. You know, some of this stuff you can see in the file

history, some of it you can't. It seemed like what was added was something that EagleView would be readily behind because their technology was not about stereoscopic pairs. Exactly how or why that's added, I don't know. I do know it was added, it was fine, and the claims issued.

Q. So, but one thing we do know from the file history, Dr. Stevenson, is that all this language was added in response to a rejection from the Patent Office, right?

A. Well, it was in response to this reexamination that EagleView asked for.

Q. It was specifically added in response to the rejection of all 56 of the original claims of the patent, wasn't it?

A. I would guess -- I'd have to go back in the file history to know if it was specifically in response to the rejection.

MR. SEEVE: Mr. Fraiser, can we that take a look at claims 1 and 2 of the '436 patent?

BY MR. SEEVE:

Q. Now, yesterday the topic of this italicized language in the claims, that was brought up. Do you remember that, Dr. Stevenson?

A. Yes, I remember explaining what that meant.

Q. And you explained yesterday that the italicized language --

MR. SEEVE: I think we have a little too much language in there, Mr. Fraiser. Just the italicized language,

if you would.
BY MR. SEEVE:
Q. We -- I believe you testified yesterday that the italicized language in the patent claim is the stuff that was added to the claim during the reexamination; is that correct?
A. Correct.
Q. So it's that, that -- I'm going to read it out loud. "Wherein the first aerial image provides a top plan view of the roof and the second aerial image provides an oblique perspective view of the roof and are not a stereoscopic pair." It's kind of a mouthful, but that's the language that they added in response to this rejection of all 56 claims in the re-exam, isn't it?
A. Well, like I said a moment ago, I'm not sure it's in response to the rejection, it's certainly in response to EagleView asking for the reexamination. I have to look at the file history to know if they were specifically added in response to the rejection.
Q. So all of the other stuff in the claim, all of the stuff that's not highlighted right now, all that stuff the Patent Office thought was old, didn't it, already known, right, Dr. Stevenson?
A. No, not at all.
Q. Well, the claim used to be just like it is now, but without that italics part, right? And the Patent Office

rejected that claim, didn't they?
A. But it doesn't mean the information was old, it just means it was part of the original invention.
Q. I'm sorry, I just want to clarify this, Dr. Stevenson. Let's assume that that italic language is removed from the claim, right?
A. Yes.
Q. Without the italic language, that claim is as it looked originally when the patent was first issued; isn't that right?
12:31PM A. Correct.
Q. And the Patent Office rejected that claim, didn't it, because it was already known, it was not inventive?
A. That decision was certainly never reached.
Q. The Patent Office never rejected that claim?
12:31PM A. The Patent Office was going back and forth with the inventors of this process. They added that language. The Patent Office never reached a determination that that claim was invalid as it stood.
Q. The Patent Office did reject that claim, though, you
12:31PM admitted it. During the reexamination process the Patent Office rejected the claim without that italic language, didn't it?
A. It was a nonfinal rejection, which means the Patent Office was considering and wanted to understand, understand
12:31PM deeper.

Q. A nonfinal rejection is a rejection, isn't it, Dr. Stevenson?

THE COURT: He's answered the question.

BY MR. SEEVE:

12:31PM Q. So then, for whatever reason, and I understand you don't know from the file history why this language was added, then this language in italics got added to the claim, right, Dr. Stevenson?

A. During that reexamination process that language was

12:32PM added.

Q. And after that language was added, only then did the Patent Office decide that the claim was patentable, right?

A. Well, I mean that's not, of course, technically true since it had decided before that it was patentable. But, you

12:32PM know, as a reexamination process they added this language, the Patent Office agreed with it, EagleView was fine with it, and this claim was allowed.

Q. And so it's that language, that highlighted language that was the difference between a claim the Patent Office rejected

12:32PM and a claim that was allowed by the Patent Office, just that language, right, Dr. Stevenson?

A. I wouldn't agree with that characterization, no.

Q. Okay. I'm going to ask you a little bit about Aerial Sketch. Just to refresh the jury's recollection, there's a

12:32PM number of accused products in this case, one of them involves

the Mass Production Tool or MPT about which you testified yesterday; is that correct, Dr. Stevenson?

A. Yes.

Q. And the other one involves Aerial Sketch, which is -- I believe you called it a do it yourself roof model software, right, Dr. Stevenson?

THE COURT: Mr. Seeve, do you have much more?

MR. SEEVE: I have probably -- yeah.

THE COURT: So let's break for lunch I think before. So it would be a good time to break for lunch.

Okay, ladies and gentlemen, we'll see you back at 1:30, okay? Enjoy your lunch.

THE DEPUTY CLERK: All rise.

(Jury leaves courtroom.)

THE COURT: Okay. You can step down, Doctor, just I want to talk to the lawyers for a second.

So before we head to lunch, have you folks given more thought to what I had raised -- you can all have a seat, thank you -- at sidebar, which is the concern that I have? I was very troubled with the beginning of the cross-examination because as it was received by me, how I heard it is that somehow the witness had doctored the presentation to the jury somewhat, his testimony was somewhat manufactured to get to an infringement opinion. And I don't know, have you given it some thought?

MR. ALPER: We have, your Honor.

THE COURT: And?

MR. ALPER: And we believe that the jury should be instructed that there is no evidence that Dr. Stevenson doctored his videos, and we believe that the full videos should be made available to the jury as evidence in the case, because this is exactly what we were talking about before, besides the fact that it really is evidence. He created them, this is part of the way we prove infringement, is showing how their software works.

12:34PM

12:34PM

THE COURT: And I allowed -- I had ruled that the videos, the little snippets that the witness used before the jury, that those would be allowed to be played before the jury as demonstrative exhibits. And that's how they were played.

Had I known that the defendants would then later cross-examine saying that somehow the presentation of just those demonstrative exhibits were manipulated, so to speak, I would have been -- I would have said to the plaintiffs, play the whole -- play the whole video. What I'm very troubled by is this suggestion that somehow the witness' testimony is not reliable because he chose a piece from here and he chose a piece from there, and together he cobbled together a theory of infringement.

12:35PM

12:35PM

MR. SEEVE: Your Honor, I do understand your concern, and I've been a little bit busy since we spoke, but I have

12:35PM

given the matter some thought. And I think that there's a difference between doctored, which we're not alleging, we don't allege that Dr. Stevenson doctored his videos, and misleading and being presented in a misleading way. Now, you just characterized the videos as being cut, and being cut and edited is what we expected.

THE COURT: Well, no, but as I heard the testimony is that -- and you focused on the timing. And you had the witness highlight, well, at this time, and then you jumped back to time prior to. And certainly I was left with the impression that the only way that the witness could come up with infringement is if he somehow did not do the software process in the way -- from beginning to end, but he started and then he went back and picked a little piece of the code here, and then he picked a little piece of the code here, etcetera, that's how it was certainly received by me.

And so when you asked the questions of the timing going back and forth -- because the whole, the whole patent involves a program where you go from beginning to end, and that was the witness' theory of infringement --

MR. SEEVE: Essentially, your Honor --

THE COURT: -- that he went from beginning to end to show infringement, and he used the defendants' software package from beginning to end to show infringement. But the questioning was you really didn't do that, did you,

Dr. Stevenson? You went from the beginning, you went to middle and then you went back to the beginning, and then you went to the end and then you went back to the beginning, and that's how you got to infringement, which is not a fair recitation of what his testimony was. It was he ran the software program from beginning to end.

MR. SEEVE: So I understand that he ran the software program from beginning to end, and if playing the video from start to finish for the jury -- we do object, I just want to make it clear right in the outset, we object to it being entered as evidence to be taken back to deliberations, we think that would be very prejudicial. But let's set that aside for a moment --

THE COURT: Well, but it may be the only way that I can address under 403 the prejudice that I think has been caused by the questioning.

MR. SEEVE: So if there is any prejudice, your Honor, that has been caused by the questioning, I think that -- I'm sorry, I shouldn't say I think that prejudice can be justified, because by definition prejudice isn't justified. But I think that impression that you're talking about is a justifiable impression. He said yesterday that he was presenting those videos to, quote, "walk through the steps for the jury." And as your Honor correctly said, these patent claims are about sequences of steps, where you start at the

beginning and you end at the end.

We don't know what Dr. Stevenson could have done, whether he could have shown infringement by actually showing a sequence of steps in order. Maybe he could, maybe he couldn't. His video -- we have no objection to it being played to the jury to see if that changes their mind on the thing. The point is, your Honor, that he didn't. For whatever reason, Dr. Stevenson chose to go to time one, then chose to skip ahead to time seven, then to back to time three, then to time ten, then back to time five. It left us with the impression, as it left your Honor with the impression, as it left perhaps the jury with the impression that Dr. Stevenson wasn't able to show infringement unless he went back and forth in time and --

12:39PM THE COURT: Well, then I think that confirms what I think the only cure for the prejudice is is that, you know, we can spend a couple of more days having the jury watch what he did from beginning to end and having him explain exactly what he did. I don't see any other way to cure the prejudice, unless somehow it's done through the redirect.

I'm trying to find exactly what the question was.

(To the reporter) Is there any way that you can tell me when the cross started?

(Short pause.)

12:40PM THE COURT: Got it.

(Short pause.)

THE COURT: See, the question that was asked, you had asked the questions about the different time periods, and you then said the question that was asked: "You testified yesterday that you were walking the jury through the steps of how you would use the accused software to infringe the patents, supposedly. Why did you have to jump around so much, Dr. Stevenson?"

And then the answer was: "I don't believe that I jumped around, I believe if you watch the entire video you'll see the entire sequence. We showed snippets, but we've provided the entire video, the video that's over half an hour. I didn't think the jury would want to have to sit through a half-hour video of me moving a mouse around the screen, so to make the point I used the clips as I discussed."

And what is inherently, I think, prejudicial in that question is that if you -- if his testimony did not coincide with the actual sequence of events in the video itself it was a fair question. But to ask the question without any basis that what he was testifying to was not what he viewed I think was prejudicial.

MR. ALPER: Your Honor, if I may. We had the exact same impression, there is no doubt that the jury had the same impression. They need to be instructed that that was an absolutely improper question, and that we -- maybe we should

come up with an instruction for your Honor to read for them on this subject.

THE COURT: I'm very troubled by it. I mean, I think that the case is not going to be -- I'm not going to let the case go to a jury based on something that I found to be improper.

MR. SEEVE: Your Honor --

THE COURT: And I'm not passing judgment or casting aspersions, but I think the question should not have been asked unless there was a good faith basis to believe that the testimony that Dr. Stevenson gave was not consistent with the sequence of events in the underlying video itself. This jury -- and what is at issue in this case is how does the software program of the defendants operate, how does it work. Does it go through the sequence of steps required by the claim language. That's clear.

If this jury is left with the impression that Dr. Stevenson's credibility or his opinion is not trustworthy, or we don't know if it was sequential because he himself said he went back in time and back and forth and back in time, and this jury is left with the impression that his analysis was not done sequentially, which is what the claims require, I don't know about all the claims, but certainly some of the claims, I think that's so prejudicial. And I don't know how to cure it other than to come up with an instruction for the

jury, perhaps have Dr. Stevenson explain, I don't know.

But to say to the witness, why did you have to jump around when there was no objection that the -- when I ruled that I would allow the snippets to go before the jury as demonstrative, there was no -- there was no objection by the defense that they did not fairly represent the sequencing of his presentation, of his beginning -- from beginning to end. There was no objection that, Judge, they're going back and forth and it's not a fair representation.

12:44PM MR. SEEVE: Your Honor --

THE COURT: Perhaps that was intentional, and that would be very unfortunate, but I don't know.

MR. SEEVE: So, I'd like to respond to a number of your points, your Honor. First of all, it was not intentional in the sense that had we seen -- obviously, you know, these are slides we got a couple days ago, we didn't notice the thing with time stamps until we reviewed them very carefully.

That said, I mean I think there is very clear evidence that those videos are not an accurate representation of the sequence of events as Dr. Stevenson viewed them. The time stamps are evidence of that. It's 1:12, then it's 12:53, then it's 1:41, then it's 1:27. Of course those videos don't represent an accurate representation of what Dr. Stevenson went through with the sequence of events.

12:45PM Now, this isn't a question of, oh, could

Dr. Stevenson have cobbled together a video that's actually a video from start to finish in which he demonstrates infringement? We don't think so, but that's a separate issue. This is an issue where the plaintiffs had a video, they had total control over that video, they had the entire video to play for the jury and they selected, they chose to play, and Dr. Stevenson, these are his demonstratives, he did too, they chose to play a bit at the beginning, and then went to the middle and then went back, and then went -- and they chose to say that they were walking the jury through the steps. If that leaves the jury with the impression that the credibility of Dr. Stevenson is somehow besmirched, then so be it. I think --

THE COURT: No, it's not a so be it. It's not a so be it, because it was a demonstrative aid only. And the evidence that is the most reliable is the evidence itself. And so I allowed the demonstrative exhibit to go before the jury only as an aid, that had been my ruling, because I thought it would assist them in understanding the testimony. That is not his testimony. His testimony is that he went from beginning to end in the software program, and this is how he reached his conclusions.

So, what the demonstrative aid did, particularly now through the questioning on cross-examination, actually created greater confusion because it's not consistent with what his

testimony was. It seems to me the only way to cure the issue is for the jury to sit through, I don't know how many videos there are, and Dr. Stevenson can walk them through the process, unless the parties can somehow come up with a way to cure that prejudice, because I find it's prejudicial.

MR. SEEVE: If the plaintiffs feel that they want to have the jury see Dr. Stevenson's videos and have him explain, I mean that's essentially redirect, it seems like that issue can be cured on redirect. Dr. Stevenson can play the videos, Mr. Brown can ask Dr. Stevenson questions about what he's doing in each moment of those videos and Dr. Stevenson can explain it. We have no objection to that, your Honor.

MR. ALPER: What the defendants did was improper, and we need to instruct the jury that what they did was improper. They have no good faith basis to suggest that the actual videos were done out of sequence. We need to explain that, they need to be informed those were improper questions. And that's the starting point, and then we can discuss how to present the actual evidence to them in order to further cure the prejudice, but it has to begin with an instruction.

MR. SEEVE: Your Honor, we feel that no instruction is necessary, and this issue can be -- to the extent, I'm sorry, that it's an issue at all, this issue can be fully cured on redirect. In fact, that's what redirect is for.

MR. ALPER: Absolutely not, your Honor. And not only

that, he asked it over and over. You only read one of the questions. He went back and back on this issue.

THE COURT: I'm going -- I want the plaintiffs to prepare an instruction that I can give to the jury. I'm not going to leave this jury with the impression that somehow the testimony of Dr. Stevenson is not reliable because he only chose the snippets out of sequence to support his theories, because that just is not what his testimony was.

Now, you know, it's hard to understand why they were out of sequence because he performed them sequentially --

MR. ALPER: I can explain, your Honor.

THE COURT: Yes, please.

MR. ALPER: Because remember, there are two different ways to show correlation. And so he went -- if you watch the actual videos, he goes through one whole way from beginning to end in the claim, and then goes back to the other one. So when he's focusing on individual elements, they're -- he's pulling from one stretch of video for a particular element and then pulling from another. And then he goes to the next element to do both. It's just because of the efficiencies of how he prepared the claim.

MR. SEEVE: I didn't ask whether --

THE COURT: And that is somewhat -- and that is consistent with what he then was explaining on cross, which he said I presented in the order walking through the claims.

MR. ALPER: Right.

THE COURT: As lawyers, I think that's understandable. As jurors, I don't know that that's --

MR. ALPER: It's not, your Honor.

12:49PM THE COURT: That's -- I think that may very well be lost on the jurors.

MR. ALPER: We'd agree, it is definitely lost on the jury.

THE COURT: So come up with an instruction. If it's 12:49PM acceptable, I'll give it.

MR. ALPER: We will. Thank you, your Honor.

THE COURT: Okay.

MR. ALPER: Your Honor, may I -- one other thing? I'm sorry. Very briefly.

12:49PM We have very serious concerns about the amount of questioning that is going on on the issues that we raised in our objection. I know you said that we'll look at this a little later in the day, I just wanted to note the amount of attention, for instance, that we're paying to the metadata 12:50PM when there's not a single claim limitation on metadata, there isn't a restriction, the only thing we've seen that talks about metadata is the declaration from the prosecution of the patent, but the jury could be coming away with the impression that metadata is somehow relevant to the claims in this 12:50PM case --

THE COURT: Well, you know, I'm getting more and more troubled as the case progresses. I am. And I am doing my gatekeeping function as best I can to keep -- by interjecting questions when I think they are appropriate -- to keep the jury focused on the case that we have.

I have read both of the submissions, and I am very concerned that the nuances that are being argued by the defendants are just somewhat made -- let me see if I can come up with the right word -- a little bit of sophistry going on, and that's what I'm concerned about.

And so, for example, one of the arguments I think the defendants are making is that, that with respect to, for example, the wireframe and the pitch determination marker, okay, it doesn't infringe because it's not operable. Right?

MR. SEEVE: To indicate pitch, yes, your Honor.

THE COURT: To indicate -- but it's operable. So somehow the questioning kept going back and forth with the expert about, well, it's just a wireframe, period. And there's -- but it's a progression, it's a software program. And it sounds like the defendants are trying a case where they want a snapshot in time where you just look at the computer screen, and then that's it. And that's how it's coming across to me, which is we are forgetting that what's here is a software program.

And so the defendants are just taking little, little

snippets. And the issue with metadata I think -- the issue of metadata, unless there's going to be, unless there's going to be -- the other question that was disturbing was that somehow there was an argument, insinuation made to the jury that now, subsequent to this witness' testimony, now the defendants' products use metadata and it's very accurate.

MR. SEEVE: Let me explain, if I may, your Honor, our positions.

THE COURT: Hang on one second. I am doing my best to try the case that brings us here today, but clearly the insinuation was made to the jury that somehow now, today, the products the defendants -- the products the defendants are using today use metadata, and that metadata is very accurate. That's -- well, that's not the case we're here about. Whether they invented a new product yesterday is completely irrelevant --

MR. SEEVE: That evidence was from 2015, your Honor.

THE COURT: -- to a -- pardon me?

MR. SEEVE: That evidence -- first of all, it was a demonstrative prepared by Dr. Stevenson, so it's not our insinuation at all. And it was a sentence that plaintiffs highlighted and Dr. Stevenson highlighted. But that evidence, that press release was from 2015. We're not talking about yesterday, we're not talking about a product that has nothing to do with the case, we're talking about a press release,

which is obviously happening after the fact, from 2015, which very much impacts a long range of --

THE COURT: Then if that's the case, then there's an obligation to present him with it. But when the questions and answers went back and forth and the witness said, unless they've changed their products, your response was a nod of the head.

MR. CHRISTIE: Well, I -- that nod of the head was not intended to be responsive.

12:54PM THE COURT: You have to understand, jurors are watching everything in this courtroom. And one of the things I'm trying to do as the gatekeeper of the evidence that goes in and stays out is how is this evidence being presented to a jury. And we have gone from trying the case that brings us here today to trying a whole different case. We have gone from trying a case on the evidence to sort of just throwing in extraneous pieces of nonevidence. It's becoming a challenge.

MR. SEEVE: I understand, your Honor. And these nuances are difficult. If you'll give me just a moment to explain, I think you'll see, hopefully, your Honor, that this isn't sophistry, that this is -- I mean this is nuanced, certainly, as every issue in this case is, but it's not sophistry.

THE COURT: And I think the nuance and sophistry there, I think they have met each other.

MR. SEEVE: If I could take each of your points in turn, your Honor.

THE COURT: Okay.

MR. SEEVE: First of all, when it comes to the wireframe and the pitch determination marker, this is the issue. Back during the Markman proceedings we argued that a wireframe roof model couldn't be a pitch determination marker as a matter of claim construction, and we lost that fight.

THE COURT: You did.

MR. SEEVE: We lost that fight. And the Court's Markman opinion says very clearly that a pitch determination marker can be a wireframe, can be the model of the roof.

THE COURT: Yes. Yes.

MR. SEEVE: But that's not the argument we're making. Plaintiffs would like you to think that we're trying to make that argument, but we're not making that argument. We're not saying that the wireframes of the accused products aren't pitch determination markers because wireframe models can't be pitch determination markers. That would be an impermissible claim construction argument, which we are not making.

We are making the argument that the wireframe models of the accused products aren't pitch determination markers because they're not operable to indicate pitch.

Now, Dr. Stevenson --

THE COURT: Because they can't be moved to indicate

pitch?

MR. SEEVE: Because they never send or receive an indication of the pitch.

THE COURT: Because they can't be moved?

12:56PM MR. SEEVE: No, they can be moved.

THE COURT: Is that what your expert's going to say?

MR. SEEVE: No, not at all, your Honor. We fully accept that they can be moved, as our expert hopefully will have the chance to explain. Those wireframe models in the

12:56PM accused products are just points in space. All models have pitch, as our expert will explain. So, the idea that there is a pitch is of course something we accept. The models can be moved; that's also something that we accept. But, we believe that the claim requires that an indication of the pitch be

12:56PM sent by the pitch determination marker, received by the software, and then based on that indication of the pitch the model be modified.

THE COURT: What does that have to do with not operable?

12:56PM MR. SEEVE: Sorry. We're not saying it's not operable, your Honor, we're saying it's not operable to indicate pitch. It's definitely movable. We're not trying to make that argument. If we were, that would be sophistry, I agree with your Honor.

12:57PM Is it possible that our briefing didn't -- didn't

emphasize the whole text? And if so I apologize, because that would be -- no, no, on Page 4 at the top of our briefing we explain this argument in detail. We say here, "The wireframe of the Mass Production Tool cannot be a pitch determination marker" -- underline, italics -- "because it is not operable to indicate the pitch." Not that it's not operable, but not operable to indicate the pitch. And that is precisely the heart --

THE COURT: And your expert will say what?

12:57PM MR. SEEVE: Well, he's his own man, your Honor, but our expert I believe will say that the wireframe models don't actually communicate in terms of pitch. When they're being moved, the wireframe model gets moved around the screen, but under the hood, like in the software communication between 12:58PM different modules of the software, pitch is never mentioned. Pitch is never exchanged, sent, received, nothing is modified.

THE COURT: But they can be moved to indicate pitch.

MR. SEEVE: They can moved. We don't think --

THE COURT: To indicate pitch, just like 12:58PM Dr. Stevenson said.

MR. SEEVE: Whether that's an indication of the pitch, I think --

THE COURT: See, that's nuance that I think is so nuanced it's -- it's somewhat cute, that's what I think. I 12:58PM don't get it, and maybe I will when your expert testifies. I

guess there just comes a point in time when I have -- it's --

MR. ALPER: Your Honor, if I may add one thing. We disagree with that as a defense. But on top of it all, they are making repeated suggestions to the jury that conflict with the Markman order. The opening statement said see, the patent has an envelope tool and a pitch determination marker, then it showed a screen of the wireframe on the accused products and said you don't see a pitch determination marker there.

THE COURT: I know.

MR. ALPER: And all it said was a wireframe. And then Mr. Seeve in his cross, he literally asked question after question where he said a wireframe -- asking about how a wireframe is distinct from the underlying model, how a wireframe --

MR. SEEVE: How is that inconsistent?

MR. ALPER: -- a wireframe and model are two different things. And he's like trying to get exactly to what the patent was -- I mean, I just took notes, but the claim construction absolutely rejected that these things couldn't be the same thing. So in that argument, and as we saw at sidebar, their only way to deal with the actual claim language is to modify it to take the indication part out of the claim language and start asking questions about whether the accused products receive pitch.

And so I guess our problem is, it to us sounds like

they are contradicting the claim construction, and that leaves them with, as your Honor put it, an argument that's a nonargument.

THE COURT: Right. Well, I think to somehow say to the jury that it has to be operable to indicate pitch conflicts with Judge Kugler's ruling that a wireframe is a pitch determination marker. And so that's why, you know, I don't use the word "cute" lightly, but that's why I think if you want to say nuanced, okay, but I think it's not -- I think at some point some of this is going to become so cumulative that I don't know that a fair trial can be held. I'm putting it out there. And the root and the cause of it I will deal with if I have to.

