IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF WISCONSIN

TANGENT TECHNOLOGIES, LLC,

Plaintiff,

vs.

RPI, INC.,

Defendant.

Case No. 1:23-cv-00261-WCG

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VIDEO DEPOSITION OF
FRANCISCO MORALES

March 12, 2024
8:54 a.m. Central

4320 Winfield Road, Suite 2000
Warrenville, Illinois

Stenographically Reported By:
Deanna Amore - CRR, RPR, CSR - 084-003999
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Nick Page, Legal Videographer

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THE VIDEOGRAPHER: Good morning. We are going on the record at 8:54 a.m. on March 12, 2024.

Please note that the microphones are sensitive and may pick up whispering and private conversations.

Please mute your phones at this time.

Audio and video recording will continue to take place unless all parties agree to go off the record.

This is Media Unit No. 1 in the video-recorded deposition of Francisco Morales, taken in the matter of Tangent Technologies versus Recycled Plastics Industries.

The location of this deposition is being held at the Regus Office Center located at 4320 Winfield Road, Warrenville, Illinois.

My name is Nick Page, representing Veritext, and I am the videographer. The court reporter is Deanna Amore, also from the firm Veritext.

I am not related to any parties in this action, nor am I financially interested in the outcome.

If there are any objections to the proceedings, please state them at the time of your

appearance.

Counsel and all present will now please state their appearances and affiliations for the record, beginning with the noticing attorney.

MR. ZAMBRZYCKI: This is Jacob Zambrzycki, from Moore & VanAllen, on behalf of the defendant.

MR. OEHLER: James Oehler, McDermott Will & Emery, on behalf of the plaintiff.

(Whereupon, the witness was duly sworn.)

THE STENOGRAPHER: Thank you.

You may proceed.

FRANCISCO MORALES,

called as a witness herein, having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. ZAMBRZYCKI:

Q. Good morning, Mr. Morales.

A. Good morning. So.

Q. My name is Jacob Zambrzycki. As I just stated, I am with the law firm of Moore & VanAllen, and I represent the defendant in this case.

So have you been to a deposition -- have you been deposed before?

A. No, I've not.

Q. So I'm sure Mr. Oehler has explained some of the ground rules to you. Essentially, I'm going to be asking you questions today. You are going to be answering some -- those questions.

Your attorney is going to -- he's allowed to object. If he objects, it's his right to do so. You are still required to answer the question unless he instructs you not to answer because there's an issue of privilege or he gives you an instruction not to answer.

Again, it's a little awkward because I'll ask my question, he will object, but you are still required to answer the question.

Do you understand that?

A. I understand that.

Q. Before answering my questions, I just ask that you wait and give me a chance to finish my question. That way we are not talking over each other, and the court reporter can take down my question, your answer, and we are not sort of talking past each other. Okay?

A. Understand.

Q. I'll try to do the same. I'll try not to interrupt you when you're answering a question. If I do interrupt you, I apologize. I don't mean to

do so. Let me know that you weren't finished, and I'll let you answer the question.

If at any time you don't understand any of my questions, let me know. I am happy to clarify. If you don't ask me to clarify, then I will have asked a question, maybe you answered a different question. We won't know we are sort of crossing paths so ask me to clarify if it's not clear.

I'll try to take a break every hour or so. If you need a break for any reason, just let me know. If there's a question pending, I'll ask you to finish answering that question, but, otherwise, if you need a break for any reason, just let me know. We'll take a break.

A. Will do.

Q. Okay. Let's see. Any more ground rules I want to go over? I think that's it. So if we could begin and have you just state your name and address for the record, please.

A. The name is Francisco Morales. My address is 12686 Schaefer Road, Plano, Illinois 60545.

Q. Is there any reason that you are unable to testify truthfully and to the best of your ability today?

A. No.

Q. Are you on any medication that would prevent you from doing so?
A. No medication.
Q. And you're one of the founders of Tangent Technologies?
A. One of three founders, yes.
Q. And Tangent was found sometime in 2003; is that right?
A. 2003.
Q. And you're also presently the chief innovation officer at Tangent; is that right?
A. Correct.
Q. Do you have other titles?
A. Business -- vice president tooling and design.
THE STENOGRAPHER: What was the last word you said?
THE WITNESS: Tooling and design.
BY MR. ZAMBRZYCKI:
Q. And how long have you held each one of those roles?
A. Tooling design, I have done tooling design since inception. So I was in charge of doing tooling from the very beginning. "Doing," meaning designing tools and helping the machine shop, the

manufacture of the tooling.

Q. Okay. You say "from the beginning." From the beginning of Tangent being founded?

A. From the beginning of Tangent.

Q. And were you the chief innovation officer since the beginning as well?

A. Back then, there was no -- there was no names at the beginning. There was no titles. It was just the three founders and the manufacturing people that we hired.

Q. Have you held any other titles at Tangent other than chief innovation officer or the tooling role that you mentioned?

A. No.

Q. Has your -- what are your current responsibilities at Tangent?

A. Still the tool and design, and I'm also in charge of relocating production lines.

Q. Do you have any other responsibilities?

A. No.

Q. Have your -- have your responsibilities changed since the time that --

A. Well, yeah, they have changed. I mean, at the inception, I mean, I was running the manufacturing side of the business. As time went

by, I mean, we hired people that start taking over that and concentrated on the tooling and design.

Q. When you say you're "running the manufacturing side of the business," what do you mean by that?

A. The "manufacturing side of the business," when I say that, I mean I was in charge of hiring people -- showing people their responsibilities, making the schedule for the production lines.

Q. Did you actually work on the production lines yourself at any point?

A. I did, yes.

Q. Do you still do that today?

A. I oversee that part -- "oversee," meaning I look at them, and if they have a -- if they have issues, they will come up to me and ask questions, help.

Q. Are there specific products whose manufacture you oversee?

A. No, very much the extrusion of the plastic lumber.

Q. During your time at Tangent, were there any other products with which you worked other than plastic lumber?

A. We currently do a sheet. So I was

involved in some of that.
Q. Any other products?
A. No.
Q. When you say you "currently do a sheet," when did Tangent start producing a sheet?
A. I don't -- I don't recall the date when we started making sheet, but this has been years, not decades but years.
Q. Do you have any -- do you have any people directly report -- excuse me.
Do any people report directly to you at Tangent?
A. Yeah, I have two direct reports.
Q. Okay. Who are those?
A. Rich Sosnowski and Omar Santillanes.
Q. And what are their titles?
A. Rich Sosnowski is a facilities manager, and Omar Santillanes is a -- I don't recall his title. He's currently working on the relocation.
Q. You mentioned a relocation a couple of times now. What's the relocation you're referring to?
A. We are moving production lines to a larger facility.
Q. And when is that moved expected to happen?

A. It's happening as we speak.
Q. And when do you expect it to be complete?
A. Hard to tell. Hard to tell. It's a -- it might take -- it might take years.
Q. Is there a goal that Tangent is shooting for in terms of completing the location?
A. Production lines, it will be -- the goal, it will be to finish at the end of this year or next year.
Q. You mentioned Mr. Sosnowski is the facilities manager. What are his responsibilities in that role?
MR. OEHLER: Objection. Scope.
We are kind of getting beyond typical background stuff.
THE WITNESS: He's in charge of maintaining the facilities. He is in charge -- with his reports, he will maintain the lighting, maintain the bathrooms, maintain the building in general, but in addition to that, I mean, he's working on the relocation.
BY MR. ZAMBRZYCKI:
Q. Does anyone report to you directly who works -- actually works on the product line producing the plastic lumber?

A. No. No.
Q. And do you still have any involvement with the production of the plastic lumber?
A. I get calls -- I get calls asking for help if they get -- if they need help.
Q. Okay. And is there someone in charge who -- like, is there someone who oversees the production of the plastic lumber?
A. Yes, there is -- there is two supervisors that are in charge of each one of our two facilities.
Q. Who are those?
A. There's two Daves. One in each building. Sorry about the last names. But there is two Daves, one in charge of one facility, and the other one in charge of the second facility.
Q. Do you know their -- the first initial of the last names?
A. Dave F. is the first initial of the one, and I believe the second one is O.
Q. Okay. And which facilities is each one of those Daves in charge of?
A. F is going to be the Montgomery facility, and O is going to be in charge of the Sullivan facility.

Q. I'm sorry. What was the name of the second facility?
A. Sullivan.
Q. Sullivan?
A. Sullivan.
Q. Got it.
Are those both in Illinois?
A. Yes.
Q. Do those facilities produce the same products?
A. Yes.
Q. Where did you work prior to -- prior to Tangent?
A. A company called U.S. Plastic Lumber.
Q. And what -- what role did you hold there?
A. I was a production manager for a -- I wore different hats on that company. The last one was a production manager for a sheet line or a sheet production, a department, and prior to that, also a production manager for the plastic lumber division of that company.
Q. How long did you work at U.S. Plastic Lumber?
A. I'm not going to recall the number of years because it was -- U.S. Plastic Lumber bought

Eaglebrook Plastics. So I stayed with the U.S. Plastic Lumber for some period of time, and I don't recall the number of years.

Q. Were you at Eaglebrook before --

A. Before U.S. Plastic Lumber.

Q. So after U.S. Plastic Lumber bought Eaglebrook, you stayed with what became --

A. What became -- I'm sorry for --

Q. That's okay.

Do you recall approximately when you started at Eaglebrook?

A. Late '80s.

Q. And did Eaglebrook also produce plastic lumber?

A. Correct.

Q. And what roles did you hold at Eaglebrook?

A. Maintenance, production, and scheduler.

Q. Did Eaglebrook, the plastic lumber that Eaglebrook produced, did it produce that plastic lumber using an extrusion process?

A. Yes.

MR. OEHLER: Objection. Scope.

BY MR. ZAMBRZYCKI:

Q. And U.S. Plastic, did their plastic lumber, was that also produced using an extrusion

process?
MR. OEHLER: Objection. Scope.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Did they produce plastic lumber -- I'm talking about U.S. Plastic now -- did they produce plastic lumber using any other process other than extrusion?
MR. OEHLER: Objection. Scope.
THE WITNESS: Both of them were extrusion processes.
BY MR. ZAMBRZYCKI:
Q. "Both of them," meaning U.S. Plastic and Eaglebrook?
A. Correct.
Q. Okay. And did you work -- did you actually work with the extrusion machines at U.S. Plastic and at Eaglebrook?
MR. OEHLER: Objection. Scope.
THE WITNESS: I did.
BY MR. ZAMBRZYCKI:
Q. And so was the process used by U.S. Plastic, the extrusion process, different than the one used at Eaglebrook?
MR. OEHLER: Objection. Scope.

THE WITNESS: No, it was the same.
BY MR. ZAMBRZYCKI:
Q. Same process?
And how would you describe that process?
MR. OEHLER: Objection. Scope. Form.
THE WITNESS: The process involve a melting -- melting plastic pellets into a melt flow, and they formed that melt flow into a -- into a profile, different profiles. You cool that down, and you form plastic lumber.
BY MR. ZAMBRZYCKI:
Q. And so that was the same at U.S. Plastic and at Eaglebrook?
A. Yes.
MR. OEHLER: Same objection.
BY MR. ZAMBRZYCKI:
Q. Okay. And the extrusion process at U.S. Plastic, did that involve using a static mixer?
MR. OEHLER: Objection. Scope.
THE WITNESS: Can you repeat that question?
BY MR. ZAMBRZYCKI:
Q. Sure.
The extrusion process that was used at U.S. Plastic to create plastic lumber, was a static

mixer used as part of that process?
MR. OEHLER: Same objection. Form.
THE WITNESS: I don't recall using the static mixers at U.S. Plastic Lumber.
BY MR. ZAMBRZYCKI:
Q. Okay. And what about at Eaglebrook? Do you recall using the static mixer?
A. I don't recall using the static mixer.
MR. OEHLER: Objection. Form. Scope.
THE WITNESS: Eaglebrook.
BY MR. ZAMBRZYCKI:
Q. Do you recall using any other type of mixer as part of the extrusion process at U.S. Plastic?
MR. OEHLER: Objection. Scope.
THE WITNESS: Don't recall.
BY MR. ZAMBRZYCKI:
Q. How about at Eaglebrook?
MR. OEHLER: Same objection.
THE WITNESS: Don't recall using the static mixers.
BY MR. ZAMBRZYCKI:
Q. What types of polymers were used to create the plastic lumber at U.S. Plastic?
MR. OEHLER: Objection. Scope.

THE WITNESS: For the most part, it was HDPE coming from milk jugs.

BY MR. ZAMBRZYCKI:

Q. And what about at Eaglebrook? What type of polymer was used to create the plastic lumber there?

MR. OEHLER: Objection. Scope.

THE WITNESS: Same material.

BY MR. ZAMBRZYCKI:

Q. HDPE also?

A. Yes.

Q. Do you know why HDPE was the polymer used at U.S. Plastic?

MR. OEHLER: Objection. Scope. Calls for speculation.

THE WITNESS: I don't recall why. When I got there, it was already the material being used to make plastic lumber.

BY MR. ZAMBRZYCKI:

Q. Are there any benefits that you're aware of to using HDPE to create plastic lumber as opposed to a different polymer?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: Back then it was a -- milk bottles were being recycled. So it was more

economical to use it than using virgin.
BY MR. ZAMBRZYCKI:
Q. Other than it being economical, were there any other benefits that HDPE provided for creating plastic lumber over other polymers?
MR. OEHLER: Same objection.
THE WITNESS: Heat history maybe.
THE STENOGRAPHER: What was that?
THE WITNESS: Heat history.
BY MR. ZAMBRZYCKI:
Q. What does that mean, heat history?
A. It's more malleable when you have a second heat history on it.
Q. What do you mean when you say "second heat history"?
A. When you process it -- when you process virgin material into one extruder, that's one heat history. When you grind that and make pellets again, or flakes, the second time that you put it through the machine is the second heat history.
Q. Any other benefits to using HDPE that you can think of to make plastic lumber?
MR. OEHLER: Same objections.
THE WITNESS: Not that I know.

BY MR. ZAMBRZYCKI:
Q. While you were working at U.S. Plastic, were UV additives used in the plastic lumber that were being manufactured?
MR. OEHLER: Objection. Scope.
THE WITNESS: Yes, we used colorants, and the colorant will have UV stabilizers and -- for the most part UV stabilizers.
BY MR. ZAMBRZYCKI:
Q. What about when you were at Eaglebrook, were UV additives being used in the plastic lumber --
A. Yes.
MR. OEHLER: Objection --
THE STENOGRAPHER: One at a time.
MR. ZAMBRZYCKI: Sorry. Let me -- let me ask. Let him object.
BY MR. ZAMBRZYCKI:
Q. What about when you were at Eaglebrook? Were UV additives also being used in the plastic lumbers that were being produced there?
MR. OEHLER: Objection. Scope.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And were colorants also being added into

the HDPE during your time at Eaglebrook to produce the plastic lumber?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Were the products, the plastic lumber products, being manufactured by U.S. Plastic during your time there? Did they -- were they a single color or multiple colors?

MR. OEHLER: Objection. Form. Scope.

THE WITNESS: Single colors.

BY MR. ZAMBRZYCKI:

Q. What about at Eaglebrook?

MR. OEHLER: Same objection.

THE WITNESS: Single colors.

BY MR. ZAMBRZYCKI:

Q. Okay. Were foaming agents included in the plastic lumber produced by U.S. Plastic?

MR. OEHLER: Objection. Scope.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. And same question, this time for Eaglebrook, were foaming agents being used in the plastic lumber produced by Eaglebrook?

MR. OEHLER: Objection. Scope.

THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Did U.S. Plastic emboss its plastic lumber products?
MR. OEHLER: Objection. Scope.
THE WITNESS: Some of them.
BY MR. ZAMBRZYCKI:
Q. And did Eaglebrook emboss any of its plastic lumber products?
MR. OEHLER: Objection. Scope.
THE WITNESS: Yes, some of them.
BY MR. ZAMBRZYCKI:
Q. What was the purpose, to your knowledge, of embossing the products at U.S. Plastic?
MR. OEHLER: Objection. Form. Scope.
THE WITNESS: To my knowledge, it was aesthetic and antislip.
BY MR. ZAMBRZYCKI:
Q. Was that the same reason that embossing was added to the products at Eaglebrook?
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. To your knowledge?
A. Yes.
Q. And do you know why foaming agents were

added to the plastic lumber products produced by U.S. Plastic?

MR. OEHLER: Objection. Form. Scope.

THE WITNESS: To reduce weight and to obtain the finish that the plastic lumber gets.

BY MR. ZAMBRZYCKI:

Q. And when you say "to obtain the finish," do you mean to make it feel more like real wood or what do you mean?

MR. OEHLER: Objection. Form. Scope.

THE WITNESS: When you add the foam -- when you foam a plastic lumber, you produce -- you produce a finish, a marbling effect, stretch marks, if you want to call it that way, that is a particular look of a foam plastic lumber which is -- makes it look better than a toy, a toy finish.

BY MR. ZAMBRZYCKI:

Q. What do you mean by that, by "toy finish"?

A. Well, when I say, "toy finish," when you look at a toy or you paint your highlighter, you see a bright yellow on it, smooth. When you put foam, you create stretch marks.

Q. I forgot to ask you: Do you know what the reason was for adding UV additive to the plastic lumber at U.S. Plastic?

MR. OEHLER: Objection. Form.
THE WITNESS: UV stabilizer to prevent fading.
BY MR. ZAMBRZYCKI:
Q. To prevent fading from the sun?
A. Correct.
Q. Did you work anywhere before Eaglebrook?
A. Yeah. Yes, I did.
Q. And where was that?
A. Not related to plastics, it was a -- I held different jobs. I worked in a welding shop. I worked on a tow truck company.
Q. Any other jobs?
A. Library. Those are the ones that I recall.
Q. Did you -- yeah, so broad question. So prior to Eaglebrook, did you work with any other companies where you were involved with an extrusion process?
MR. OEHLER: Objection. Form.
THE WITNESS: No.
BY MR. ZAMBRZYCKI:
Q. And do you have any degrees? Any -- what's your educational background? Do you have any -- do you have a college degree?
MR. OEHLER: Objection. Form.

THE WITNESS: No college degree.
BY MR. ZAMBRZYCKI:
Q. Did you graduate high school?
A. Yes.
Q. Okay. Do you have any -- any, like, professional degrees?
A. No, not professional degrees.
Q. Any certifications or anything like that?
MR. OEHLER: Objection. Form.
THE WITNESS: I went to an industrial electrical institute in Mexico.
BY MR. ZAMBRZYCKI:
Q. Okay. And was that -- was that post high school? Was that after high school?
A. That was in between.
Q. Like during high school?
A. In between -- in between a high school -- I'm sorry -- in between -- there's different -- it's different in Mexico. You finish six years, and then you go to -- it's called secondary, and in between secondary and high school, I went to this electrical institute.
Q. Okay. So what did you study at the electrical institute?
A. Industrial electricity.

Q. Nothing to do with extrusion processes there?
A. No.
Q. Okay. And then I think you said that after the institute, there's a secondary school; is that right?
A. Correct.
Q. And did you attend a secondary school?
A. Correct.
Q. And what did you study at the secondary school?
Apologies. I don't know how it works. So I'm sort of asking widely.
MR. OEHLER: Objection. Form.
THE WITNESS: This is the same, just regular subjects that you study in high school.
BY MR. ZAMBRZYCKI:
Q. Okay. So it wasn't -- so it wasn't --
A. It was not.
Q. I'm sorry. So it wasn't focused on electrical work, for example?
A. No.
Q. Okay. So you started Tangent around 2003; right?
A. Correct.

Q. Okay. And prior to that, it sounds like you had about 20 years of experience in the plastic lumber industry; is that right?

MR. OEHLER: Objection. Scope. To the extent it mischaracterizes testimony.

THE WITNESS: I don't recall the number of years, but before I started Tangent, there was a -- there was years working at Eaglebrook and U.S. Plastic Lumber.

BY MR. ZAMBRZYCKI:

Q. Did Eaglebrook have any competitors that you're aware of in the plastic lumber industry?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: Not that I recall. I believe Eaglebrook was the first ones -- strike that. There was at least one more that I recall that it was making plastic lumber.

BY MR. ZAMBRZYCKI:

Q. And what company was that that you recall?

A. Renew Plastics.

Q. Okay. And once -- during your time at U.S. Plastic, are you aware of any other companies out there that were making plastic lumber?

MR. OEHLER: Objection. Form. Scope.

THE WITNESS: Renew, and I don't recall the

other ones.
BY MR. ZAMBRZYCKI:
Q. Okay. Is it fair to say -- well, let me ask you one more question.
Are you familiar with something called co-extrusion?
A. Yes.
Q. And what is your understanding of what co-extrusion is?
MR. OEHLER: Objection. Scope. Form.
THE WITNESS: Co-extrusion is when you apply or you merge two melts into one melt flow.
BY MR. ZAMBRZYCKI:
Q. Did the plastic lumber products that U.S. Plastic created, did those involve -- were those created using co-extrusion?
MR. OEHLER: Objection. Scope. Form.
THE WITNESS: Not that I recall, no.
BY MR. ZAMBRZYCKI:
Q. Okay. How about the products at Eaglebrook?
MR. OEHLER: Same objection.
THE WITNESS: Not that I recall, no.
BY MR. ZAMBRZYCKI:
Q. Okay. Is it fair to say that before you

joined Tangent, the process of extrusion was already well known?

MR. OEHLER: Objection. Scope and form. Calls for speculation.

THE WITNESS: The extrusion process is used to make pellets. So the extrusion process is well known, yeah, before -- before Tangent.

BY MR. ZAMBRZYCKI:

Q. And it was well known before Tangent that you could make plastic lumber using an extrusion process; right?

MR. OEHLER: Same objections.