So, for example, the questioning of Dr. Stevenson, why was it even relevant to the questioning that the claim doesn't require to generate a new model? That's not the claim at issue here, and that's why -- why are we talking about claims that aren't even at issue here. If it's to obfuscate and confuse, I'm not liking it.

01:01PM MR. SEEVE: It is not to obfuscate and confuse, your Honor. I can explain exactly what I was going for there, if you'll let me.

So, when I asked about the '840 patent and whether that patent claimed generating a model, it was to get to this distinction that we're trying to raise in the '436 patent

actually, these other interrelated claims as Dr. Stevenson himself explained. In fact, he referred to it as an invention before remembering that there were six different inventions. So, these are interrelated claims and interrelated claim terms.

01:01PM

And part of what we think is a totally legitimate strategy here is to use what the expert says about claim language that appears in one claim, and apply it to claim language in another claim that uses the same language, but which Dr. Stevenson is interpreting entirely differently.

01:01PM

THE COURT: And I think that's fair. But I haven't seen evidence of that.

MR. SEEVE: So, in the instance you raised, your Honor, Dr. Stevenson testified that modifying a model is taking an existing model and changing it, whereas generating a model requires making a model from scratch. It turns out that Dr. Stevenson's position on the '436 patent is at odds with that, that interpretation of the claim. Dr. Stevenson in the '436 patent says that a model can be generated and the entire claim can be met and infringed when you don't -- when you already start with a model.

01:02PM

And that is the difficulty here. These claims are very complicated, they're very nuanced. A point in one claim raises a point in another claim, and it's not going to be immediately obvious to Dr. Stevenson, to the Court, maybe not

01:02PM

even to the jury.

THE COURT: Are there any claims at issue here that require the generation of a model from scratch?

MR. SEEVE: Yes, the '436 patent, Claim 2, the '436 patent, Claim 36, the '770 patent, Claim 12; they all require the generation of a model from scratch.

MR. ALPER: Your Honor, there is not a claim construction, there is never a suggestion in any -- any -- in this case so far that that was the requirement, restriction on the claims. And the only statement on whether model generation has to be original or not is in the *Markman* order where Judge Kugler absolutely rejected that notion.

MR. SEEVE: We disagree with that interpretation of the *Markman* order.

THE COURT: All right. Let me see it because that, again, the jury -- and I did my best to bring the jury back to the claims at issue -- clearly was left with the impression that somehow, somebody is right, somebody is wrong, that the claim requires a generation of a model. Now, if I'm being told that that was not what Judge Kugler's order is, then, okay, I guess I'm just going to have steam come off my head.

MR. ALPER: Let me be clear. With respect to the patents that they raise that issue on, so he did not -- he did not address the generation term in the '436 patent, but no one did. No one has ever in this case suggested that the -- any

generation term, up until today, requires generation --

THE COURT: From scratch.

MR. ALPER: -- from scratch -- except for with respect to the other patents where the defendants said that the generation term had to be from scratch. Judge Kugler said no, it's an iterative process, just like Dr. Stevenson said, you go round and round until you come up with the generation of the model that you have.

01:04PM And what's happening here, because I don't think the jury is tracking the word "generation" from one patent to the next the way that Mr. Seeve may be. What's happening here is he is -- they are -- defendants are suggesting to the jury that generation must happen from scratch. That is an argument, at least with respect to some of the patents, that was quintessentially rejected by Judge Kugler. And that was -- your Honor also excluded from this case in granting our *motion in limine* Number 8.

MR. SEEVE: We submit that that is -- every aspect of that we think is untrue.

01:05PM First of all, generation was a key component of Dr. Cohen's -- our expert in this case -- Dr. Cohen's arguments that was explained in his noninfringement report. So to say that the first time this distinction between generate from scratch and modified is being raised is today, that's false.

Secondly, we don't believe that Judge Kugler's *Markman* decision says what they say it says. We understand that they won certain aspects of the *Markman* decision, but that doesn't mean that's it's a carte blanche for them to --

01:05PM THE COURT: Mr. Seeve, hold on one second.

Where on the *Markman* order do you want me to look and then I will ask you, Mr. Seeve, where you want me to look?

MR. ALPER: Our *motion in limine* Number 8 slides have the relevant portions of it, and I'm just asking my colleagues 01:05PM for the copy of that. It's in my box, if I may just go look.

Okay, your Honor. What I'm talking about is -- so, just by way of example, your Honor, just to keep things moving, this is -- this is from Page 12 of the *Markman* order. And it has to do with the pitch determination marker, and the 01:06PM issue came up --

THE COURT: All right. Let me just look at the opinion. I have it here.

(Pause.)

THE COURT: Okay.

01:07PM MR. ALPER: Okay. So I'm going to show you two things, your Honor. The first is on Page 12 of the *Markman* order, where Judge Kugler says, in connection with the pitch determination marker and pitch adjustment, he says, that "Pitch adjustment by the operator's action is an iterative 01:07PM activity. The previous roof model can, in effect, serve as

the new pitch determination marker upon which an operator can act."

And then if you go down, he says, that "Since the '840 patent unambiguously describes it, a person of ordinary skill in the art would understand the iterative and interrelated nature of pitch determination activity, roof model construction activity, and roof model review activity."

And then later in the *Markman* opinion, he addresses the defendants' argument, where they -- "Further, they argue," that's referring to defendants, "the creation of a roof model must therefore occur after the movement of the first visual marker."

And the reason that he's talking about that, your Honor, is explicitly in one of the claim elements at issue here, which I will show you. That's right here.

So -- this is Claim 12 of the '770. It's one of the asserted claims that talks about digital wireframe model construction, which their expert contends in his expert report, which we believe was stricken by your *motion in limine* order, means original from scratch construction. Okay?

And then Judge Kugler addressed that. He said, "Defendants argue that the creation of a roof model must therefore occur after the movement of the first visual marker," meaning you move the first visual marker, and then you create the model. And he says he doesn't agree with that.

"The frame model may be considered a visual marker that is the end result of an iteration of the entire method, which may be the starting point marker in a subsequent iteration of the method."

01:09PM What he's saying is that when you perform generation of the model, that is the process of going around and around and around the claim, and it doesn't require just a creation from scratch.

Now, he did not address the generation element in the 01:09PM '436.

THE COURT: And was that ever raised?

MR. ALPER: No, never raised, until -- until just now. No one has made an argument that there is a defense in this case --

01:10PM THE COURT: Show me the '436 patent, please.

MR. ALPER: Yes. Let me see.

And, to be clear, when I say not raised, there is no defense in this case that there is no infringement because they create --

01:10PM THE COURT: From scratch.

MR. ALPER: Right, from scratch.

THE COURT: I understand.

MR. ALPER: On the '436.

THE COURT: Yes.

01:10PM MR. ALPER: There was a defense on the other patents.

Judge Kugler got rid of that --

THE COURT: I understand.

MR. ALPER: -- in his *Markman* order, and your Honor's *motion in limine*.

01:10PM So here is the claim element from the '436. Okay, there it is.

(Document was published.)

MR. ALPER: So it says Claim 1 of the '436 patent on the screen.

01:10PM THE COURT: For the reexamination.

MR. ALPER: For the reexamination claim.

And there is the generation element. And it doesn't say -- what it does say is generate based, at least in part, on the correlation. It doesn't say only on -- only on the

01:11PM original correlation. It doesn't say generate first, generate from scratch.

THE COURT: Well, I think where it would show -- well, a roof estimation module would be up front, up above, right?

01:11PM MR. ALPER: Right. So you start with the roof estimation module. That's going to be the software that's going to -- software, and then the hardware that's going to provide the following steps.

You receive the aerial images. You then perform a

01:11PM correlation element, so that's a requirement. You then

generate, based at least in part on the correlation, so it's open-ended. It's telling you that you can do other stuff to get to the generation of a 3D model. It's not excluding other -- other things that you might do to generate. And that's what we're talking about.

01:12PM

And if you look at the patent, the specification, you'd see, just -- the three patents actually share a lot of specification. As Judge Kugler noted in looking at the other patents, there is an iterative nature to the way that the patents are laid out.

01:12PM

THE COURT: And so -- okay. So my question then for Mr. Seeve is: Does not Judge Kugler's ruling of the iterative nature -- does not the argument that you're making, that it must be generated by scratch, contravene that ruling?

01:12PM

MR. SEEVE: It does not, your Honor, and --

THE COURT: How so?

MR. SEEVE: -- we will explain why.

Actually, may I use the same ELMO for the *Markman* order, if you don't mind?

01:12PM

MR. ALPER: Yeah, this one, the creation. Here.

MR. SEEVE: That's the one. Or both of them.

Now, let's look first at what they pointed to originally.

(Document was published.)

01:13PM

MR. SEEVE: I'm sorry. I'm not super expert when it

comes to use of ELMOs. Bear with me for a moment.

Here we are. Here, this is what they pointed to originally, supposedly showing that the claim covers pitch determination, roof model construction, roof review, all at the same time.

What they didn't highlight and they didn't read for your Honor is this: "Even though such interactivity is not claimed."

When the Court's *Markman* order says that something isn't claimed, that means it's not claimed. And this Court's *Markman* order specifically says that this notion of pitch determination, roof model construction and roof model review, even though described in the specification as being related, they are distinctly claimed, and that is what we understand such interactivity is not claimed to mean.

THE COURT: No, but he went on to hold how a POSA would understand it, even though it's not specifically claimed.

MR. ALPER: Right.

THE COURT: He described, even though it's not specifically claimed, how a person skilled in the art would understand the claim, and that was his ruling.

MR. SEEVE: So I believe --

THE COURT: So I think your reading of his order is incorrect.

MR. SEEVE: Sir -- I'm sorry.

Your Honor, I believe that in the above paragraph, actually, he says, "All of this information is imparted to a POSA that's in the specification" --

01:14PM THE COURT: He said: But then since the '840 patent unambiguously describes it, a POSITA would understand the iterative and interrelated nature of pitch determination activity, et cetera, even though it's not -- interactivity is not claimed.

01:14PM And that's the whole point. That was his ruling, which is there is this iterative nature of the claim, and so he never limited it that it must then be generated from scratch. That's exactly what his ruling says. Now, that's the '840, but I think the argument carries on into the '436. And --

MR. SEEVE: So, your Honor --

THE COURT: Well, let me just move on. When was this first raised? Today?

MR. SEEVE: No. That's another issue we wanted to

01:15PM raise with your Honor.

This has been an issue in the case for well over a year, since expert discovery. I'm reading from Dr. Cohen's expert report here. I don't have a printout, unfortunately, to show your Honor because we weren't expecting this issue to

01:15PM come up today.

But he says -- Dr. Cohen says very clearly: Dr. Stevenson identifies modifying an existing roof model as satisfying these claim elements. In particular, he alleges that Dr. Stevenson says it is met by the iterative process of correlating roof features. But then he says: But refining the accuracy of an existing model is not the same thing as generating it in the first place. This is Dr. Cohen in his report a year and a half ago.

So for plaintiffs to suggest now, falsely, that this is the first time we are raising this argument, and that on Stevenson's cross somehow we're coming up with new arguments out of whole cloth, that is simply untrue. And we definitely believe that this argument is fair game now. We believe this argument is fair game during Dr. Cohen's testimony next week. And we --

THE COURT: Well, I guess the case law allows the Court to construe a claim at any time during the course of a proceeding, even during trial. So if I have to construe a claim and it conflicts with your expert's opinion, I will so do it.

But I am inclined to say that, consistent with Judge Kugler's ruling, that I think to construe the claim the way that your expert has conflicts with his ruling. The case law is very clear. My recollection of the case law, you'll tell me if I'm wrong, is that I can construe a claim as late as

during trial.

MR. SEEVE: That is true, your Honor.

THE COURT: So now it looks like you folks have disputed what the claim means under '436 and I'll have to construe it. That is the only way to resolve it. And then if I construe it in a way that is inconsistent with the testimony that the jury has heard, i.e., generating a model from scratch, then the jury will be so told.

So you folks give me something on it. I mean, the question's already been asked. You are not going to go back to it, I presume.

MR. SEEVE: Of course not, your Honor.

THE COURT: Okay. And I will deal with it. But if I construe the claim in a way that I'm predicting I will, unless you all persuade me differently, then I suppose your expert's testimony is not going to -- you know, it's going to fall on that construction because it will have been based on a faulty construction.

That's the best I can give you.

Okay. I think we folks should take a break, lunch break. So I will tell the jury we will be a little late so you all can get something to eat. Okay?

RESPONSE: Thank you, your Honor.

THE DEPUTY CLERK: All rise.

THE COURT: In the meantime, I want the plaintiffs to

work on an instruction to cure the prejudice that we talked about.

MR. ALPER: Yes, your Honor.

(A luncheon recess was taken at 1:17 p.m.)

01:49PM THE DEPUTY CLERK: All rise.

THE COURT: Okay. We all set?

MR. ALPER: Your Honor, we have a proposed instruction.

THE COURT: Yes, let me see.

01:49PM MR. ALPER: May I approach?

THE COURT: Yes. Have you shown it to --

MR. BROMBERG: We had a look and we object to it, Your Honor.

THE COURT: Okay. Let me have a look.

01:49PM Okay. You can all have a seat. Thank you.

Okay. I will take a look at it. Okay. I'm going to look at it -- the jury is lined up. I certainly want to do it before the witness is off the stand, though.

THE DEPUTY CLERK: All rise.

01:50PM (The Jury entered the courtroom at 1:50 p.m.)

THE COURT: Sorry to keep you all waiting. We have been working a little. Okay?

You can have a seat. Thank you.

Okay. We will continue with examination.

01:50PM MR. SEEVE: Thank you, your Honor.

I have only a, hopefully, a brief time left. I know that after lunch is not always the easiest time to focus, especially not on 3D roof models, but we'll try to get in and out as quickly as possible.

01:50PM BY MR. SEEVE:

Q. Dr. Stevenson, as you know, we have been discussing the question of infringement, right?

A. Yes.

Q. Now, let me talk a little bit about infringement and

01:51PM ask -- rather, ask you a little about how you understand infringement.

Infringement of a patent claim requires that an accused product meet every single limitation of that claim, right?

A. That's the basic idea, yes.

01:51PM Q. And what's at issue in this case is what's called literal infringement of patent claims; isn't that right, Dr. Stevenson?

A. I believe that's the legal term, right.

Q. And to literally meet or to literally infringe a patent

01:51PM claim, the accused product literally has to satisfy each and every requirement of the claim, right down to the letter; isn't that right, Dr. Stevenson?

A. I thinks that's the basic concept.

Q. Now, I just want to make it clear, sort of -- your

01:51PM opinions on noninfringement, if there were a claim with ten

different requirements, and some of the claims in the patent-in-suit have many more than ten different requirements, and nine out of ten requirements were met by an accused product, but not the tenth one, the tenth one wasn't met, there wouldn't be infringement, would there?

01:52PM

A. No. That's why I walked through each and every element and showed my evidence for infringement.

Q. Now, what if you had a claim with ten requirements and there was an accused product and the accused product satisfied nine out of ten of those requirements, and it was pretty close on the tenth requirement, did something that was almost just like the tenth requirement, would there be infringement of that claim, literal infringement, Dr. Stevenson?

01:52PM

A. I'm not sure I understand your hypothetical at this point.

01:52PM

Q. If there is a requirement of a claim and the accused product doesn't quite meet it but it's close, is that requirement literally infringed, Dr. Stevenson?

A. I'm sorry. I would like to answer your question, but I don't know what you mean by "close." I guess you mean if it's not literal, then, yeah, then I agree, it's not literal.

01:52PM

Q. So, just to be clear, the answer is no, there would be no literal infringement if an accused product comes close to the patent claim but doesn't quite satisfy the literal requirements of the claim?

01:53PM

A. I'm not sure what you mean by "close." I understand that if a limitation is not found in the claim -- in the accused product, then there is not literal infringement.

Q. Now I'm going to ask you a little bit about Aerial Sketch. Now, you accused several products of infringing the claims in your testimony earlier. One of them is Mass Production Tool, and one of them is Aerial Sketch; is that right?

A. Correct.

Q. And Aerial Sketch is the one of those accused products that you addressed last, you addressed it at the end of yesterday and at the beginning of today in your testimony, right?

A. It was the second one I addressed, yes.

MR. SEEVE: Now, could we bring up Plaintiffs' Demonstrative 199, please, Mr. Frasier?

(Pause.)

MR. SEEVE: I'm sorry. Bear with us, ladies and gentleman. We are having a technical issue, but this will hopefully be resolved very soon.

(Pause.)

MR. SEEVE: I will try to use this projector because it looks like the screens are being finicky right now. Hopefully, this works.

(Document was published.)

MR. SEEVE: 199, please.

Thank you.

Apologies for the delay.

BY MR. SEEVE:

01:56PM Q. Now, Dr. Stevenson -- uh-oh. Well, that doesn't look good.

MR. SEEVE: Can everyone see this screen here? That screen seems to be on the fritz, but this screen seems to be working.

01:57PM THE COURT: Okay. Are you going to have it up for a little while because I can dim the lights so the jurors can see it maybe a little bit better.

MR. SEEVE: It should only be up for a second or so.

THE COURT: Oh, okay.

01:57PM MR. SEEVE: I'm hoping that it should be bright enough.

THE COURT: Only because it takes forever to reilluminate the lights.

Are you all okay?

01:57PM They're fine. Okay.

BY MR. SEEVE:

Q. So, Dr. Stevenson, this is a demonstrative that you prepared for your testimony at this trial, isn't it?

A. Yes.

01:57PM Q. And this is a screenshot of Aerial Sketch, which is one

of the two products that you have accused of infringement, correct?

A. Correct.

Q. And only one aerial image is displayed on this slide, correct, in this screenshot?

A. No, I see -- what? -- six aerial images displayed.

Q. I see one aerial image on the left and I see six thumbnails on the left; is that correct? Do you see that?

A. Well, they are small versions of the aerial images that I refer to as thumbnails.

Q. So when you're referring, for example, to the requirement of the '454 patent, that two aerial images be shown on the same display, you're counting these thumbnails; is that right, Dr. Stevenson?

A. Which requirement are you talking about?

MR. SEEVE: Mr. Frasier, if we could bring up Claim 26 of the '454 patent.

(Document was published.)

MR. SEEVE: Thank you.

BY MR. SEEVE:

Q. I'm referring to the requirement up top there, you see displaying, by the computer system, of the Roof Estimate Report System. First there is an aerial image of a roof, on a single display, and then a little bit later, displaying a second aerial image of the same roof on the same single

display. Do you see that requirement, Dr. Stevenson?

A. I see that requirement.

MR. SEEVE: And could we go back to demonstrative Number 199?

01:59PM (Document was published.)

BY MR. SEEVE:

Q. It's a little stretched out here, as you can see, Dr. Stevenson, but I think you get the general idea.

You are saying, correct, that this -- or are you, are you not -- that this screenshot here on the right, which shows one aerial image and six thumbnails, that that satisfies the requirement that a first aerial image and a second aerial image be displayed on the same display? Is that right?

A. Well, I mean, I would -- I would take two different approaches to that. I think there is two different ways you could show that this product practices that element, at least the part we read.

One is what we see there is the, you know, the smaller versions of the aerial images, and the large version of aerial image. That seems like they're both showed simultaneously on the same display.

I also didn't see, at least in the language we read of that claim, any requirement that they be shown simultaneously on the same display.

And so when I click around the thumbnails, it seems

like that will also meet that limitation, at least the section we read out. I didn't read the whole element.

Q. Now, Dr. Stevenson, the claim also requires that there be a line drawing overlaid on the first aerial image and a line drawing overlaid on the second aerial image, both line drawings overlaid on aerial images that are shown on the same display, doesn't it?

A. I don't want to ask you to go back to the claim language, but my recollection of the claim language is that there is a requirement that there is a line drawing on a first aerial image shown on a display, which, clearly, that is right there.

Then there is a requirement for a second aerial image. Any of those can meet that, but there is other ways to meet that here.

And then there is a requirement that a line drawing be shown over the second aerial image, which you would get if you click on any of those thumbnails, and you'd see that second aerial image, you would see it on the same display. It would be a second line drawing on the second aerial image.

Q. So, the red and blue and green lines that you see on top of that aerial image, that's what you call a line drawing, isn't it, Dr. Stevenson?

A. That's a line drawing, yes.

Q. In your terminology, using the term "line drawing," which is your term for that, how many line drawings do you see on

that display?
A. At that instant in time? Well, I'm not sure your question is particularly clear because I could point to a lot of things as potentially line drawings. But in terms of line drawings overlaid on aerial images, I see the one at that instant in time, all I have to do is click on another thumbnail and I see, on that same display, a different one.
Q. Did you say you could point to a lot of things on that image as line drawings, Dr. Stevenson?
A. Well, line drawings is nothing more than the word "line drawings." You know, any line thing can be a line drawing. I mean, I think you're trying to talk about the line drawings of the claim, so that's why I clarified about a line drawing overlaid on an aerial image.
Q. What else on this demonstrative here would you call a line drawing?
A. Well, like I said, there is other things I could call a line drawing. They're not overlaid on aerial images, so I'm not sure why we would talk about them.
Q. But you did say that there were other things you could call line drawings, and I'm curious. The claim term says line drawing. What else is a line drawing on this -- on this demonstrative right here? Can you point to any?
A. I'm happy to.
MR. BROWN: Your Honor, objection, relevance.

THE COURT: Go ahead. Can you point it out?

THE WITNESS: Sure. I mean, that is the only line drawing that I'm accusing of practicing the claim, just to be clear, but, certainly, the window itself is a line drawing.

02:03PM BY MR. SEEVE:

Q. So the whole window around the entire user interface, that's a line drawing?

A. It's a line drawing. It certainly doesn't meet the claim elements, and it's not part of what I accuse as meeting the

02:03PM claim element --

Q. Any other line drawings on that side?

A. Any time we have a line that's drawn on the screen, we can call it a line drawing. It's not relevant to the analysis of the claim though, of course.

02:03PM Q. Do you see anything that you would call a line drawing overlaid on the thumbnail images on the left?

A. I'm not sure I can see them, but I don't recall anything that I would say is over the thumbnail images.

Q. And -- sorry.

02:04PM So, currently, on this display that you see right here, there is only one thing you would call a line drawing that meets the requirements of the claim, and it's only displayed on one aerial image; is that correct?

A. At this snapshot of time that I have here, yes, there is

02:04PM one line drawing overlaying I believe what I referred to as

the first aerial image.

Q. Thank you, Dr. Stevenson.

Now, what I would like to ask you a little bit about, what you called secondary considerations of nonobviousness this morning. That's a mouthful. But I believe you testified that secondary considerations of nonobviousness include, among other things, commercial success; is that right?

A. Yes.

Q. And I believe the general idea here is that if a patent is the source of a lot of commercial success, well, that must mean that it's not obvious. Is that the idea here?

A. That's the idea of a secondary consideration, that these are this other sort of evidence that's not directly related to the patent, but is -- well, maybe it is directly related to the patent. It's directly related to the patent, but it's not the technology side of it, you might say.

Q. It's actually that issue that you just raised yourself that I would like to get into a little more.

You say that, actually, the evidence of commercial success doesn't have to be directly related to the patent; is that the case, Dr. Stevenson?

A. No. I -- I tried to clear that up very quickly. The -- it's, of course, related to the patent. It's the idea of secondary considerations. It's not so much on the technology side, but this other sort of evidence that is showing that

this patent is important and meaningful and not obvious.
Q. So, just to clear up, what you said was: It's other sorts of evidence that's not directly related to the patent, and then I believe you clarified, but is, you said, well, maybe it's directly related to the patent.

Is it possible for evidence of commercial success to not be directly related to the patent, Dr. Stevenson?
A. No. All this secondary considerations are clearly related to the patent. I was trying to talk about the technology of the patent. Some of the stuff, this commercial success, is about the business that came out of the patent, not about the technology in the patent. And that's why I tried to clarify right away.

MR. SEEVE: Mr. Frasier, can we go to Plaintiffs' Demonstrative Number 59, please.

(Document was published.)

BY MR. SEEVE:
Q. Could you point out where on this slide it talks about patents, Dr. Stevenson?

MR. BROWN: Objection, Your Honor. We did not show this slide as part of Dr. Stevenson's presentation.

MR. SEEVE: This was part of the presentation --

THE COURT: One second.

MR. SEEVE: I'm sorry.

THE COURT: What is the question?

MR. SEEVE: I was asking Dr. Stevenson to point out where on this slide it talks about patents.

THE COURT: Okay. On that slide, there is not the use of the word "patent." Okay?

02:07PM MR. SEEVE: I agree.

BY MR. SEEVE:

Q. Dr. Stevenson, do you agree with the Court, this slide doesn't talk about patents?

A. It certainly doesn't use the word "patent."

02:07PM MR. SEEVE: Now, Mr. Frasier --

THE COURT: And the software programs that are referred to in there, do you have an understanding of what they are?

THE WITNESS: Yes, at this time they certainly only

02:07PM had this one software program, which is the Render House software that I talked about and that practices the patents in this case.

THE COURT: Okay. Next question.

MR. SEEVE: Could we go to Slide 63, please?

02:07PM (Document was published.)

BY MR. SEEVE:

Q. Now, here, you can see this is another one of the slides you prepared for your testimony today, right, Dr. Stevenson?

A. Yes.

02:07PM Q. And you're talking about a tool or, rather, the e-mails

on this slide are talking about a tool that may have a lot of potential for use, right?

A. Yes.

Q. And then the e-mail below says this looks like a great service, right?

A. Yes.

Q. Is that talking about patents, Dr. Stevenson?

A. It's talking about the EagleView software again.

Q. It's talking about the EagleView software?

A. Yes.

Q. Is the service the EagleView software?

A. Well, I mean, the EagleView, through its software and computing system, provides this service of allowing a person to generate this customized Roof Report that is delivered as a product.

Q. But you agree that neither of these e-mails talk about patents, right?

A. They're talking about the software, but they don't use the word "patent" certainly.

Q. And, certainly, neither of these e-mails refer to the patents here in suit; there is five particular patents-in-suit, right?

THE COURT: Are you asking -- okay. Are you asking him, do they use the word "patents," or are you asking him do they refer to the patents at issue?

MR. SEEVE: I'm asking both, your Honor. I will ask them individually.

THE COURT: Okay. So do you -- okay.

BY MR. SEEVE:

02:08PM Q. Dr. Stevenson, first, as an initial matter, let's just get this out of the way. The -- neither of these e-mails use the term, the word "patents;" is that correct?

A. I believe that's correct.

Q. And secondly, neither of these e-mails refer directly to 02:09PM the patents-in-suit or the technology at issue in the patents-in-suit; is that correct?

A. Well, they're certainly referring to the technology at issue in the suit.

Q. Can you point out the sentence where they refer to the 02:09PM specific roof modeling technology that's at issue in the patents-in-suit?

A. Yeah. I think, actually, if you look at the underlying -- the word "tool" there, then I actually think if you go to the next slide, you can see even more clearly they 02:09PM are talking about the software tool that's provided by EagleView.

Q. Well, I'm talking about these e-mails here. Now, I believe --

A. Well, the next slide is from the same e-mail.

02:09PM MR. SEEVE: Let's go to the next slide, Mr. Frasier.

BY MR. SEEVE:

Q. Here in this next slide, I think you're -- I assume that you are about to point out the giant red arrow that you drew here to the e-mail below, and it says the website is HTTP://EagleViewmeasurements.com?

A. Yes.

Q. And HTTP://EagleViewmeasurements.com you believe is a specific reference to the technology at issue in the patents-in-suit; is that correct?

02:10PM A. Yes, that's how you access the EagleView software and generate a Roof Report.

Q. Now, generating a Roof Report, that's a pretty general technology. Earlier when we were talking about one of the patents-in-suit, you testified that that patent-in-suit is

02:10PM directed to a very narrow tool, didn't you, Dr. Stevenson?

A. I don't remember using the word "narrow tool." I said some of the patents talk about these tools that you're going to use to generate a Roof Report, certainly.

Q. The patent that we were talking about, the '840 patent,

02:10PM Claim 10, talked specifically about modifying the pitch of a roof model once you've already created it, doesn't it, Dr. Stevenson?

A. Once you've already created what?

Q. A roof model.

02:10PM A. The -- I mean, I think we have gone through this before.

And we looked at the figure. You generate a preliminary roof model, you modify it, and this is an iterative process where you are sitting there with the software, you're updating the line drawing. Those are the modifications that the pitch determination marker patents talk about.

Q. Is there anything in this e-mail about line drawings, Dr. Stevenson?

A. I don't see the word "line drawings" there.

Q. Is there anything in this e-mail about pitch, Dr. Stevenson?

A. I don't see the word "pitch" in those e-mails.

Q. I believe you said slope meant the same thing as pitch. Do you see the word "slope" anywhere in these e-mails?

A. I don't recall seeing the word "slope" in there.

Q. How about correlation, do you see any reference to correlation in these e-mails?

A. None of these words are used directly. They're all just talking about the software that EagleView has that practiced these patents.

Q. So the technology that's specifically at issue in this case, the technology that's relevant to what we're talking about here, none of that technology is described in these e-mails?

A. I would disagree with your characterization.

Q. Can you point to where in this e-mail that technology is

described, Dr. Stevenson?
A. Sure. It says "tool" at the top, they talked about it. It refers to the website. The website is how you access and use the EagleView technology that's been patented and is at issue in this case.
Q. It's not possible they're talking about some other tool, is it, Dr. Stevenson?
A. At this time, EagleView had just one tool. They had no other tool.
Q. But we're talking not about tool, as in a whole software program, right, Dr. Stevenson? We're talking about tools like a pitch determination marker that serves a very, very specific purpose in a roof modeling piece of software, right?
A. Those were the tools that were embodied in that tool that's being referenced in the e-mail.
Q. Well, so, how do you know he's not referring to some other tools, though, Dr. Stevenson?
A. Because those are the tools in the -- the product. I'm not -- I feel like we're going in circles now. I'm sorry.
Q. The product has many tools, doesn't it, Dr. Stevenson?
A. That product, and certainly at that time, was all about generating this Roof Report. I don't think you could -- I don't think you could do that without, for instance, doing the correlation step. I don't think that would -- you could even try to get through the tool without doing the correlation.

Q. So it's all about generating --
A. And at that time --
THE COURT: Mr. Seeve --
THE WITNESS: -- certainly, the correlation tool was used by anyone who accessed that website and ordered a Roof Report. I don't think it's practical to not also use those tools of corresponding changes and pitch determination marker in the EagleView product to -- and still generate an accurate Roof Report. So I believe that site there is referring to all these tools and all that technology.
BY MR. SEEVE:
Q. So I just want to make it clear what your testimony is. You're saying that that word "tool" there, where it appears in the e-mail, just says this looks like a tool that may have a lot of potential for use in many of our products, you think that tool refers to the correlation tool that's described in the patents-in-suit; is that correct?
A. It's certainly referring to the EagleView software product that existed at that time. I don't see how you could use the EagleView software product without practicing the claims of, for instance, the correlation patents. So, yes, it's referring to those patents.
Q. But that word "tool," it's doing double duty, right, because it's also referring to the pitch determination tool that's the subject of the '840 patent; is that your testimony?

A. It's referring to the software provided by EagleView at that time, which was Render House, which is one of the software products we went through and showed that all those tools in the patents were found in that particular piece of software.

Q. Now, this e-mail, this e-mail is from 2008. Do you see that, Dr. Stevenson?

A. Yes.

MR. SEEVE: Now, if we could go to Plaintiffs' Demonstrative Number 28, please.

BY MR. SEEVE:

Q. This is another demonstrative that you prepared for your testimony here today, right, Dr. Stevenson?

A. Yes.

Q. And this at the top of this slide, it says, "In January 2008, Mr. Pershing reduced his invention to practice in the form of the Render House roof estimation software." Do you see where it says that?

A. Yes.

Q. And that's the software you were just talking about, the software that was supposedly so commercially successful, right?

A. Yes.

Q. And it's also the software you say embodies the patents-in-suit, right?

A. Yes. It's one of the softwares.
Q. This screen shot, is this a screen shot that was taken by you?
A. It looks like it was. It looks like it's a screen shot from the video based on the exhibit number.
Q. And was this the same version of the software that existed in 2008?
A. No, not this software. We'd look at the manual for the version that existed in 2008.
Q. But the heading of the slide says in January 2008, doesn't it, Dr. Stevenson?
A. Yes.
Q. So, how can you use software that didn't exist in 2008 to show what supposedly happened in 2008?
A. Well, I don't think -- I don't think the software changed in any meaningful fashion between those times. It's just other than what I could run today was the version that's found within Twister.
Q. So, you didn't even run the software that existed in 2008; is that right?
A. Let me think about that because I know I had access to multiple versions of execution. I'd probably go and look at the exhibit, the videos I created to see if -- all the versions I did.
Q. And you say you don't think there were any meaningful

changes between 2008 and 2019, which is, you know, more than a decade later. Why don't you think there were any meaningful changes in that time?

A. Well, it's clear, if you look at the documentation, and even Mr. Pershing's testimony, they moved to this other piece of software, which is the one they continually developed, which they call Twister. This original they kept around in some sense because some people liked, you know, were more comfortable with it and kept on using it.

02:17PM

Q. But it's not that they didn't change it at all, right, Dr. Stevenson, because you said that this software that you were using didn't exist in 2008. So, they must have changed it somehow, right?

A. Well, what I recall for sure is in looking at the manuals, which described the 2008 version, I didn't see anything different between that version and the version I executed, I was able to execute. And so that's why there might be some differences. Maybe they changed an icon somewhere, maybe they changed a wording. To me it was about the operation. I didn't see any meaningful difference in the operation.

02:17PM

Q. This demonstrative doesn't have a cite to a product manual on it. It has a screen shot, right?

A. Yes.

Q. And that screen shot is from 2018, right?

02:17PM

A. Yes.
Q. Not 2008?
A. Correct.
Q. Now, Dr. Stevenson, I think you testified earlier that you were retained in this case by EagleView's attorneys in December of 2017, right?
A. Correct.
Q. And you -- December 11th of 2017, just to be super precise about it, right?
A. I verified that because I was asked that question at depo and I wasn't sure then.
Q. I see. So, if you could turn to page 1472 of your expert report, please, and let me know when you're -- when that page is in front of you.
A. Okay.
Q. So, 1472, I just want to make sure we're on the same page, literally the same page. This is a signature page, right, of your expert report?
A. Yes.
Q. And you can see your signature there, right, Dr. Stevenson?
A. Yes.
Q. And the top of this page reads, and if I may read it, "I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct,"

right?
A. Yes.
Q. And the foregoing is a fancy term meaning all of the 1471 pages that came before this page, right, Dr. Stevenson?
02:19PM A. That's what I'm referring to, yes.
Q. And it's dated April 11th, 2018. Do you see that?
A. Yes.
Q. So, that's exactly four months after you were first contacted about this case, right?
02:19PM A. That seems to work out that way, yes.
Q. Now, before you were contacted in December 2017, you had never read the patents, right?
A. No, I had not.
Q. You never heard of the patents, right?
02:20PM A. No, I don't think so.
Q. So, between December 11th and April 11th, 2018, in those four months, you wrote an entire 1472-page expert report; is that right?
A. Certainly my report is 1400 and some pages and I did work
02:20PM on that from when I was hired to April 11th. There's a lot of pictures and things like that in it. So, I wouldn't call it 1400 pages of writing.
Q. But it's a lot of writing, isn't it, Dr. Stevenson?
A. I think if you take out the images and screen shots, a
02:20PM lot of the screen shots from these videos are in this report,

I think you're around 600 pages.
Q. Only 600 pages. But that's not all you did during that four months, right, Dr. Stevenson? You also reviewed a number of documents relating to this case, relating to the accused products and the patents, didn't you?
A. Certainly. That's how I prepared the report, by doing it.
Q. And if you flip to Exhibit B of your report, which begins -- unfortunately the page numbering is different on this exhibit, but --
A. I found it. I know what you're talking about.
Q. Okay. Exhibit B lists the materials that you considered in writing this report, doesn't it?
A. Yes, that's what I tried to do there.
Q. And those materials include, for example, deposition transcripts, right?
A. Yeah. I don't see that listed necessarily right here, but I would assume. Oh, you know what, I didn't -- oh, yeah, I see it, yeah.
Q. How many deposition transcripts did you review, Dr. Stevenson?
A. I think I might have miscounted, but it was on the order of 20, 20 some.
Q. And you reviewed a whole bunch of other documents, too, right?

A. Yes, certainly.
Q. Thousands of pages of documents, right?
A. I didn't count them up, but it wouldn't surprise me if it was thousands.
02:22PM Q. And you have a day job, too, Dr. Stevenson, don't you?
A. Certainly.
Q. You are a professor at Notre Dame University. Were you teaching a class during these four months when you wrote a 1400-page expert report and reviewed thousands of pages of
02:22PM documents?
A. I guess, based on that timing, the first month I was not, because that was our winter break, but the last three months I certainly was.
Q. So, you were teaching a class during part of that time?
02:22PM A. Yes.
Q. Do you recall when you reached your conclusion that the accused products in this case were infringed?
A. I certainly don't think there's a specific day where I said, oh, they infringe. Certainly I worked, you know, quite
02:22PM hard, working and forming the opinions. Somewhere along those lines I certainly came to the conclusion they were infringed, but I don't remember the date. Certainly somewhere in that time frame though.
Q. Sometime in the four months between December 11th, 2017,
02:23PM and April 11th, 2018?

A. Yes.
Q. Did you start writing your report before you concluded that the accused products were infringed?
A. I may have, just because there's some introductory material about my background and my qualifications. That may have been put down on paper first, but I don't recall.
Q. So, you took the case before you decided that the accused products had been infringed, correct?
A. Well, when I start working on a case, I generally have no idea if something is infringed or not. I start figuring it out. That's what I'm initially hired to do, is to figure it out and figure out if there is infringement or not.
Q. And you're being paid for your time here today, right, Dr. Stevenson?
A. Yes, certainly I get paid my normal hourly consulting rate.
Q. What is your normal hourly consulting rate?
A. $600.
Q. Were you being paid $600 an hour for your time on this case right from the beginning back to December 11th, 2017?
A. Yes.
Q. Approximately how many hours would you say you have worked on this case?
A. I don't know. It's, I mean, it's spread out over two years, and, you know, certainly there's some months where it's

zero because I didn't talk to people for a while. I don't have -- I don't have a -- I mean, it's certainly not less than 100. I don't know how much more than that it would be.

Q. At your deposition, I believe you testified, and this was more than a year ago, you testified that it was at least 100 hours. Do you remember that?

A. Yes, that wouldn't surprise me if I said that.

Q. So, at that time you had made at least $60,000 from your work on this case?

A. Yes.

Q. And since then I assume you've spent 100 hours at least?

A. I would think so.

Q. So, at least $120,000; is that fair to say, Dr. Stevenson?

A. I think that's probably true.

Q. Now, I have one last set of questions to ask you.

A. Can I put the report away?

Q. Sorry?

A. Can I put the report away?

Q. You can, you can. It's a heavy one. I'm sorry to make you take it in and out and flip through such a giant binder.

MR. SEEVE: Slide 299 of plaintiff's presentation, please, Mr. Frasier.

BY MR. SEEVE:

Q. This relates to, this slide -- this slide that you

prepared for your testimony today, right, Dr. Stevenson?
A. Yes.
Q. And this slide lists what defendants have identified as non-infringing alternatives to the technology at issue in the
02:25PM patents-in-suit, right?
A. Yes, that's what I understand I got that from.
Q. So, did you investigate each one of these non-infringing alternatives?
A. To the best of my ability I could. Some of them,
02:25PM especially some of the defunct ones, I could find very little, but I lay out what I could find in my expert report.
THE COURT: And by defunct, you mean they're out of business?
THE WITNESS: Yes.
02:26PM BY MR. SEEVE:
Q. RoofShots/Roofers411, let's just take that one as an example. Do you see that in the left column?
A. Yes.
Q. What was that?
02:26PM A. There's a lot of these. I think if you want to get into details, I probably should review the report, but that one is certainly, it looks like, you know, I found evidence that it was inaccurate. So, the measurements, what they provided were not considered accurate relative to the EagleView software.
02:26PM Q. Now, accuracy, is that a requirement of the claims at

issue in this case, Dr. Stevenson?
A. That's an outcome of the fact that you're using the patented technology, is that you can generate these accurate reports.
02:26PM Q. But the claims don't require a certain level of accuracy, do they?
A. No, that's not a requirement of the claims. This is a different sort of analysis. I'm not considering infringement here. I'm considering whether there's alternative.
02:26PM Q. Well, you are considering infringement, aren't you, Dr. Stevenson, because the top of this slide says non-infringing alternatives. Non-infringing is part of that analysis, isn't it?
A. Well, I mean, I come up with there's kind of two, a
02:27PM couple of different things you think about, whether or not they're infringing or non-infringing, and you can see on some of them, for example, the Aerialogics one, it's the second on the list, they were sued for infringement and settled by going out of business. They were an infringing -- maybe they were
02:27PM an alternative, but they were infringing. Some of them, the ones that are out of business, for instance, aren't really alternatives. You can't go out and get a roof report from them, and so they're not alternatives. Some of them, like the RoofShots, are inaccurate, and so it doesn't seem -- it
02:27PM doesn't appear to me like it would be, given all the praise

about the accuracy that seemed to draw their customers, they wouldn't, someone wouldn't go and look for an inaccurate report.

Q. So, the reason -- I'm just trying to get this straight -- the reason that you believe the ones that you've labeled inaccurate are non-infringing alternatives is because they're not accurate enough, even though the claims don't require a certain level of accuracy; is that right?

A. This is not about an infringement analysis for those particular claims. So, it wasn't about whether they infringe the claims. It was about whether they were alternatives to the EagleView product.

Q. I'd like to highlight one other item on this list, Google Earth. That's a product with which a lot of us I think are familiar. Here you say that Google Earth is not a non-infringing alternative because it has no roof report product. Do you see that, Dr. Stevenson?

A. Correct.

Q. And in your expert report, one of the reasons that you say Google Earth isn't a non-infringing alternative is that it can only deal with a small number of roof faces; is that right?

A. Well, that's one of the reasons why it's not a viable alternative, correct.

Q. Do the claims require a certain minimum number of roof

faces?
A. Again, this is not about determining whether Google Earth necessarily infringes. It's about whether it's an alternative product that someone could use instead of the EagleView product.
Q. You also say in your expert report that Google Earth was incapable of meeting the production volumes and demand for roof reports; is that right?
A. That's why it's not, one of the reasons why it's not a viable alternative.
Q. Now, Google Earth, that doesn't mean that Google Earth can't still make roof reports that satisfy the claim requirements, doesn't it?
A. Well, it can't.
Q. Did you say it can or it cannot?
A. It cannot.
Q. But the fact that it can't meet report production volumes, that's not why not, right? I'm sorry, that question was super difficult to understand.
I understand that you say that Google Earth can't make roof reports that satisfy the claims, but you also say that Google Earth can't meet report production volumes that are in demand, and I'm just asking you whether its failure to meet report demand has to do with the fact that its reports don't meet the requirements of the claims?

A. No. It's just -- again, this is, this particular part of my analysis is not about whether it's meeting the claim or not. If they are meeting the claim, that's one of the reasons why they're non-infringing alternatives, but for a lot of these products, they're just not viable alternatives to the product being produced by EagleView. That's what my opinion's about. It's not about whether these products infringe or don't fringe the claims.

Q. I understand. I asked you earlier about Google Earth's own internal roof report capabilities, but now I'm going to ask you a different question. With Google Earth, just any user can measure roofs and create a model of a roof; isn't that right?

A. I would -- I would have to know what you're talking about more probably.

Q. You don't think that a user of Google Earth can measure dimensions of a roof; is that what you're saying, Dr. Stevenson?

A. Well, certainly not accurately. Google Earth provides some drawing tools that allow you to draw lines on things and maybe even -- I'm not sure if they allow you to draw shapes. And it has a separate tool to allow you to measure distances. I find that tool not particularly accurate down to the inches. It's accurate to tens of feet, but I don't see it being accurate down to the inches that you would want in a product

to provide roof reports.
Q. Now, some of the things on this list you have identified as not being non-infringing alternatives because they're inaccurate, right?
02:31PM A. Yes.
Q. But you didn't say that about Google Earth, did you?
A. Well, this was not trying to summarize -- if you look in my section of my report, I have a lot more reasons than just the ones listed up there for why they're non-infringing
02:31PM alternatives.
For this slide, all I did was kind of pull out the most clearly obvious reason why it's not a non-infringing alternative. The fact that it doesn't produce a roof report is not an alternative to EagleView's product.
02:32PM Q. Now, when you say that an item on this list is inaccurate, what you're saying is that it fails to meet the standards of acceptable roof reports by consumers, right, what a consumer would see as an acceptable roof report, right?
A. I think that's generally the idea. Once EagleView came
02:32PM on the market and that accuracy was achieved, people were not willing to use these inaccurate systems.
Q. But you didn't do any studies to determine exactly what level of accuracy is acceptable to consumers, did you?
A. I did not do that. I just relied on the statements made
02:32PM by Xactware about what it viewed as important.

Q. And you didn't cite any independent third-party studies about what customers in this field view as acceptable either, did you?

A. No. Again, like I said, I mostly relied on what Xactware said was important for the industry.

Q. Did Xactware say --

THE COURT: And what was that? Remind the jury.

THE WITNESS: Well, what they said was accuracy was very valuable and important to them, and that's one of the reasons why they were so interested in integrating with EagleView or adopting their technology, I think is the phrase they used.

BY MR. SEEVE:

Q. I don't think it surprises anyone that accuracy is something that's valued, but those statements by Xactware, they don't -- they also don't cite any particular standard of how accurate a roof report has to be to be acceptable, do they?

A. Well, in terms of, you know, this particular assessment I'm doing here, the accuracy was the accuracy provided by the EagleView report. I'm talking about what's available relative to what EagleView had. So, the accuracy provided by EagleView is you might say the standard here.

Q. So, is what you are saying that something can't be a non-infringing alternative if it's even just a tiny little bit

less accurate than EagleView's software? That sounds like what you're saying, Dr. Stevenson. Is that your testimony?
A. Well, these particular ones are way less accurate. They don't have 3D modeling tools, for instance. So, the height couldn't be put in. Some of them, you had to manually put in, so you still had to go out and measure, that sort of thing. So, we're not talking about just a slightly bit worse; these things were a lot worse.
Q. But you just said that the standard you used to determine what's acceptable and what's not in terms of accuracy for non-infringing alternatives is the accuracy provided by EagleView's software, right?
A. Well, this line of analysis that I'm doing here is whether there is a non-infringing alternative to the patented technology and in particular what EagleView had on the market. So, that's what I'm comparing to.

MR. SEEVE: Thank you. I have no further questions for the witness.

THE COURT: Okay. Let me just see counsel at sidebar, please.

(At sidebar.)

THE COURT: Okay. So, I reviewed the proposed jury curative instruction, I'll call it, that the plaintiffs proposed, and I'm not going to give that. This is the one I propose to give.

Ladies and gentleman, you will recall when Dr. Stevenson testified on direct examination, he showed you various portions of the entire videos he took while he conducted his examination of the defendants' software. During cross-examination, you may recall that Dr. Stevenson was asked about the time stamps on the video clips and Dr. Stevenson was then asked why he had to jump around so much. Dr. Stevenson's answer was, in sum, of course, your recollection controls, that he presented the video portions in a way to walk through the patent claims.

02:35PM 02:36PM

I instruct you, ladies and gentleman, that I've permitted Dr. Stevenson to use the portions of the videos he took and use them in a way to better assist you in understanding his testimony. There was nothing improper about Dr. Stevenson's presenting the videos in a way designed to illustrate his testimony. 4.

02:36PM

These video clips are what are called demonstrative exhibits and they are not evidence. Rather, the evidence is the underlying testimony of the witness you heard. The entire videos that Dr. Stevenson took are exhibits that I have permitted to be introduced into evidence and you may consider those as evidence.

02:36PM

Any objection?

MR. ALPER: No objection.