THE WITNESS: I do not know. To make pellets, yes.

To make plastic lumber before Eaglebrook.

BY MR. ZAMBRZYCKI:

Q. No. No. So not before Eaglebrook, before Tangent.

MR. OEHLER: Same objections.

THE WITNESS: Before Tangent, yes.

BY MR. ZAMBRZYCKI:

Q. And it was also well known before Tangent that -- let me make sure I'm asking these in the right order here.

Okay. And it was also well known before

you started at Tangent that you could make plastic lumber using an extrusion process with HDPE as the polymer; right?

MR. OEHLER: Objection. Scope. Form. Calls for speculation.

THE WITNESS: When you say, "well known," I mean, there is people that knows that you can use the extrusion process to make plastic lumber.

BY MR. ZAMBRZYCKI:

Q. So people in the plastic lumber industry knew that you could use HDPE in an extrusion process to make plastic lumber before you even joined Tangent; right?

MR. OEHLER: Objection. Form. Scope. Calls for speculation.

THE WITNESS: The plastic industry, it's broad. I mean, there's people that makes -- that makes pellets and people that use injection molding to make different things. To make plastic lumber, I believe is a limited number of people that knows how to make plastic lumber using the extrusion process.

BY MR. ZAMBRZYCKI:

Q. When you say "limited number of people," what do you mean by that?

MR. OEHLER: Objection. Scope.

THE WITNESS: Just that, that it's limited. There is not a -- there is not many in the country that I -- that I know.

BY MR. ZAMBRZYCKI:

Q. Now, you are an inventor on a few patents, some of which have been asserted against RPI that they infringe patents; right?

A. Yes.

Q. Right.

And -- well, so, you know that we're here, right, we are here in relation with the case that Tangent filed against RPI, and in that case Tangent asserted three patents against RPI; right?

A. I didn't know there was three, but, yes, I'm aware.

Q. We'll go through those. I am not trying to trip you up here, but one of those patents is a utility patent, are you aware of that?

A. Yes.

Q. And you're an inventor named on that patent; right?

A. Yes.

Q. You are not suggesting that you invented using extrusion of HDPE to create plastic lumber;

right?

MR. OEHLER: Objection. Outside of the scope. Calls for speculation. Calls for a legal conclusion. Form.

THE WITNESS: No.

BY MR. ZAMBRZYCKI:

Q. Because that was known even before you joined Tangent; right?

MR. OEHLER: Same objections.

THE WITNESS: Before Tangent, yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And before you joined Tangent, it was also known in the industry that you can add UV additives to plastic lumber that was made with an extrusion process using HDPE; right?

MR. OEHLER: Objection. Scope. Form. Calls for speculation.

THE WITNESS: Do not know that.

BY MR. ZAMBRZYCKI:

Q. Okay. Do you believe that you invented adding a UV additive to a plastic lumber product that was created using extrusion HDPE?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.

THE WITNESS: No.

BY MR. ZAMBRZYCKI:
Q. And do you believe that you invented embossing such a product?
MR. OEHLER: Same objections.
THE WITNESS: No.
BY MR. ZAMBRZYCKI:
Q. And that's because that was done before your time at Tangent; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And adding UV additives to plastic lumber products extruded with HDPE was also done before your time at Tangent; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And adding color to such products was also done before your time at Tangent; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And adding a foaming agent to such products was also done before your time at Tangent; right?

MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. During your time at Tangent, have you ever used a static mixer as part of the extrusion process to create plastic lumber?
A. Yes.
Q. Did you ever use a static mixer to create plastic lumber prior to your time at Tangent?
MR. OEHLER: Objection. Scope.
THE WITNESS: No.
BY MR. ZAMBRZYCKI:
Q. Okay. I am going to hand you now what I've marked as Exhibit 1.
(Whereupon, Tangent (Morales) Exhibit 1 was marked for identification.)
BY MR. ZAMBRZYCKI:
Q. You can take a look at this and just let me know if you recognize this document, sir.
MR. OEHLER: I'll note for the record we had an agreement to modify Topic No. 1.
BY MR. ZAMBRZYCKI:
Q. Are you waiting on me, sir?
I think we were both waiting on each

other.

Do you recognize the document, sir?

A. I do not. I haven't seen this document before.

Q. Can you take a look -- even though you haven't seen it, can you take a look at page 3 of the document, and there's two topics listed there.

And your attorney noted that Topic 1 we've modified, and we'll talk about that. He's right about that.

But do you recognize seeing these two topics before?

A. I recognize seeing these two topics.

Q. Okay. And so the first topic says "Conception and reduction to practice of the alleged inventions disclosed and claimed in the asserted patents, including the individuals, processes, and machinery involved."

Do you see that?

A. I see it, yes.

Q. Okay. As Mr. Oehler noted, so we had agreed that that topic would be limited to discussing the development of the alleged inventions disclosed and claimed in the asserted patents.

Are you familiar with that?

A. Yes.

Q. Okay. And then there's a second topic there, and are you -- you understand that you're here to testify today on behalf of Tangent regarding these two topics with Topic 1 modified in the way I just described; right?

A. Yes.

Q. And what did -- did you do anything to prepare for today's deposition?

A. I --

MR. OEHLER: I caution you not to reveal any attorney -- anything we discussed, any attorney-client information.

THE WITNESS: I checked my notes, my notes that I made when we were working on developing the wood grain in the plastic lumber.

BY MR. ZAMBRZYCKI:

Q. Okay. When you say your "notes," what notes are you talking about?

A. The notes that I took from meetings that we had; the notes I took when we ran testing; the notes I took when we produced, manufactured the components that are used to make plastic lumber.

Q. So these are notes that you maintained

while -- like during the development of the wood-grained products? Is that what you're talking about?

MR. OEHLER: Objection. Form.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:

Q. Okay. And approximately when did you begin taking those notes?

MR. OEHLER: Objection. Form.

THE WITNESS: From the beginning, which was sometime on 2013, the first part of 2013.

BY MR. ZAMBRZYCKI:

Q. Was there a time that you sort of stopped taking notes related to this development?

A. The development took years. So there was -- yeah, there was a time when there was no notes, there was nothing to note.

Q. Okay. So the development took a year --

A. Years.

Q. Years, plural. Okay. Glad we clarified that.

And approximately when did you stop taking notes related to this development?

A. I don't recall. I mean, it was on and off. We started; we stopped. We started again; we

stopped.

Q. Are you still taking notes related to development of the wood-grained product?

A. Not at this point, no.

Q. Okay. So these notes you're talking about, were these handwritten notes? Are these typed up on a computer somewhere?

MR. OEHLER: Objection. Form.

THE WITNESS: Handwritten notes.

BY MR. ZAMBRZYCKI:

Q. Okay. And where do you store these notes?

A. In my office.

Q. Okay. And where is your office?

A. The Sullivan facility, 1001 Sullivan Boulevard in Aurora.

Q. Okay. Did reviewing the notes to help refresh your memory as to anything related to the development of the wood-grained products?

A. Dates, not many dates, but the 2013 I had to go and check and see when we started working on it.

Q. Other than reviewing those notes, did you do anything else to prepare for today's deposition?

MR. OEHLER: Same caution as before.

THE WITNESS: I checked some of the drawings

that we -- that I produce when making parts -- when we were making parts.

BY MR. ZAMBRZYCKI:

Q. Were the drawings -- is that part of your notes or is that something separate?

A. The drawings are a -- they are not on the note -- the drawings are not on the notes, but the drawings exist in an electronic format.

Q. Okay. And where -- where are those? Are they electronic on your own personal computer? Are they on some shared drive?

I'm sorry. Go ahead.

A. Not a personal computer but a company computer.

Q. And was there anything when you reviewed those notes -- sorry -- when you reviewed those drawings, was there anything that refreshed your memory about the development?

A. It's in my head. I mean, I know -- I know everything about it.

Q. Okay. When did you review the drawings in preparation for your deposition?

A. Last week.

Q. And when did you review your notes?

A. Also last week.

Q. Okay. Was it just on one day or multiple days?
A. No, just one day.
Q. Okay. How long did you review the notes and drawings for?
A. Probably took an hour.
Q. Okay. Hour total?
A. More or less, yes.
Q. Okay. Did you do anything else to prepare for today's deposition?
A. No.
Q. Okay. Did you meet with your attorney?
So he doesn't want you to tell me what you guys talked about, and I'm not asking you to tell me. As much as I'd like to know, I'm not allowed to ask you what you talked about.
Just yes or no, did you meet with your attorney in preparation for this deposition?
A. We had a Zoom meeting.
Q. Okay. And when was that meeting?
A. It was last Friday.
Q. And how long did that meeting take?
A. It took two hours, to the best of my recollection.
Q. And was that meeting with Mr. Oehler who

is here today?
A. Yes.
Q. Was anyone else in that Zoom meeting?
A. Two more people.
Q. Okay. Who were the other people in that meeting?
A. Emol (phonetic) and Kent. I don't recall their last names.
Q. Were those both attorneys from Mr. Oehler's law firm as far as you know?
A. As far as I know, yes.
Q. Okay. They weren't Tangent employees?
A. No.
Q. Was anybody else from Tangent present during your meeting with Mr. Oehler and the other attorneys?
A. No.
Q. Okay. Did you speak with anybody at Tangent in preparation for this deposition?
A. No.
Q. Did you speak with anybody at Tangent about this deposition?
A. No.
Q. Other than that Zoom meeting last Friday, did you have any other meetings with Mr. Oehler in

preparation for this deposition?
A. We got a phone call to arrange for the meeting on Friday.
Q. Did you review any documents during your meeting in preparation for this deposition with the attorneys?
MR. OEHLER: That's a yes or no question.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And did any of those documents refresh your recollection? Did it refresh your memory?
A. Yes.
Q. And what documents were those?
A. I glanced through one of the patents, and I look at -- I looked at that document.
Q. Is that the utility patent that you're talking about?
A. Yes.
Q. Okay. Any other documents that you reviewed that refreshed your memory?
A. As I said before, I checked my notes and the drawings for the components.
Q. Any other documents you reviewed that refreshed your memory in preparation for today's deposition?

A. No.
Q. Anything else that you did to prepare for today's deposition?
A. No.
Q. Okay. I'll hand you now another exhibit that I'm marking at Exhibit 2.
(Whereupon, Tangent (Morales) Exhibit 2 was marked for identification.)
BY MR. ZAMBRZYCKI:
Q. Take a look at that. Let me know when you've had a chance to take a look at it.
Do you recognize Exhibit 2?
A. No, I don't recall seeing this document before.
Q. Okay. I'll just state for the record, because I forgot to with Exhibit 1, so Exhibit 1 was Defendant's Amended Notice of Rule 30(B)(6) Deposition to Plaintiff.
And Exhibit 2 is Defendant's Notice of Deposition of Francisco Morales.
You don't recall seeing Exhibit 2?
A. No.
Q. That's okay. We can move on.
What was the name again of the company

that you were at right before Tangent?
Was it U.S. Plastics?
MR. OEHLER: Objection. Scope.
THE WITNESS: U.S. Plastic Lumber.
BY MR. ZAMBRZYCKI:
Q. U.S. Plastic Lumber. Okay.
The products that U.S. Plastic Lumber manufactured, the plastic lumber products, were those sold in the United States during your time at U.S. Plastic Lumber?
MR. OEHLER: Objection. Form. Scope.
THE WITNESS: Yes, that I'm aware.
THE STENOGRAPHER: What was that?
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Did U.S. Plastic Lumber sell any other products?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. What other products were those?
A. They made -- they made composite lumber.
Q. Okay. Any other products other than the composite lumber and the plastic lumber?
MR. OEHLER: Same objection.

THE WITNESS: A slip sheet, recycle pellets.
BY MR. ZAMBRZYCKI:
Q. You distinguished between the plastic lumber and the composite lumber. What's the distinction you're making between those two types of products?
A. Plastic lumber --
MR. OEHLER: Objection. Scope.
THE WITNESS: Plastic lumber is made of 100 percent plastic, and composites are made of a wood fiber and plastic.
BY MR. ZAMBRZYCKI:
Q. Okay. So the plastic lumber products that were sold by U.S. Plastic Lumber did not have wood fiber; is that right?
MR. OEHLER: Objection. Scope.
THE WITNESS: U.S. Plastic Lumber produce composites and 100 percent plastic lumber.
BY MR. ZAMBRZYCKI:
Q. Right. So stupid question.
But the 100 percent plastic lumber did not have -- did not contain wood fiber; is that right?
MR. OEHLER: Objection. Scope.
THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:
Q. And the plastic lumber products that were sold by Eaglebrook -- well, let me take a step back.
The plastic lumber products that we discussed Eaglebrook making during your time there, were those sold in the United States, to your knowledge?
MR. OEHLER: Objection. Scope. Form.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And did those products contain wood fiber?
MR. OEHLER: Same objections.
THE WITNESS: Some of them contained wood fibers. Some of them didn't.
BY MR. ZAMBRZYCKI:
Q. Do you have any idea of the sales numbers for Eaglebrook's plastic lumber, like, how much they sold of their plastic lumber?
MR. OEHLER: Objection. Form. Scope. Calls for speculation.
THE WITNESS: I don't recall.
BY MR. ZAMBRZYCKI:
Q. Okay. What about the plastic lumber sold

by U.S. Plastic Lumber?
MR. OEHLER: Same objection.
THE WITNESS: I do not recall.
BY MR. ZAMBRZYCKI:
Q. Okay. We talked about co-extrusion very briefly earlier. Were you familiar with the concept of co-extrusion before your time -- before you joined Tangent?
MR. OEHLER: Objection. Scope. Form.
THE WITNESS: I seen a plastic sheet made with a cut wave.
BY MR. ZAMBRZYCKI:
Q. Okay. And so that was done using co-extrusion?
A. I do not -- I didn't know then.
Q. Okay. And when you say, "then," what time period are we talking about?
MR. OEHLER: Objection. Scope.
THE WITNESS: While I was working at Tangent -- at -- sorry -- at U.S. Plastic Lumber or Eaglebrook Plastics.
BY MR. ZAMBRZYCKI:
Q. So you saw the sheet being made while you were at U.S. Plastics or Eaglebrook?
A. Not being made. I seen it on the scrap

that will come from other companies to be recycled.

MR. OEHLER: Objection. Scope.

BY MR. ZAMBRZYCKI:

Q. Okay. All right. I am going to hand you now what I've marked as Exhibit 3, and this is plaintiff's initial disclosures. Let me know if you have seen this document before once you've had a chance to review it, please.

(Whereupon, Tangent (Morales) Exhibit 3 was marked for identification.)

THE WITNESS: I haven't seen this document before.

BY MR. ZAMBRZYCKI:

Q. If you could take a look at page 2, please, you'll see, at the bottom of page 2, there's a chart, and it starts naming some people, and the second person named is yourself.

Do you see that?

A. Yes.

Q. It says the subject for information -- to give you a little background -- and your attorney can object if I misstate something -- but basically this is a document that in all litigation each side discloses people that they believe have certain

knowledge, and this is Tangent or what your attorneys disclosed as an identification of people and some of the knowledge they may have.

And so next to your name the topics or the subjects of information that were disclosed there, you'll see it says that you may have information relating to the asserted patents, which may include, but is not necessarily limited to conception, reduction to practice, design, development, prosecution, and commercialization.

Do you see that?

A. I see that.

Q. Okay. Any of those topics that you look at and you're thinking why was I listed for those, and you don't actually have knowledge about those, or does that seem accurate to you?

MR. OEHLER: Objection. Form. Scope.

THE WITNESS: Commercialization, that's not my -- didn't get involved in any of that.

BY MR. ZAMBRZYCKI:

Q. Okay. Well, it's funny that you say that because I was going to ask you actually what you know about the commercialization of the Tangent products, but you're saying that's not something that you get involved with?

A. I don't get involved with that, yeah.
Q. Okay. What's your understanding of what "commercialization" means? What does that word mean to you?
MR. OEHLER: Objection. Scope. Calls for speculation.
THE WITNESS: The sales side of it to make it commercially available to customers -- or, yeah, customers.
BY MR. ZAMBRZYCKI:
Q. Okay. Are you involved -- so were you involved with -- after the design and development of Tangent's products, were you involved in any way in sort of scaling production to make it available to customers?
A. Scaling production, yes.
Q. Okay. But you don't consider that part of commercialization?
A. Not in my mind. When I see that word, I think that's related to the sales side of it.
Q. Okay.
A. The market side of it.
Q. So are you involved with the pricing of Tangent's products?
MR. OEHLER: Objection. Scope.

THE WITNESS: I'm not involved on the pricing side.
BY MR. ZAMBRZYCKI:
Q. Okay. Okay. But the other topics -- conception, reduction to practice, design, development, and prosecution -- those are all topics that you have some knowledge about?
MR. OEHLER: Objection. Scope.
THE WITNESS: Yes.
MR. ZAMBRZYCKI: Okay. So I'm trying to ignore the objections, but why is there a scope objection in an individual noticed deposition where I'm asking him about his topics that are listed in your initial disclosures?
MR. OEHLER: Because it's outside the scope of his topics for 30(b)(6).
MR. ZAMBRZYCKI: This is background of his knowledge.
MR. OEHLER: That's not Tangent speaking about what his knowledge is.
MR. ZAMBRZYCKI: So your objection you're making is just it's outside of the 30(b)(6)?
MR. OEHLER: Correct.
MR. ZAMBRZYCKI: Okay.
MR. OEHLER: I guess, for the record, when

I say scope, I'm meaning 30(b)(6). I'm trying not to speak over you and have a big, long objection.

MR. ZAMBRZYCKI: I think that's fair.

I've got my next exhibit for you.

MR. OEHLER: It's been about an hour. Is this a decent time for a break?

MR. ZAMBRZYCKI: Sure. Do you guys want to take a break?

THE VIDEOGRAPHER: Off the record at 9:57.

(A short break was taken.)

THE VIDEOGRAPHER: Back on the record at 10:05.

BY MR. ZAMBRZYCKI:

Q. Welcome back.

I just handed you an exhibit. Before we turn to that, I just want to follow up on a few things we were talking about before the break.

I wanted to ask you during your time at Eaglebrook, what -- did you ever actually work on, like, the manufacturing line to create the plastic lumber products that Eaglebrook was making?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: Not making the plastic lumber -- not operating the machines.

BY MR. ZAMBRZYCKI:

Q. Okay. I guess what I'm getting at is we

talked about, you know, what those products were made of, and I'm trying to understand how did you know -- how do you know today what the products that Eaglebrook was making, that they were extruded, and they had UV additives and the other ingredients? How do you know those things?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: When you -- how do I know?

Eaglebrook started by recycling plastic milk jugs and mixed color jugs. So I knew what the milk jugs were made of. Eaglebrook had a QC department where you will distinguish between the different kinds of plastics coming into the facility. So I knew, I learned, the different kinds of plastics then. Bores come out different colors. So you have to put different colors to make different colored plastic lumber. So it's knowledge that permeated through everybody.

BY MR. ZAMBRZYCKI:

Q. Did you have any roles sort of related to the manufacturing of the products where you learned these things? Like I guess what I'm trying to understand is what were your roles at Eaglebrook?

MR. OEHLER: Objection. Form. Scope.

THE WITNESS: I held different roles, many

different roles. When I say, "many," I work on maintenance. I work on a production, production. I was in charge of the recycling side, and then I was in charge of the lumber side, and then I was in charge of this -- the sheet.

BY MR. ZAMBRZYCKI:

Q. When you say you were in charge of "production on the lumber side," what do you mean by that?

What did do you?

What were your responsibilities being in charge of the production lumber side?

MR. OEHLER: Objection. Scope.

THE WITNESS: I will make schedules for people to run the machine -- schedule meaning what is this production line going to run.

BY MR. ZAMBRZYCKI:

Q. Okay. Okay. And you learned just through your time at the company what the products were made of, though; is that right?

MR. OEHLER: Objection. Scope.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. What about at U.S. Plastics? What roles did you hold that allowed you to learn how the

plastic lumber products were made and what they were made from?

MR. OEHLER: Objection. Form. Scope.

THE WITNESS: When the company was bought, the responsibility stayed the same. So I was in charge of the same -- my role was the same. So, again, I will make the schedule and give that to operators that needed to run production lines making composite lumber or plastic lumber or a 100 percent PE plastic lumber.

BY MR. ZAMBRZYCKI:

Q. When Eaglebrook joined or got bought, whatever, when the two companies sort of became U.S. Plastics and when you joined U.S. Plastics, was U.S. Plastics making plastic lumber differently than Eaglebrook had been making it?

MR. OEHLER: Objection. Scope.

THE WITNESS: No.

BY MR. ZAMBRZYCKI:

Q. They were doing it the same way?

A. Yes.

Q. Okay. We took a break a few minutes ago. Did you talk to your attorney about the subject matter of today's -- of your testimony or the subject matter of this deposition today?

A. Just now?
Q. Yes. During the break.
A. No.
Q. Okay. How did you -- so you are one of the founders of Tangent; right?
A. Correct.
Q. So how did -- how did that happen? How did you go from U.S. Plastics to forming Tangent?
MR. OEHLER: Objection. Scope.
THE WITNESS: Well, what was -- while I was still working at U.S. Plastic Lumber, we will have conversations about starting our own company, and those conversations went on for some time, and at some point U.S. Plastic Lumber was running the company -- it was not being run well. So we seen an opportunity, and we said, "Let's just start up another company."
BY MR. ZAMBRZYCKI:
Q. When you say, "we," who else are you talking about?
MR. OEHLER: Objection. Scope.
THE WITNESS: Andy Stephens, Guy De Feo, and myself.
BY MR. ZAMBRZYCKI:
Q. Did they all work with you at

U.S. Plastics?
MR. OEHLER: Objection. Scope.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. So then you all decided to form Tangent sometime in 2003; right?
MR. OEHLER: Objection. Scope.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And what production did you all make in the beginning of 2003 at Tangent?
MR. OEHLER: Objection. Scope.
THE WITNESS: 100 percent plastic lumber.
BY MR. ZAMBRZYCKI:
Q. And did you make -- did Tangent make those products any differently than what you had done at U.S. Plastics?
MR. OEHLER: Objection. Scope. Form.
THE WITNESS: We used different components. We -- I used some of the efficiencies on the way -- of the components. So we bought different components to make -- to put the machines together.
BY MR. ZAMBRZYCKI:
Q. When you say, "different components," what components are you talking about?

MR. OEHLER: Objection. Scope.
THE WITNESS: U.S. Plastic Lumber, for the most part, used volumetric blenders. We replaced that with gravimetric blenders that are more accurate.
BY MR. ZAMBRZYCKI:
Q. Okay. But beginning in 2003, Tangent was using an extrusion process to create its plastic lumber; right?
MR. OEHLER: Objection. Scope.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Okay. And HDPE was the polymer that was being used for the plastic lumber?
MR. OEHLER: Objection. Scope.
THE WITNESS: Recycled HDPE, yes.
BY MR. ZAMBRZYCKI:
Q. And a colorant was being added to the HDPE; right?
MR. OEHLER: Objection. Scope.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. And also UV additive?
MR. OEHLER: Same objections.
THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:
Q. And also a foaming agent?
MR. OEHLER: Same objection.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. And some of the products were being embossed?
MR. OEHLER: Same objection. Form.
THE WITNESS: Not at the beginning.
BY MR. ZAMBRZYCKI:
Q. When did Tangent start embossing some of its plastic lumber products?
MR. OEHLER: Objection. Scope.
THE WITNESS: I don't recall. It has to be a few years after the inception.
BY MR. ZAMBRZYCKI:
Q. Fewer than five years, do you think?
MR. OEHLER: Objection. Calls for speculation. Scope.
THE WITNESS: Fewer than five, to the best of my recollection.
BY MR. ZAMBRZYCKI:
Q. Okay. And then is that how Tangent continued to manufacture -- did anything then change -- well, let me think how I want to ask

this.

Until Tangent started developing its wood-grained products -- and when I talk about wood-grained products, I am talking about the products that have a wood grain pattern throughout the core. Do you understand that? Do you understand what I'm talking about when I say wood-grained products?

A. Yes.

Q. So having the wood grain pattern throughout the core as, I guess, opposed to a solid core?

A. Yes, I understand.

What's your question?

Q. I just want to make sure, before I start asking my questions, that we're talking about the same thing.

A. Okay.

Q. Okay. So from 2003 until Tangent started developing its wood-grained products, did the manufacturing process change at all for the plastic lumber products?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: We streamlined the process.

BY MR. ZAMBRZYCKI:
Q. In what way?
MR. OEHLER: Same objection.
THE WITNESS: There is a -- so when you foam plastic lumber, you have a cell structure on the boards. You need to -- in laminate, flow degrades plastic on the surface of the boards. We bettered that. We streamlined that part.
BY MR. ZAMBRZYCKI:
Q. And I'm still not following you.
You streamlined which part?
A. The foaming.
Q. The foaming.
MR. OEHLER: Objection. Scope.
BY MR. ZAMBRZYCKI:
Q. In terms of what part of the foaming did you streamline?
I'm sorry for being dense.
MR. OEHLER: Objection. Scope.
THE WITNESS: So when you have a piece of plastic lumber, you want to have an even cell structure throughout the board.
BY MR. ZAMBRZYCKI:
Q. Okay.
A. In some cases you don't get a stable

enough process to get an even cell structure on the cross-section of the board. So we got to a point where we got better at that.

Q. Okay. Any other changes that you made to the manufacturing process from the time that -- from 2003 until the wood-grained products were developed?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: Yes. We changed screw design. We changed process loops, PID loops, to make it more automated.

BY MR. ZAMBRZYCKI:

Q. What's a PID loop?

MR. OEHLER: Objection. Scope.

THE WITNESS: A PID loop is where you read a certain process, and you send feedback to a certain component to make it automated.

BY MR. ZAMBRZYCKI:

Q. But throughout that whole time, until the development of the wood-grained products, it was still an extrusion process; right?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: Extrusion process with improvements, yes.

BY MR. ZAMBRZYCKI:
Q. Understood.
And you still used the HDPE as the polymer; right?
MR. OEHLER: Same objection.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Still used UV additives?
MR. OEHLER: Same objection.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Still used foaming agents?
MR. OEHLER: Same objections.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. And I was forgetting the most basic one, and you still used the colorant in the products; correct?
MR. OEHLER: Same objection.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. So I put in front of you -- annoyingly the cover page says Exhibit 1. That's because it was Exhibit 1 to the complaint filed in this case, but for purposes of this deposition, it's Exhibit 4.

So I'll be calling it Exhibit 4.

(Whereupon, Tangent (Morales) Exhibit 4 was marked for identification.)

BY MR. ZAMBRZYCKI:

Q. And if you take a look and open that up and let me know if you recognize it. For the record, this is U.S. Patent 10,981,350.

A. I have seen this document. I didn't read through it completely, but I have seen it.

Q. Do you know what it is?

A. It's a patent for the blueprint, patent for the blueprint.

Q. When you say "blueprint," what do you mean by "blueprint"?

A. Not a blueprint. It is a patent for the wood-grained plastic lumber that we make.

Q. Okay. And, okay, so if you take -- if you take a look at where it says -- in the left-hand column, it says "Inventors." Do you see that?

A. I see that, yes.

Q. And one of the inventors, your name is listed there; right?

A. Correct.

Q. And then if you move down a few paragraphs

to where it says -- and it's parenthesis "(22)," and it says "Filed: August 24, 2016."

Do you see that?

A. I see that.

Q. I'm pointing to these places because I'll be talking about some of these dates. So the application for this patent was filed on August 24, 2016, and if you go to parentheses (60), it says Provisional Application No. 62/208928 filed on August 24, 2015.

Do you see that?

A. I see it.

Q. Okay. So if I -- I don't know if -- we'll talk about it later, and maybe you're familiar with the provisional application, but if I talk about the filing of the provisional application, I am going to be referring to this August 24, 2015, date. Okay?

So if later I'm talking about the filing of the provisional application, that's the date I'm talking about. If I'm not clear or you need me to remind you of the date, please just do that. I want to make sure we are on the same page.

A. Okay.

Q. Okay. And so you're listed on there with

two other inventors. The other ones are Andrew Stephens and Tadeusz Rybka. I'm saying that in my Polish accent.

Do you see that?

A. I see that.

Q. What was your contribution to the invention of the '350 patent?

MR. OEHLER: Objection to scope. Calls for a legal conclusion.

THE WITNESS: I am the one that will make the components, visualize the components, draw the components, give drawings to our internal machine shop, machine those components, put them to -- machine shop will make them. We will -- I will put that into a -- I will give that to the production people to put on the machine and test run.

BY MR. ZAMBRZYCKI:

Q. Okay. And what then was the contribution of the two inventors to this patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: When we initially -- when we initially -- when the marketplace asked for a wood-grained product, we got together, Andy Stephens, myself, and later on, Ted, Tadeusz,

we get together in a meeting and will talk about how can we produce a wood-grained lumber.

BY MR. ZAMBRZYCKI:

Q. Okay. It sounds like you're the one who designed the process of how to produce that lumber; is that right?

MR. OEHLER: Objection. Scope. Objection. Calls for speculation. To an extent it mischaracterizes testimony.

BY MR. ZAMBRZYCKI:

Q. Did I mischaracterize what you said or did I state that correctly?

A. No.

Q. Okay. Let me ask again because I asked two questions in one.

Did I state correctly what your contribution was to the patent?

A. Can you --

Q. Sure.

A. -- repeat that again.

Q. Sure.

It sounds to me like you were the one who designed the process to produce the lumber that's claimed in this patent; is that correct?

MR. OEHLER: Objection. Scope.

THE WITNESS: With the contribution of the other two people, Andrew Stephens and Tad.
BY MR. ZAMBRZYCKI:
Q. Okay. And what was their contribution?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.
THE WITNESS: Andy will -- Andy and myself at the beginning, before Ted got involved, we'll get together and talk about how to make it happen, and we'll talk about different ways to make it happen, different components to make it happen. There's specific design of those components -- some of the design of those components, I came on my own and will review that with Andy Stephens and later on Ted.
BY MR. ZAMBRZYCKI:
Q. Okay. Any other contribution that Tad had to the invention?
MR. OEHLER: Objection. Scope. Calls for speculation. Calls for a legal conclusion.
THE WITNESS: Yeah, Ted did a different version of different components for the same purpose.
BY MR. ZAMBRZYCKI:
Q. How was his version different?
MR. OEHLER: Same objections.

THE WITNESS: He didn't produce it -- one of his versions didn't produce the desired effects.
BY MR. ZAMBRZYCKI:
Q. And what was the difference in his components versus the components that produce the desired effects?
MR. OEHLER: Same objection.
THE WITNESS: There was not enough wood grain on the board.
BY MR. ZAMBRZYCKI:
Q. And so what was the difference in the components he was using that resulted in there not being enough wood grain on the board as compared to the components you used to create the patented wood-grained effect?
MR. OEHLER: Same objection. Form.
THE WITNESS: I don't recall the specifics of the components that he used, but they were different.
BY MR. ZAMBRZYCKI:
Q. Was it a different -- when you say "components," are we talking about the machine or are we talking about the ingredients that are being put into the machine?
MR. OEHLER: Same objection.

THE WITNESS: When I say "components," an extruder is an extruder. The components that you use after the extruders are the ones that you put together to obtain wood grain.

BY MR. ZAMBRZYCKI:

Q. Are you thinking of any components in particular?

MR. OEHLER: Same objection.

THE WITNESS: I'm thinking -- I'm thinking on the components that we use, and the components that we tested, and I'm thinking that the ones that we end up using, we all got together, and we fine-tuned those, and we changed them as needed to make it better, and we discard some of them because they didn't work.

BY MR. ZAMBRZYCKI:

Q. You mentioned that you took notes and had some drawings during the development of the invention that's in this patent; right?

A. Yes.

Q. Did you have any other documentation that you had during the development -- that you created during the development?

A. Pictures, I mean, we have meetings, and we make notes on white boards, and we took pictures of

the white boards, and we -- drawings, some of the drawings are here, and, actually, this drawing was put together by Ted --

Q. And --

A. -- using the components that we use.

Q. And, Mr. Morales, so that the court reporter can take it down -- because it won't be obvious in the transcript -- when you said, "This drawing was put together by Ted," which drawing were you referring to? Were you referring to Figure 1 in the patent that I'm looking at?

A. Correct.

Q. I should have said this at the outset. The patent we are looking at is 10,981,350. We are going to call it the '350 patent. So just so you know, when I say the '350 patent, this is the patent I'm referring to.

Is Mr. Stephens still at Tangent today?

A. He's not.

Q. Okay. When did he leave Tangent?

MR. OEHLER: Objection. Scope.

THE WITNESS: I don't recall when he left. It's been years.

BY MR. ZAMBRZYCKI:

Q. Do you recall what his title was at the

time that he left?
MR. OEHLER: Objection. Scope.
THE WITNESS: I believe he was chairman.
BY MR. ZAMBRZYCKI:
Q. Do you know if he had a technical background?
MR. OEHLER: Objection. Scope. Calls for speculation.
THE WITNESS: I believe he's a mechanical engineer or a civil engineer, one of the two.
BY MR. ZAMBRZYCKI:
Q. Civil or mechanical?
A. Right.
Q. Okay. And then Mr. Rybka, is he still with Tangent?
A. He is.
Q. Okay. And what is his title?
MR. OEHLER: Objection. Scope.
THE WITNESS: I don't recall his title.
BY MR. ZAMBRZYCKI:
Q. Do you know what his responsibilities are?
MR. OEHLER: Objection. Scope.
THE WITNESS: Mechanical design.
BY MR. ZAMBRZYCKI:
Q. Okay. And so in terms of responsibilities

at Tangent, what does that mean?

MR. OEHLER: Same objection.

THE WITNESS: That means that he will -- he will put machines together. He will design machines and put machines together.

BY MR. ZAMBRZYCKI:

Q. Okay. All right. So you're one of the named inventors on the '350 patent here, and what is your understanding of what it is you all invented?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: Well, we put a process together to produce plastic lumber with wood grain throughout.

BY MR. ZAMBRZYCKI:

Q. And was that wood grain intended to simulate natural wood?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. I'd like you to take a look at where it says "Abstract" at the bottom right-hand portion of Exhibit 4 on this cover page we're looking at.

Do you see under "Abstract," it says "A

wood-grained polymer substrate includes a plurality of layers of different colors. The substrate is formed into elongated boards and used in the production of various end products similar to natural wood."

Do you see that?

A. I do.

Q. Okay. Is there some distinction between a substrate and a board?

MR. OEHLER: Objection. Form. Calls for speculation. Calls for legal conclusion. Outside the scope.

THE WITNESS: When I see the "substrate" word, I associate that with a board.

BY MR. ZAMBRZYCKI:

Q. When you say, "you associate it with a board," do you mean --

(Simultaneous speaking.)

BY MR. ZAMBRZYCKI:

Q. I'm sorry. You understand that to be interchangeable?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. So when it says in the abstract

there that the "substrate is formed into elongated boards," do you have an understanding of what that's -- what that means?

MR. OEHLER: Same objection.

THE WITNESS: I'll have to see the definition of substrate, but I will use those two to describe the same thing, and when I look elongated board, I understand that's as long board or a -- that, a long board.

BY MR. ZAMBRZYCKI:

Q. Okay. So as far as you're concerned, within the meaning of your -- what you invented in the '350 patent, substrate and board, you understand those to be referring to the same thing; right?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. Are you aware of either Mr. Stephens or Mr. Rybka using those words differently?

MR. OEHLER: Same objections. Calls for speculation.

THE WITNESS: No. I mean, we didn't use substrate to define a board or lumber.

BY MR. ZAMBRZYCKI:

Q. I'm sorry. Did you say, "we didn't use substrate to define a board or lumber" or "we even"?

A. We did not, on a daily conversation, use the "substrate" word to describe profiles.

Q. Okay. So I'm -- I -- I don't think there's any distinction, but it sort of doesn't matter what I think. So, in your view, though, substrate and board, there's no distinction being made there; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:

Q. Okay. All right. Let's move on to -- so actually, conveniently, at the bottom of each page, you'll see there is -- in blue there are page numbers. It will say page something out of 17. So I'd like you to turn to -- sorry -- get my bearings here -- turn to page 13 of 17. So this will be column 1 of the '350 patent.

Okay. And if you take a look at column 1, you'll see at the top there's column numbers, and there's line numbers. So I'll be referring to

those.

So if you take a look at column 1, around line 11, it says "Field of the Disclosure."

Do you see that?

A. Yes.

Q. Okay. And then under that, it says "The present disclosure relates to polymer composites and more particularly to polymer composites that are used as a natural wood substitute or replacement."

Do you see that?

A. I do.

Q. And so would you agree with me that the purpose this invention or a purpose of this invention was to simulate the look of natural wood in plastic lumber?

MR. OEHLER: Objection. Calls for a legal conclusion and form.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. I meant to ask you actually something you said earlier. I think you said the market was calling, that there was a -- I'm going to paraphrase here, and your counsel can say I'm mischaracterizing the testimony, but let's see

if we can go back to what you were talking about.

So you mentioned -- I think you said there was a demand in the market for a wood-grained plastic lumber. Am I recalling that correctly?

MR. OEHLER: Objection. Scope. To an extent it mischaracterizes testimony.

THE WITNESS: I don't think I used the word "demand," but there was a -- there was a desire to have more than single-color boards.

BY MR. ZAMBRZYCKI:

Q. And when you say there was a "desire," where -- was that a desire on Tangent's part? Where was that desire coming through?

MR. OEHLER: Objection. Scope. Calls for speculation.

THE WITNESS: Guy De Feo was in charge of sales, and he came to myself and Andy with a -- and described the conversation he had with customers.

BY MR. ZAMBRZYCKI:

Q. Okay. And so, to your understanding, this was a desire expressed by some customers for wood-grained boards; is that right?

MR. OEHLER: Objection. Scope.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:
Q. Now Tangent still sells its non-wood-grained plastic lumber as well; correct?
MR. OEHLER: Objection. Scope.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Which product does Tangent sell more of, the wood-grained plastic lumber or the non-wood-grained plastic lumber?
MR. OEHLER: Objection. Scope. Calls for speculation.
THE WITNESS: It's more of the demand wood-grained plastic lumber as of today.
BY MR. ZAMBRZYCKI:
Q. And, proportionately, how much of Tangent's plastic lumber it sells today is wood-grained versus non-wood-grained?
MR. OEHLER: Same objections.
THE WITNESS: I do not know.
BY MR. ZAMBRZYCKI:
Q. Proportionally, how much plastic lumber does Tangent manufacture that has a wood grain versus plastic lumber that does not have a wood grain?
MR. OEHLER: Same objections.

THE WITNESS: I do not know.
BY MR. ZAMBRZYCKI:
Q. Now, I thought you are here, in part, to testify about Tangent's manufacture of any commercial products that practice the patents.
Does that -- you're saying you don't have that information in terms of --
A. I don't have no percentages. I don't know the percentage of one versus the other.
Q. Do you have an approximate number?
MR. OEHLER: Objection. Scope. Calls for speculation.
THE WITNESS: If I was going to put a number -- it might be wrong -- it might be 30 percent, 30 percent of wooded grain versus 70 percent -- 30 percent to 40 percent of the one versus the other.
BY MR. ZAMBRZYCKI:
Q. If there was a desire for wood-grained plastic lumber, do you have an understanding as to why the non-wood-grained lumber, you're still making more of that rather than the wood-grained lumber?
MR. OEHLER: Objection. Scope. Calls for speculation. Form.

THE WITNESS: I don't know how to answer that. There's different factors. The customer orders what he needs or what he wants, and at this point there's roughly about those percentages. There's also different kind of production lines that make last longer versus -- the wood-grained plastic lumber versus the single-color plastic lumber.

BY MR. ZAMBRZYCKI:

Q. When you say that the customer orders what he needs or what he wants, do you know whether the wood-grained lumber and the non-wood-grained plastic lumber are used in the same applications by customers?

MR. OEHLER: Objection. Scope. Calls for speculation.

THE WITNESS: Yes, they do.

BY MR. ZAMBRZYCKI:

Q. Do they always use that in the same applications, to your knowledge?

MR. OEHLER: Objection. Calls for speculation. Form.

THE WITNESS: Not always.

BY MR. ZAMBRZYCKI:

Q. Are you aware of some applications where a customer would want to use one but not the other?

MR. OEHLER: Objection. Scope. Calls for speculation.

THE WITNESS: There are products that are made with one, and there are products that are made with a mix, and there are products that are made with the other.

BY MR. ZAMBRZYCKI:

Q. Let's go back to the patent.

Did you have any involvement in preparing the patent application that was filed that resulted in the '350 patent?

MR. OEHLER: Objection. Scope.

THE WITNESS: Not to my recollection.

BY MR. ZAMBRZYCKI:

Q. Okay. Were you involved in putting together any of the description that we're reading now in the patent in the specification?

MR. OEHLER: Objection. Scope.

THE WITNESS: I provide -- I provide a -- some of the drawings that are -- that are used on the patent.

BY MR. ZAMBRZYCKI:

Q. Okay. Which drawings are those? Which drawings did you provide?

MR. OEHLER: Objection. Scope.

THE WITNESS: I provide this picture that is here on the front page, Document 1 of 1.

BY MR. ZAMBRZYCKI:

Q. Okay.

A. I provided drawings for Figure 2 and Figure 3.

Q. Okay.

A. I provide drawings for Figure 4.

I provide PDF files for the mixer on page 7 of 17.

Q. If you go back to that, are you referring to Figure 5 or the Figure A through 5G below that?

MR. OEHLER: Objection. Scope.

THE WITNESS: Everything on that page.

BY MR. ZAMBRZYCKI:

Q. Okay.

A. I provide pictures for Figure 7, Figure 8.

Q. I think we skipped over Figure 6. Was that one you provided or was that not you?

A. Figure 6.

Q. Figure 6, yes, that was you?

A. Yes.

Figure 9, Figure 10, Figure 11 and 12 and 13.

Q. Okay. All right. Well, if you can go

back now to the page we were looking at, which is page 13 of 17, column 1, and I'd like you to take a look at where it says "Background" in column 1.

Do you see that?

A. I do.

Q. Okay. And right below that, and this is going to be column 1, starting at line 19, it says "The decking industry has seen numerous introductions of composite and alternative plastic lumber decking products over the past decade."

Do you see that?

A. I do.

Q. And so I think we already discussed this, but you agree that even before the filing date of the provisional application, which, as you recall, was August 24, 2015, plastic lumber products existed; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion.

THE WITNESS: Correct.

MR. OEHLER: To an extent, it mischaracterizes testimony.