MR. CHRISTIE: Your Honor, the only objection would

02:36PM

be the wholesale production of these exhibits. For reasons we have expressed earlier, we think it is ripe for abuse to have these back in the jury room to allow them to manipulate them at will. We think that a more appropriate approach would be to have one or more of these videos played to the jurors in court once and to allow them to be available to the jurors upon deliberation if they wish rather than have them as negative evidence.

THE COURT: Okay. Do you want to be heard?

MR. ALPER: Sure. We disagree. We think this shows the operation -- we believe this shows the operation of the software. It's been confirmed on the stand. It is evidence, and it also is necessary to cure the prejudice of the questions that were asked.

THE COURT: Yes, and for those reasons articulated by Mr. Alper, I agree. I think it's the only way that the Court under its 403 balancing obligations, that it can cure the prejudice. I did take a look, and I went back and not only was he asked why he jumped around, there was a subsequent question that was asked, something to the effect of, which I can't remember right now, but it was like, well, why did you have to, it wasn't cut and paste, but something to that effect, but there was a second question I found even more problematic. So, you don't happen to have exhibit numbers for those videos, do you, that I can give to the jury now?

MR. BROWN: I do back at the podium.

THE COURT: Yes, if you can go get them, I'll add them to my instruction.

MR. BROWN: Your Honor, they are PTX-210, 212, 218, 286, 299, 300, 301, 335, and 336.

THE COURT: Okay. So, your objection is noted to the admission of those exhibits. Okay?

MR. CHRISTIE: Thank you, Judge.

MR. BROMBERG: Your Honor, we don't have a problem with the instruction you just read us, but I wanted to raise a more general issue, which is that in our view, the cross that Mr. Seeve did was entirely standard, and I've been doing these cases for a long time, and it was effective cross to suggest that Dr. Stevenson's testimony was unreliable, that what he's doing is testifying to support the plaintiff's claim and that there are problems with it, and I think that's what Mr. Seeve brought out apparently effectively in view of your Honor's reaction.

It's not unfair prejudice. It is harmful to plaintiff's case, but that's our right, to present evidence that shows that there is non-infringement, and that includes the unreliability of the expert. These cases are frequently a battle of the experts.

THE COURT: No, I couldn't agree more with you that the objective is to show the unreliability of the experts.

But when the questions are unfairly phrased to suggest that a witness prepared, fabricated, or manipulated demonstrative exhibits, I think it goes too far, and we've been around and around about it. I know you disagree with my ruling, and your objection is noted. Okay? Thank you.

02:40PM

(End of sidebar.)

THE COURT: Okay. Ladies and gentleman, before the redirect examination of Dr. Stevenson commences, you may recall, and maybe I did or I didn't, from time to time I may be giving you limiting instructions that you are to follow. And so this is one such time I'm going to give you a limiting instruction.

02:41PM

Ladies and gentleman, you will recall when Dr. Stevenson testified on direct examination, he showed you various portions of the entire videos he took while he conducted his examinations -- examination of the defendants' software. During cross-examination, you may recall, Dr. Stevenson was asked about the time stamps on the video clips, and Dr. Stevenson was then asked why he had to jump around so much. Dr. Stevenson's answer was, in sum, and, of course, your recollection will control, that he presented the video portions in a way to walk through the patent claims.

02:41PM

I instruct you, ladies and gentleman, that I permitted Dr. Stevenson to use portions of the videos he took and use them in a way to better assist you in understanding his

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testimony. There was nothing improper about Dr. Stevenson presenting the videos in a way designed to illustrate his testimony.

These video clips are what are called demonstrative exhibits and they are not evidence. Rather, the evidence is the underlying testimony of the witness that you heard. The entire videos that Dr. Stevenson took are exhibits that I have permitted to be introduced into evidence and you may consider those as evidence, and they are exhibits PTX-210, 212, 218, 286, 299, 300, 301, 335 and 336.

Okay? So, that concludes my instruction.

Okay. Redirect.

MR. BROWN: Yes, thank you, your Honor.

(REDIRECT EXAMINATION OF DR. STEVENSON BY MR. BROWN:)

Q. Hello again, Professor. I want to start with where the cross-examination just left off.

MR. BROWN: Can I have slide 297 for Professor Stevenson -- actually, 298, 299 -- 299 from Professor Stevenson's presentation. Okay.

BY MR. BROWN:

Q. And you were asked a number of questions about this, particularly with regard to Google Earth, and I think you were told that you didn't opine that Google Earth had problems with accuracy of roof reports initially; is that right?

A. It seemed to be one of the things that was indicated to

me.
Q. Yes.
MR. BROWN: If we just go back two slides to slide 297.
02:43PM BY MR. BROWN:
Q. Do you remember presenting testimony on this demonstrative, sir?
A. Yes.
Q. Okay. And you've got a picture there on the right, and
02:44PM what, what is that picture from?
A. That is from Dr. Mundy's report which is an expert you will hear from later in this case.
Q. And what -- is it coming from, is it coming from Google Earth; is that where it's sourced from?
02:44PM A. Yes.
Q. And what is it about this picture among your other analysis of Google Earth that confirmed for you that Google Earth didn't have accuracy that could come close to EagleView?
A. Well, I think it's pretty evident by just looking at the
02:44PM picture. You can't even get the straight lines correct. The ridges of the roof are wavy, the edges of the roof are wavy. To get accurate roof reports and accurate roof measurements, you need to measure down to, you know, two, three inches accuracy, at least, and this is not going to get you anywhere
02:44PM close to that.

Q. Okay. And are we talking about a subtle difference in accuracy or are we talking about a big difference in accuracy?
A. It's a big difference.
Q. I want to switch now and talk about the metadata point that came up during your cross, and I want to start with slide 289 of your presentation. You were asked a number of questions about this slide, and you mentioned, I think, that the high quality imagery and data for Property InSight didn't have anything to do with metadata, but I don't think you were allowed to explain why you felt that way. Can you do so now?
A. Well, what is needed for Property InSight, right, this is the tool that can be used to generate a roof report, is, yes, it needs aerial images, but it also needs this roof model. I think the data that's being referred to here is the roof model because that's how you're going to go about generating the model that you need in order to generate a high quality roof report.

So, yes, you need imagery. You also need this roof model. You need a high quality, you know, version of that roof model, which is what EagleView was providing.
Q. And you were directed to the date of this press release, which is August 4th, 2015. And I believe you were asked whether or not this press release meant that there would be good enough metadata afterwards so that defendants would no longer need to use the correlation patents at all. Is that

right?
A. I was asked something like that, yes.
Q. Yes. And is that correct, that defendants, after this press release came out, didn't need to use the correlation feature at all?
A. No, I've seen nothing that -- and I'd be very surprised to learn that they somehow got a better, that much better source of metadata. To my knowledge, they still use the correlation and I see nothing that suggests otherwise.
Q. Okay. And let me take you to your slide 127. Now, can you just reorient us to what 127 is? And then I'll ask you a question about it with regard to metadata.
A. Sure. This is a database that Xactware maintains internal to its company, and what they're doing is they're monitoring the use of their tools by their operators. So, these operators in China, in India who are using their software to generate the roof models, they're kind of watching how they're using the tool for whatever reason.

What this is, what this is telling us is on a month-by-month basis, you can see the years and dates, how often they use this epipolar movement part of edit properties, which is one of the things I point out to as meeting the correlation claims in patents, what percentage of time for all the roof reports, how many times they actually use that -- or the percentage of time they use this particular feature of the

software.
Q. So, is this fair to say that this is from defendants' own files and shows how often defendants use the correlation feature on any given month there?
02:48PM A. Yes.
Q. And so the first one in September 2015, defendants used the correlation for 97.83 percent of the reports that they generated; is that your understanding, or do I have it wrong?
A. No, that's correct.
02:48PM Q. Okay. And do you remember the date of the press release that we just looked at?
A. It was sometime in 2015.
Q. Right. So, why don't we go back to 289. It was August 4th, 2015, right, right up there on the top?
02:48PM A. Yes.
Q. And now if we just go back to 127. After putting out that press release in August of 2015, did defendants use the accused correlate feature less or more?
A. Well, they used it more.
02:49PM Q. Now, I want to go to slide 37 and I want to talk about metadata in the context of the claims. Where in these claims, the asserted claims of the '436 patent, does it say that if you use metadata you don't infringe? I can't find it. Can you point us to it?
02:49PM A. No, certainly it's not there.

Q. Okay. Is there anything in your understanding of reading the claim that would exclude it inherently or subtly?
A. No. You can certainly use metadata and still practice this claim.
02:49PM Q. And what does that mean then for the jury in finding infringement if whether -- well, let me ask it differently.
Should it matter here whether or not defendants have good metadata or bad metadata or something in the middle in terms of finding infringement of these patents in this case?
02:49PM A. It really shouldn't matter at all. I don't see where it's an element of any claim. They haven't suggested -- well, I guess they suggested they don't correlate because they use metadata maybe, but they clearly do correlate. The evidence shows that. The tools we walked through, the fact that they
02:50PM use those tools a lot of the time, they clearly have that tool and do those steps.
Q. Now, I want to take you to -- actually, staying on this slide for a second, you were asked a question about the italicized language, and I think the implication was that the
02:50PM only thing the Patent Office thought was new about this claim was the italicized language. Do you remember that question?
A. Yes.
Q. Do you agree with that as an initial matter?
A. No.
02:50PM Q. What does the addition of this language do to the

invention of the '436 patent in terms of the problem that it was trying to solve?

A. I think I look at this language as clarifying a little bit in terms of the type of data they were trying to address. They wanted -- you know, right from the beginning, Mr. Pershing's idea was using two views of, aerial views of the houses, a top plan view and oblique view. You can see, if you take that language out, that wasn't originally there. So, that adds that idea that he had from the very beginning into the claim. So, in my mind it was about clarifying and, you know, more correctly telling the public what the invention was.

Q. And so was it easier or harder in the prior art to correlate something that had actual stereoscopic images rather than what Mr. Pershing says he invented?

A. With stereoscopic images, the correlation is almost kind of built into the camera the way you capture the data. The problem with them is it's much harder to capture the data there, and I think that's what he saw, and so he wanted to move away from that less image sources out there, let's use the image sources that are more abundant, and that's where the invention became necessary. He had to go from stereoscopic images that didn't really require this because it was built into the camera system to something that added this sort of, you know, requirement.

Q. And now when Mr. Pershing came up with this invention, you were asked a number of questions about why it didn't come up in your context, in your academic context. Did Mr. Pershing ever submit any of his invention to an academic conference or an academic publication?

A. Not that I was aware of. I didn't see that.

Q. Are you surprised that, as an expert in this field, that Mr. Pershing's invention wasn't something that had showed up in any of the publications that were more focused on academia?

A. No. Academics mainly talk about themselves. So, unless they publish -- unless someone publishes themselves, it usually doesn't show up in academic stuff.

Q. Let me take you briefly to slide 63 -- 64, actually. And you were asked a number of questions about this, particularly about whether or not how you know that this tool is the EagleView tool and particularly how it relates to the patent inventions. Can you just explain why, in your own words, why this, the technology that the president of Xactware and the general manager of Xactware are discussing here is actually the very technology that you analyzed in this case?

A. Sure. I think we've gotten a lot of testimony from, for instance, Mr. Pershing about development of his idea, his initial building of a product, and getting it out to the marketplace and the impact it had. The technology developed was, you know, this idea of going from these two aerial

images, doing these various steps to build a roof model. Correlation, pitch determination marker, these corresponding changes were all these tools he saw that added to an ability to make an accurate roof report. And that's what you end up seeing embodied in his software when it's -- when it comes out.

So, the tool that comes out onto the marketplace is this one that can generate these accurate reports. What they did then and what they still do today is use this patented technology. They still do this correlation of the images. They still use this pitch determination marker, and they still use this corresponding changes.

Q. And when you tested the EagleView products, were you able to create a roof report without using the '436 patent's correlation functionality?

A. No, not at all.

Q. How about without using the pitch determination functionality?

A. I mean, certainly it would not have been an accurate one. Maybe you could have done something to kick it off, but it seems like it would be wildly inaccurate if you didn't use it.

Q. And when you say wildly inaccurate, if you didn't use the pitch determination marker, would you be able to, as patented, would you have been able to figure out the pitch when you were using the Render House software?

A. No.
Q. So, it just wouldn't have reflected the house then?
A. Correct, no, it wouldn't be a roof model in some sense.
Q. And as you were using the software, did you find that you always saw the corresponding changes patents in use as well?
A. Yes.
Q. And then you were asked a question about the timing of the software that you tested, and I believe you explained that the Render House software was only in use for a short period of time; is that right?
A. Yes.
Q. And do you remember how long that was?
A. It was a couple of years. I think Render House came out in 2008 and then Twister, the updated version, came out in 2011, I believe.
Q. Okay. And so it's not a comparison between all the changes that could have happened between 2008 and 2019 like was implied, but really only between 2008 and 2011 when the new product came out?
MR. SEEVE: I object. That's a leading question, your Honor.
THE COURT: Yes, rephrase it, please.
MR. BROWN: Of course.
BY MR. BROWN:
Q. So, would it be accurate to say that there were a number

of changes to Render House between 2008 and 2019, or would it reflect a different time period?

A. Yeah, my understanding of the development process and what I've heard testimony about is that they basically switched their development effort from this Render House to Twister. So, other than integrated into Twister, the development of the Render House stopped probably, probably sometime in like 2010, but probably, maybe as late as 2011. But the changes to Render House were only over the period 2008, 2011, 2010, something like that.

Q. And let me go to -- you were shown a slide in which you had a screen shot from the Render House software and you were told that you didn't show the manual of how -- the original manual for Render House on that slide. Let me clarify. Did you review the Render House manual in addition to using the software in order to figure out whether or not it embodied the claims going back to the early days of Render House?

A. Yes, I did.

Q. Okay. And let me go to slide 222. And, in fact, PTX-452 is one of the manuals you reviewed.

Well, let me ask that differently. Is PTX-452 one of the manuals you reviewed for Render House?

A. Yes, it is.

Q. And did you find and conclude that the original Render House software still had all the same functionality of the

asserted claims as you testified to during your direct examination?

A. Yes, it did.

MR. BROWN: Okay. I'll pass the witness, your Honor.

02:57PM THE COURT: Any recross?

MR. SEEVE: Yes, your Honor, I have just a couple of questions on recross.

THE COURT: All right.

(RECROSS EXAMINATION OF DR. STEVENSON BY MR. SEEVE:)

02:57PM Q. First, Dr. Stevenson, regarding the programs that you were just talking about, Render House and Twister, those aren't products that are sold to consumers, are they?

A. The results of using those products are sold through the roof reports, but I don't believe they sell that software to

02:58PM anyone directly.

Q. The software is purely internal, right, Dr. Stevenson?

A. That's my understanding, yes.

Q. And then one other topic.

MR. SEEVE: If we could bring up plaintiff's

02:58PM demonstrative 127.

BY MR. SEEVE:

Q. Mr. Brown asked you whether epipolar movement was used more or less after that press release that we just talked about in 2015. Do you remember that?

02:58PM A. Yes.

Q. And you said it was used more?
A. It varies. It's always very high after that time frame, it's always in the upper 90 percent.
Q. But metadata relates to aerotriangulation, doesn't it, not epipolar movement; isn't that right, Dr. Stevenson?
A. It could be used in either way.
Q. Do you have statistics about whether aerotriangulation was used more or less after 2015 included in your demonstratives that you made for trial today?
A. I don't have it in the demonstratives. My recollection is, and I don't remember the dates, but at some point it stopped, it was used less.
Q. So, aerotriangulation was actually used less after the press release in 2015 that Mr. Brown just asked you about; is that correct?
A. I don't remember the dates of when they started using it less. I know early on they were using it more. More recently they seem to have started using this tool more.

MR. SEEVE: Thank you. I have no further questions.

THE COURT: You are excused. You may step down. If you're going home, safe travels.

THE WITNESS: Thanks.

(Witness excused.)

THE COURT: Do you want to collect the binders, please, Counsel, while you're getting your next witness.

MR. ALPER: Yes, Your Honor. The plaintiffs call Hugh West to the stand, please.

THE COURT: How about we take our afternoon break now, and it will be just a tad shorter since I gave you folks an extra 15 minutes of lunch, okay?

Let's just take a little short break, maybe eight minutes or something like that.

THE DEPUTY CLERK: All rise.

(JURY EXITS; 3:00 p.m.)

THE COURT: Okay. So take a break and we'll be back. Mr. West is here, I imagine, yes?

(RECESS)

THE DEPUTY CLERK: All rise.

(OPEN COURT; 3:08 p.m.)

THE COURT: Okay. We will bring the jury in.

THE DEPUTY CLERK: All rise.

(JURY ENTERS; 3:10 p.m.)

THE COURT: Okay. You may be seated.

Okay. Mr. Alper.

MR. ALPER: Your Honor, plaintiff calls Hugh West to the stand.

THE COURT: Okay. Come forward, please.

THE DEPUTY CLERK: Good afternoon. If you can please take a step in the witness stand, place your left hand on the Bible and raise your right hand.

(**HUGH SLOAN WEST, III**, having been duly sworn as a witness, testified as follows:)

THE DEPUTY CLERK: Can you please state and spell your full name for the record.

03:11PM THE WITNESS: Hugh Sloan West, III. H-U-G-H S-L-O-A-N W-E-S-T and Roman Numeral III.

THE COURT: Okay. Have a seat. Make yourself comfortable. Please bring the microphone closer to you and if you want water, it's in the pitcher.

03:11PM THE WITNESS: Thank you.

THE COURT: Mr. Alper. Hang on one second. You have binders, yes.

MR. ALPER: And while Mr. Carlo is handing out the binders, may I move some unobjected to exhibits into evidence

03:11PM that are relevant to Mr. West's testimony?

THE COURT: Yes, please.

MR. ALPER: Okay. So I have PTX-27, PTX-65, PTX-66, PTX-86, PTX-94, PTX-117, PTX-657, PTX-658, PTX-659, PTX-660, PTX-936, PTX-937, and PTX-938.

03:12PM THE COURT: Okay. With no objection, in evidence.

(PLAINTIFF EXHIBITS PTX-27, PTX-65, PTX-66, PTX-86, PTX-94, PTX-117, PTX-657, PTX-658, PTX-659, PTX-660, PTX-936, PTX-937, and PTX-938 WERE RECEIVED IN EVIDENCE)

MR. ALPER: May I?

03:12PM THE COURT: You may proceed, yes.

MR. ALPER: Thank you, Your Honor.

(DIRECT EXAMINATION OF HUGH SLOAN WEST BY MR. ALPER:)

Q. Good afternoon, Mr. West.

A. Good afternoon.

03:12PM Q. Will you please introduce yourself to the jury?

A. Yes, sure. My name is Hugh West.

Q. And where do you work, Mr. West?

A. I work at EagleView Technologies.

Q. And what's your current position at EagleView?

03:12PM A. Vice-president of sales.

Q. How long have you held that position?

A. For just over two years.

Q. And how long have you worked at EagleView in total?

A. Almost eight years.

03:13PM Q. Okay. Can you tell the jury where you're from?

A. Yeah, born and raised in Salt Lake City, still live there today. Come from a large family, five brothers and sisters, live close by to my folks and couple of my siblings and the other three are spread out across the United States.

03:13PM Q. Are you married?

A. Engaged to be married, big day is on October 12th, so it's coming up.

Q. We will get you and everyone out of here way, way before that.

03:13PM A. Thank you.

Q. Let's talk a little bit about your education.
Where did you go to school?
A. I graduated from Brigham Young University in Utah with degrees in economics and English.
03:13PM Q. Okay. And once you graduated, what did you do?
A. I went to work for a company called TWG Insurance down in Dallas, Texas. They're a large independent insurance agency, started selling home and auto insurance and then quickly transitioned to selling commercial insurance for them.
03:13PM Q. And how long were you at TWG Insurance?
A. For almost three years.
Q. Okay. And what did you do next?
A. After that, I went to work for EagleView.
Q. Okay. How did you connect up with EagleView?
03:14PM A. I was introduced to Rishi Daga through a mutual acquaintance that I had in Dallas.
Q. Okay. And did you have an interview with Mr. Daga?
A. I had several interviews with Mr. Daga.
Q. And ultimately, you were offered a job at EagleView?
03:14PM A. Yes.
Q. And did you accept the offer?
A. Yes, I did.
Q. Okay. And what attracted you to EagleView?
A. As a salesperson, you always want to sell exciting
03:14PM products and when I was first introduced to EagleView, I

thought that the technology was really interesting. I liked the fact that EagleView held several patents and I thought that, not only were the products really cool, but also the markets that they were serving were very interesting to me and the impact that they were making, and I also thought that the group of folks that I met while interviewing with EagleView was very impressive and I wanted to join that type of group.

Q. Thank you. Let's walk through a little bit of your position since you've been at EagleView over the past eight years.

So when you joined EagleView, what was your title?

A. National sales executive.

Q. And what were your responsibilities as a national sales executive?

A. So, I was hired into the insurance business at EagleView as a national sales executive. Well, let me give you some context.

By the time that I had joined EagleView, I already had agreements or contracts with the largest insurance companies in the business, and so when I was hired, they hired me as a junior enterprise sales rep to go sell the small and medium-sized insurance companies and try to win that business.

Q. And what EagleView products did you focus on as a national sales executive in insurance?

A. Primarily, our Roof Report business and the insurance

business at EagleView, we call it a claims-ready Roof Report.
Q. Okay. And how long were you in that role for?
A. For three years.
Q. And then what was your next position?
03:15PM A. In 2015, I was promoted to the director of insurance sales position.
Q. And what were your responsibilities as director of insurance sales?
A. I -- in that role, I was asked to build out a small team.
03:15PM That team handled all of the small-to-medium-sized insurance companies and then I also took over some personal responsibilities for some of the larger accounts over the years. I worked Liberty Mutual, State Farm, Allstate, Farmers, some of the larger accounts in the business for us.
03:16PM Q. And at some point, you were promoted to vice-president, insurance sales?
A. That's correct, in 2017.
Q. Okay. And that's the title you have now?
A. Correct.
03:16PM Q. What are your responsibilities as vice-president, insurance sales?
A. Currently, I oversee all of the business activities and sales-related efforts for our insurance business.
Q. And do you have a team?
03:16PM A. Yes, I do.

Q. How big is the team?
A. I currently manage nine people.
Q. Okay. Now, in the course of your jobs, you've talked about interfacing with customers, customers regarding sales.
03:16PM Has each of your jobs at EagleView involved interfacing directly with customers?
A. Yes, quite a bit. In fact, it's probably the most critical aspect of my job is interfacing with customers.
Q. And can tell us a little more about that aspect of your
03:17PM job?
A. Yeah, so in sales, we interact with customers in a lot of different ways. We obviously build relationships with our customers over time. We introduce them to new products. We help build value in the products that we're selling at
03:17PM EagleView and try to connect those products to business outcomes for our customers, and then hopefully, we have the opportunity to negotiate agreements to do business with those customers.
Q. All right. I'm going to talk briefly about how the sales
03:17PM organization is structured at EagleView.
Are you familiar with how the sales organization is structured?
A. Yes.
Q. Okay. Can you tell the jury how EagleView sales
03:17PM divisions are organized?

A. Yeah. So we are organized by the different businesses or when we call customer verticals at EagleView. So we have four of them. We have a government business, an insurance business, a construction business, and we have an energy business.

03:17PM

Q. Okay. I want to focus on the insurance business and the construction business.

Who are EagleView's customers in the insurance business?

03:18PM

A. Primarily insurance companies, and then several third-party firms which are affiliated with insurance companies.

Q. And what products does EagleView sell to the insurance customers?

03:18PM

A. Again, primarily, those Roof Report products, we call them the claims-ready suite of products.

Q. And can you explain to the jury why insurance companies need Roof Reports?

A. So as an insurance company, you handle a lot of claims

03:18PM

and one of the largest segments of claims for any insurance company is roofing claims, and when insurance companies handle roofing claims, they have a need to assess the roof, to understand the measurements and dimensions of that roof so they can prepare an accurate settlement, and we help them

03:18PM

measure those roofs.

Q. Let's switch over to the construction business.

Who are the customers in the construction business unit or division?