BY MR. ZAMBRZYCKI:

Q. You're not suggesting in this patent in this part of your development you invented plastic

lumber products; right?
MR. OEHLER: Same objections.
THE WITNESS: I do not.
BY MR. ZAMBRZYCKI:
Q. Okay. And then let's move down to column -- still column 1, line 31.
It says "In recent years a composite" -- sorry -- "In recent years as composite products have evolved, manufacturers have introduced several colors to the exterior co-extruded layer to produce a surface which has varied color tones to emulate natural wood. This wood grain appearance is only skin deep and cutting or planning" -- not sure if should that have said "planing of the wood composite removes this co-extruded cap layer to expose the standard fiber-filled, homogenous core."
Do you see that?
A. I do.
Q. Okay. And you would agree with me that before the filing date of the provisional application for this patent, plastic lumber products were known that had a wood-grained surface; right?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: I wouldn't use "wood-grained surface," but I would use it as streak surface.
BY MR. ZAMBRZYCKI:
Q. Now, when I'm talking about the surface, I'm not talking about the core, the inside. I'm just talking about the outside of the plastic lumber. Are we talking about the same thing when we are talking about "surface"?
MR. OEHLER: Objection. Scope. Asked and answered.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. So would you agree at least that there was plastic lumber out there before Tangent filed its provisional application that had streaking on the surface that was meant to emulate natural wood?
MR. OEHLER: Objection. Scope.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. So what's the distinction you're making between a wood-grained surface and streaking on the surface to emulate natural wood? What's the difference?
MR. OEHLER: Objection. Scope. Form.

THE WITNESS: In my opinion, it doesn't look like a wood grain. The streaking surface, it doesn't look like wood grain. It's closer when you -- when you use the process that we're using.

BY MR. ZAMBRZYCKI:

Q. And what is it about the look of the process that you're using that makes something look more like wood grain than using streaking?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: In my opinion, again, the grain looks more realistic.

BY MR. ZAMBRZYCKI:

Q. With Mr. Stephens and Mr. Rybka, did you guys ever talk about what is and is not a wood grain surface?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Calls for speculation.

THE WITNESS: We obtain pictures of different kinds of woods and look at the grain, and we compare that against what we were trying to make with the samples that we were making.

BY MR. ZAMBRZYCKI:

Q. Okay. So you were looking at pictures of actual wood boards?

A. Correct.
Q. Okay. And you were trying to simulate the look of those natural wood boards with the plastic lumber products that you were developing; is that right?
MR. OEHLER: Same objections.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Would you agree that -- so you said, in your opinion, it's a wood grain, something is wood grain, in your opinion. So would you agree that whether something does or doesn't look like wood grain is a subjective opinion?
MR. OEHLER: Objection. Form. Outside the scope. Calls for legal conclusion.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And so one person might think something is wood grain but another person might think it's not; right?
MR. OEHLER: Same objections.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. And even -- even the other inventors on this patent, Mr. Stephens and Mr. Rybka, they might

disagree with you as to what is or what is not a wood-grained surface; right?

MR. OEHLER: Same objections. Calls for speculation.

THE WITNESS: They might.

BY MR. ZAMBRZYCKI:

Q. Now the patent also talks about having a wood grain pattern throughout the core of the product -- right? -- not just on the surface?

A. Yes.

Q. And that's part of what you all invented; right? Is having a wood grain pattern throughout the core; is that right?

MR. OEHLER: Objection. Scope.

THE WITNESS: Correct.

MR. OEHLER: Calls for a legal conclusion.

BY MR. ZAMBRZYCKI:

Q. And again, what is or is not wood grain pattern in the core of a plastic lumber product, that's a subjective opinion; right?

MR. OEHLER: Objection. Scope. Calls for speculation. Calls for a legal opinion.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Even Mr. Stephens or Mr. Rybka might

disagree with you on what is or is not a wood grain pattern on the inside of a plastic lumber product; right?

MR. OEHLER: Objection. Outside the scope. Calls for a legal conclusion.

THE WITNESS: I don't think they will disagree for the core, for the inside of the board because we all looked at it, and we all liked it.

BY MR. ZAMBRZYCKI:

Q. But what I mean is if you and Mr. Rybka and Mr. Stephens were shown, let's say, 100 different plastic lumber products, and they all had different wood-grained designs inside of them, as you said, some of them may look like wood grained to you, but they might not look like wood grain to others; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: It might.

BY MR. ZAMBRZYCKI:

Q. I mean, what is and is not a wood grain pattern in the core of a plastic lumber product, that's sort of in the eye of the beholder; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Calls for speculation.

THE WITNESS: I believe that the majority of the people looking at a cross-section of one of the plastic lumber profiles that we make will associate that with a wood grain.
BY MR. ZAMBRZYCKI:
Q. You're talking about the product that Tangent makes; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. But it's possible that if there's other products out there that have a pattern on the inside of the core, some people may consider that to be a wood grain pattern and others may not; right?
MR. OEHLER: Same objections.
THE WITNESS: They might, yes.
BY MR. ZAMBRZYCKI:
Q. And so what is it -- how do you know that a pattern is a wood grain pattern within the meaning of the '350 patent?
MR. OEHLER: Same objections.
THE WITNESS: The layers that it has. It will very closely simulate the wood grain.

BY MR. ZAMBRZYCKI:
Q. You're saying the pattern that's disclosed in the '350 patent, that discloses wood grain?
MR. OEHLER: Same objection.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And so if -- for example, if you're suing somebody for infringement, and you need to show that they have a wood grain pattern, at what point is something a wood grain pattern or is it not a wood grain pattern in the meaning of the '350 pattern?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.
THE WITNESS: Repeat that question again.
BY MR. ZAMBRZYCKI:
Q. At what point is something a wood grain pattern within the meaning of the '350 patent and at what point is it not a wood grain pattern within the meaning of the '350 patent if you're looking at the cross-section of a piece of plastic lumber?
MR. OEHLER: Same objections.
THE WITNESS: Your first impression is going to -- is going to -- or at least you're going to believe is wood grain or not.

BY MR. ZAMBRZYCKI:
Q. And different people in the industry can have different impressions; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. So there's no objective boundaries that we can define in terms of what is or is not a wood grain pattern within the meaning of the '350 patent; right?
MR. OEHLER: Same objections.
THE WITNESS: Well, I say when the majority of the people look at a piece and associate that with plastic lumber, that's the driver. Yes, some people might not consider that to be a wood grain, but if the majority of it does, then it's a wood grain pattern.
BY MR. ZAMBRZYCKI:
Q. And so if a competitor is selling a plastic lumber product and it has a pattern through the cross-section, who decides if that's a wood grain pattern or not --
MR. OEHLER: Same objection.
BY MR. ZAMBRZYCKI:
Q. -- within the meaning of the '350 patent?

MR. OEHLER: Same objections.
THE WITNESS: I do not know.
BY MR. ZAMBRZYCKI:
Q. So you don't have a definition of what wood-grained is right within the meaning of the '350 patent?
MR. OEHLER: Objection. Calls for a legal conclusion. Scope. Form.
THE WITNESS: A definition of a wood-grained on our patent. It's described in here.
BY MR. ZAMBRZYCKI:
Q. Right.
So you'd agree that if you take a look, for example, at Figure 6 in the patent --
A. I'm looking at it.
Q. -- would you consider the pattern in the cross-section that's being shown in Figure 6 to be a wood grain pattern?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion.
THE WITNESS: In my opinion, yes.
BY MR. ZAMBRZYCKI:
Q. So beyond that pattern, if some other manufacturer makes a different pattern, who decides whether that's a wood grain pattern in the meaning

of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation, form.

THE WITNESS: The one that is looking at it.

BY MR. ZAMBRZYCKI:

Q. Okay. All right. So going back to column 1 in the '350 patent, we were just looking at column 1, line 31, beginning at line 31, and then starting around line 34, it says "This wood-grained appearance is only skin deep and cutting or planing of the wood composite removes this color extruded cap layer to expose the standard fiber-filled, homogenous core."

Do you see that?

A. Still in column 1?

Q. Yes.

A. Okay.

Q. So is that one of the problems that you all were trying to solve with this invention was to have the wood-grained appearance not just be on the surface but also appear throughout the core of the plastic lumber?

MR. OEHLER: Objection. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: One of the main objectives, yes.

BY MR. ZAMBRZYCKI:
Q. Okay. And it talks here about cutting the wood that was already known. Was the wood that -- was the plastic lumber that was produced at Eaglebrook, that could be cut; right?
MR. OEHLER: Objection. Outside the scope.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And that could be planed as well?
MR. OEHLER: Scope. Objection.
THE WITNESS: I wasn't aware of anybody planing that, but, yes, it can be planed.
BY MR. ZAMBRZYCKI:
Q. Okay. Okay. Then if we move down to column 1, still column 1, line 38, it says "The standard plastic extrusion process is designed to evenly mix all ingredients" -- sorry -- "all ingredients to produce consistent quality of products."
Do you see that?
A. Yes.
Q. So, as we talked about, plastic extrusion was known well before the filing of the provisional application; right?
MR. OEHLER: Objection. Scope. Calls for a

legal conclusion.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. Then let's move to the next sentence. It says "Introducing multiple colors at the beginning of the extrusion process results in a homogenous mixture of a single color. The industry produced multiple color tones by utilizing color concentrates (streaker colors) that have carrier resins that melt at relatively high temperatures."

And then if you read this, this goes on to describe the use of streakers in previous plastic lumber products.

Would you agree with that?

MR. OEHLER: Objection to the extent it mischaracterizes the document. The document speaks for itself. Scope.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. At line 50, it says "This effect would produce a short string of color on the surface of the board. However, the streakers only produced a line of color in a single direction, usually along the extrusion direction, and when cut would not create a wood grain-like appearance through the

core of the board."

Do you see that?

A. I do.

Q. I'm not sure why I wanted you to look at that because my notes fall off there, but let's keep going.

So then at line 59 --

A. I don't see line 59. Where is line 59? The last paragraph? Okay.

Q. Do you see line 60?

A. I see 60, yes.

Q. So right before 60.

A. Okay.

Q. We're still talking about the streakers.

It says "With the board cut, pockets of color appear on the end surface but are discontinuous and do not form a wood grain appearance."

Do you see that?

A. Yes.

Q. In your opinion, if the colors appearing inside -- well, let me ask it differently.

So would you agree that within the meaning of the '350 patent, if the colors inside the surface are not continuous, then you wouldn't

consider those to be a wood-grained appearance within the meaning of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Calls for speculation.

THE WITNESS: Let me understand the question. So you're saying using streakers is not going to look like wood grain and using our process is going to look like wood grain? Is that --

BY MR. ZAMBRZYCKI:

Q. So I'm certainly not saying that, sir. You know, we can have a fight over that another time, but just I am pointing to what it says in the patent; right?

There's a discussion of -- this is the background. We are talking about what's been known in the art.

And the part I've been pointing you to is there's a discussion of the use of streakers, and the sentence -- and this is the question. So the sentence at column 1, beginning at line 59 says that "With the board cut, pockets of color appear on the end surface but are discontinuous and do not form a wood-grained appearance."

And so we've been talking about what it means to have a wood-grained appearance, and my

question is, is it the case that if the colors inside the core are not continuous, does that make them not have a wood-grained appearance within the meaning of the '350 patent?

MR. OEHLER: Objection. Scope. Outside the -- I'm sorry -- objection. Scope. Legal conclusion and form.

THE WITNESS: It can also look like wood grain if the lines are not continuous in my opinion.

BY MR. ZAMBRZYCKI:

Q. Okay. But that's your opinion; right?

A. That's my opinion.

Q. So the person looking at the board, it would be up to them to decide if it's a wood-grained appearance or not?

MR. OEHLER: Same objections.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:

Q. And different people obviously can have different opinions; right?

MR. OEHLER: Same objections.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:

Q. I'd like you to take a look at column 2, beginning at line 4.

It says "Attempts have also been made to produce polymer boards having a wood-grained appearance through a core of the board."

Do you see that?

A. I do.

Q. Would you agree that prior to the filing of the provisional application, there had been polymer boards that had a wood-grained appearance throughout their core?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: I didn't run into a board with a wood grain that appears to be a wood grain throughout.

BY MR. ZAMBRZYCKI:

Q. Is it possible because maybe you didn't think it's a wood grain design, but somebody else would have thought it's a wood grain design?

MR. OEHLER: Same objections.

THE WITNESS: It could.

BY MR. ZAMBRZYCKI:

Q. That's possible?

MR. OEHLER: Same objections.

THE WITNESS: It's possible.

BY MR. ZAMBRZYCKI:
Q. So you don't -- you have no reason to disagree with what your patent says here -- right? -- that there have been attempts to make polymer boards with a wood-grained appearance throughout the core; right?
MR. OEHLER: Same objections.
THE WITNESS: I don't disagree.
BY MR. ZAMBRZYCKI:
Q. Let's take a look at line 16, so still column 2.
It says "Another example is French Patent No. 2,738,768 which illustrates a process for simultaneously extruding plastics of different colors to coalesce them into a single product without mixing together."
Do you see that?
A. I do.
Q. Would you agree with me that before the filing of the provisional application, it was known that you could simultaneously extrude plastics of different colors to coalesce them into a single product without mixing them together?
MR. OEHLER: Same objections.
THE WITNESS: I don't disagree with the

statement here.
BY MR. ZAMBRZYCKI:
Q. Okay. Now, we've been talking a lot about an extrusion process. Would you agree that extrusion involves pushing a material through a die having a desired cross-section?
MR. OEHLER: Objection. Scope.
THE WITNESS: I agree with that.
BY MR. ZAMBRZYCKI:
Q. Okay. Do you -- and as we discussed, it was known before Tangent filed the provisional application that HDPE could be used in an extrusion process; right?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And it was known before that time that HDPE could be melted and combined with other polymers before extruded -- being extruded; right?
MR. OEHLER: Same objection.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And it was also known that other additives could be melted and combined with the HDPE and/or

other polymers before being extruded before the filing of the provisional application; right?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. And it was also known before the filing of the provisional application that HDPE and one or more additives could be used in an extrusion process to produce plastic lumber; right?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

MR. ZAMBRZYCKI: It's been about an hour. We can take a break, if you want, or we can keep going. It's up to you.

THE WITNESS: We can keep going.

MR. ZAMBRZYCKI: Let me know if you want to stop.

MR. OEHLER: Does anyone else want to stop also?

MR. ZAMBRZYCKI: I think everybody wants to get out of here as soon as possible.

BY MR. ZAMBRZYCKI:

Q. Okay. So let's take a look at -- still on the same page, column 2, if you take a look at where it says "Summary."

A. I see it.

Q. Okay. And in line -- so would you agree that what we've been talking about up to this point in the "Background" section, that was a discussion of what was known in the prior art?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. And we'll read this, and maybe I'll ask the question after. In fact, I will.

So looking at the "Summary," take a look at column 2, line 30. It says "An illustrative embodiments, a high-density polyethylene wood-grained substrate includes a plurality of layers of different colors. The substrate is formed into elongated boards which each include a first set of polymer layers formed that include a first colorant. The substrate includes a second set of polymer layers that include a second colorant different than the first colorant. The first and second layers alternate within the substrate to form a wood-grained appearance throughout the entire substrate."

Do you see that?

A. I do.
Q. Would you agree that this is describing a summary of the invention in the '350 patent?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And then what follows is a brief description of the drawings. Do you see that?
A. I see it.
Q. Okay. And, again, feel free to read through a description of the figures, but would you agree that the Figures 1 through 13 are showing examples of the invention in the '350 patent?
MR. OEHLER: Same objections.
THE WITNESS: It shows pictures of the final product, yes.
BY MR. ZAMBRZYCKI:
Q. And also the machine used to create the final product; right?
MR. OEHLER: Same objections.
THE WITNESS: The components, yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And so this is no longer talking about the prior art. This is talking about the

invention and how the invention is made; right?
MR. OEHLER: Same objections.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Okay. And if we could turn to -- actually, one more question on the summary.
So the last sentence says that "The first and second layers alternate within the substrate to form a wood-grained appearance throughout the entire substrate."
Sorry. It's the last sentence of the portion we had read previously.
What's the benefit of the invention claimed in the '350 patent over previous prior art plastic lumber products?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation, form.
THE WITNESS: It's a new product. It's more attractive or it's attractive.
BY MR. ZAMBRZYCKI:
Q. Okay. So it's the look of it that improves upon previous products?
MR. OEHLER: Same objections.
THE WITNESS: It's different. It's wood grain like.

BY MR. ZAMBRZYCKI:
Q. All right. But so it's not a functional improvement. It's a visual improvement over previous plastic lumber products; is that right?
MR. OEHLER: Same objections.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. So you could still use the wood-grained plastic lumber in every application that you could use non-wood-grained plastic lumber in; right?
MR. OEHLER: Objection. Scope. Calls for speculation. Calls for a legal conclusion. Form.
BY MR. ZAMBRZYCKI:
Q. To your knowledge?
MR. OEHLER: Same objections.
THE STENOGRAPHER: Say it again.
THE WITNESS: One or the other can be used on the same application.
BY MR. ZAMBRZYCKI:
Q. But there's just some applications that, to your knowledge, customers prefer one versus the other; right --
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. -- because of the look?

MR. OEHLER: Same objections.
THE WITNESS: Yes, there is a preference. There's going to be a preference for one or the other, a demand for one or the other.
MR. ZAMBRZYCKI: I actually wouldn't mind a break now, if you guys don't mind.
THE VIDEOGRAPHER: Off the record at 11:16.
(A short break was taken.)
THE VIDEOGRAPHER: Back on the record at 11:27.
BY MR. ZAMBRZYCKI:
Q. Welcome back again.
I still want to talk a little bit more about the '350 patent with you, and I'd like you now to take a look at page 14 of 17, column 3, where it says "Detailed Description of the Drawings."
Do you see that?
A. I do.
Q. Okay. And, again, what follows here, we are no longer talking about the prior art. We are talking about the invention of the '350 patent; right?
MR. OEHLER: Calls for a legal conclusion. Scope.

BY MR. ZAMBRZYCKI:

Q. I think we are waiting on each other again. So I'll repeat the question and be able to address it as we go.

But my question is what follows here after "Detailed Description of the Drawings," this is a description of the invention of the '350 patent. We are no longer talking about the prior art; right?

A. I understand.

MR. OEHLER: Same objection.

BY MR. ZAMBRZYCKI:

Q. Do you agree with me on that?

I'm asking. I'm not telling you that.

A. Yes.

MR. OEHLER: Same objections.

BY MR. ZAMBRZYCKI:

Q. Okay. So let's take a look at column 3, beginning at line 25. It's the second paragraph under "Detailed Description of Drawings."

A. I see it.

Q. Okay. And it says "An illustrative extrusion machine 100 in accordance with the present disclosure is shown in Figure 1. Extrusion machine 100 is used to from wood-grained polymer

substrates 10, 210 as shown in figures 6 through 10 having varying patterns of simulated wood grain which extend through and along each substrate 10, 210."

Do you see that?

A. I see it.

Q. Okay. If you take a look at Figure 1, is Figure 1, is that representative of the extrusion machine that was -- that you all used to develop the inventions claimed in the '350 patent?

MR. OEHLER: Objection. Scope.

THE WITNESS: Yes. There is only the end of the extruder barrel shown in this picture, but the rest of the components it is.

BY MR. ZAMBRZYCKI:

Q. Okay. Is there any component that's in Figure 1 that was a component that was not known prior to the provisional application, the filing date of the provisional application?

MR. OEHLER: Objection. Scope. Calls for speculation. Form. Calls for a legal conclusion.

THE WITNESS: 125 it was not -- is not a -- is not that I'm aware, known or previously made.

BY MR. ZAMBRZYCKI:

Q. Okay. Any other components that you're

not aware of previously being known before the provisional application?

MR. OEHLER: Same objections.

THE WITNESS: The way it's put together it may not be known that I'm aware -- it's not known that I'm aware.

BY MR. ZAMBRZYCKI:

Q. Okay. So 125 says flow adapter, Figure 1; right?

A. Correct.

Q. You're not suggesting that flow adapters weren't known. You're just saying that the specific flow adapter that you guys used, there's something different about that?

MR. OEHLER: Same objections.

THE WITNESS: The specific design of this flow adapter, I am not aware that there's one like it.

BY MR. ZAMBRZYCKI:

Q. Okay. Any other element shown in Figure 1 that -- well, let me ask this: Are any of the elements in Figure 1 shown -- let me start again.

Are any of the elements that are shown in Figure 1 elements that were invented as part of the development of this -- what's claimed in the '350 patent?

MR. OEHLER: Same objections.

THE WITNESS: The way it's put together I don't believe there's one that is -- that it was known before. The flow adapter was made in-house. The reducers -- the reducers that is shown 139, the expander that is shown 152, the die it's going to be also -- it was a die made in-house with the -- I mean, it might be similar, similar dies out there, but the dimensions, I mean, I don't believe they're going to be -- they're going to be -- and characteristics, I don't believe there is going to be one that is going to be the same.

BY MR. ZAMBRZYCKI:

Q. What about just the general arrangement of having a flow adapter that then leads into a flow divider and an expander and a die? That arrangement, that's not an arrangement you all invented as part of this development; right?

MR. OEHLER: Objection. Objection to the extent it --

THE WITNESS: To my best recollection, we didn't -- we were not able to find something that it was similar to this. So we put -- had to put it together, and previous versions were where we introduced accent colors prior to the exit of the

extruder barrel. So not that I'm aware.
BY MR. ZAMBRZYCKI:
Q. Okay.
A. Now flow adapter has other components also.
Q. We'll go through some of those.
So the extrusion machine 100 that's illustrated in Figure 1, that's what's used to create the polymer with boards and substrates that are illustrated in Figures 6 through 11; right?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. To an extent, it mischaracterizes the document. Form.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Let's go back now to column 3 in the patent. Oh, actually, going back to the Figure 6 through 11, so if you can go to Figure 6 first.
Okay. So you had mentioned earlier that -- I'm going to paraphrase here, so please feel free to correct me -- but I believe you testified that when -- as part of the development, you all looked at pictures of real wood and were trying to simulate the look of real wood. Am I remembering that correctly?

A. Yes.
Q. Okay. So is the wood grain pattern that's shown in Figure 6, was that based on a picture of real wood that you all had?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. Is the same true for Figure 7?
MR. OEHLER: Same objection.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Is the same true for Figure 8?
MR. OEHLER: Same objection.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Figure 9?
MR. OEHLER: Same objection.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Figure 10?
MR. OEHLER: Same objection.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And Figure 11?

A. Yes.
MR. OEHLER: Same objection.
BY MR. ZAMBRZYCKI:
Q. Okay. Let's go back to column 3. Let me know when you're there.
A. I'm there.
Q. Okay. And then line 30, beginning at line 30, it says "Substrates 10, 210 can be made from polymer-based material such as recycled high-density polyethylene (HDPE) having at least two different colorants added thereto to define the wood grain patterns."
Do you see that?
A. I do.
Q. As we talked about before, using HDPE in an extrusion process to create plastic lumber products, that was already known before the provisional application filing date; right?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Mischaracterizes testimony.
THE WITNESS: State that again.
BY MR. ZAMBRZYCKI:
Q. Sure.
So as I believe we discussed before, it was known before the filing date of the provisional

application here that HDPE could be used in an extrusion process to create plastic lumber; right?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Do you know whether HDPE has good moisture barrier properties?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. It does have good moisture barrier properties?

MR. OEHLER: Same objections.

THE WITNESS: I believe so.

BY MR. ZAMBRZYCKI:

Q. Would that be one of the reasons for using HDPE to create plastic lumber?

MR. OEHLER: Same objections. Speculation. Form.

THE WITNESS: One of the many reasons, yes, or several reasons.

BY MR. ZAMBRZYCKI:

Q. And that was a reason that would have been known before this provisional application was filed; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.

THE WITNESS: I believe so.

BY MR. ZAMBRZYCKI:

Q. And do you know whether HDPE has good chemical resistance properties?

MR. OEHLER: Same objections.

THE WITNESS: I believe so.

BY MR. ZAMBRZYCKI:

Q. Is that something you were aware of before filing of the provisional application?

MR. OEHLER: Same objection. Calls for speculation.

THE WITNESS: HDPE is used for making bottles to put the different substances on it, so, yes.

BY MR. ZAMBRZYCKI:

Q. And that would have also been a known reason to use HDPE to create plastic lumber products before the filing date of the provisional application; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: One of the reasons, yes.

BY MR. ZAMBRZYCKI:

Q. And was it also known before the filing

date of the provisional application that HDPE would be good to use in plastic lumber because it's strong?

MR. OEHLER: Same objections.

THE WITNESS: It might.

BY MR. ZAMBRZYCKI:

Q. To your knowledge, is -- was HDPE one of the most commonly used polymers used to create plastic lumber before the provisional application date?

MR. OEHLER: Objection. Scope. Calls for speculation. Form.

THE WITNESS: I am not sure.

BY MR. ZAMBRZYCKI:

Q. Did you -- during your time at either U.S. Plastics or at --

A. Eaglebrook.

Q. During your time at either U.S. Plastics or Eaglebrook, did either of those companies make plastic lumber products with a polymer other than HDPE?

MR. OEHLER: Same objections.

THE WITNESS: No, other than composites, other than wood fiber composites.

BY MR. ZAMBRZYCKI:
Q. Right.
But for the plastic lumber products, not the composite but the plastic lumber products, HDPE is the only polymer that was used by both U.S. Plastics and Eaglebrook; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. How did you all decide on what colorants to use in conjunction with the polymers in the wood-grained products that are disclosed in the '350 patent?
MR. OEHLER: Same objections.
THE WITNESS: We did trial and error. We did -- we chose different colors. We combined different colors into the test boards that we were making, and we picked the ones that were closer to real, real wood grain.
BY MR. ZAMBRZYCKI:
Q. So it was just a design choice in terms of which colors you used?
MR. OEHLER: Same objections.
THE WITNESS: We'll pick up the colors that we -- that at that time we believe that will make

a -- the different varieties of the wood, and we'll make samples. We'll look at them, like them or not, we'll discard them. We'll put a different color until we got to the closest to the one, to the target that we were looking for.

BY MR. ZAMBRZYCKI:

Q. How long did that process take of figuring out which colors to use to achieve a wood grain look?

A. It can take -- it can take days to weeks to months depending on the -- depending on how many different trials that you want to -- do you need to make. I mean, some of them, they -- the first trial will produce what we're looking for. Some of the trials will take many, many different attempts.

Q. Is it just sort of routine experimentation just to get to the color you're looking for?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.

THE WITNESS: Well, it's several variables that you have to -- that you have to adjust plus the different colors.

BY MR. ZAMBRZYCKI:

Q. And I -- okay.

And so some of the colors you were able to

arrive at within just even within a day?

MR. OEHLER: Objection to the extent it mischaracterizes testimony. Form.

THE WITNESS: I wouldn't say a day, but I'll say some of the colors we were able to get within a week. Some of the colors you will take months to get them to where you need it -- where you want it to get.

BY MR. ZAMBRZYCKI:

Q. Okay. Let's take a look at column 3, lines 34 to 39, and it says "Polymer substrates" -- actually, let me -- I may have my line numbers wrong here. Let me see.

Sorry. So it's column 3, but it's line 35, and it says "Polymer substrates 10, 210 can include additives such as UV inhibitors, foaming agents, and color concentrates to produce polymer substrates having desired colors and material properties such as durability and strength."

Do you see that?

A. I do.

Q. So as we discussed before, even before the filing date of the provisional application, it was known that you could include UV inhibitors, foaming

agents, and other additives with HDPE in an extrusion process to create plastic lumber products; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Would you agree that using HDPE or having UV additives or foaming agents, that's not the inventive part of your invention?

MR. OEHLER: Same objections.

THE WITNESS: Agree.

BY MR. ZAMBRZYCKI:

Q. Would you agree that even mixing colors and using two different colors is not really the inventive part?

MR. OEHLER: Same objection.

THE WITNESS: Using colors is not -- I wouldn't say is part of the invention. Mixing colors, you're -- I'm not sure about that one.

BY MR. ZAMBRZYCKI:

Q. I think I'm hearing your distinction. You're saying using colors with HDPE in an extrusion process, that's not the inventive part?

MR. OEHLER: Same objection.

THE WITNESS: Right.
BY MR. ZAMBRZYCKI:
Q. Arriving at the colors that you arrived at, that's where you're hesitating?
A. Correct.
MR. OEHLER: Same objection.
BY MR. ZAMBRZYCKI:
Q. Also the fact that these products could be embossed, is that an inventive part of this invention?
MR. OEHLER: Same objection.
THE WITNESS: Not part of it.
THE STENOGRAPHER: I'm sorry.
THE WITNESS: Not part of it.
BY MR. ZAMBRZYCKI:
Q. Okay. All right. So I want to talk a little bit now about -- I said I'd come back to it. So I'd like to talk about the components of the extrusion machine, and so just to orient us, I want to go back to column 3, line 25.
And so, again, it starts off saying "An illustrative extrusion machine 100 in accordance with the present disclosure is shown in Figure 1. Extrusion machine 100 is used to form wood-grained polymer substrates 10, 210 as shown in

Figures 6 through 11 having varying patterns of simulated wood grain which extend through and along each substrate 10, 210."

Do you see that?

A. I do.

Q. Would you agree with me Figure 1 shows an extrusion machine that creates the plastic lumber that's claimed in the invention that shows up in Figure 6 through 11?

MR. OEHLER: Objection. Scope.

THE WITNESS: Yeah.

MR. OEHLER: Calls for a legal conclusion. Form.

BY MR. ZAMBRZYCKI:

Q. If you look at Figure 6 -- I think I may have asked this -- Figure 6 shows an embodiment of a plastic lumber -- well, let me start again.

Figure 6 shows an embodiment of the claimed invention that's produced by the figure -- the extrusion machine shown in Figure 1; right?

MR. OEHLER: Same objection.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:

Q. And this is -- here we're looking at a cross-section of the claimed invention; right?

MR. OEHLER: Same objection.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Okay. And if you could take a look at Figure 10, and you'd agree that Figure 10 is another embodiment of the claimed invention that's produced by the extrusion machine shown in Figure 1; right?
MR. OEHLER: Same objection.
THE WITNESS: With a different setup, yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And we'll talk about that setup in a little bit.
All right. If you want to kind of keep one hand on the figures, I'm going to be flipping back and forth between the description and the figures themselves.
So next, I'd like you to look at column 4.
A. Looking at it.
Q. Okay. So 4, column 4, line 1, it says "In the illustrative embodiment, polymer substrate 10 is made using extrusion machine 100, shown in Figure 1, from a first polymer 120 and a second polymer 124."
Do you see that?

A. I do.
Q. Okay. And then if you skip -- well, actually, next line, it says: "A first extruder 118 is adapted to extrude first polymer 120 which is blended with a primary (main) base color."
Sorry.
A. I see it.
Q. Okay. Sorry. I'm a little lost in my notes here. Hold on one second.
Okay. And then if we skip to column 4, line 12, there it talks about "A second extruder 122 of extrusion machine 100," and it says it's "adapted to extrude second polymer 124 as shown in Figure 1."
Do you see that?
A. I do.
Q. Okay. So if we look at Figure 1 now, okay, so we could see those two extruders 118 and -- and I lost --
A. 122.
Q. Yeah. 122. Thank you.
So we see the two extruders 122 and 118. Okay. And would you agree with me that it was known that you can use two extruders in an

extrusion machine like this one?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

BY MR. ZAMBRZYCKI:

Q. And prior to the filing of the provisional application?

MR. OEHLER: Same objection.

THE WITNESS: Not with this specific setup, but it was known to use two extruders or more than two extruders to do extrusion.

BY MR. ZAMBRZYCKI:

Q. Okay. And it was known that you can use HDPE in both extruders before the filing of the provisional application; right?

MR. OEHLER: Same objections.

THE WITNESS: Yes, HDPE or other polymers.

BY MR. ZAMBRZYCKI:

Q. Right.

But there's no reason that someone would think you couldn't use two extruders both with HDPE prior to the provisional application; right?

MR. OEHLER: Objection. Speculation. Outside the scope. Calls for a legal conclusion.

THE WITNESS: No.

BY MR. ZAMBRZYCKI:

Q. Okay. And then let's turn back to column 4, and at line 43, it says "A flow adapter 125 is coupled to first extruder 118 by securing flow adapter 125 to an adapter plate 126 by use of fasteners, such as bolts, as suggested in Figure 1."

And then it says "Flow adapter 125 is positioned to receive the output flows from extruders 118, 122 and configured to initiate the combined flow of first and second polymers 120, 124, through extrusion machine 100. The combined flow of first and second polymers 120, 124, is then directed to flow divider 140 for formation of the wood grain pattern."

Do you see that?

A. I do.

Q. Okay. So would you agree that, in short, this is saying that the two extruders 118 and 122, those feed the flows of the polymers into the flow adapter 125, and then the flow adapter directs the flow of those polymers into flow divider 140?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. The document speaks for itself. Form.

THE WITNESS: Yes, passing through the reducer.
BY MR. ZAMBRZYCKI:
Q. And passing through a reducer, right. Okay.
Would you agree the flow divider 140 that's illustrated in Figure 1 is an example of a static mixer?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And you'd agree static mixers were known for use in extrusion the process before the filing of the provisional application; right?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.
THE WITNESS: It's more generally used for mixing liquids or glues or other substances than HDPE, but, yes, it's a helical mixer that we use for plastic lumber.
BY MR. ZAMBRZYCKI:
Q. Okay. So even though you're saying it's more generally used for mixing liquids or glues or other substances, it was known prior to the provisional application that you could use a static mixer in an extrusion process with HDPE; right?

MR. OEHLER: Same objection.

THE WITNESS: I don't know if it was generally known to be used on plastic lumber or on extrusion of HDPE. I do not know that answer.

BY MR. ZAMBRZYCKI:

Q. Okay. Okay. Now, the flow divider or the static mixer, that's shown in Figure 5; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Mischaracterizes the document. Form.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And if you can hold your hand on that and then turn back to column 5 now, actually, I want to ask you about the step that you mentioned and I skipped over by accident.

So column 5, line 25, it says "The combined flow of first and second polymer 120, 124 exit from the flow adapter 125 and enter a reducer 139 of extrusion machine 100 as shown in Figure 1. Reducer 139 increases pressure of the flow by reducing a cross-section of the combined extrusions. Reducer 139 directs the flow of the first and second polymers 120, 124, into flow divider 140."

Do you see that?

A. I do.

Q. Okay. And I think you had mentioned -- because I skipped over the reducer step, you had mentioned that.

Was using a reducer to increase the pressure of the flow something that was known before the filing date of the provisional application?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: Not that I'm aware, or I should say I do not know.

BY MR. ZAMBRZYCKI:

Q. Okay. How did you decide to include a reducer in the extrusion machine 100 and in the place that it was included in that machine?

MR. OEHLER: Same objections.

THE WITNESS: We know -- we know by experience that we need a pressure drop after the -- before the exit of the melt, and so a reducer there will give us a pressure drop after.

BY MR. ZAMBRZYCKI:

Q. And you knew that from experience -- from experience with what? With other Tangent products

or --

A. Other Tangent products.

MR. OEHLER: Objection. Scope. Form.

BY MR. ZAMBRZYCKI:

Q. Did you also know that from experience with Eaglebrook -- was it Eaglebrook? Did I say it right?

A. (Witness nodding head.)

Q. Eaglebrook or U.S. Plastics products?

MR. OEHLER: Same objection. Calls for speculation.

THE WITNESS: Not that I recall. I believe the pressure drop it was -- the benefits of having a pressure drop, it was observed during the Tangent days.

BY MR. ZAMBRZYCKI:

Q. Okay. That was before the provisional filing application that you observed those benefits; right?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Was it shortly after Tangent was founded?

Approximately when did you guys make that discovery?

MR. OEHLER: Same objections.
THE WITNESS: Not shortly -- not shortly but years after.
BY MR. ZAMBRZYCKI:
Q. Okay. If we keep reading along in column 5, line 31, it says "Flow divider 140 includes a channel 149 formed through flow divider 140 and a plurality of section inserts 141 to 147 positioned within the channel 149 as shown in Figure 1. Section inserts 141 to 147 are coupled to one another to form a continuous dividing element 148 as suggested in Figure 5. In the illustrative embodiment, each section insert 141 to 147 is a plate having opposing ends twisted relative to one another to form a helical profile."
Do you see that?
A. I do.
Q. Okay. So this is a description of the static mixer that's shown in Figure 5; right?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. The document speaks for itself.
THE WITNESS: A helical static mixer.
BY MR. ZAMBRZYCKI:
Q. A helical static mixer.

Are there other static mixer types that you're aware of?

A. Yes.

Q. What other types are there?

MR. OEHLER: Same objection.

THE WITNESS: Several more.

BY MR. ZAMBRZYCKI:

Q. Okay. Can you name those?

MR. OEHLER: Same objections.

THE WITNESS: There's at least two or three more different -- that is not a helical mixer anymore. It's composed of plates with gaps in between, and they might be arranged in different ways. The name for them -- for them, I do not -- I do not have names for them, but there's -- it's a completely different design than a helical mixer.

BY MR. ZAMBRZYCKI:

Q. Okay. Any other mixers that you can think of?

A. No.

Q. Okay. The other type you were just talking about, was that type of mixer known before the provisional application date?

MR. OEHLER: Objection. Scope. Calls for speculation.

THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. Okay. Let's continue on in column 5. Let's move to line 43. It's the next paragraph. It says "Section inserts 141 to 147 cut across and redirect the combined flow of first and second polymer 120, 124 as the flow passes through channel 149 of flow divider 140 as suggested in Figures 1 and 5 through 5G. Section inserts 141 to 147 can be of different designs and fit together in a variety of orientations to vary the wood grain patterns 16 of polymer substrate 10."
Do you see that?
A. Yes.
Q. Okay. And then if we could turn back to Figure 5 again, would you agree that it is here in the static mixer that the wood grain pattern is being formed?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.
THE WITNESS: I would say that is a combination of all the components put together.
BY MR. ZAMBRZYCKI:
Q. Okay. Well, if you see the below Figure 5, there are additional Figures 5A through

5G. Do you see that?

A. Uh-huh.

Q. Would you agree that each one of those figures, 5A through 5G, that's a cross-section look of what the melt looks like at that point in the static mixer?

So, for example, 5A, that's the cross-section -- that's what the cross-section looks -- of the polymer looks like -- sorry.

Figure 5A, would you agree that's what the cross-section of the polymer melt looks like at that point in the static mixer at location 5A?

MR. OEHLER: Same objections. The document speaks for itself.

THE WITNESS: No. Close but, no. If you look at the flow adapter, you're going to see that there is four melt streams of the accent color, and this one shows only one.

BY MR. ZAMBRZYCKI:

Q. Is there a disclosure somewhere in the '350 patent that shows what the flow would look like coming in from the flow adapter that's different than what's shown here in Figure 5?

MR. OEHLER: Scope. Calls for a legal conclusion.

THE WITNESS: I don't know if there's a disclosure in here, a description in here, but if you look at Figure 4, you're going to see four orifices where the -- and, actually, a cross where the accent color is going to come from.

BY MR. ZAMBRZYCKI:

Q. Right, sir, but in Figure 5, that's not what's shown; right?

What's shown is -- what's shown in Figure 5A is two polymers, only two polymer -- only two differently colored polymers; right?

MR. OEHLER: Objection. Scope. The document speaks for itself.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. And so -- I didn't mean to cut you off.

A. That's what it shows.

Q. So what 5A is showing in Figure 5, the cross-section of the flow will be as shown in Figure 5A; right?

MR. OEHLER: Objection to form. The document speaks for itself. Calls for a legal conclusion.

THE WITNESS: This is an example of what a helical static mixer will do with two melt flows or any color you put in a helical static mixer. What

happens when you're making wood grain, you are making an accent color through the X you see on Figure 4, and so if you were to look at this picture here, you will see that accent color, that black, representing a cross.

BY MR. ZAMBRZYCKI:

Q. Okay. But that's -- that's not what's disclosed in Figure 5; right?

MR. OEHLER: Objection. Asked and answered. Scope. Calls for a legal conclusion. The document speaks for itself.

THE WITNESS: It's not.

BY MR. ZAMBRZYCKI:

Q. Okay. And as we go along in Figure 5 from 5A to 5G, in Figure 5G, at the bottom, there's a cross-section there that has alternating polymer layers. Do you see that?

MR. OEHLER: Objection. Scope.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay.

MR. OEHLER: Calls for a legal conclusion. Document speaks for itself. Scope as well. Sorry.

BY MR. ZAMBRZYCKI:

Q. Okay. And would you agree that the

cross-section that's shown in Figure 5G when that goes to the expander and then the die, that that then results in the wood grain pattern that we saw in Figure 6?

MR. OEHLER: Same objections. Calls for speculation.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And so even if you didn't use the flow adapter that's disclosed in Figure 4, as long as you followed -- as long as you used the static mixer that's shown in Figure 5, you would arrive at the wood grain pattern that's shown in Figure 6?

MR. OEHLER: Objection. Calls for a legal conclusion.

(Simultaneous speaking.)

MR. OEHLER: -- his testimony.

BY MR. ZAMBRZYCKI:

Q. According to this disclosure; right?

MR. OEHLER: Sorry for the interruption.

THE WITNESS: If you use the flow adapter in Figure 4 coupled together with the helical mixer shown in Figure 5, you will get the picture shown on Figure 6.

BY MR. ZAMBRZYCKI:

Q. Okay. Well, let's go back to Figure 5.

So in Figure 5 there's a cross-section shown at 5G in the static mixer; right? And -- do you see that?

A. I do.

Q. Okay. And then Figure 5G shows a cross-section there, and it shows a -- would you agree that's a horizontal wood grain pattern?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. The document speaks for itself. Calls for speculation.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And so if you began with the flow that's shown in Figure 5A, right, according to Figure 5, you would end up with the cross-section that's shown in Figure 5G by the time you went through all the elements that are disclosed in that -- in Figure 5 for the static mixer; right?

MR. OEHLER: Same objection. Form.

THE WITNESS: It will not be the same result as if you use this flow adapter here on Figure 3.

BY MR. ZAMBRZYCKI:

Q. Right.

And that's not my question, sir. My

question is -- okay. If you know that the cross-section of what you're getting out is what's shown in Figure 5B -- sorry -- 5G. Let me start again.

If you know that the cross-section of what's coming out of the static mixer is what's shown in Figure 5G, are you then able to -- is there anything additional you need to do to feed that melt through the expander and the die to arrive at the wood grain pattern that's shown in Figure 6?

MR. OEHLER: Same objections.

THE WITNESS: You need to -- you need to use the flow adapter on Figure 4 to be able to obtain the layers shown on Figure 5G.

BY MR. ZAMBRZYCKI:

Q. Okay. So to obtain the layers shown in Figure 5G, you need to use the adapter in Figure 4?

MR. OEHLER: Same objections.

THE WITNESS: Correct. Yes.

BY MR. ZAMBRZYCKI:

Q. And how does that follow from Figure 5?

Because in Figure 5, Figure 5A shows that you start off with two polymer -- two differently colored polymers -- right? -- and with each

successive step, it shows the mixing from Figure 5A through 5G -- right? -- and you end up in the cross-section of 5G from the flow that's shown in 5A; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. The document speaks for itself. Speculation.

THE WITNESS: The only difference is having an accent color that is in the middle of the profile, you have a cross instead of having a concentration of the accent color on the middle of the profile or on the middle of the melt.

BY MR. ZAMBRZYCKI:

Q. Sir, my only question is -- it's truly limited to Figure 5. In Figure 5, if you start -- if you use the static mixer that's shown in Figure 5, and you start with the flow that's shown in Figure 5A, that cross-section that's two different polymers, you will end up with the color that's shown in Figure 5G?

MR. OEHLER: Same objection. Asked and answered.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:

Q. And then once you get to 5G, to get the

board that's shown in Figure 6, all you need to do is just feed it through the expander and extrude it; right?