A. Primarily, roofing and siding contractors, folks that work to repair houses.

Q. And what products does EagleView sell in the construction business?

A. We also sell Roof Reports to the construction business. It's a very similar product to what we sell to insurance companies, but we call it by a different name. We call it our Premium Roof Report.

Q. Do you also -- are you familiar with something called QuickSquares?

A. Yes, I am.

Q. What is QuickSquares?

A. QuickSquares is another product that's designed specifically for the construction business. It's essentially a bid product. It gives contractors an overview of the amount of roofing material that would be required to create an accurate estimate or bid for a roof.

Q. And why do contractors need Roof Reports?

A. As a contractor, you may go out and bid on a lot of jobs, but you won't win every one of those jobs, so QuickSquares is designed to help them create bids efficiently and accurately, and then if they win a job, they upgrade to the premium report

and buy that Roof Report because it provides more detail so they can actually do areas on that roof.

Q. Okay. Is there any overlap in customers between the insurance and the construction business?

03:19PM A. Yes, quite a bit.

Q. And can you explain that overlap?

A. Yeah. So insurance companies have a lot of direct relationships with construction firms, and there's a lot of contractors that also switch over and operate in an insurance

03:20PM adjuster capacity as well.

Q. Now, you've testified a bit about your positions at EagleView on the insurance side of the business.

Do you have personal knowledge of EagleView's construction business?

03:20PM A. Yes, I do.

Q. And how have you developed that personal knowledge?

A. In the course of our business, we interface a lot with the other leads from the other business units, so again, as I lead our insurance business unit, we have a gentleman that

03:20PM runs our construction business unit. We're in weekly staff meetings together, we get together in person, quarterly for off-site meetings and the gentleman that runs the construction business has now been with EagleView for just over five years and we've become good friends over the years as well.

03:20PM Q. Okay. Thank you. Let's talk a little bit about some of

the substance of your sales job.

We've heard testimony so far in the case about some of the benefits of EagleView's technologies.

Are there certain aspects of EagleView's technologies that you focus on when you're out there in the actual world selling the products?

A. Yes, there are, and I prepared a demonstrative for today.

Can we put that up?

Q. We can.

03:21PM MR. ALPER: Mr. Thomas, can we see PDX-4.2 please.

THE WITNESS: While we're putting that up, I'll talk through them. The four that we're referencing here are accuracy, safety, time savings, and cost savings.

BY MR. ALPER:

03:21PM Q. Okay. We've heard a lot so far in the trial, I know you weren't here, but we heard a lot so far in the trial about accuracy and safety.

Can you tell us what time savings refers to?

A. Time savings in this context specifically refers to

03:21PM efficiency. So whether you're an insurance company or a contractor, when using EagleView's Roof Reports, you realize some significant time savings from an efficiency perspective.

If you don't have to spend time manually measuring a roof and pulling a tape measure and climbing all over the roof

03:22PM to do that, you can save a lot of time, which means that you

can get to more jobs.

For insurance companies, this is especially impactful, we do a lot of work around natural catastrophes, such as hurricanes or tornadoes or hailstorms, or even kind of pocket windstorms in a localized area, and as an insurance company, you could have several thousand or tens of thousands of claims that happen at one time, so the efficiency is a big deal.

Q. And when that happens, can EagleView meet demand, for instance, in those periods of high demand?

03:22PM A. Yes.

Q. Okay. On that note, since you started at EagleView in 2012, have you ever had to turn away business because you couldn't meet demand or you couldn't meet a large set of requests from a customer?

03:22PM A. No, we have not.

Q. Okay. Let's talk about cost savings. What does cost savings refer to?

A. Cost savings refers to the amount of money that our customers can save in their business operations by using

03:23PM EagleView. That's primarily driven by the accuracy of the product and ordering the correct amount of material for a job and then also in the time savings. If you save time on each job, you end up saving money, so.

Q. Okay. And has EagleView performed any studies to assess

03:23PM the cost saving aspects of its technology?

A. Yes. We've performed dozens of studies like that over the years. It's the normal course of business when customers are evaluating our products and services.

Q. Okay. I'm going to ask you, you have a binder in front of you with the exhibits.

I'm going to ask you to turn to PTX-126, and before we display it to the jury, I'm going to ask you some foundational questions.

A. Okay. I have it here.

Q. Okay. At a high level, what is PTX-126?

A. PTX-126 is a case study that a customer performed with EagleView when they were evaluating how the patented technologies would stack up against manual measurements by the insurance adjusters.

Q. Okay. And are you an author of PTX-126?

A. I am.

Q. And did you have a co-author on PTX-126?

A. Yes, I had a direct report named Chad Hunt who helped author this for me. He was the direct salesperson that worked the same insurance account at the time.

Q. Okay. And do you have personal knowledge of the information and data that's collected in PTX-126?

A. Yes, I do.

Q. And how did you obtain that personal knowledge?

A. Directly from the customer when putting this together.

Q. Okay. And was PTX-126 made in the regular course of your activities, your business?

A. Yes. As I mentioned, these case studies were very typical of how insurance companies would evaluate our products and services, and so we put these together on a frequent basis. Every time we put these together, we store them, we have a shared folder ate EagleView where we put these case studies and can reference them, so this is very typical over the course of business.

03:24PM Q. Was PTX-126 kept in the ordinary course of your business?

A. Yes, it was. In fact, we published this on our website.

MR. ALPER: Your Honor, plaintiff offers PTX-126 into evidence.

MS. PROCTOR: Your Honor, we maintain our objection

03:25PM expressed earlier and also, I think we had understood this morning that this document wouldn't have been used, but in any event, we maintain our objection.

THE COURT: Has it been redacted consistent with our conversation from -- yes? Yesterday?

03:25PM MR. ALPER: Yes, Your Honor, it has.

THE COURT: Okay. All right. So the objection is overruled and I'll permit the exhibit into evidence.

MR. ALPER: Thank you, Your Honor.

(PLAINTIFF EXHIBIT PTX-126 WAS RECEIVED IN EVIDENCE)

03:25PM MR. ALPER: May I have the Elmo, please?

THE COURT: Is there any date on this document, Mr. West?

THE WITNESS: There is not on the document, but we completed this in 2015.

03:25PM THE COURT: So the document was prepared at or about the time in 2015?

THE WITNESS: Yes, it was, and it's been on our website ever since.

THE COURT: Okay.

03:25PM MR. ALPER: Thank you, Your Honor.

BY MR. ALPER:

Q. So let's take -- this is PTX-126.

Can you read the title of PTX-126 for us?

A. Yes. "Hand measurements and DIY sketching tools unable

03:26PM to compete with aerial measurement technology."

Q. And now that we have it front of us, can you tell us what PTX-126 is? What the purpose of it was?

A. Yeah. So again, the customer in this case had been familiar with using EagleView's technology on a case-by-case

03:26PM basis and they wanted to do an evaluation of what would happen in terms of cost savings and time savings if they were to use EagleView reports every time they had a need to measure a roof.

So they were comparing how the technology from

03:26PM EagleView stacked up against manual measurements by the

insurance adjusters.
Q. And which customer did PTX-126, this particular study, relate to?
A. This customer was Georgia Farm Bureau.
03:26PM Q. Okay. And I believe you touched on this just a moment ago, but has EagleView performed similar studies to this one?
A. Yes, we have dozens of studies like this.
Q. Okay. What were you trying to show in this study, this document?
03:27PM A. Again, we weren't trying to show anything. The customer was trying to evaluate what type of cost savings and time savings that they could get from stacking the two up, and it was kind of open-minded to see what the data showed and then make business decisions based on the outcome of the data.
03:27PM Q. And is that reflected anywhere in the document?
A. Yes, it is. If we look at the second paragraph, I think we have it highlighted on the screen.
And I quote: "Looking for ways to be more efficient, the carrier's senior property claims manager wanted to dig
03:27PM deeper and analyze what the impact would be if they decided to require the use of EagleView reports on every loss."
MS. PROCTOR: Objection. Hearsay, Your Honor.
THE COURT: No, overruled.
BY MR. ALPER:
03:28PM Q. And when you wrote that "the claims manager wanted to dig

deeper to analyze the impact of EagleView," what were you referring to?

A. In this case, the customer really wanted to get under the hood and understand, you know, what were the benefits of the technology, what did the data show. I think theoretically they had an understanding of what those benefits were, but they wanted to put the data behind the theory.

Q. Okay. Was this an objective analysis, or was this type of -- are these studies sort of a sales tool, kind of like a paid advertising kind of a thing?

A. No, this is an objective analysis performed by the customer.

Q. And is there any part of the document that reflects that?

A. Yeah. If we go down to the next paragraph, in the third paragraph starting where we have highlighted here, and I quote: "The claims manager wanted to prove or disprove several items, including determining if using EagleView reports would deliver an improvement in accuracy that could result in measurable savings of both money and time."

Q. Okay. And when you're talking about how the claims manager wanted to prove or disprove several items, what does that refer to?

A. Again --

MS. PROCTOR: Objection. Hearsay.

THE COURT: Overruled.

THE WITNESS: Again, the claims manager in this case was a gentleman named Gary Willis, and Gary was very open to whatever the data showed, so he wanted to prove or disprove the hypothesis that we had that they could save money using EagleView reports.

BY MR. ALPER:

Q. Okay. And did the carrier make findings with respect to time savings associated with or due to EagleView's technology?

A. Yes, they did.

03:29PM MS. PROCTOR: Objection. I can just say that I'm going to object to any questions regarding the elicit hearsay on this document. I don't have to make an objection every time.

THE COURT: Yes, overruled. The document is in evidence.

BY MR. ALPER:

Q. Let me ask that one more time.

Did the carrier make findings with respect to time savings due to EagleView's technologies?

A. Yes, they did.

Q. And how did the carrier go about doing that?

A. So in this case, what the carrier wanted to do is they wanted to establish a baseline for how long it would take them to do manual measurements, so they took one of their best insurance adjusters, a gentleman by the name of Cedrick, and

they asked him to go hand-measure a typical roof that they saw and they timed every step of that and found that it took him approximately 45 minutes to measure the roof.

Q. And can we see that in the document?

03:30PM A. Yes, that's in the paragraph -- in the fourth paragraph.

We see here, and I quote: "In order to determine the amount of time and labor involved, the carrier had one of their most proficient estimators measure a roof by hand and timed it. They found that it took 45 minutes for the roof to

03:30PM be measured."

Q. Okay. Now, did the study assess how long it took to use EagleView's technology by comparison?

A. Yes, it did.

Q. Okay. And how much was that?

03:30PM A. If we look down at the next paragraph, we can see -- do we have that highlighted? Yes, we do.

So I quote: "They looked at the time involved when ordering an EagleView report from within their estimating platform and found the total time the estimator spent to be

03:31PM nine minutes."

Q. Okay. So what is the -- according to this particular study, the time savings associated with using an EagleView report on an individual claim basis?

A. That's approximately 35 minutes.

03:31PM Q. Is that a significant amount of time in your field?

A. Yes, it is. 35 minutes for any specific insurance claim is a big deal, and then like I mentioned, oftentimes insurance companies are handling catastrophe or large-scale events where they have thousands or tens of thousands of claims so that 35 minutes adds up very quickly.

Q. Now, did the study make any findings on accuracy, or on the accuracy of EagleView versus hand measurement?

A. Yes, it did.

Q. Okay. How many claims did the carrier review to determine accuracy?

A. They reviewed 30 claims in this case.

Q. Okay. And does the study reflect that in there?

A. Yes. If we flip to the next page, we can see.

In the second full paragraph, and I quote: "The carrier decided to perform an accuracy study of the adjuster's manual measurements and ordered EagleView reports on a sampling of 30 closed claims. It was found that the roofs were over-measured by an average of 9.52 percent per roof."

Q. Okay. I want to focus on that second sentence here.

It says, "it was found that the roofs were over-measured by an average of 9.52 percent per roof."

First, what is over-measurement?

A. Over-measurement is when the insurance adjuster either incorrectly does the math on the roof or pulls the tape measure incorrectly and they estimate that there's more

material than is actually needed to repair that roof.
Q. Okay. And what does this mean, that there is an average over-measurement of 9.52 percent per roof?
A. That was the average variance between what the EagleView measurement said and what the adjuster's hand-measurement set out over these 30 claims.
Q. Okay. Now, is there a portion of the study that goes on to calculate what that means in terms of actual dollars?
A. Yes, it does. So again, in the course of this case study, the claims manager, once we had established baseline facts for what the difference was between EagleView's measurements and the hand measurements, he wanted to run this for a period of time, so for the next -- it was between 60 and 90 days on 324 claims that followed, they used EagleView to calculate how much money they could save.
Q. Okay. Can you point us to where that section of the study is?
A. Yes, it's down further on that page.
Q. Okay. Is it right over here, this part?
A. Yes.
Q. Okay. Can you walk us through the calculations there?
A. Yes, sure. So again, 324 claims in question, they recorded from their data that the average amount to replace a roof and that subset was $5,767.09.
So again, by applying the coverage variance of

9.52 percent per roof, you multiply that by the average claim settlements on those claims, and the carrier found that had they measured by hand in these cases, that they would have overpaid by $549.03 per claim.

03:34PM Q. So you're taking the -- if I understand your testimony that you just gave, you're taking the 9.52 percent over-measurement per roof and multiplying that by the total dollar amount per claim?

A. That's correct.

03:35PM Q. Okay. And what does that come out to be?

A. $549.03.

Q. Okay. And what does that number reflect?

A. That reflects the amount that the carrier would have overpaid had they measured by hand as opposed to using

03:35PM EagleView's technology.

Q. Okay. Now, is there a cost associated with purchasing the EagleView report that needs to be factored in?

A. Yes, there is.

Q. Okay. And what did the carrier come up with for average

03:35PM cost, in this instance, of an EagleView report?

A. Over those 324 claims, the average cost of an EagleView report was $46 per report.

Q. Okay. And what does that mean for the overall cost savings per report once you factor that in?

03:35PM A. In determining the business case for the customer and the

return on investment, we factor that out of the total savings that they would see, so we take that $549, we subtract away the cost of the EagleView report at $46, and that leaves us with just over $500.

03:36PM Q. And is $500 a significant cost savings per claim?

A. Yes. $500 is extremely significant per claim.

Q. Okay. Maybe we can use an example to illustrate.

What do savings like that mean, for instance, for a customer like State Farm, the insurer?

03:36PM A. State Farm is a very large insurance carrier. On average, State Farm does -- they order between 400 and 500,000 Roof Reports from EagleView on any given year, so if we took a number in the middle of 450,000 and multiplied that by $500 per claim, that gives you $225 million in savings, which is a

03:36PM big number.

Q. $225 million of savings by using EagleView's technology in just one year?

A. Yes, sir.

Q. For just one customer?

03:37PM A. Yes.

Q. How many customers would you say EagleView has?

A. Several hundred insurance companies do business with us regularly and then tens of thousands of contractors.

Q. Do all of EagleView's customers see significant savings?

03:37PM A. Yes, they do.

Q. Now, that's talking about the insurance companies and the contractor customers. Do those savings provide benefits to homeowners?
A. Yes, they do.
03:37PM Q. How's that?
A. Let's start with insurance. So if insurance companies can save money as part of their claims process, then it reduces their overall cost structure which in turn gets passed back to homeowners as well.
03:37PM EagleView creates efficiencies, like we talked about, which speeds up the claims process so owners get their roofs repaired or replaced faster.
In the construction side of the business, if contractors can more accurately measure roofs using
03:38PM EagleView's technologies, then homeowners don't end up paying for wasted materials.
Q. Thank you. Let's switch gears a little bit and talk a little bit about Xactware.
Now, you have personal knowledge of Xactware in the
03:38PM course of your role of selling against them basically, right?
A. Yes, sir.
Q. Okay. Do you have personal knowledge concerning customers that EagleView has lost to Xactware?
A. Yes, I do.
03:38PM Q. Do you have personal knowledge concerning customers that

EagleView -- with respect to -- that EagleView has had to drop its prices in order to retain?

A. Yes, I do.

Q. How did you obtain that knowledge in the insurance context?

A. In the course of my regular business, I frequently interact with customers, so mostly through direct conversations with customers.

Q. And how did you obtain that knowledge in the construction context?

A. Again, I participate in weekly meetings with my construction counterparts and quarterly off-site meetings where we discuss market trends, aggregate trends, and I get weekly reporting on that.

Q. Have the defendants' sales of their Aerial Sketch Roof Insight and Property Insight products impacted EagleView?

A. Yes, absolutely.

Q. How many customer relationships have defendants' sales impacted?

A. In the insurance business, at least 40 that we know of, and probably many more. In the construction business, several hundred.

Q. Describe for the jury at a high level -- we will get into a little more detail in a moment, but at the high level the ways in which EagleView has been impacted by the defendants.

A. Lost customers. So taking our customers from us. Also, undercutting us on price, which has forced us to reduce our price points in the marketplace, and then it's also negatively impacted several of our customer relationships.

03:39PM Q. Mr. West, isn't that just fair competition in the marketplace?

A. No, I don't think so. EagleView spends a lot of money in research and development and bringing innovative solutions to the marketplace, and when somebody else uses our technology

03:40PM and then undercuts us on price in the market, I don't think that's fair competition.

Q. Okay. Do you have personal knowledge of that happening?

A. Yes. I see it every week. In my day job, through direct interactions with customers, my team tells me about it all the

03:40PM time. It's probably the most challenging part of my job. So I'm very familiar with it.

Q. All right. Let's start with some examples of customers that EagleView has lost. Can we have PDX-4.3, please.

Okay. Are we see a couple of insurance -- couple of

03:40PM examples of lost customers here. Let's start with Traveler's. Do you have personal knowledge of EagleView's relationship with Traveler's?

A. Yes, I do.

Q. And how?

03:41PM A. From working in the insurance business at EagleView for

almost eight years and for a couple of years in 2014 and '15 I directly managed and handled the Traveler's account.

Q. Did EagleView lose Traveler's as a customer?

A. We did. We lost Traveler's as a customer in 2012 to Xactware. I believe the product was Aerial Sketch Version 2.

Q. Okay. And what happened, why did you lose Traveler's to Xactware?

A. Traveler's opted to move to that product because it was priced at a significantly lower price, in the single digits.

Q. And was Traveler's a big customer of EagleView's?

A. No, they were one of our largest at the time. In 2011, the year before they left, they did 1.3 million in revenue with us.

Q. Okay. Next customer that I want to talk about is as an example customer is Nationwide. Did EagleView lose Nationwide?

A. We did.

Q. And by the way, do you have personal knowledge of EagleView's relationship with Nationwide?

A. Yes, I was personally involved in these negotiations.

Q. Okay. When did EagleView lose Nationwide as a customer?

A. They notified us that they would be moving to the defendants' products right before Christmas in 2017. So 2018 was the first year without them as a customer.

MR. ALPER: Your Honor, I mentioned yesterday that

there's going to be a portion of this examination that would involve highly sensitive pricing information, and I'm about to get into that. So we would ask that the courtroom be sealed for that information.

03:42PM THE COURT: Okay. So anyone who's not affiliated -- directly affiliated with either party in this case, I am going to direct that they exit the courtroom and the courtroom will be sealed, and will be unsealed when they can return.

So is there anyone here in the audience who's not

03:43PM affiliated with either party?

MR. ALPER: And, Your Honor, I think we have to ask the Xactware -- the defendants' personnel who are not affiliated -- who are not attorneys, to leave as well.

THE COURT: Yes. Oh, the personnel, the employees.

03:43PM MR. ALPER: Yes, the employees for just this portion of --

THE COURT: Who are not subject to the order?

MR. ALPER: Yes.

THE COURT: Okay. Anyone else?

03:43PM MR. CUTRI: Sorry, I don't think the employees that are here are subject to the protective order. Well --

MR. ALPER: I should have said outside counsel.

THE COURT: Well, the parties know who they are, so if you can --

03:43PM MR. CHRISTIE: Everyone else is a non -- is an

attorney of the client or one of our -- expert witnesses, Judge, so we have no non-attorney company employees who are currently in the gallery.

THE COURT: Okay. Anyone else?

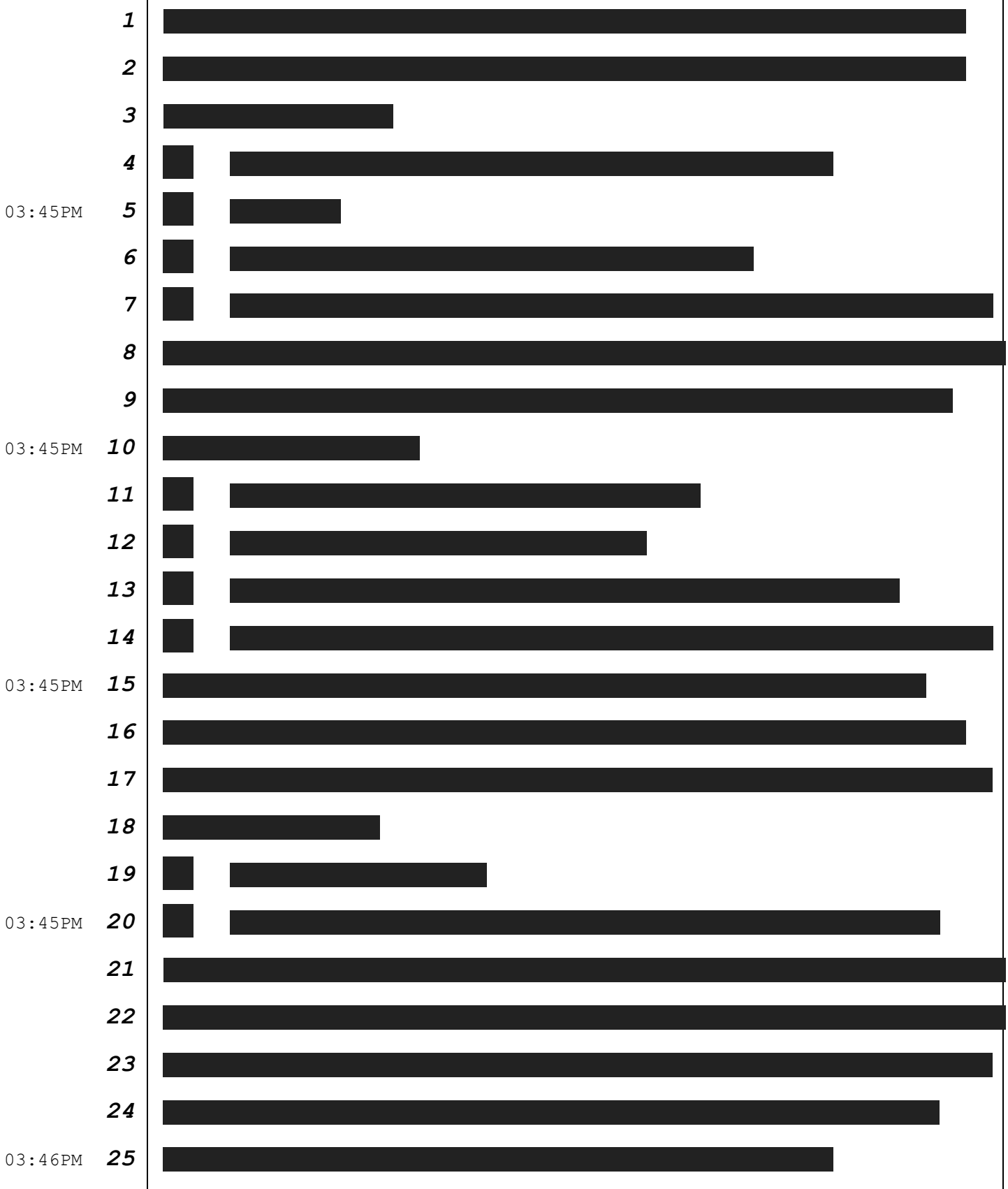
03:44PM MR. ALPER: Okay.

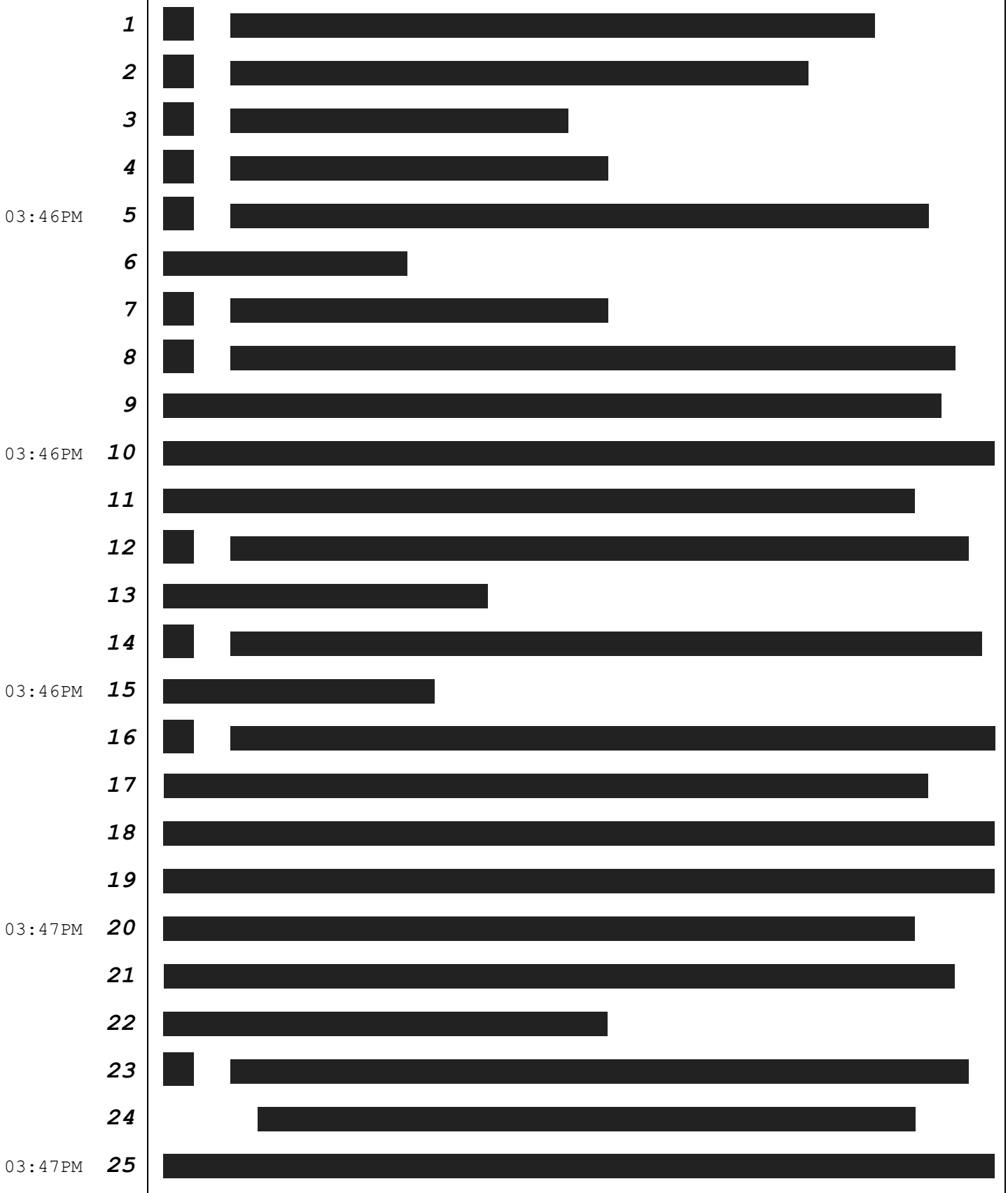
THE COURT: Just, Officer, if you can just seal the courtroom for a moment.

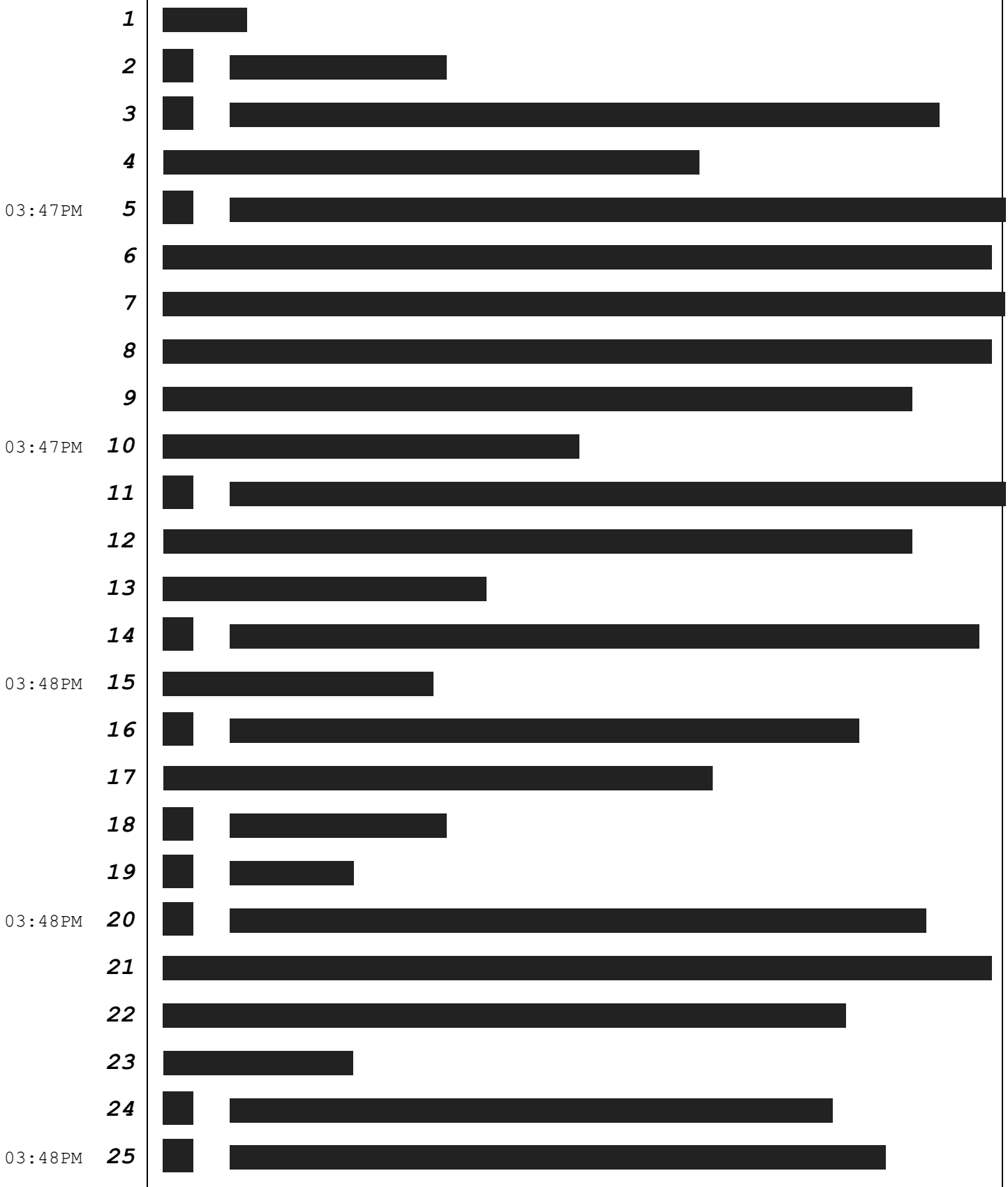
Thank you. Okay.

(AT THIS TIME THE COURTROOM IS SEALED.)

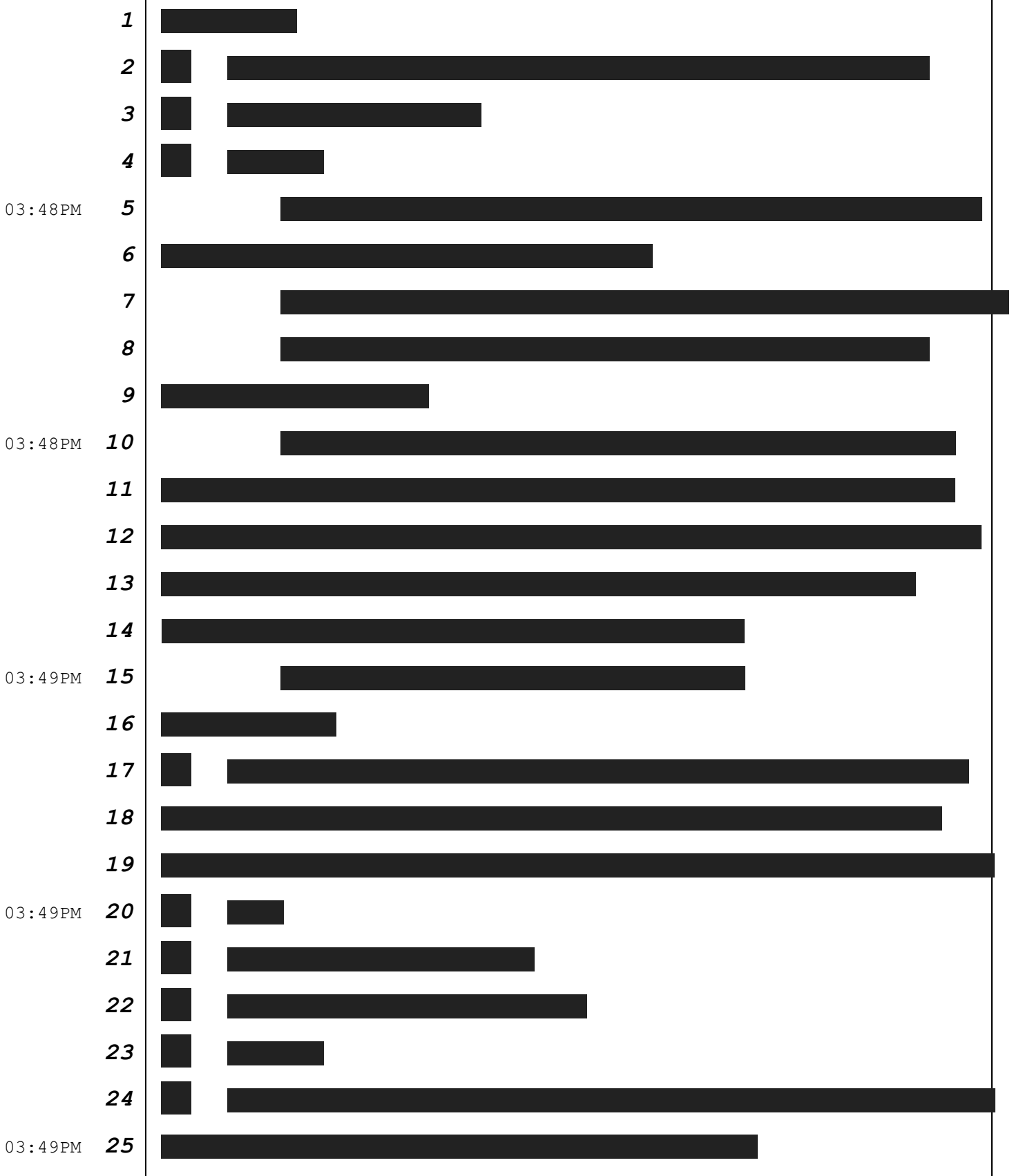
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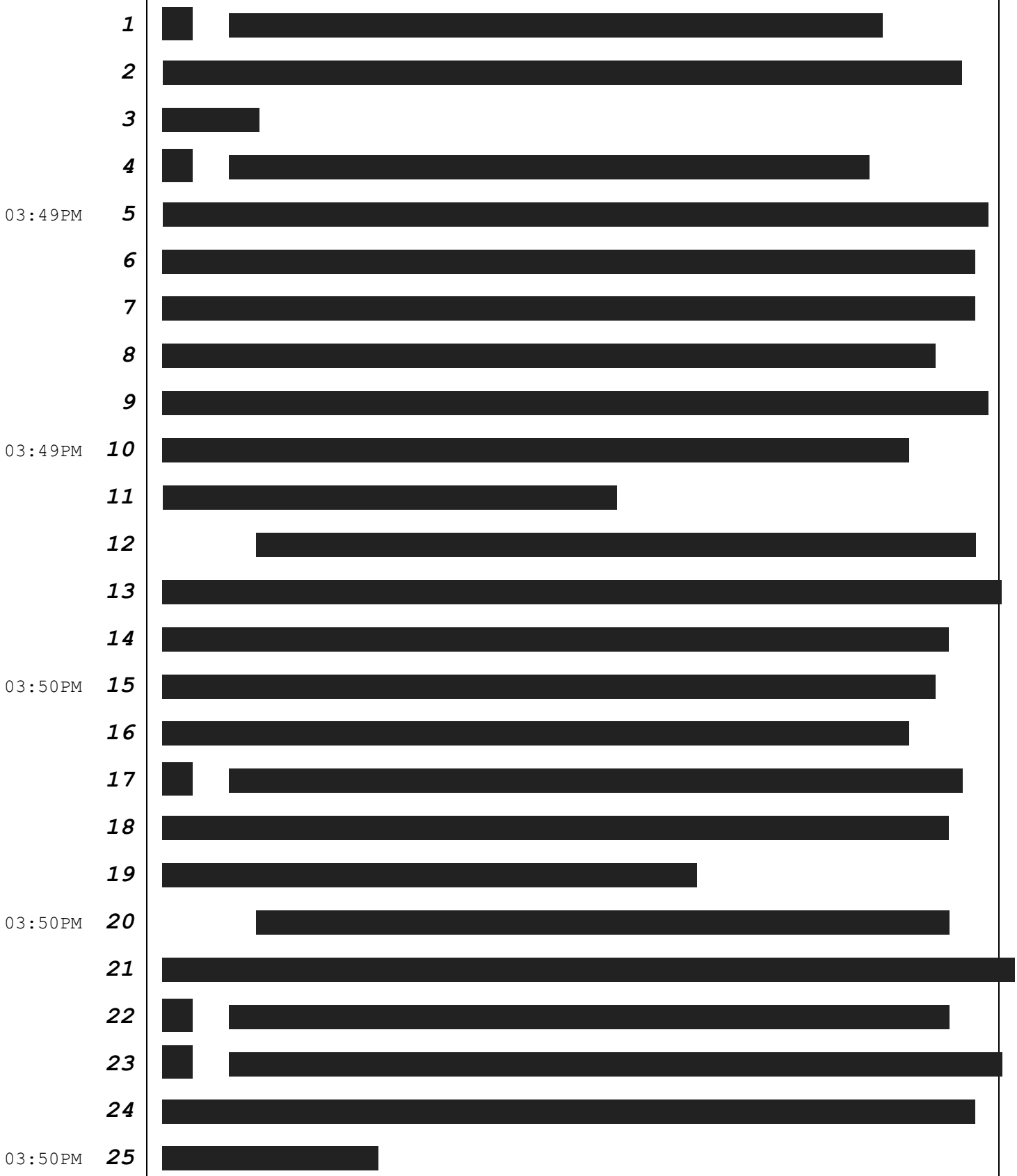

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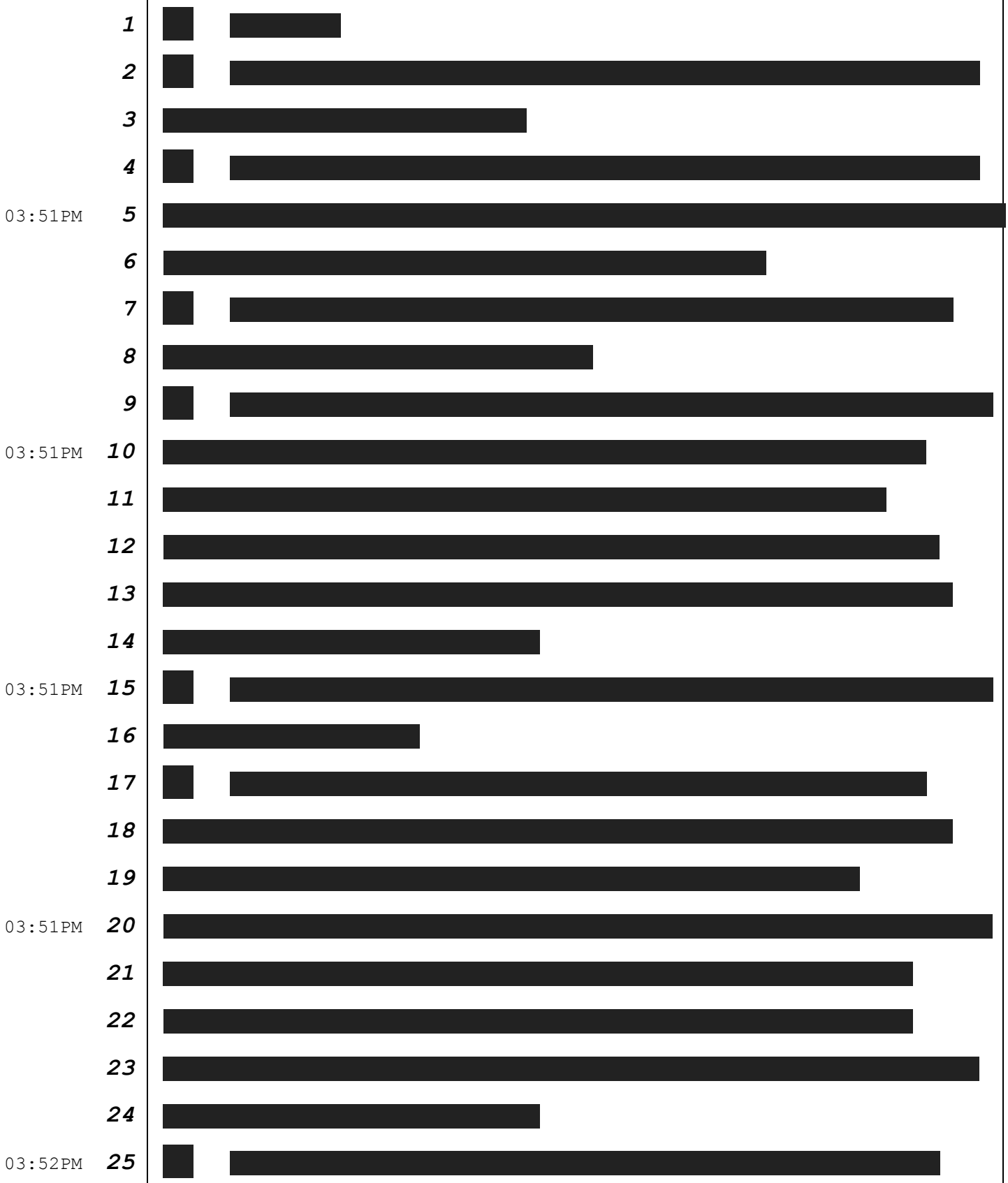

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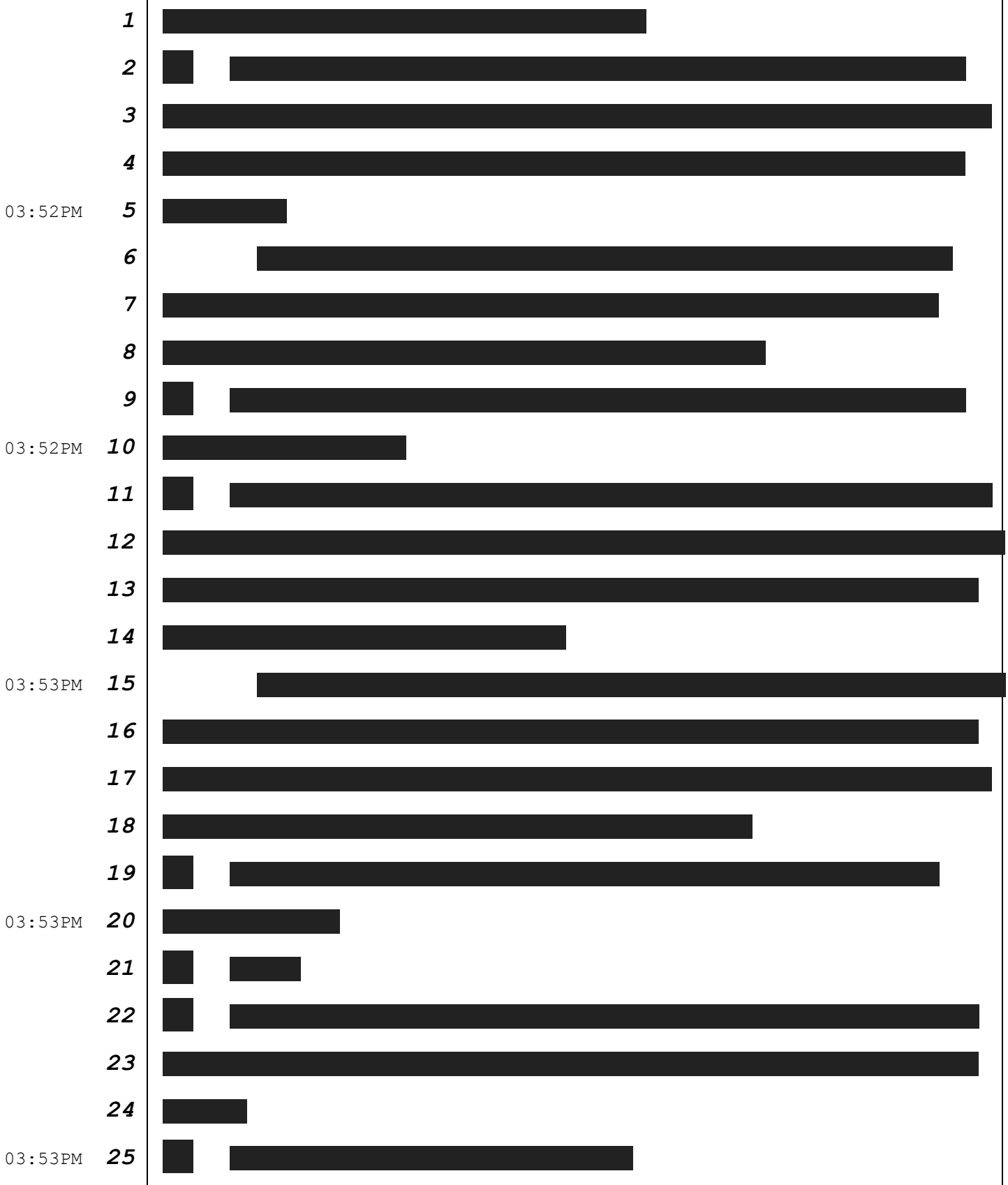
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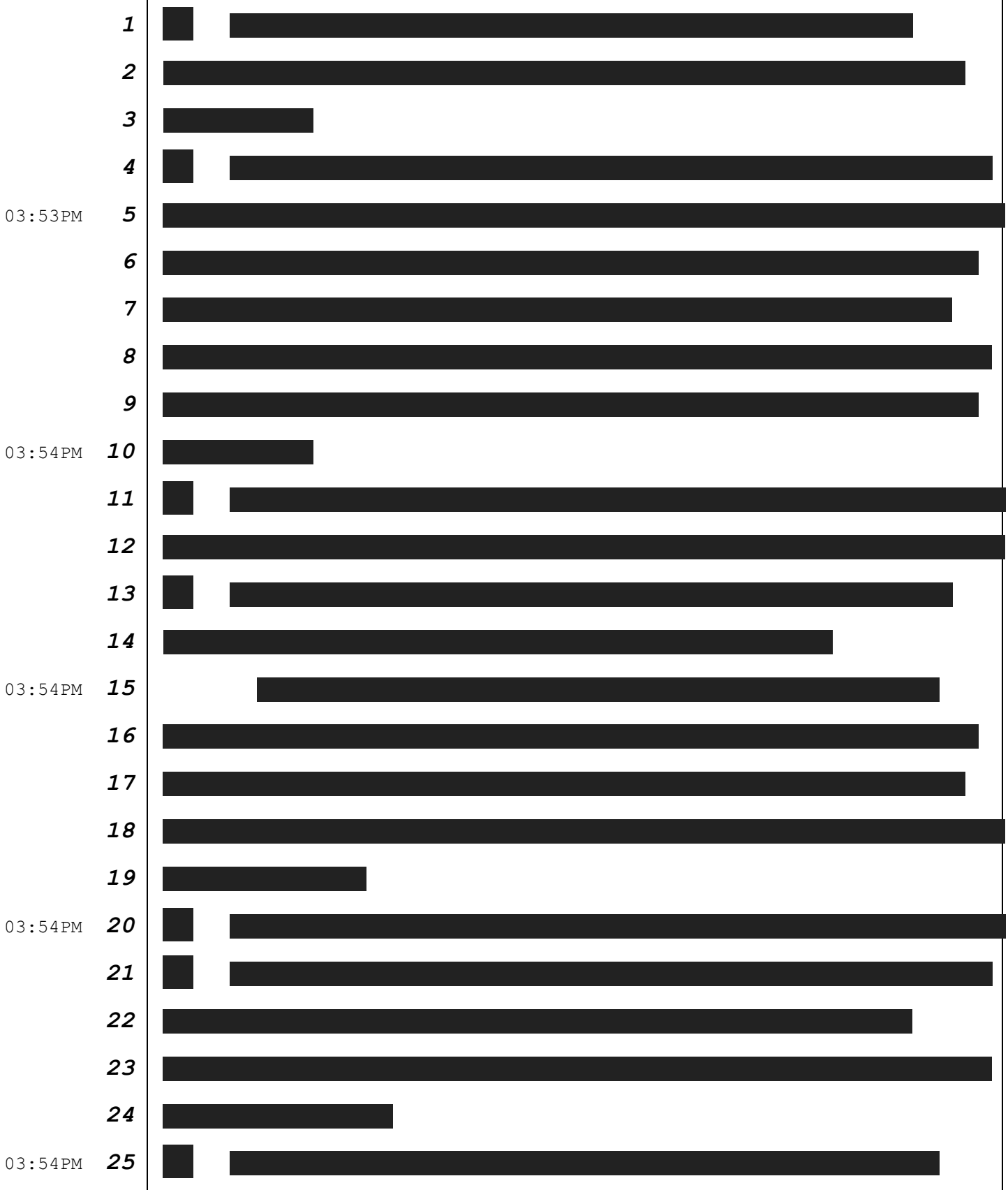