MR. OEHLER: Same objections. Mischaracterizes testimony.

THE WITNESS: No.

BY MR. ZAMBRZYCKI:

Q. What additional steps need to be taken to get from 5G to 6?

MR. OEHLER: Asked and answered. Scope.

THE WITNESS: When you push the melt through the Figure 4, instead of having that round concentration of accent color on the middle of the melt, you have a cross which then deconcentrates that black accent color in the middle, and then you have the product that you see on Figure 6.

BY MR. ZAMBRZYCKI:

Q. Where is that described in the patent, sir?

MR. OEHLER: Asked and answered. Scope. Legal conclusion.

You've asked that four times now.

THE WITNESS: I don't know where it's described on the --

BY MR. ZAMBRZYCKI:

Q. Okay. So let's take a look at column 5, line 58. Okay?

And there it says -- I'm sorry. Are you there?

A. Yeah, I'm there.

Q. So column 5, line 58, says "In the illustrative embodiment, the design orientation in number of section inserts 141 to 147 determine the linear grading and layering aesthetics for a particular profile size and shape of polymer substrate 10. For example, as suggested in Figure 5 and 5G, a horizontal longitudinal to the substrate orientation of the final end of the dividing element 148 produces horizontal layers in the flow which leads to horizontal grains in the final polymer substrate 10 as suggested in Figure 6."

Do you see that?

A. I do.

Q. Okay. Would you agree with me that that is saying that the -- when you have the cross-section that's shown in Figure 5G, that results in the board that's shown in Figure 6?

MR. OEHLER: Objection. Scope. Document

speaks for itself. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: It's saying that, yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And where does it say that you need to do anything else to get the design that's in Figure 6 from the point that you're at that's illustrated in Figure 5G?

MR. OEHLER: Same objections.

BY MR. ZAMBRZYCKI:

Q. I'll wait. So feel free to look through as much of the patent as you would like, but I suggest to you, sir, that it's not there.

MR. OEHLER: Same objections. Lower your voice a little bit, Jacob. It would be appreciated.

MR. ZAMBRZYCKI: As the video shows, my voice is perfectly fine, but, for the record, since you want to make a record of saying I'm speaking loudly, I'm not.

MR. OEHLER: In my view, the volume of your voice has been increasing through this line of questioning.

MR. ZAMBRZYCKI: In my view, you're a soft speaker. So I disagree with you.

BY MR. ZAMBRZYCKI:

Q. Let me ask another question, sir.

The patent says, if you have the cross-section in 5G, you end up with the wood product shown in Figure 6; right?

MR. OEHLER: Same objections. Asked and answered.

THE WITNESS: I tried to describe the best I can the way this works. This is saying that -- this is saying that if you push a melt flow with two different polymers, one color and the other one a different color, it's going to end up looking like that.

BY MR. ZAMBRZYCKI:

Q. Like 5G?

A. Like 5G.

Q. And, just for the record, because this isn't going to be in the transcript, so you said if you push a melt flow with two different polymers one color and one one different color, you're taking about 5A?

A. Yes.

Q. You're going to end up looking like 5G; right?

A. Correct.

Q. Okay. And then, as we just read in column 5, the patent then says once you get to 5G, it doesn't say you do anything else; right?

It says you just put it through the expander and the die and you end up with the wood grain pattern that's in Figure 6; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Asked and answered. Calls for speculation.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. So there's no additional step that's disclosed in the patent that would suggest you need to do anything additional once you get to 5G to end up with the board in Figure 6 other than to expand and extrude the melt out; right?

MR. OEHLER: Same objections.

THE WITNESS: I don't know if there was a question there.

BY MR. ZAMBRZYCKI:

Q. Yes. The question is there's no additional step that's disclosed in the patent that would suggest you need to do anything additional once you get to 5G to end up with the board in Figure 6 other than to expand and extrude the melt

out; right?

MR. OEHLER: Same objections.

THE WITNESS: There's not.

BY MR. ZAMBRZYCKI:

Q. Okay. And if we take a look at Figure 5 again and if we step back to Figure 5F right before 5G.

A. Uh-huh.

Q. So 5F is showing the cross-section at that point in the static mixer that's shown in Figure 5; right?

A. Correct.

Q. And so --

MR. OEHLER: The document speaks for itself.

BY MR. ZAMBRZYCKI:

Q. So 5F is showing a vertical alternating polymer pattern; right?

A. At that point in time, yes.

Q. At that point in time, correct.

Okay. And then if we go back to column 5 and next sentence before we ended, so column 5, line 66, says "Having the final end of the dividing element 148 oriented vertically produces vertical (transverse to the substrate) layers in the flow which leads to vertical grains in the final polymer

substrate 10 as suggested in Figure 10."

Do you see that?

A. I do.

Q. If you can take a look at Figure 10, please.

A. Looking at it.

Q. So you would agree that if the polymer flow exited the static mixer at the point shown as 5F in Figure 5, you would end up with the wood grain pattern that's shown in Figure 10 after expanding and extruding through the die; correct?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. The document speaks for itself. Form.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And the patent doesn't say you need to take any additional steps once you're at Figure 5F other than to feed the melt through the expander and the die in order to get the board that's shown in Figure 10; right?

MR. OEHLER: Same objections.

THE WITNESS: The patent doesn't mention that.

BY MR. ZAMBRZYCKI:

Q. Okay.

A. That I'm aware.
Q. You would agree that at the point that the melt goes through the expander, the pattern is no longer -- there's no more mixing that's taking place there; correct?
MR. OEHLER: Objection. Form. Outside the scope. Calls for speculation.
THE WITNESS: After it exits the helical mixer, no, there's no more mixing.
BY MR. ZAMBRZYCKI:
Q. Okay. So same thing when you go through -- when the melt goes through the die, it's also not mixing at that point; correct?
MR. OEHLER: Same objections.
THE WITNESS: Not on the core.
BY MR. ZAMBRZYCKI:
Q. Okay. And so once you've got the pattern set when the melt is exiting the static mixer, the expander and the die are just to form the shape of the board; is that right?
MR. OEHLER: Same objections.
THE WITNESS: That's correct.
BY MR. ZAMBRZYCKI:
Q. Anything inventive about that part, shaping a melt into the shape of a board from your

perspective?
MR. OEHLER: Objection to scope. Calls for a legal conclusion. Calls for speculation. Form.
BY MR. ZAMBRZYCKI:
Q. I'll withdraw the question.
It wasn't your invention as part of this patent, the shaping of a polymer melt into the shape of a board; right?
MR. OEHLER: Same objections.
THE WITNESS: It was not.
BY MR. ZAMBRZYCKI:
Q. Now, you talked about Figure 4 and the flow adapter there. There's no figure in the '350 patent that shows what the cross-sections through a static mixer would be at any point if the flow adapter in Figure 4 were used; right?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. The document speaks for itself. Calls for speculation.
THE WITNESS: Not that I'm aware, no.
BY MR. ZAMBRZYCKI:
Q. You would agree that in -- sorry. If you can turn to Figure 5, again, please.
You would agree that someone reading -- you would agree that someone in the plastic lumber

industry looking at Figure 5 would understand that by using the static mixer shown in Figure 5, they could create a plastic lumber product with the wood grain patterns that we saw in either Figure 6 or 10; right?

MR. OEHLER: Objection. Scope. Calls for speculation. Calls for a legal conclusion.

THE WITNESS: I do not know.

BY MR. ZAMBRZYCKI:

Q. If you were to -- so looking at Figure 5, if you were to feed the melt that's shown at Figure 5G having that cross-section through an expander and an extruder, would you expect any result other than a board having the wood grain pattern shown in Figure 6?

MR. OEHLER: Same objection.

THE WITNESS: It will not look the same.

BY MR. ZAMBRZYCKI:

Q. If you feed Figure 5G through an expander and a die, it will not look like Figure 6?

A. It will not.

MR. OEHLER: Same objection.

BY MR. ZAMBRZYCKI:

Q. Didn't we just read what the patent said, that you feed what's shown in Figure 5G through an

extruder and a die, and you get Figure 6?

MR. OEHLER: Objection. Mischaracterizes testimony. Scope.

THE WITNESS: That picture shows you it's a representation of what it's going to look like if you put what I call the accent color in one stream of a melt on the middle of the melt.

Figure 5G is showing what it looks like if the accent color, it gets introduced in the form of an X.

It's just the intricacies of making it look better versus having one glob of melt concentrated on the middle. You have blurs on the surface of the board instead of having more gentle transitions.

BY MR. ZAMBRZYCKI:

Q. I think I understand what you're saying, but what I'm saying is in the patent there's -- what the patent tells us is that if you have the cross-section shown in Figure 5G, you end up -- and if you expand that and put it through the die, you get the wood-grained product shown in Figure 6; right?

MR. OEHLER: Objection. Call for speculation. The document speaks for itself. Asked and

answered.
BY MR. ZAMBRZYCKI:
Q. I am waiting on an answer.
A. That's what the patent says, to the best of I can read it.
Q. Okay. Would you agree that Figure 5, that based on Figure 5, you can tell that the more mixing elements that you have in the static mixer, the more grains you'll have in your final product?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And you can tell by looking at Figure 5 that if the final element is aligned horizontally, the resulting grains are going to be oriented horizontally; right?
MR. OEHLER: Same objection. Form.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. You can tell by looking at Figure 5, that if you have the final element oriented vertically, the resulting grains are going to be oriented vertically; right?
MR. OEHLER: Same objection.

THE WITNESS: Correct.

MR. ZAMBRZYCKI: Okay. I think we can take a break now if that works for everybody for lunch. I think we have been going about an hour, but I'm losing track a little bit.

THE VIDEOGRAPHER: Off the record at 12:33.

(A lunch break was taken.)

THE VIDEOGRAPHER: Back on the record at 1:47.

BY MR. ZAMBRZYCKI:

Q. Welcome back again.

Did you talk to your attorney about the substance of your testimony on either of the previous two breaks that we took?

A. Nope.

Q. Okay. If we could go back to Figure 5 in the patent that we were just looking at, Exhibit 4. Okay.

I was asking you about what would result if the cross-section that's shown in Figure 5G were put through an expander and a die.

Do you recall that?

A. Yes.

Q. Okay. And so I think you said that the pattern that would result would be different than what's shown in Figure 6. Is that -- do I recall

that correctly?

MR. OEHLER: Objection. Scope. To an extent it mischaracterizes testimony.

THE WITNESS: If you were to introduce the two melts the way it's represented on Figure 5A, the end result, the final product, it will not look like the pictures on Figure 6, and so if you see the flow adapter, you can tell by looking at it that what's going to be coming out of that flow adapter is not what's represented on Figure 5A.

BY MR. ZAMBRZYCKI:

Q. I understand.

But if you get to Figure 5G -- right -- isn't Figure 5G, doesn't that have a -- isn't that showing a wood grain pattern cross-section within the meaning of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. The document speaks for itself.

THE WITNESS: It shows layers with darker lines towards the middle of that image.

BY MR. ZAMBRZYCKI:

Q. Right.

And the layers are -- would you agree that the layers are curvilinear?

MR. OEHLER: Same objection.

THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And would you agree that the layers are alternating with one another?
MR. OEHLER: Same objection.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And would you agree that the layers are substantially interrupted -- sorry.
Would you agree that the layers are substantially uninterrupted going from side to side?
MR. OEHLER: Same objections. Form.
THE WITNESS: I see interrupted layers in the -- on the bottom section and on the top section of the -- from the middle plane.
BY MR. ZAMBRZYCKI:
Q. Okay. You would agree that at least some of the layers are substantially uninterrupted going from side to side?
MR. OEHLER: Same objections.
THE WITNESS: Some of the layers, yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And so you would agree that if what's shown in Figure 5G were expanded and put

through a die, you would end up with a plastic lumber having a wood grain appearance throughout its cross-section; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Calls for speculation.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. So you're saying it would just be a different wood grain pattern than was shown in Figure 6; is that right?

MR. OEHLER: Same objection.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And is it the case -- the same thing for Figure 5F, that you agree if you stop the static mixer at 5F, and you put that melt through an expander and a die, you would -- you would get a plastic lumber with a wood grain pattern, vertical pattern, it would just be a different wood grain pattern than shown in Figure 10?

MR. OEHLER: Same objection.

THE WITNESS: It would be less layers with a vertical pattern.

BY MR. ZAMBRZYCKI:

Q. You would agree that would be a wood grain

pattern?

MR. OEHLER: Same objection.

THE WITNESS: Never made the plastic lumber with that number of mixing elements. I do not know -- I don't know if it would represent a wood grain pattern with that thick of -- that few and that thick of layers on it.

BY MR. ZAMBRZYCKI:

Q. Okay. But at least the patent says that Figure 5F would result in plastic lumber having the wood grain pattern that's shown in Figure 10; right?

A. I think it says -- I think it says that if you turn the mixers in a vertical position with the same number of mixers, you will get a vertical pattern.

MR. OEHLER: Same objection.

BY MR. ZAMBRZYCKI:

Q. I see.

Okay. So if Figure 5G were in a vertical pattern, you would end up with a plastic lumber having a wood grain pattern. It would just be in a vertical pattern; correct?

A. Correct.

MR. OEHLER: Same objection.

BY MR. ZAMBRZYCKI:

Q. And I think you just said that you never tried making a plastic lumber having only five mixer elements; is that right? Or six mixer elements; is that right?

MR. OEHLER: Same objection.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:

Q. How many mixer elements did you use in your development of the invention claimed in the '350 patent?

MR. OEHLER: Objection. Form. Calls for a legal conclusion.

THE WITNESS: It was six or more. Actually, I believe it was six or more. At some point we were making those mixers in house. We twist them. We weld them. We put them together. We serrated the ends, and then we have different trials that we did.

BY MR. ZAMBRZYCKI:

Q. Okay. Let's take a look at column 6. I'd like you to turn your attention to line 34, please.

Okay. And there it says "In some embodiments, surfaces 12 of polymer substrate 10 can be further enhanced by embossing techniques

applied to the surfaces 12 as suggested in Figure 8. Embossing can provide a texture similar to natural wood lumber and add to the wood grain effect in the final product. Alternatively, or in addition to embossing, a thin layer can be removed from each outer surface 12" -- it says by -- "planning to expose the wood grain pattern 16 as suggested in Figure 9. In the illustrative embodiment a burling effect is created due to the horizontally oriented and closely spaced grains 16.

Do you see that?

A. Yes.

Q. What is meant by a "burling effect" in the context of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for speculation. Calls for a legal conclusion.

THE WITNESS: What's the word that's used?

BY MR. ZAMBRZYCKI:

Q. Burling.

A. Still on 30?

Q. So burling is referred to in the last sentence of that section, so around line 42, 41.

A. Oh, 41. Oh, burling, marbling, burling. When you plane the board, you get to see figure -- what's the figure?

Q. I think it said Figure 9.

A. So Figure 9. So that's the -- we will call that a burling effect, marbling. Really, in my view, what I see here, it's more of a wood grain below the surface.

Q. Okay. So is burling, within the context of the '350 patent, just the wood grain effect when you plane -- when you plane off a surface?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. So there's not any additional process that's required to create a burling effect. It's just what appears inside the board after it's planed; correct?

MR. OEHLER: Same objections.

THE WITNESS: Correct. Expose the grain.

BY MR. ZAMBRZYCKI:

Q. Okay. Let's look at one more place. Let's look at column 7.

Okay, and starting at line 36, it says "The width direction (i.e., cross-direction of the grains 16, 216) can assume various orientations to change the quantity of 16, 216 to simulate natural wood grains of different patterns. For example,

the exposed grain patterns in natural wood assume different orientations depending on the portion of the timber the board is cut from. The orientation of the grain 16, 216 can be changed to simulate these different patterns. In the illustrative embodiments, the grain 16, 216 extend along curvilinear paths across the width of the substrate 10, 210. In some embodiments, a majority of the grains 16, 216 extend substantially uninterrupted across the board, i.e., with minimal or no gaps in the visible grain 16, 216."

Do you see that?

A. I do.

Q. So I had actually just asked you about the term "curvilinear" where it says "the grain 16, 216 extend along curvilinear paths across the width of the substrates."

How can you -- how do you determine whether grains are curvilinear or not within the scope of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: How can you determine? Is that question -- does that question mean if we can change the curvilinear layers or is it -- I mean,

if it's curvilinear, it's curvilinear; right?
BY MR. ZAMBRZYCKI:
Q. That's the question. I don't know how much of this you know or is controversial here, but I don't think much of what I'm about to say is.
But in a patent, your invention is defined by the claims and what you read in the claims; right? So the language you put in there, those are the limitations of the claims.
And if you look, for example, at claim 1 in the patent, so that's in column 8, and you look at the last limitation in claim 1, so the bottom paragraph, that says "Wherein a plurality."
It says "Wherein a plurality of individual layers of the first and second sets of polymer layers alternate within the board and extend along a substantially uninterrupted curvilinear path originating proximate the first side of the board and terminating proximate the second side of the board."
Do you see that?
A. I've read that before, yes.
Q. So when you have a patent and you want to accuse somebody of infringement, you have to show that their product or thing or whatever meets all

the limitations that are in your claims.

So my question is how do you determine whether another plastic lumber has polymer layers that are substantially -- excuse me -- that are curvilinear?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: Well, by looking at the board and analyzing those layers.

BY MR. ZAMBRZYCKI:

Q. Right.

But different people can have a difference of opinion as to what is or what is not curvilinear; right?

MR. OEHLER: Same objections.

THE WITNESS: If it's not a straight line, it's curvilinear.

BY MR. ZAMBRZYCKI:

Q. So anything that is not a straight line is curvilinear?

MR. OEHLER: Same objections.

THE WITNESS: As long as it has a curve on it; right? If it's not a straight line and it doesn't have right angles, it's going to be a curve.

BY MR. ZAMBRZYCKI:
Q. And you're basing that definition -- is there something in the patent that defines it that way or what are you basing that definition on?
MR. OEHLER: Same objections.
THE WITNESS: My better understanding of a layer or a line.
BY MR. ZAMBRZYCKI:
Q. So you don't think that other people in the industry can have a disagreement as to what would be a curvilinear polymer layer?
MR. OEHLER: Same objections.
THE WITNESS: I don't think so.
BY MR. ZAMBRZYCKI:
Q. Okay. So in your view, curvilinear within the meaning of the '350 patent is not a straight line; is that right?
MR. OEHLER: Same objections. Asked and answered.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Okay. And what about this language "substantially uninterrupted"? How does -- how does one know when a polymer layer, a curvilinear polymer layer, is substantially interrupted within

the meaning of the '350 patent?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Calls for speculation.
THE WITNESS: Line is or layer line is a substantially -- most of the layers are or layers or lines there are continuous.
BY MR. ZAMBRZYCKI:
Q. Can something have -- can a polymer layer in the meaning of the '350 patent have any interruptions for it to be substantially uninterrupted?
MR. OEHLER: Same objections.
THE WITNESS: There's some of them that they are interrupted before the end of the -- before the end of the cross-section.
BY MR. ZAMBRZYCKI:
Q. And so you can have some interruptions and still be substantially uninterrupted within the meaning of the '350 patent; is that right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And so how many interruptions make it so that you're outside of the meaning of the '350 patent "substantially uninterrupted" language?

MR. OEHLER: Same objections.
THE WITNESS: Can't quantify that.
BY MR. ZAMBRZYCKI:
Q. Different people might view that differently; right?
MR. OEHLER: Same objections.
THE WITNESS: Substantially will be more than -- more than -- more than 60 -- more than 30 percent -- more -- substantially, I say, 30 to 40 percent or 20 to 40 percent interruptions, it will be substantially uninterrupted, and the rest of them will be interrupted.
BY MR. ZAMBRZYCKI:
Q. Okay. And what are you basing --
A. In my -- my view.
Q. That's your subjective opinion; right?
A. Right.
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. So a person reading the phrase "substantially uninterrupted" in this patent may have a different opinion about what substantially uninterrupted means?
MR. OEHLER: Same objections.
THE WITNESS: They might.

BY MR. ZAMBRZYCKI:
Q. So it's in the eye of the beholder; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Are there any objective boundaries that you can put on that term, "substantially uninterrupted," or is it just subjective?
MR. OEHLER: Same objections.
THE WITNESS: More of the one versus the other, substantially. Boundaries.
BY MR. ZAMBRZYCKI:
Q. Again, that's your -- that's your subjective opinion; right?
A. Yes.
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. Is there some objective understanding that everybody in the industry would agree that substantially uninterrupted means something?
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. That you're aware of?
A. I do not know.
Q. If you can take a look at claim 10 in the

patent. So this is column 9. And in column 10 -- excuse me -- in claim 10, first, you'll see it begins with "a simulated natural wood-grained polymer." Do you see that?

A. Yes.

Q. We talked about wood grain earlier in the context of the '350 patent; right?

A. Yes.

Q. Okay. If you -- excuse me -- if you take a look at the -- so there is sort of the first big paragraph next to claim 10, and then there's a second paragraph that says "a first set of polymer layers extending along the first direction and containing a first colorant, a majority of the first set of polymer layers being substantially continuous along the first direction."

Do you see that?

A. Yes.

Q. Do you have a -- what does "substantially continuous" mean within the context of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: The way I read this is that, for the most part, it goes from one end to the other.

BY MR. ZAMBRZYCKI:

Q. Okay. And when you say, "for the most part," what does that mean?

MR. OEHLER: Same objections.

THE WITNESS: Different words for that -- some layers might touch the two sides of the board; some layers might not.

BY MR. ZAMBRZYCKI:

Q. Is "substantially continuous," is this again a term that depending on who, that it's -- it's a subjective quantification of when something is or is not substantially continuous in the meaning of the '350 patent?

MR. OEHLER: Same objections.

THE WITNESS: I think this is substantially continuous, it's going to be when some people look at those layers or the majority of the people looking at those layers are going to think that a -- there's more layers going from one end to the other.

BY MR. ZAMBRZYCKI:

Q. Now, when you say, "going from one end to the other," so you're saying to be continuous, you have to go from one end to the other; is that right?

MR. OEHLER: Same objection. Also to the extent it mischaracterizes testimony.

THE WITNESS: They don't stop in the middle of the board and they start again --

BY MR. ZAMBRZYCKI:

Q. Okay. And --

A. -- for the most part.

Q. And different people in the industry can have different opinions as to when something is or is not substantially continuous within the meaning of the '350 patent; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Calls for speculation.

THE WITNESS: Don't know.

BY MR. ZAMBRZYCKI:

Q. At what point within the meaning of the '350 patent is a polymer layer no longer substantially continuous?

MR. OEHLER: Same objections.

THE WITNESS: When they interrupt, when they get interrupted.

BY MR. ZAMBRZYCKI:

Q. What do you mean --

A. For the most part, they get interrupted.

Q. What do you mean by "interrupted"?

Like, if there's a space in the middle of one, for example?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. What if another layer crosses through one layer? Would that be an interruption?

MR. OEHLER: Same objection.

THE WITNESS: It could cross each other, but if the original line is just continuing to go to the other side, I mean, it's uninterrupted. It's just crossing, in my opinion.

BY MR. ZAMBRZYCKI:

Q. Is it possible that other people in the industry would have a different opinion?

MR. OEHLER: Same objection.

THE WITNESS: Possible.

BY MR. ZAMBRZYCKI:

Q. Okay. So is there some objective metric that you can provide that explains when something -- when a polymer layer is substantially continuous and when it stops being substantially continuous within the meaning of the '350 patent?

MR. OEHLER: Same objections.

THE WITNESS: The way I see it is if it

communicates to each other, it's not interrupted. If they end at some point, then that's interrupted.

BY MR. ZAMBRZYCKI:

Q. So -- okay. So maybe we are not on the same page. So there are two different terms; right? One was substantially uninterrupted curvilinear path, and we already talked about that one; right?

Now we're talking about a polymer layer being substantially continuous. So I want to make sure we are talking about substantially continuous.

Are you saying that substantially continuous means that it's not interrupted?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. So if there is a single interruption, then that's not substantially continuous within the meaning of the '350 patent; right?

MR. OEHLER: Same objections.

THE WITNESS: The substantial part is -- when I hear the "substantial" word in there, there's going to be some of them that they are going to be uninterrupted, and there is going to be some of

them that are going to be interrupted. More of the ones that are not interrupted.

BY MR. ZAMBRZYCKI:

Q. Okay. So you don't think being substantially continuous is referring to a single polymer layer and whether that layer is continuous along its whole length? You think it's referring to the number of polymer layers that are not interrupted within the board; is that right?

MR. OEHLER: Same objections.

THE WITNESS: I'm thinking about the overall number of layers, not one single individual layer.

BY MR. ZAMBRZYCKI:

Q. Okay. And is there some quantification that you can provide us to -- like, if I wanted to avoid infringing your patent and I wanted to make plastic lumber, at what point -- what would I have to do for my plastic lumber to have polymer layers that are not substantially continuous along the first direction?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Calls for speculation.

THE WITNESS: I don't know.

BY MR. ZAMBRZYCKI:

Q. Okay. We talked a lot about the extrusion

machine that is illustrated in Figure 1 of the patent. Is that the only machine that was used in the development of the patented products to actually create those products?

MR. OEHLER: Objection. Scope. Assumes facts not in evidence. Form.

THE WITNESS: That's the only one that it was used to make the samples represented on these figures, on these pictures.

BY MR. ZAMBRZYCKI:

Q. Were there any other machines that were used that you were all able -- you were all successful in creating plastic lumber products with a wood grain pattern?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. And what other machines were used?

MR. OEHLER: Same objections.

THE WITNESS: We used different components and more extruders.

BY MR. ZAMBRZYCKI:

Q. Okay. So it was all -- it was all extrusion processes?

A. All extrusion processes, yes.

MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. And when you say you used "different components," what type of components were used?
MR. OEHLER: Same objections.
THE WITNESS: We used flow diverters. We used other mixers. We streaked the color extrusion part before entering the melt stream.
BY MR. ZAMBRZYCKI:
Q. Did any of those other processes result in successfully creating a lumber product with a wood grain pattern inside?
A. Yes.
MR. OEHLER: Objection. Scope. Calls for a legal conclusion.
BY MR. ZAMBRZYCKI:
Q. And which -- which of those other processes resulted in a wood-grained product?
MR. OEHLER: Same objections. Form.
THE WITNESS: Actually, the core -- the core, which is the internal wood grain, uses the same principle as represented here. The other processes refine the wood grain on the surface of the wood.
BY MR. ZAMBRZYCKI:
Q. Okay. I see. Got it.

All right. I am going to hand you a couple new exhibits. That's the wrong ones.

I am handing you now Exhibit 5, and again it says Exhibit 2 on the cover, and that's because it was attached to the complaint as Exhibit 2. For the purposes of today, we are going to call it Exhibit 5.

(Whereupon, Tangent (Morales) Exhibit 5 was marked for identification.)

BY MR. ZAMBRZYCKI:

Q. Do you recognize this document?

A. I've seen it before.

Q. Okay. What is it, as far as you can tell?

A. Looks like a continuation of the previous one.

Q. Okay. Is this a -- is this a design patent on which you're named an inventor?

A. Yes.

Q. Okay. And we were previously talking about the '350 patent. You understand that the '350 patent is one of the patents that Tangent is accusing RPI defendant of infringing in this case; right?

A. Yes.

Q. And do you understand that patent, Exhibit 5, which is U.S. Design Patent 819,234 -- and I'll call this the '234 patent -- do you understand this is another of the patents that Tangent is accusing RPI of infringing?

A. I know now.

Q. Okay. Fair enough.

If you take a look at Figure 2 -- let me know when you're there.

A. I'm there.

Q. Okay. Does this figure look familiar to you?

A. Yes.

Q. Okay. Would you agree that this is the same design that we saw in Figure 6 of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion.

THE WITNESS: I don't know if it's the same figure, but it's very similar to each other.

BY MR. ZAMBRZYCKI:

Q. Okay. You are one of the named inventors on this patent. I don't know if you saw that.

A. Uh-huh.

Q. Is there some additional invention that

you are aware of inventing that led to this '234 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.

THE WITNESS: Not that I'm aware.

BY MR. ZAMBRZYCKI:

Q. Do you have any reason to believe what's shown in Figure 2 is somehow different of what was shown in Figure 6 of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion.

THE WITNESS: No.

BY MR. ZAMBRZYCKI:

Q. And you're free to take a look at Figure 6 of the '350 patent to compare them side by side, if you'd like.

And it appears to me that Figure 2 is the same design, obviously, with breaks in between, but it's the same design as Figure 6 of the '350 patent except one of them is turned 180 degrees as compared to the other one.

Would you agree with that?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: They are similar to each other.

BY MR. ZAMBRZYCKI:
Q. I mean, you are the inventor of this patent. Both patents, are they the same? Are they different? You don't know?
MR. OEHLER: Form. Same objections.
THE WITNESS: They are made with the same -- with the same -- the same equipment. They could be slightly different depending on settings of the machine.
BY MR. ZAMBRZYCKI:
Q. I understand.
Do you know -- you said you had provided the drawings that were in the '350 patent. Do you know who provided the drawing that's here in the '234 patent?
MR. OEHLER: Scope. Mischaracterizes testimony. Form. Calls for speculation.
THE WITNESS: There's no drawings on this patent. There's pictures of --
BY MR. ZAMBRZYCKI:
Q. I'm sorry.
So the figures, Figures 1 and 2, do you know who provide -- where those figures came from?
MR. OEHLER: Same objection.
THE WITNESS: These pictures could have come

from Andy Stephens.
BY MR. ZAMBRZYCKI:
Q. In the '350 patent, I thought you testified earlier that what's shown in Figure 6 of the '350 patent, that you were involved in producing that image?
MR. OEHLER: Same objections.
THE WITNESS: I did.
BY MR. ZAMBRZYCKI:
Q. But you were not involved in producing Figure 2 of the '234 patent?
MR. OEHLER: Same objections.
THE WITNESS: I don't recall. It might have been me, or it might have been Andy Stephens.
BY MR. ZAMBRZYCKI:
Q. Okay. Is there any reason for you to believe that what's shown in Figure 2, that the -- would you agree that Figure 2 is showing a wood-grained design?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion.
BY MR. ZAMBRZYCKI:
Q. Of the '234 patent?
A. Yes.
Q. Sorry. I'm sorry.

Do you have any reason to believe the design shown in Figure 2 of the '234 patent is a different design than what's shown in Figure 6 of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. The document speaks for itself. Calls for speculation. Form.

THE WITNESS: The equipment that was used to make it, same equipment.

BY MR. ZAMBRZYCKI:

Q. So the answer is you don't have a reason to believe that the two figures are different?

MR. OEHLER: Same objection. Asked and answered.

THE WITNESS: The figures are close to the same, but they're -- they're -- it's not the same picture. It's a -- both of them are wood grains. Both of them were made with the same equipment.

BY MR. ZAMBRZYCKI:

Q. Okay. What makes you say that they are not the same picture?

MR. OEHLER: Same objections.

THE WITNESS: I don't believe it's the same picture. They don't look like the same picture.

BY MR. ZAMBRZYCKI:
Q. If you turn one of the figures 180 degrees and then you look at them side by side --
A. Yes.
Q. -- do you still believe they are not the same picture?
MR. OEHLER: Same objections.
THE WITNESS: It's not the same picture. You look at the -- where all the lines merge into each other at the end of the board, they merge to the top, and this merge farther to the center.
BY MR. ZAMBRZYCKI:
Q. Okay.
A. Same equipment, different setup.
Q. Oh, you think it was a different setup that created what's shown in Figure 2 of the '234 patent?
MR. OEHLER: Same objections.
THE WITNESS: The mixer was slightly tilted.
BY MR. ZAMBRZYCKI:
Q. It was slightly tilted? Is that what you said?
A. Yes.
Q. Okay. Are you saying that because that's what you recall or that's what you're deducing from

looking at the figures now?

MR. OEHLER: Objection. Scope.

THE WITNESS: I have looked at many boards, the cross-section of many boards, and I know when the last element is not horizontal.

BY MR. ZAMBRZYCKI:

Q. Okay. In any event, so Figure 2, you believe, is made using the same extrusion process that is disclosed in the '350 patent; is that right?

A. Yes.

MR. OEHLER: Scope.

BY MR. ZAMBRZYCKI:

Q. With slight modifications to the tilting; correct?

A. Correct.

MR. OEHLER: Object to the extent it mischaracterizes testimony.

BY MR. ZAMBRZYCKI:

Q. So it's the same inventors that are named on the '234 patent as on the '350 patent.

Was your respective contribution to the '234 patent the same as it was for the '350?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion.

THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And just like Figure 6 in the '350 patent, would you agree that Figure 2 in the '234 patent is intended to simulate the look of natural wood?
MR. OEHLER: Same objection.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. And, again, that was -- you all attempted to do that by looking at pictures of real wood; right?
MR. OEHLER: Same objection to the extent it mischaracterizes testimony.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And then I will now hand you Exhibit 6.
(Whereupon, Tangent (Morales) Exhibit 6 was marked for identification.)
THE WITNESS: Thank you.
BY MR. ZAMBRZYCKI:
Q. Exhibit 6, unfortunately, also has another exhibit number, which is Exhibit 3, because it's Exhibit 3 to the complaint in this case, and for

purposes of this deposition, it is Exhibit 6, and it is United States Design Patent D819,235.

Do you recognize this document, sir?

A. I have seen it before.

Q. Okay. And you're named as an inventor on this patent again with the same two co-inventors as on the other two we looked at; right?

A. Yes.

Q. Okay. And would you say that your respective contribution amongst of three of you is the same to the invention in this patent as it was for the other two?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. If you could take a look at Figure 2 of this patent. We are going to see if we agree or continue to disagree, but I wanted to see whether you -- so I'm not sure if you actually looked at the corresponding figure.

So if you still have the '350 patent next to you as well, that's Exhibit 4, I'd like you to compare Figure 2 in the '235 to Figure 10 of the '350 patent, if you can -- actually, Figure 11 --

sorry about that -- of the '350 -- do you have those -- so Figure 11 in the '350, yep, would you agree with me that Figure 11 of the '350 patent is showing the same design as Figure 2 of the '235 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion.

THE WITNESS: They appear to be the same.

BY MR. ZAMBRZYCKI:

Q. Okay. And so both of these figures, Figure 11 of the '350 and Figure 2 of the '235, would have resulted from the same process that's described in the '350 patent; right?

MR. OEHLER: Same objection. Form.

THE WITNESS: It appears to be so.

BY MR. ZAMBRZYCKI:

Q. Okay. And would you agree with me that Figure 11 in the '350 patent is actually a top view of the board that's shown in Figure 10 with a thin layer of its surface removed?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: Agree.

BY MR. ZAMBRZYCKI:

Q. Okay. Is -- without removing a thin layer

of the surface, would the top of the board that's created by the process shown in the '350 patent, would that -- would it look like what's shown in Figure 11?

MR. OEHLER: Same objections.

THE WITNESS: No.

BY MR. ZAMBRZYCKI:

Q. Okay. Would it look more like what's shown in Figure 7 of the '350 patent?

MR. OEHLER: Same objections.

THE WITNESS: Similar.

BY MR. ZAMBRZYCKI:

Q. Okay. So then what's being shown in Figure -- I want to turn your attention back to the '235 patent, what's being shown in Figure 2 there, and take a look at Figure 1 as well, if that helps you in the '235, but is -- what's being shown there, is that a design that's on the surface of a board or is that design under the surface where you have to shave off the top of the board in order to expose that design?

MR. OEHLER: Objection. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: Figure 2 shows boards that have been planed.

BY MR. ZAMBRZYCKI:
Q. Okay. And the design that's shown in Figure 2, that, again, is intended to simulate the look of natural wood; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And that look, we talked about before, was based on looking at pictures of real wood; correct?
MR. OEHLER: Same objections.
THE WITNESS: We use real wood to get the idea of what we wanted to make.
BY MR. ZAMBRZYCKI:
Q. Okay. Okay. I'm going to hand you another exhibit now, and, unfortunately, I had to print this single-sided because I had to fit this in my carry-on. Give me one minute.
Exhibit 7. Okay. So I'm handing you now what I've marked as Exhibit 7.
(Whereupon, Tangent (Morales) Exhibit 7 was marked for identification.)
BY MR. ZAMBRZYCKI:
Q. For the record, Exhibit 7 is the

prosecution history of the '350 patent, and I'll just note that I added page numbers at the bottom so that we can orient ourselves, but those were not in the original.

I don't expect you to look at every page right now, obviously, but have you -- like, flipping through this, is this anything that you've ever seen before? Does it look familiar?

A. Haven't seen it.

Q. Okay. I think you mentioned you had some involvement with the prosecution of the patents that -- well, we talked about three patents; right?

There is the one utility and the two design patents today; right?

A. Uh-huh.

Q. Were you involved with the prosecution of any of those three patents?

MR. OEHLER: Objection. Scope.

THE WITNESS: Define "prosecution."

BY MR. ZAMBRZYCKI:

Q. I was just going to ask you if you know what prosecution means. So prosecution in the context of patents is the filing of an application at the Patent Office. It's filing for the patent and then sort of having the back-and-forth with the

Patent Office where the Patent Office comes back and maybe has some objections, maybe has -- requires some modifications, and the applicants for the patent have an opportunity to sort of interact with the Patent Office as they try to get their patents issued.

So that's what's referred to as prosecution of a patent, and so with that background, did you have any involvement with the efforts to apply for either '350 or the '234, '235 patents that we talked about today?

MR. OEHLER: Objection. Scope.

THE WITNESS: Most of the efforts to get the patents were done by Andy Stephens.

BY MR. ZAMBRZYCKI:

Q. Okay.

A. I provided the drawings and then participated in the initial -- initial meeting. It was probably just one or two at the very beginning.

Q. So did Andy work with an attorney to try to get the patents filed? Do you know?

MR. OEHLER: Objection to scope. Calls for speculation.

THE WITNESS: Yes, he did.

BY MR. ZAMBRZYCKI:
Q. And beyond those initial meetings, were you involved with the process of trying to get these patents?
MR. OEHLER: Objection. Scope.
THE WITNESS: Didn't.
BY MR. ZAMBRZYCKI:
Q. Okay. Okay. Let's take a look at page 52 of 437. Okay.
Do you see the page says that it's a declaration, and you'll see at the bottom, it says -- has your name. Do you see that?
A. I see it.
Q. Okay. And there's a signature. Is that your signature?
A. That is.
Q. Okay. And it's dated October 18, 2016.
Do you recall signing this declaration?
MR. OEHLER: Objection. Scope.
THE WITNESS: Vaguely.
BY MR. ZAMBRZYCKI:
Q. Do you understand that as an inventor on these patents, you had a duty of candor and good faith in dealing with the Patent Office in trying to get these patents issued?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And do you recall signing a similar declaration for the '234 patent and the '235 patent?

MR. OEHLER: Objection. Scope.

THE WITNESS: Vaguely.

BY MR. ZAMBRZYCKI:

Q. Okay. I'd like to take you to page 196 now and just give me one second, please.

Okay. So just to orient ourselves, if you go back to page 195, you'll see that this is a communication from the Patent Office. It's dated July 13, 2018, and if we continue on to page 196, you'll see there that under this "Position of Claims," it lists that claims 1 through 15 and 17 through 25 are pending in the application, and then it says that all those claims are rejected.

Do you see that?

It's about halfway on that page.

A. This one?

Q. Yes.

A. Claim 1-15 and 17-25 are rejected. I read

that.

Q. Okay. All right. And then turn to page 199. Okay. Towards the bottom of the page, you'll see it says "Claims 1, 10, 21, and 25 are rejected under 35 USC 103 as being unpatentable over Piedbouef (U.S. 7,204,944)."

Do you see that?

A. I do.

Q. Okay. If you follow along with me here, again, this is a notification from the Patent Office to the applicants. I don't know who on your end was prosecuting this. Well, let me take a step back.

So you mentioned that -- is it Andy Stephens? Andrew Stephens?

A. Correct.

Q. So was Andrew Stephens sort of the -- was he sort of the point person from Tangent for interfacing with the attorney that was filing this patent application?

MR. OEHLER: Objection. Scope.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Did you ever talk to the attorney?

And I don't want to know anything you

talked about, but did you ever talk to the attorney in connection with prosecuting the patent application?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: I don't remember talking to them.

BY MR. ZAMBRZYCKI:

Q. Okay. Was anyone else at Tangent involved past those initial meetings with the process of filing these applications?

MR. OEHLER: Objection. Scope. Calls for speculation.

THE WITNESS: To the best of my recollection, it was Andy Stephens. It might have been somebody else, but he was the point person.

BY MR. ZAMBRZYCKI:

Q. Was anyone at Tangent responsible for identifying prior art to give to the Patent Office in connection with prosecuting the patent application or was that something done by the attorneys?

MR. OEHLER: Objection. Scope. Form. Calls for speculation. Calls for a legal conclusion.

THE WITNESS: Again, to the best of my recollection, it was the attorneys.

BY MR. ZAMBRZYCKI:

Q. Okay. Let's turn back to page 199 that I had started to talk about and got a little sidetracked.

So that bottom paragraph that says "Regarding claims 1, 10, 21, and 25, Piedbouef teaches processes for creating color effects and extrudable material (column 1, line 8 through 10). The process includes the steps of providing a first and second stream of viscous materials of different colors and combining those streams feeding them into a helical static mixer shown in Figure 3 (column 1, line 49 to 63). The system additionally includes a die, a feed block, and at least two extruders as shown below with the static mixer (column 1, line 44 to 56, Figure 1)."

You've never seen this before, sir?

A. I don't recall seeing it.

Q. I'll represent to you, to the extent it's helpful that, again, it's a communication in which the examiner is saying that the claims that were pending at the time are rejected as being unpatentable over this prior art called Piedbouef, and that was part of the explanation.

And, of course, you guys all got the

patents later. So I'm not suggesting you didn't. I'm just trying to orient you as to what we're looking at.

Are you familiar with the Piedbouef reference that the examiner mentioned here?

MR. OEHLER: Objection to scope.

THE WITNESS: I remember the name. I don't remember reading this paragraph.

BY MR. ZAMBRZYCKI:

Q. In what context do you remember the name?

MR. OEHLER: Objection. Form.

THE WITNESS: Prior art or a previous patent for similar efforts.

BY MR. ZAMBRZYCKI:

Q. Do you remember that prior art because that was some prior art that you were aware of before this patent application was filed, or how did you come to learn of Piedbouef?

MR. OEHLER: Objection to form. Scope.

THE WITNESS: One of those initial meetings that came up. I remember that name.

BY MR. ZAMBRZYCKI:

Q. Are you the person who found Piedbouef?

A. No, I am not.

Q. So if you turn to the next page, the next

payment shows Figures 1 and 3 of Piedbouef.

Do you see that?

A. Uh-huh.

Q. You can see in Figure 1 there are three extruders. Do you see that?

A. Yes.

Q. And those all lead into a feed block and a static mixer and into a die.

Do you see that?

A. Yes.

Q. Would you agree this is a similar setup as to the extrusion setup that's disclosed in the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: In the eyes of the beholder. Again, this is three extruders. The other one is two extruders. So if -- it's not the same. Similar, you can say it's similar.

BY MR. ZAMBRZYCKI:

Q. And the static mixer is shown in Figure 3 below.

Do you see that?