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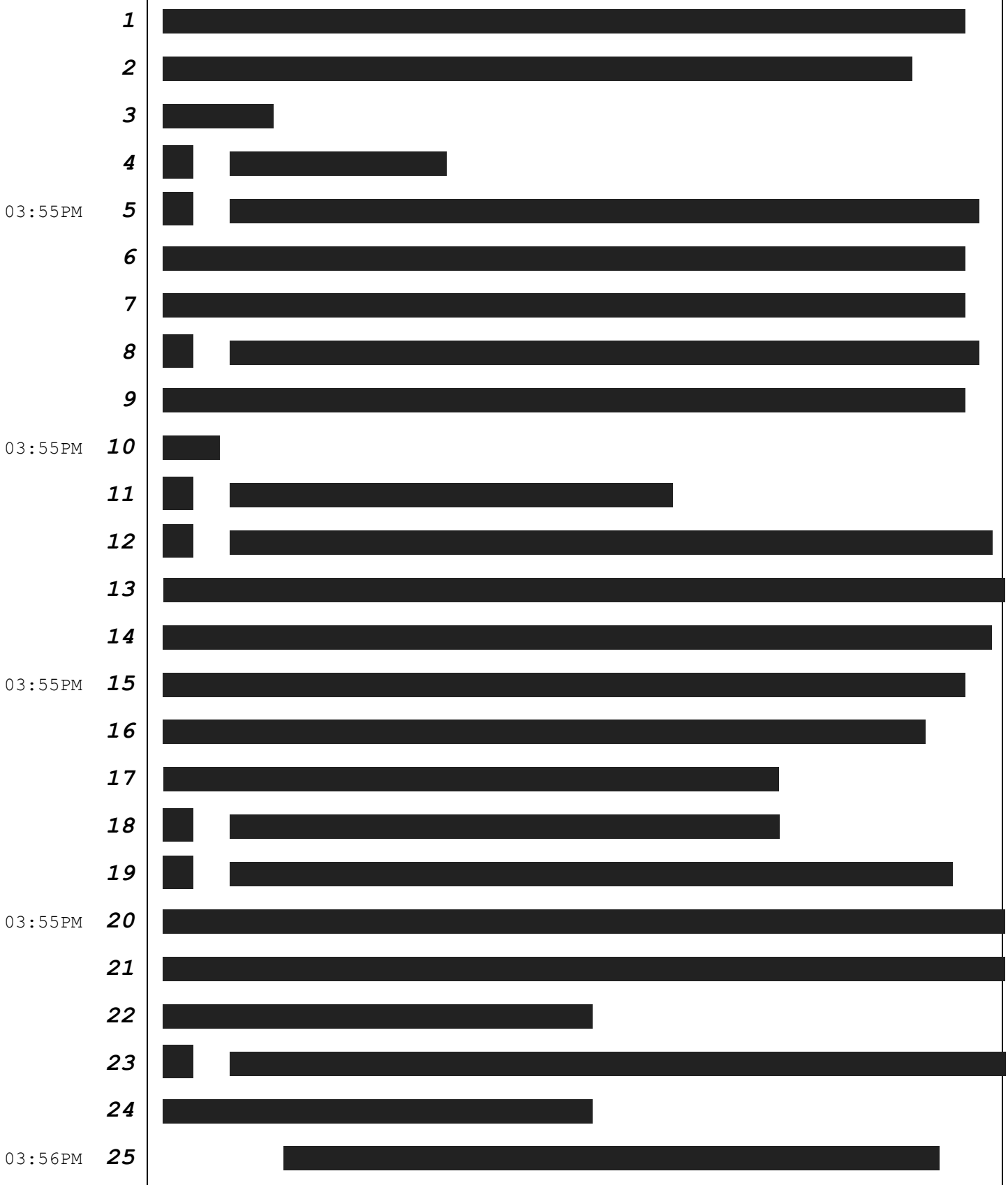


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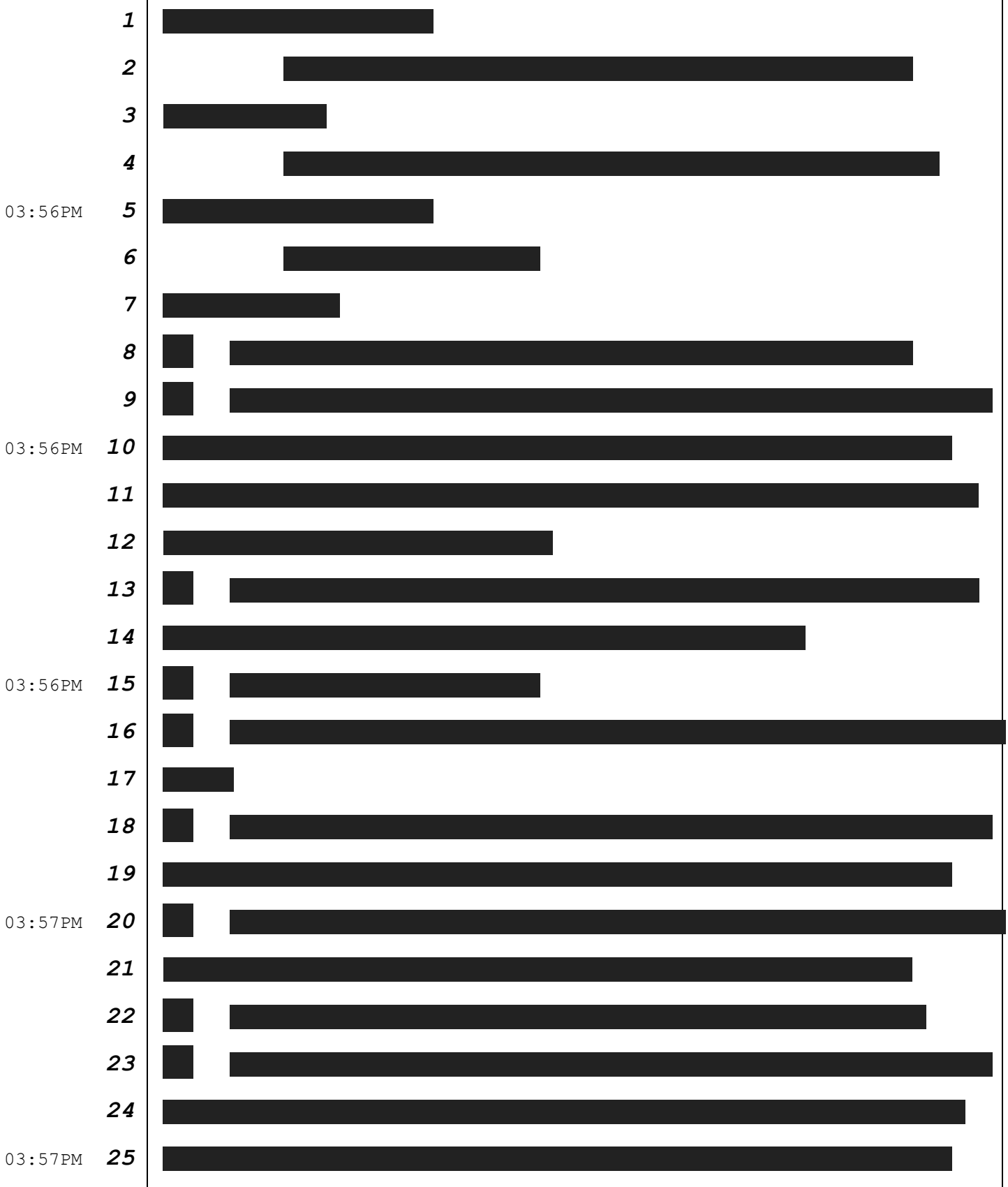




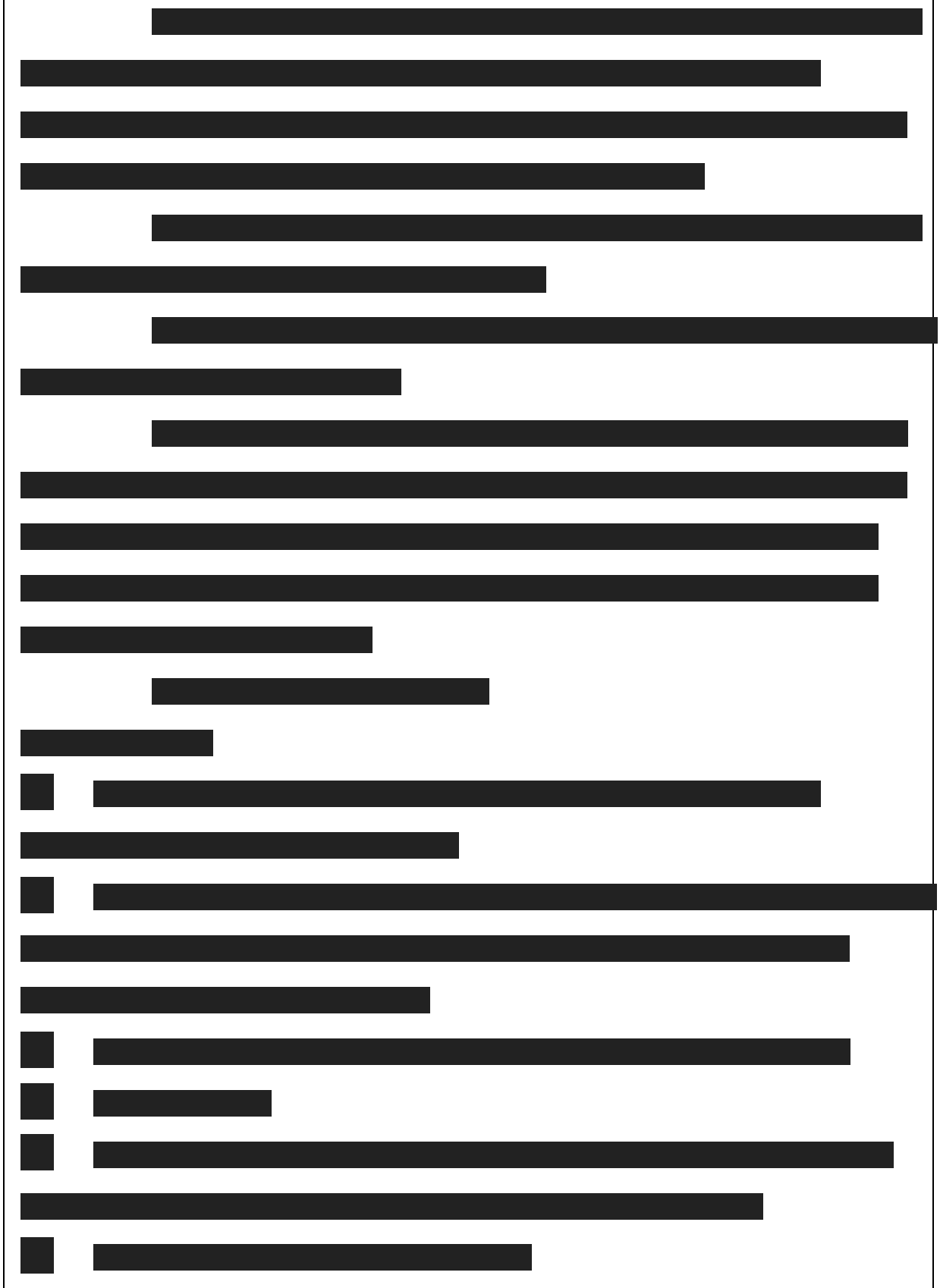
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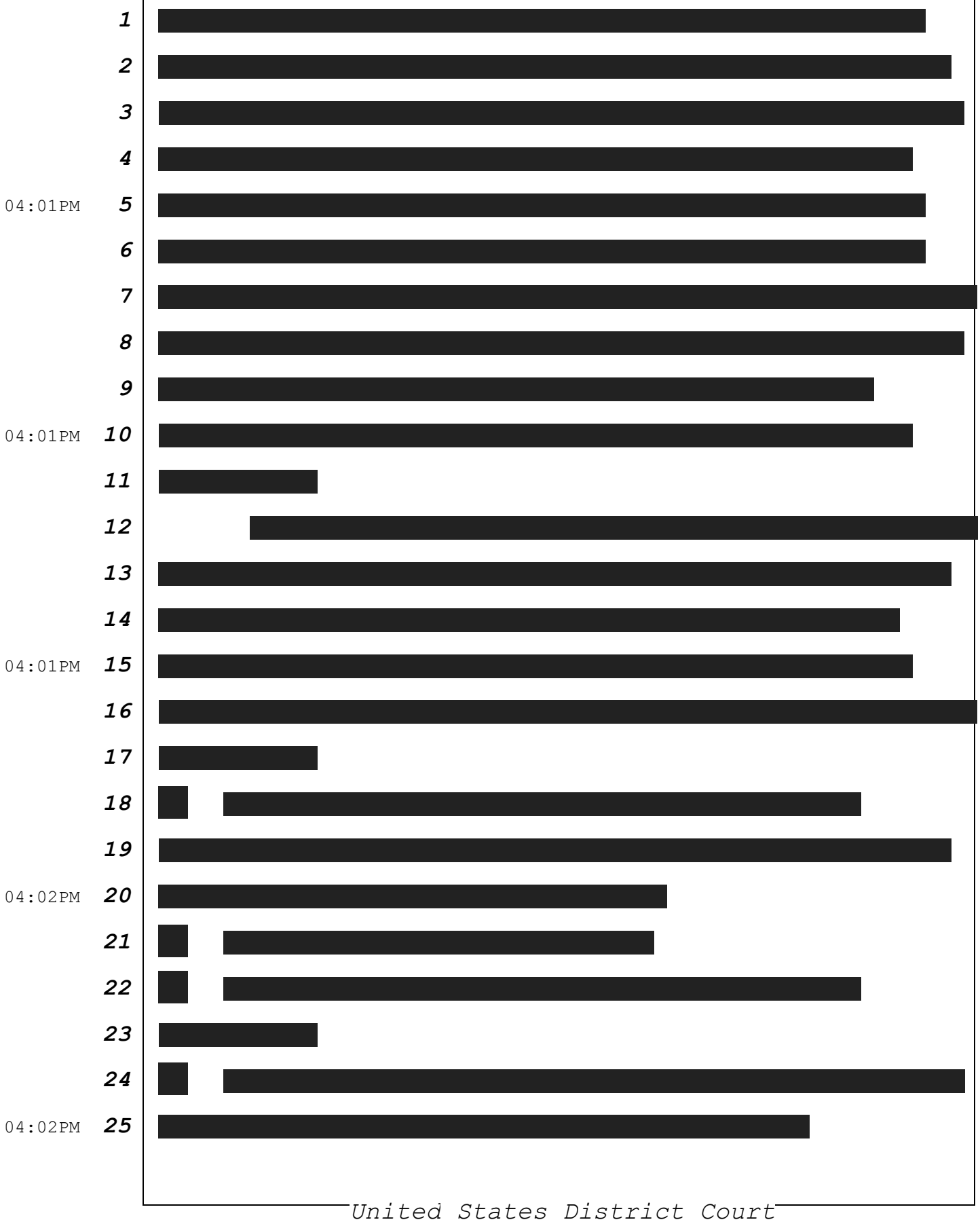
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[redacted]

(AT THIS TIME THE COURTROOM IS UNSEALED.)

THE COURT: And so the portion is sealed in the transcript from when the courtroom was sealed until now. Thank you.

MR. ALPER: May I proceed, Your Honor?

THE COURT: You may, thank you.

MR. ALPER: Thank you.

BY MR. ALPER:

Q. Okay. We were talking about the insurance business side of things for a bit there. Let's talk about the construction business a bit. Has EagleView been forced to reduce its prices in response to Xactware sales of the accused products in the construction business?

A. Yes, we have.

Q. Okay. Can you describe how EagleView's pricing works in the construction business?

A. In our construction business, we have several different pricing models, the most common of which follows precious

metal methodology. So at the bottom we have bronze pricing, then we have silver, then gold, then platinum. Each tier is associated with volume discounts. So essentially the more contractor does business with EagleView the better discounts they get.

Q. Okay. And can you give us an example of how price pressure from the defendants relates to EagleView's pricing in the construction market?

A. Yeah, sure. So historically when a contractor would come to negotiate with us, they would show up and try to negotiate with us to get into a better tier. So they were maybe at gold pricing and they wanted to get up to platinum, or they're bronze and they want to get to silver. But what we've been seeing over the last several years is contractors that are getting offers from the defendants for pricing that's better than even our platinum pricing that we offer. And so when they come and negotiate with us, they want us to either start at platinum or ever offer something better than we ever offered to our contractor customers.

Q. So give us an example. Let's say bronze -- bronze is the lowest tier?

A. It is.

Q. So that's the lowest volume. That's the pricing you get if you're buying the fewest amount of reports?

A. That's correct.

Q. Okay. So let's say you have a contractor who's at the bronze level. Give us an example of what has happened when Xactware comes on to scene and offers its pricing to that bronze-level customer?

04:04PM A. Again, EagleView has a choice to make. We -- we can either participate in those negotiations and try to win that business, which forces us to offer platinum or better pricing to that contractor, when they're volume -- ad historically for us, doesn't even merit them to get silver pricing, or we can

04:04PM walk away and lose that business.

Q. How many construction customers does EagleView have?

A. Tens of thousands. Approximately 40,000 that do business with us on an annual basis.

Q. Can you quantify the overall impact on price of

04:05PM Xactware's sale of the products that are accused of infringement in this case in the construction business?

A. Yeah, we consistently see the defendants' products in the market at 30 to 50 percent below EagleView's pricing.

Q. If someone has -- I'm going to switch gears just a bit

04:05PM here. If someone has an EagleView report, is it true that the only way that they can get cost estimation information, is to run that report through the Xactimate platform?

A. No, that's not accurate.

MS. PROCTOR: Objection. Foundation.

04:05PM BY MR. ALPER:

Q. Does EagleView sell reports through something called Xactimate?
A. Yes, we do.
Q. And do you have personal knowledge of what Xactimate is?
04:06PM A. Yes, I do.
Q. And what is Xactimate, for the jury?
A. Xactimate is claims estimation software that's produced by the defendants.
Q. Okay. If someone has an EagleView report, is the only
04:06PM way that they can get cost estimate information by running the report through the Xactimate platform?
A. No.
Q. Okay. Can you explain that?
A. Yes. So there are several other ways to get cost
04:06PM estimates. So again, EagleView produces Roof Reports which are exterior measurements of a roof. If insurance industry is using our Roof Reports they have to run those measurements through some sort of cost engine in order to get material pricing when settling a claim. In the insurance business,
04:06PM there's several cost estimating platforms. Xactimate, by the defendants is one of them. There's another called Symbility, another called Power Claim, another called Symsol. There's several platforms out there which do the same thing, and then in the construction business, there are several cost
04:07PM estimating platforms out there and EagleView has a proprietary

one that we call Construct, where contractors can use our roof measurement reports and run them through our own cost estimating system in order to get material pricing for their jobs.

04:07PM Q. Is Xactware -- is the Xactimate platform the reason people buy EagleView Roof Reports?

A. No, it's not. People buy EagleView Roof Reports for the reasons that I mentioned earlier, primarily around accuracy, safety, time savings and cost savings.

04:07PM Q. Is Xactimate the only distribution channel for EagleView?

A. No, it is not. As I mentioned before, we have several distribution channels both on the insurance side and on the construction side.

Q. Is EagleView successful selling its products on those

04:07PM other distribution channels?

A. Yes, we are.

Q. In the history of EagleView, what percentage of its overall Roof Reports have been sold through Xactimate?

A. Between the insurance and the construction businesses,

04:08PM approximately 25 percent.

Q. What does that mean for the other 75 percent?

A. It means that those reports either ran through other distribution channels or those customers came directly to EagleView to purchase through our website or through our

04:08PM mobile app.

Q. As one of the senior-most sales executives at EagleView, what does that say to you about the importance of the Xactimate platform?

A. It means to me that customers buy our reports for the reasons I mentioned earlier; accuracy, safety, time savings and cost savings.

THE COURT: Are there certain insurance carriers that require you to run them through Xactimate?

THE WITNESS: There are certain insurance companies that use Xactimate as part of their workflow, and so they ask us to run it through there because it's convenient for them to work in one platform. So yes.

MR. ALPER: Have you had any -- thank you, Your Honor.

BY MR. ALPER:

Q. On that note, have you had any examples of customers, in fact, big customers switching from Xactimate to other platforms?

A. Yes. In 2012, Farmers Insurance switched from the Xactimate platform over to a platform called Symbility.

Q. And before -- let me -- withdrawn. Was Farmers buying EagleView reports through Xactimate before it switched to Symbility?

A. Yes, they were.

Q. And did Farmers continue to buy EagleView reports after

the switch to Symbility?
A. Yes, they did. They didn't buy them through the Symbility platform because at that time we did not have an integration with Symbility but they continued to buy EagleView reports directly from EagleView.
Q. And was there an impact on EagleView sales to Farmers when you compared the sales to Farmers before the switch and after the switch?
A. No, the business stayed consistent.
Q. You've been providing some data, fair amount of data in your testimony. Are you providing that data purely from memory?
A. No, I'm not.
Q. Okay. Where does the data come from?
A. The data comes from financial records in our financial databases.
Q. Okay. You have a binder in front of you and I'd just like for the record to identify some of the financial records.
If you could turn to PTX-86, and then take a look at that, and then also PTX-117. I'm going to ask you, what are those?
MS. PROCTOR: Objection, Your Honor. My binder has placeholders.
THE COURT: Pardon me? Oh, okay. Can we get.
MR. ALPER: Your Honor, I think 117 -- 86 and 117 are

electronic files that we produced to the defendant. Maybe I can just elicit the foundation from Mr. West --

THE COURT: Okay.

MR. ALPER: And then everyone can go look at those later. I'm not planning to dive deep into the records. I just want them identified for the record.

THE COURT: Yeah, mine says it's an Excel file.

MR. ALPER: They are already admitted exhibits.

MS. PROCTOR: Your Honor, may I ask if the witness has a copy that he's looking at, of a file?

THE COURT: He does not.

THE WITNESS: I'm looking at a paper copy in front of me.

BY MR. ALPER:

Q. Did you look at the electronic records in preparation for your testimony?

A. Yes, it's what I used to pull a lot of the numbers that I used in my testimony today.

Q. Okay. And what are the -- are PTX-86 and 117 Excel files?

A. Yes, they are. They detailed EagleView's coverage in terms of our report completion and by ZIP code analysis where we have imagine coverage to prepare Roof Reports.

Q. Okay. Now I'm going to ask you about a few other of those exhibits that I listed at the very outset of this.

So I'm going to walk through them slowly so you can take a glance at them and then I'll ask you what they are. So I'd like to you to look at PTX-27, 65, 66, 94, 657 -- sorry if I'm going too fast.

04:12PM A. One sec, I'm one behind you. 94. Okay. I'm on 94.

Q. Okay. 657.

A. Okay.

Q. 658.

A. Okay.

04:12PM Q. 659.

A. Okay.

Q. 660.

A. Okay.

Q. 936.

04:12PM A. Yep.

Q. 937.

A. Okay.

Q. And 938.

A. Okay.

04:12PM Q. And what are those exhibits?

A. These are all financial records from EagleView's financial database. I'd like to note that I did not look through paper copies like this, in order preparing for today. I used electronic records. It's much easier to search Excel

04:13PM files. I went looking for some of this info rather than going

through all these papers.

Q. Thank you, Mr. West. A couple of remaining questions. First one is, what is EagleView's market share in the aerial computer aided design part of your business?

04:13PM A. I would say somewhere between 80 and 90 percent.

Q. And that's the Roof Report business based on aerial images?

A. Yes, that's correct.

Q. Who has the other 10 to 20 percent?

04:13PM A. The defendants.

Q. All right. You testified today about losing customers in a variety of ways to the defendants, and having to lower your prices. Let me ask you, isn't all of that just about EagleView having trouble competing with defendants' products?

04:13PM A. No, not at all. In fact, at EagleView we love competition. Competition is something that drives us. It forces us to innovate to be better to be our best, and we really do love competing. What we don't like is when we're competing with somebody who is using our technology and

04:14PM undercutting us in the market. That's not fair competition.

MR. ALPER: Thank you very much, Mr. West. I pass the witness. Thank you.

THE COURT: Cross-examination.

MS. PROCTOR: Good afternoon, Mr. West.

04:14PM THE WITNESS: Good afternoon, Ms Proctor.

MS. PROCTOR: I think we have met before. My name is Wyley Proctor and I represent the defendants.

One moment, actually let me confer with counsel.

(CROSS EXAMINATION OF HUGH SLOAN WEST, III BY MS. PROCTOR:)

04:14PM Q. Mr. West, we talked about some of the products that EagleView sells to its insurance companies. Do you remember that?

A. That's correct.

Q. And you're aware of a customer of EagleView called Texas

04:14PM Windstorm Insurance Association. Is that correct?

A. Yes, that's correct.

Q. What products do you sell to them?

A. We sell several products to Texas Windstorm. We sell our Roof Report products that we've been talking about, as well as

04:15PM some risk management products for their underwriting business.

Q. And specific to Roof Reports, what particular Roof Report products, if any, do you sell to the Texas Windstorm Insurance Association?

A. We sell our -- we sell our Roof Report products. Are you

04:15PM asking what line?

Q. Yeah. EagleView has several Roof Report products, right?

A. We do.

Q. Okay. And those are Roof Report products are sold under different names?

04:15PM A. That's correct.

Q. Okay. Do you call those lines or brands?
A. They're just lines for different businesses. Primarily -- again, primarily in our insurance business we have our Claims Ready Roof Reports, which is the name of our
04:15PM Roof Reports for the insurance business. For the construction business, we typically called it Premium Roof Report. The majority of our customers in our insurance business use our Claims Ready Roof Reports.
Q. Okay. So the Texas Windstorm Insurance Association, what
04:15PM products or lines of products do you sell to them?
A. I would assume the Claims Ready Roof Reports, but I'm not sure offhand.
Q. You don't know what percent of which types of reports or products you sell to the Texas Windstorm Insurance
04:16PM Association?
A. I don't know the percentage offhand.
Q. You're aware of a customer called Hancock Claims Consultants?
A. Yes, I am.
04:16PM Q. And what products or lines do you sell to them?
A. We sell something to Hancock called the Diagram Report.
Q. Is that all you sell?
A. To Hancock, yes. It's a specific product that we build specifically for Hancock. They're the only ones that buy that
04:16PM product from us.

Q. Okay. Your Honor, there's a question of whether the courtroom needs to be resealed. I'm hoping not.

(Short pause.)

MS. PROCTOR: Your Honor, since there's about 13 minutes left in the Court day, I can move on from this line of questioning so we don't have to clear the courtroom and unclear it again, we can get all of that done first thing in the morning on Monday.

THE COURT: Were you planning on going back Salt Lake City?

THE WITNESS: I would love to go back to Salt Lake City.

THE COURT: How much longer is your --

(Laughter.)

THE WITNESS: I have a lot to do. I have to be in a wedding.

THE COURT: You do like South Jersey?

THE WITNESS: I love South Jersey, your Honor. I would love to stay here as well.

MS. PROCTOR: Your Honor --

THE COURT: I think the jury will indulge me if we can finish this witness today, so let's do our best.

THE WITNESS: Thank you.

MS. PROCTOR: Your Honor, I have to warn you there is -- since the scope of cross can exceed the scope of direct,

there is quite a bit.

THE COURT: Okay. We'll make use of the time we have.

MS. PROCTOR: I'm going -- about to ask the witness --

THE COURT: Do you need to go into the sealed information now? We can move on.

MS. PROCTOR: I can do that later.

THE COURT: Okay.

BY MS. PROCTOR:

Q. Mr. West, you negotiate contracts for EagleView, right?

A. That is correct.

Q. And including contracts for selling group reports, right?

A. That is correct.

Q. And different customers at EagleView are charged different price for the same EagleView products, right?

A. That is correct.

Q. And part of the negotiation process involves determining the price that a particular customer will pay, right?

A. Yes.

Q. For example -- and some customers get discounts, right?

A. Yes.

Q. For example, high volume purchasers can get discounts, right?

A. Correct.

Q. Okay. In fact, there are several factors that go into settling a price for a particular customer; is that right?
A. Yes.
Q. The size of the contract, is that one factor?
04:18PM A. Yes.
Q. Yes. How about the anticipated volume?
A. Yes.
Q. How about the length of the contract?
A. Yes.
04:18PM Q. And how about the strategic relationship with the customer?
A. Yes.
Q. And you're the vice president of sales for insurance, right?
04:18PM A. Correct.
Q. And your job is to win business for EagleView, right?
A. Yes, ma'am.
Q. EagleView has lots of levers that it can use to win that business, right?
04:19PM A. Can you clarify? I'm not sure what you're talking about.
Q. Sure. Do you recall the last time we met when I took your deposition in April?
A. I do recall.
MS. PROCTOR: May I approach, your Honor?
04:19PM THE COURT: Well, just tell him what you mean by

the -- he wants to know what you meant by your question. Would you tell him?

THE WITNESS: Just what levers are we talking about?

BY MS. PROCTOR:

04:19PM Q. So, I can refer you to your deposition. When I asked --

THE COURT: Did he use the word levers?

MS. PROCTOR: He did.

THE WITNESS: I'm just wondering, I just didn't understand what you were asking when you said the levers. I 04:19PM wasn't sure what levers we're talking about. Before I agree to the question I just want to know.

THE COURT: He just wants to know what you mean by the use of levers.

BY MS. PROCTOR:

04:19PM Q. During your testimony you testified in your deposition: EagleView negotiates with customers based on a number of factors. And there's a lot of levers that you can pull in order to win business.

THE COURT: And what is your --

04:19PM BY MS. PROCTOR:

Q. Do you recall that?

A. I do.

THE COURT: And what is your question?

BY MS. PROCTOR:

04:20PM Q. My question is is it true that EagleView has a lot of

levers that it can pull in order to win business?
A. Okay. Yes.
Q. Okay. Pricing is not the only one of those levers, right?
04:20PM A. That is correct.
Q. The other such levers include offering different service levels, right?
A. Correct.
Q. And another is assigning dedicated customer
04:20PM representatives?
A. These are all things that are impactful to making a deal. Some of these levers are more important than others in getting a deal done.
Q. Just for a clear transcript, another such lever is
04:20PM assigning dedicated customer representatives, right?
A. Yes.
Q. And these are all tools that you use to negotiate a contract, right?
A. Yes.
04:20PM Q. And Xactware has such levers as well?
A. I can't speak to Xactware's levers.
Q. You testified on direct about the price -- excuse me, the impact of price on EagleView's customers, right?
A. That's correct.
04:20PM Q. And you'll agree that there's always customers that are

very price sensitive, right?
A. Yes, correct.
Q. But some customers are more price sensitive than others?
A. Correct.
04:21PM Q. Okay. In particular, above a certain level of accuracy, you'd agree that some customers are more price sensitive than others, right?
A. Can you restate the question? Above a certain level of accuracy?
04:21PM Q. Sure. Do you believe that all customers require the same level of accuracy in their roof reports?
A. I don't know how to answer that from a customer perspective, but there is a threshold but I definitely -- there is a threshold at which all customers require a certain
04:21PM level of accuracy, and then beyond that there may be some variability, but all customers require a certain level threshold for sure.
Q. But assuming that certain threshold of accuracy, there are some customers that are more price sensitive than others,
04:21PM correct?
A. Yes, I would assume so.
Q. What is accurate enough for one customer may not be accurate enough for another, right?
A. That's a fair statement.
04:21PM Q. In fact, customers have informed you that less accurate

reports are accurate enough for them, right?
A. That has happened on occasion with some very small customers, yes.
Q. That has happened, sir?
04:22PM A. Yes.
Q. As part of your job at EagleView you work with people who work at Xactware, right?
A. Yes.
Q. And you do so routinely?
04:22PM A. Yes.
Q. Primarily with Xactware senior leadership around sales?
A. We come in contact when customers are asking us to work through issues together, yes.
Q. And you talk to them or work with them because you share
04:22PM customers in common, right?
A. Yes.
Q. And you have mutual customers in common with Xactware, right?
A. We do.
04:22PM Q. Customers that buy roof reports from EagleView through an Xactimate platform, right?
A. Yes. That's correct.
Q. And your relationship with these Xactware employees is pretty good?
04:22PM A. It's very professional.

Q. EagleView has partnered with Xactware since 2009, right?
A. I believe so.
Q. And it continues to partner with Xactware today, right?
A. That's correct.
04:22PM Q. And EagleView partners with Xactware because your clients want you to, right?
A. That's correct.
THE COURT: This is for the cost estimating services?
THE WITNESS: This is for the integration between our
04:23PM roof reports and their claims estimation software, correct.
BY MS. PROCTOR:
Q. And in fact, EagleView customers specifically request that you be integrated with Xactimate, correct?
A. Yes, we have customers that request integrations from us
04:23PM in several different parts of our business with a host of different partners, and our goal at EagleView is to always accommodate the integration requests of our customers whenever we can to make their lives easy.
Q. Xactimate is the dominant claims estimation platform in
04:23PM the insurance business, isn't it?
A. Yes.
Q. And the Xactimate platform has existed a long time before EagleView as a company existed, right?
A. I don't know the dates, but I think so.
04:23PM Q. You are aware that Xactimate has been around since at

least the 1990s?
A. Yes.
Q. And EagleView started in 2008?
A. Yes.
04:23PM Q. And EagleView got on the Xactimate platform around 2009?
A. I believe so.
Q. And would you agree that as of 2009, Xactimate was then the dominant claims estimation platform?
A. That was three years before I joined EagleView, I'm not
04:24PM sure.
Q. When you joined EagleView in 2012, was Xactimate the dominant claims estimation platform?
A. Yes.
Q. Were you aware of any claims estimation platforms before
04:24PM 2012 that was more dominant?
A. I wasn't aware of a claims estimation platform before 2012.
Q. We talked about this a little bit. EagleView's roof reports do not contain cost information, right?
04:24PM A. They do not.
Q. And they don't contain the cost of materials?
A. No, they're just measurements.
Q. And they don't contain, for example, the cost of labor?
A. No.
04:24PM Q. Okay. So what an EagleView report that the customers are

buying contains is information about estimated dimension of a roof, right?

A. That's correct.

Q. And a roof -- and a report won't tell you how much it would cost to repair the roof in terms of dollars, right?

A. That's not the function of an EagleView roof report.

Q. And for that you'd need an estimating platform?

THE COURT: Okay. I think that point has been made. He said that a couple of times.

BY MS. PROCTOR:

Q. Okay. You were asked on direct about whether there's any alternatives to EagleView, correct?

A. In terms of roof measurement services or...

Q. I don't have the transcript in front of me, but I believe in terms of competitors.

A. I was asked about EagleView's competitors?

Q. Let me just ask the question.

A. Okay.

Q. Do you believe that EagleView has any competitors in the roof estimation --

A. Yes.

Q. Okay. Those competitors include SkyMeasure.

A. Yes, that's a competitor.

Q. And RoofWalk?

A. That's also a competitor.

Q. And RoofShots.com?
A. I hear these names. I don't -- I don't come up against them in my business, but I know they exist.
Q. And in fact one reason a competitor -- excuse me. You consider these competitors not viable competitors to EagleView, don't you?
A. That's correct.
Q. Okay. And the reason they're not viable is because they can't scale, right?
04:25PM A. That's one reason, correct. There are others.
Q. And to scale means they can increase the number of reports they can create in -- to the level that the customer demands; Is that correct?
A. It would help to give a little bit -- can I give you some
04:26PM context? So when customers are evaluating EagleView or any service, there's several things that they need to take into account from a roof measurement service company like ours. One is accuracy. Is the report even accurate? If it's not accurate, nobody's going to buy it no matter how great
04:26PM anything else is. The next thing is scale and coverage. It's great if you can produce a report, but if you can't produce it everywhere they need it, it's not worth a whole lot. And also, if you can't scale to meet the demand when they need you most during natural catastrophes, it's also not a service that
04:26PM any insurance company is going to sign on with. So those are

the main factors when a company is selecting EagleView, and that's why I don't think those other companies are viable, because they can't do those things that we can do.

Q. Sir, do you recall during your deposition we talked about the competitor SkyMeasure?

A. Yes.

Q. And you told me that you believed SkyMeasure is not a viable competitor?

A. That's correct.

Q. And you gave me reasons why you thought SkyMeasure was not a viable competitor?

A. Yes.

Q. And those reasons were that it was not integrated with Xactimate, correct?

A. That was one of several reasons. And again, from the reasons I just pointed out I think those are the most impactful reasons.

Q. You gave me two reasons. One, it couldn't integrate with Xactimate, and two, that it couldn't scale, correct?

A. If you say so. I'm not reading my transcript right now, but...

Q. I'm happy to show you your transcript, sir.

A. I'll take your word for it.

Q. Okay. And similarly, when I asked you about your main competitors, you said Geomni was the primary competitor,

correct?

A. Yes. The defendants.

Q. And you gave me two reasons why Geomni is your primary competitor; do you remember this?

04:27PM A. I -- I'd love for you to tell me, but yeah.

(Laughter.)

Q. Don't worry.

The question was, I'm looking at Exhibit 2, this is the document in front of you describing your testimony, which

04:28PM says that you're going to testify about EagleView's competitors.

You answered: Yes, ma'am.

Very polite.

Question: So what competitors?

04:28PM Answer: The primary competitor which has been a competitor to me over the last several years that comes to mind is Geomni, for several reasons. One, Geomni has the scaling to produce reports for insurance customers. They also have integrations with Xactimate, given that they are owned by

04:28PM Xactware. So that makes them a viable competitor, and really the only one that I have come up against in negotiations because of their market share with their Xactimate products.

Do you remember that?

A. Yes.

04:28PM Q. So you gave to me two reasons five months ago why

Geomni's your primary competitor. One is they can scale, and two is they're integrated with Xactimate; is that correct?

A. That is what I said.

Q. The same with SkyMeasure. You gave me two reasons, they're not integrated with Xactimate, so they're not viable, and they can't scale so they're not viable; is that correct?

A. Seems to be the theme in my mind that day, yes.

Q. Okay, thank you.

A. You're welcome.

04:29PM THE COURT: Okay. We'll have to end it there, Mr. West. We'll see you back on Monday.

THE WITNESS: See you Monday.

THE COURT: Yes. We will not interfere with your wedding, I promise.

04:29PM (Laughter.)

THE WITNESS: Thank you. Thank you, your Honor.

THE COURT: Okay, ladies and gentlemen. So we're going to call it a day. So I'll see you folks back on Monday, 9 o'clock, okay? And we'll have a full day. Tuesday we'll start later, I think 10:00 is what my schedule will be. Okay? And remember, next Thursday -- is it Thursday? -- we're off? Yeah. Okay.

So, it's going to be the weekend, so don't talk about the case during the weekend. Okay? Don't talk about it tonight or at any time. Remember my instruction.

And my second instruction?

THE JURORS: Have a good weekend.

THE COURT: Have a good weekend. Thank you.

THE DEPUTY CLERK: All rise.

04:30PM (Jury leaves courtroom.)

THE COURT: You can step down, Mr. West. Thank you.

MR. ALPER: Your Honor, before Mr. West leaves, because he's going to be held over the weekend --

THE COURT: Yes.

04:30PM MR. ALPER: -- either may I communicate with him while he's in open court, or may we have permission to communicate with him solely for purposes of logistics, like if he's going fly home and back --

THE COURT: You can talk to him about anything you

04:30PM want except the substance of his testimony. Yes, of course.

MR. ALPER: Thank you, your Honor.

THE COURT: You can step down.

(Witness leaves the stand.)

THE COURT: I wanted to get to the submissions and

04:30PM give you my thoughts and all that, but given the hour and all that, I think it's just way too late. And so unless you folks need to get rulings from me, Mr. West will go on Monday, and then who is up next?

MR. ALPER: Dr. Arnold, our damages expert.

04:31PM THE COURT: Okay. And then?

MR. ALPER: Then we have some deposition designations that we have to play, a large part of which are just, I guess you'd call it authenticating documents. We have a proposal for saving the jury that time, which we're happy to discuss on Monday or now, either way. And then I think we'll be done.

THE COURT: Yes.

MR. ALPER: We'll be ready to rest.

THE COURT: Okay. So then my rulings then I think are going to become more helpful to the parties when the defendants present their case. So we'll deal with that sometime on Monday.

I do want the issue of the claim construction on the '436 to be resolved, consistent with what we were talking about prior to lunch. So if you folks want to give me a brief submission over the weekend, I'll take a look at it. I do think it's going to be something that if the defendants' position is that the claim should be construed as requiring a generation of a model from scratch, then I'm going -- then I'm going to construe the claim. So that's the defendants' -- I forgot who. Mr. Seeve, that's the position, right?

MR. SEEVE: So the defendants believe, your Honor, that the claim should be given its plain and ordinary meaning, that generate means generate, but yes.

THE COURT: From scratch.

MR. SEEVE: Yes, we believe that the claim --

THE COURT: Come on up to the podium.

MR. SEEVE: I'm sorry, your Honor. I'll be slow.

We believe, your Honor, that the claim term at issue in the '436 patent should be given its plain and ordinary meaning, like all of the other claim terms at issue in this case.

THE COURT: Right. But you folks don't agree what that plain and ordinary meaning is, so therefore I have to construe it.

MR. SEEVE: That's fair enough, your Honor. And given that the plain and ordinary meaning is itself a subject of dispute, we believe that "generate a model," as that term appears in the '436 patent, requires that the process begin with no 3D model and end with a 3D model, that's what we believe.

As for a particular construction, I'm not sure I can come up with it off of the top of my head, but we will definitely give you a submission this weekend, your Honor, that will clarify with precision exactly what we think that term means.

THE COURT: Okay. So both sides, if they can get me something brief, I don't need -- two or three pages, please, nothing more -- because I feel I have a handle on it, and I have a handle on Judge Kugler's rulings in that. But I'll give you the opportunity, both sides, to be heard on it.

Okay?

MR. SEEVE: Thank you, your Honor.

MR. ALPER: Thank you, your Honor. And I think this is totally clear, but with respect to the other objections that we have in our other submission, we feel like what's happening is the defendants are kind of putting out these sort of stealth claim constructions to the jury that is having a very prejudicial effect on them, the amount of time, for instance, we spent on metadata alone when it's not a claim requirement. So, those are things we would like to take up with your Honor on Monday.

THE COURT: And they are laid out in the submissions.

MR. ALPER: They are.

THE COURT: And I will leave you all with, if I haven't made myself clear, which I think I have, I share your concerns. And so that is what I was discussing earlier on, and so we can talk about it more on Monday, and I think I can deal with it. And if I have to instruct the jury so that those concerns that I have are alleviated, I will. And it could even go so far as to say something as follows: The defendants have argued such-and-such, or Dr. Cohen has testified such-and-such, and instructing the jury that that is not to be considered, that it was improper. I'm just saying that may be the only way -- and I know Dr. Cohen hasn't testified, but there's a lot that comes in and then it's

harder to take it back out. So, I want to have this conversation before we have Dr. Cohen testify for sure, because I think much of his testimony is objected to -- not much, but his testimony poses problems that are laid out in the submission. So, it will be helpful to have this so maybe we'll do that on Monday.

MR. SEEVE: Thank you, your Honor.

THE COURT: Okay?

MR. SEEVE: I just want to say one last thing. You know, your rulings are what they are and the issues are what they are, but we are not attempting stealth anything here. These are nuanced issues, and we just want to get to the bottom of claim construction and have our witness testify. So that just when it comes to the parties' intentions here, and our intentions, we're not trying to stealthily put something over on the Court.

THE COURT: You know, look, I have not found that any party has been acting in bad faith to start with. It's not to say that I may ultimately. I'm not saying that. I think the problem has arisen because when Judge Kugler ruled that several of these claims have their plain and ordinary meaning, the parties went off and there was no clear understanding as to some of the claims. But from what I have read, it does seem that the defendants are intending -- attempting to inject a construction that for the first time sort of, kind of is

raising its head here at trial. That's what it appears to me.

Again, you folks have a better handle on the case, but I have read through all of Judge Kugler's opinions, I've read through much of the documents in this case, and so when I hear some of these arguments being made, I'm like, where did that come from?

MR. SEEVE: I understand that it appears --

THE COURT: Yes. So, but we can talk more about it on Monday. I'll even have a better handle on Monday because I'm going to read it all again.

MR. SEEVE: Thank you, your Honor. And hopefully our submissions will make it clear that that's not the case, that these are new issues in the case.

THE COURT: Okay.

MR. SEEVE: Thank you.

MR. DE VRIES: Your Honor, just very briefly, we made a submission earlier this week expressing concern about, as your Honor has acknowledged, arguments that were made in the opening. Those became amplified during the cross-examination today. The cross-examination also introduced new arguments that violated the Court's claim construction order, and we would ask for permission to submit a supplemental submission over the weekend identifying those. I can assure you it will be very brief, but they're very clear and we can direct your Honor exactly to what we're talking about.

THE COURT: Okay. If you're going to do that, no more than two to three pages, and do it so that the defendants have an opportunity to reply.

MR. DE VRIES: Yes, your Honor.

04:38PM THE COURT: Okay. So, you know, maybe tomorrow by 5:00, or something like that, so that they have Sunday by 5:00, and I have Sunday night to read it all.

MR. DE VRIES: Yes, your Honor.

THE COURT: Okay. So, yeah, I don't want anybody 04:38PM taken by surprise or having to work, you know, through the night because of a late submission.

MR. DE VRIES: Yes, your Honor.

THE COURT: Okay. So you can do that and I will read them. Okay?

04:38PM MR. ALPER: Thank you, your Honor.

THE COURT: Everybody have a good weekend, okay?

THE DEPUTY CLERK: All rise.

(Court adjourned at 4:38 p.m.).

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I certify that the foregoing is a correct transcript from the record of proceedings in the above-entitled matter.

/S/ Theodore M. Formaroli, CCR, correct, RMR, FAPR
Court Reporter
September 13, 2019
Date

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