A. Yes.

Q. And any reason to disagree with the

examiner that this is a helical static mixer?
MR. OEHLER: Objection to form. Calls for a legal conclusion.
THE WITNESS: No.
BY MR. ZAMBRZYCKI:
Q. Okay. Would you agree the static mixer shown in Figure 3 here is similar to the static mixer shown in Figure 5 of the '350 patent?
MR. OEHLER: Objection. Scope. Form. Legal conclusion.
THE WITNESS: Similar, yes.
BY MR. ZAMBRZYCKI:
Q. Is there something different about it?
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. That you can tell from looking at the figure?
A. Can't tell. Diameter might be different. Number of elements is not the same. Similar, yes.
Q. If we look at page 201, first full paragraph, the examiner says, "It is noted that the system taught by Piedbouef is nearly identical to the system which forms the simulated natural wood-grained polymer board as claimed by the applicant and that the system as designed by

applicant's specification is formed by the input of two different materials, having two differing colors, which are then mixed through a static mixer similar to the one shown above taught by Piedbouef, and then extruded to form the board as shown in Figures 1 and 5 through 5G. The examiner notes that the processing two polymer materials having differing colors taught by Piedbouef would ultimately result in the" -- "in a plastic sheet having the shape of a board and would be formed of, quote, 'a first set of polymer layers generally extending along the length direction and containing a first colorant, a majority of the first set of polymer layers extending along the length of the entire board; the second set of polymer layers generally extending along the length direction and containing a second colorant different than the first colorant; a majority of the second set of polymer layers extending along the length of the entire board; and wherein a plurality of individual layers of the first and second sets of polymer layers alternate within the board and extend along a substantially uninterrupted curvilinear path originating proximate the first side of the board and terminating proximate to the second side of the

board' as required by claim 1."

Follow along with me there?

A. Yes.

Q. Would you disagree that the system shown by -- in Piedbouef is nearly identical to the system which forms the claimed inventions in the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: Can't tell. This is just described as a feedback. Can't tell the way the three or the two extruders are feeding material, and they're merging into one melt flow. So I wouldn't say identical.

BY MR. ZAMBRZYCKI:

Q. Other than the feed block, would you agree that the system taught is nearly identical to the system shown in the '350 patent?

MR. OEHLER: Same objections.

THE WITNESS: Well, again, without looking at the cross-section of that die, leaving the feed block aside, don't know what the inside die looks like.

BY MR. ZAMBRZYCKI:

Q. Okay. So --

A. So, again, identical, I wouldn't say it's identical or nearly identical.

Q. So it would be helpful here to be able to see the cross-section coming out of the static mixer to compare what the cross-section would look like coming out of Piedbouef; is that right?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. I'd like you to turn to page 250 of the same exhibit, and you'll see -- actually, you'll see on the next page, 251, that this was submitted on September 13, 2018, by an attorney named Mark J. -- I may mispronounce his name -- Nahnsen. Are you familiar with Mr. Nahnsen?

A. I don't recall hearing his name.

Q. Okay. Are you familiar with the law firm he's listed at, Barnes & Thornburg LLP?

A. Yes.

Q. Okay. Is that, to your knowledge, the law firm you worked with to obtain these patents?

A. That was changing to a law firm for patents and other legal matters.

Q. Okay. All right. So then going back to page 250 and feel free, of course, if you want to

orient yourself more in the document, you're welcome to do that, so just pause me.

So this is the response to the Office Action we were just looking at. So this is a response to what the examiner said, and on page 250, the bottom paragraph, that says "Here the Office Action fails to make a prima facie case of obviousness by not considering all of the claim limitations and misconstruing the same. See MPEP 2143.03. Specifically, the Office Action makes a blanket conclusion, without support in the cited references or otherwise, that the result of the process described in Piedbouef would ultimately result in the claim structures of the present application. Yet, the Office Action admits that the cited references failed to show these specific structures. The Office Action also fails to describe how one skilled in the art could arrive at the claimed structures simply by reviewing the processes of the cited references without undue experimentation or the benefit of hindsight bias from the disclosure of the present application. Indeed, hindsight bias is clear as 'knowledge gleaned only from applicant's disclosure' is used in the rejection of the claims."

Do you see that?
A. I do. A lot of legal language here.
Q. Fair enough. And I'm trying to think of how to ask you questions about this in a fair way.
So in the '350 patent, obviously, we looked at Figure 5, which had images of the cross-sections of the product that would be coming out of this static mixer; right?
MR. OEHLER: Objection. Scope. Form.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And as we talked about here, in Piedbouef, it was just a picture of a static mixer, but there was no showing of what the cross-sections would be of those products coming out; right?
MR. OEHLER: Objection. Scope. Form.
THE WITNESS: We didn't see any product made with the -- with his system -- with his equipment.
BY MR. ZAMBRZYCKI:
Q. With Piedbouef?
A. Right.
Q. And so do you have an understanding whether -- whether -- if Piedbouef had shown cross-sections of the product coming out of that static mixer, do you have an understanding as to

whether it would have been possible to know if that product would result in a wood grain pattern?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: It could.

BY MR. ZAMBRZYCKI:

Q. So images of the cross-section would be helpful to deciding -- to knowing what the cross-section of the final product of a given process would be; right?

MR. OEHLER: Same objection.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And who made a decision to file an application for a patent for the '350 patent?

MR. OEHLER: Same objections.

THE WITNESS: Andy Stephens.

BY MR. ZAMBRZYCKI:

Q. Did you have any input into that decision?

MR. OEHLER: Same objections.

THE WITNESS: We all spoke about it, and we determined that it was a -- it was a good thing to do.

BY MR. ZAMBRZYCKI:

Q. Okay. So you agree with that decision?

A. Yes.
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. Was there any -- was there any disagreement among any of the inventors as to whether a patent application should be filed for the invention that's claimed in the '350 patent?
MR. OEHLER: Same objections.
THE WITNESS: No disagreements that I'm aware.
BY MR. ZAMBRZYCKI:
Q. Okay. Was there any concern amongst the inventors that you would not be able to get a patent because the product that you were trying to patent was actually made by a process that was already known?
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. In the industry?
A. No.
Q. That never came up?
MR. OEHLER: Same objections.
THE WITNESS: It didn't, that I -- that I recall.
BY MR. ZAMBRZYCKI:
Q. Okay. I want to turn back to page 32 of

this same document. Are you there?
A. I am there.
Q. Okay. And so I'll just represent to you that this is -- so this is part of the original -- not the provisional but the original application that was filed in connection with the '350 patent, and on page 32, which I don't actually -- here you go, page 32, would you agree that this is the same Figure 5 that we saw in the '350 patent?
MR. OEHLER: Objection. Scope. The document speaks for itself.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. Where did this -- these images in Figure 5 come from?
MR. OEHLER: Objection. Scope. Calls for speculation. Form.
THE WITNESS: This figure came from a company called StaMixCo.
BY MR. ZAMBRZYCKI:
Q. And how -- how do you know that?
MR. OEHLER: Same objections.
THE WITNESS: I bought different mixers from that company. This mixer as well as other mixers.

BY MR. ZAMBRZYCKI:

Q. Okay. So when you're saying, "this mixer," you're saying the mixer shown in Figure 5, the one that was actually used in the development of the product that was claimed in the '350 patent, that was a mixer you bought from StaMixCo?

A. No, I bought some mixers from StaMixCo. The initial testing that it was done to make the initial testing was homemade. It was made in-house. Helical mixer, they are helical mixers, both of them, but the samples that were made or the mixer that was used to make this lumber that represents this pictures, I don't recall where that one comes from. It might have been one of our homemade mixers or we purchased that from somebody else in the -- that makes helical mixers.

Q. Okay. So what we are looking at in Figure 5 of the '350 patent, and we're seeing it here in this exhibit as well, you're saying that image came from a company called StaMixCo?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And so when -- do you know when that image was created by StaMixCo?

MR. OEHLER: Same objections.
THE WITNESS: I do not.
BY MR. ZAMBRZYCKI:
Q. Do you know when you obtained that image?
MR. OEHLER: Same objections.
THE WITNESS: Don't recall.
BY MR. ZAMBRZYCKI:
Q. Was it you personally who obtained this image from StaMixCo?
MR. OEHLER: Same objections.
THE WITNESS: It was sent over to me by somebody at StaMixCo.
BY MR. ZAMBRZYCKI:
Q. Okay. And who made the decision to put this image in the patent?
MR. OEHLER: Same objections.
THE WITNESS: Had to be Andy Stephens.
BY MR. ZAMBRZYCKI:
Q. Okay. And did you -- are you the one who shared this image with Andy?
MR. OEHLER: Same objections.
THE WITNESS: Probably.
BY MR. ZAMBRZYCKI:
Q. And so even though this image was not something -- so what's shown in this image is not

a -- it's not something that you all developed; right?

MR. OEHLER: Same objections.

THE WITNESS: No.

BY MR. ZAMBRZYCKI:

Q. Okay. And okay. I'm going to hand you another exhibit.

THE STENOGRAPHER: Do you want to take a break?

MR. ZAMBRZYCKI: Sure.

THE VIDEOGRAPHER: Off the record at 3:06.

(A short break was taken.)

THE VIDEOGRAPHER: Back on the record at 3:14.

(Whereupon, Tangent (Morales) Exhibit 8 was marked for identification.)

BY MR. ZAMBRZYCKI:

Q. I am handing you now what I've marked as Exhibit 8, and this is the provisional application that was filed before the full application for the '350 patent was filed.

I suspect the answer is going to be the same as before, but if you can flip through and let me know whether you've seen this document before, sir.

A. I have not. Some sections of it, I have.

Some pictures, some pages, I have seen them previous.

Q. So, again, I'll -- as I've already represented, this is the provisional application that was filed in connection with trying to get the '350 patent issued, and I'd like you to take a look at Figure 1 in this document, if you can. I think it's the second page.

All right. Do you see that that's -- well, do you recognize this figure?

A. I do.

Q. Okay. And how do you recognize this?

MR. OEHLER: Objection. Scope.

THE WITNESS: I seen this picture in color in the past, the original one.

BY MR. ZAMBRZYCKI:

Q. Is this -- does this look like the same Figure 1 that we saw in the '350 patent?

MR. OEHLER: Objection. Scope. The document speaks for itself.

THE WITNESS: It looks to be the same, yes.

BY MR. ZAMBRZYCKI:

Q. And it looks like there is a different, maybe additional, handwriting and some different numbers but sort of the same machines being

illustrated; right?

MR. OEHLER: Same objection.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:

Q. Do you recognize -- do you know whose handwriting this is on Figure 1?

A. Andy Stephens.

Q. Okay. You can just recognize it or you know that separately?

How do you know that that's Andy's handwriting?

A. I recognize the handwriting.

Q. Okay. And did you work with Andy to come up with the labels for each of the parts that are labeled here?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: I don't remember working with him labeling this drawing or this sketch.

BY MR. ZAMBRZYCKI:

Q. If you look at element 40, it says "mixer with Element Inserts Sections 1, 2, 3, 4...."

Do you see that?

A. 40. See 41. Where is 40? Oh, 40. Yes.

Q. Okay. And that's pointing to the same component that was marked as the flow divider in

Figure 1 of the '350 patent; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. The document speaks for itself.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:

Q. Okay. If you turn, please, to page 20 of 32 -- and I should mention the numbers out of 32 were also added on our end just to make this more manageable.

Are you on page 20, sir?

A. Yes.

Q. Okay. If you look at paragraph 0039, it begins by saying "Static mixer 40 with element inserts 41 through 47."

Do you see that?

A. Yes.

Q. Do you know why in the provisional application that element was referred to as a static mixer, but then by the time that the full utility application was filed, it got changed to being referred to as a flow divider?

MR. OEHLER: Objection. Scope. Form. Calls for speculation.

THE WITNESS: I do not know.

BY MR. ZAMBRZYCKI:
Q. So that's not a decision that you made?
MR. OEHLER: Same objection.
THE WITNESS: I didn't.
BY MR. ZAMBRZYCKI:
Q. Okay. And then same paragraph, if you go one, two, three, four, five, six, seven lines down in that paragraph, paragraph 39, it says "Preferably helical static mixers are used as shown in Figure 7."
Do you see that?
A. I see it.
Q. If you turn to page 7, please -- sorry -- Figure 7, which is on page 4 of 32 -- okay. Are you on Figure 7?
A. I am.
Q. Okay. Would you agree that this is the same image that we saw in Figure 5 of the '350 patent.
MR. OEHLER: Objection. Form. The document speaks for itself. Scope.
THE WITNESS: Appears to be the same.
BY MR. ZAMBRZYCKI:
Q. Okay. And is this also an image that you received from StaMixCo?

MR. OEHLER: Same objections.

THE WITNESS: I do not know. If it is the same picture, it is. If it's a different picture, static mixer pictures are readily available on the web.

BY MR. ZAMBRZYCKI:

Q. And they were readily available on the web before this provisional application was filed as well; right?

MR. OEHLER: Same objections.

THE WITNESS: Didn't look for them back then. I happened to have -- I happened to run into them when I was looking for a mixer for a different application.

BY MR. ZAMBRZYCKI:

Q. Okay. And so previously you mentioned that you were provided the image in Figure 5 from StaMixCo, but then now you're saying that you ran into this on the Internet on your own. I'm not sure I'm following.

A. Both. Both. I had seen them -- I seen them on the web, and when I purchased a different mixer from StaMixCo, they would send me a package with all of their offerings.

Q. Okay. And, obviously, if this is in the

application, you must have ran into this before the application was filed; right?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And you would agree that the -- we talked about the static mixer at the top, Image 7, but the images below that are labeled -- well, each one of them is 24 and 20; right?

These are the same images we saw in Figure 5A through 5G of the '350 patent; right?

MR. OEHLER: Objection. The document speaks for itself.

THE WITNESS: They appear to be the same.

BY MR. ZAMBRZYCKI:

Q. I am going to hand you another exhibit. This is Exhibit 9.

(Whereupon, Tangent (Morales) Exhibit 9 was marked for identification.)

BY MR. ZAMBRZYCKI:

Q. Let me know if you recognize this.

A. I don't remember seeing this one. Well, I remember seeing the second page or some images on the second page. I don't remember seeing

the first page.

Q. Okay. And which images do you remember seeing?

A. The one on the bottom of the second page, Figure 3.

Q. Figure 3. Okay.

A. I remember seeing Figure 2.

Q. Okay.

A. The image at the top.

Q. Do you remember seeing these online, or where do you remember seeing these?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: On the package that StaMixCo sent to me.

BY MR. ZAMBRZYCKI:

Q. I forgot to ask something.

When we were looking at the provisional application and we were looking at Figure 1 with the handwriting that you said was Andy Stephens' handwriting, you mentioned that you had seen a color version of that figure; right?

A. Yes.

Q. Okay. When we were looking at Figure 6 through 11 of the '350 patent, if you recall those are the wood grain cross-sections and also

surfaces, did you also have color pictures of those?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. Is that something that you still have?

MR. OEHLER: Same objection.

THE WITNESS: Have to check. I should.

BY MR. ZAMBRZYCKI:

Q. Fair enough.

And -- sorry -- now, back to what we were just talking about, Exhibit 9. You mentioned you had seen Figure 3 before. That's in Exhibit 9; right?

A. Yes.

Q. Okay. And you would agree that that figure, that's the same image that we've now seen in both the provisional application and in the '350 patent itself; right?

MR. OEHLER: Objection. Mischaracterizes testimony. Scope.

THE WITNESS: It appears to be the same.

BY MR. ZAMBRZYCKI:

Q. And if you take a look at the top of the

first page, I'll represent to you that we got this by using the Wayback Machine.

Are you familiar with the Wayback Machine?

A. No.

Q. No? Okay.

So I'll just represent to you that it's a web page where you can try to get historical versions of web pages, and so you're able to, if you plug in, like, Tangent's website today, you can try to get versions of it 10 years ago, 15 years ago, whenever they happened to save them. In any event, so that's how we got this.

And the version of this web page that we pulled was dated December 9, 2008. Do you have any reason to believe that this static mixer that's shown in Figure 3 of this Exhibit 9 did not exist as of 2008?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: No, I don't have a reason to believe that it did not exist back then.

BY MR. ZAMBRZYCKI:

Q. Okay. And in the very first line under "Principles of Operation," it says "For more than 40 years, static mixers (also known as motionless

mixers) have been successfully used as inline mixers for the mixing/dispensing" -- sorry -- "/dispersing reaction and heating/cooling of high and low viscosity liquids, slurries, gases, and the multi-phase contacting of gases, solids, and liquids," and then it goes on.

Would you agree that -- assuming this is, in fact, from December 2008, would you agree that for -- do you have any reason to believe that static mixers were not used for at least 40 years before that?

MR. OEHLER: Objection. Scope. Form. Calls for speculation. The document speaks for itself.

THE WITNESS: I don't believe -- I believe -- they've been in service for a very long time. I don't know how far back, helical static mixers.

BY MR. ZAMBRZYCKI:

Q. Okay. I am going to hand you another exhibit, Exhibit 10.

(Whereupon, Tangent (Morales) Exhibit 10 was marked for identification.)

BY MR. ZAMBRZYCKI:

Q. All right. Do you recognize Exhibit 10?

A. I have seen this pages before.

Q. Okay. I'm just -- I'll actually note two things for the record so that it's there.

So Exhibit 9 was a Wayback Machine printout from StaMixCo-USA.com/principles-of-operation/default.html, and, again, that was from the Wayback Machine dated December 9, 2008.

And then Exhibit 10 is titled "StaMixCo Mix It Up," "SMB Extrusion Melt Blender," Bulletin SMB-3.1.

You said you've seen these pages before. Where have you seen these before, sir?

A. From the package that StaMixCo sent over to us, and they also have available -- they have this available on their website.

Q. Do you know how long this has been available on their website?

MR. OEHLER: Objection. Scope. Calls for speculation.

THE WITNESS: I do not know.

BY MR. ZAMBRZYCKI:

Q. Do you recall when StaMixCo sent over the package to you that included this document?

MR. OEHLER: Objection. Scope.

THE WITNESS: No, I do not know, do not remember.

BY MR. ZAMBRZYCKI:

Q. It was before the filing of the provisional application, though; right?

A. It did.

Q. And, to your knowledge, this was also available online prior to the filing of the provisional application; right?

MR. OEHLER: Objection to form. Scope. Calls for speculation.

THE WITNESS: I don't remember if they have -- if it was all of this pages that were available online. Could have been. But then the package they sent over to me, it looked like more complete, more of it.

BY MR. ZAMBRZYCKI:

Q. Okay. If you take a look at the last page, please, and all the way at the bottom, all the way in the fine print, it says "Copyright 2007" -- "2007 StaMixCo LLC."

Do you see that?

All the way on the bottom left, very, very last thing on the bottom left.

A. I don't see the copyright part, but I see the note "We believe the information contained in this brochure is correct. However" --

Q. Is there not right under that --
A. Oh, the last one -- the last part: "We reserve the right to modify the design and construction of our products based on new findings and developments."
Q. And right under that, do you see it says "Copyright 2007 StaMixCo"?
A. Oh, yes, I do.
Q. And all the way to the right of that, it says "SMB-3.1," and it has a date of 2/9/07.
Do you see that?
A. I see.
Q. Okay. Any reason to believe that this brochure, or whatever you want to call it, was not available as of 2007?
MR. OEHLER: Objection. Scope. Form. Calls for speculation.
THE WITNESS: I don't know.
BY MR. ZAMBRZYCKI:
Q. Okay. Fair enough.
All right. I'd like you to turn to page 10 of this document and take a look at Figure 20.
All right. And are you looking at Figure 20 there, sir?

A. I am.
Q. Okay. And, again, this is the same picture that's included in Figure 5 of the '350 patent; right?
MR. OEHLER: Objection. Form. The document speaks for itself. Calls for speculation. Scope.
THE WITNESS: It appears to be the same.
BY MR. ZAMBRZYCKI:
Q. Okay. Two quick ones I want to show you.
I'm handing you what I've marked as Exhibit 11, and, for the record, I'll represent that this is the prosecution -- actually, this is excerpts from the prosecution history of the '234 patent.
(Whereupon, Tangent (Morales) Exhibit 11 was marked for identification.)
BY MR. ZAMBRZYCKI:
Q. For our purposes, there is just one page I want to ask you about, but do you recognize any of this material that's in Exhibit 11, sir?
A. I don't.
Q. I'd like you to turn to page 29. Are you on page 29?
A. I am.

Q. Okay. You'll see your name is listed at the bottom of this declaration.

Do you see that?

A. I do.

Q. Okay. And is that your signature under the declaration?

MR. OEHLER: Objection. Scope.

THE WITNESS: It is.

BY MR. ZAMBRZYCKI:

Q. Okay. And it is signed October 18, 2016; right?

A. Correct.

Q. Do you recall signing this declaration?

A. Vaguely.

Q. Okay. Handing you now what I've marked as Exhibit 12.

(Whereupon, Tangent (Morales) Exhibit 12 was marked for identification.)

BY MR. ZAMBRZYCKI:

Q. And, for the record, this is excerpts from the prosecution history of the '235 patent.

Do you recognize this, sir?

A. No, I don't.

Q. Okay. I'd like you to turn to page 29

again, and, again, I just want to confirm that's your signature at the bottom of this declaration?

A. It is.

Q. And that's dated October 18, 2016; right?

A. Right.

Q. And do you recall signing this declaration in connection with prosecution of the '235 patent?

A. Vaguely.

Q. Okay. You can set that aside.

All right. I am handing you now Exhibit 13.

(Whereupon, Tangent (Morales) Exhibit 13 was marked for identification.)

BY MR. ZAMBRZYCKI:

Q. And as best as I can tell, this is a Tangent brochure, but we'll talk about it shortly.

Do you recognize this document, sir?

A. I have seen -- I have seen it.

Q. Okay. Is this a Tangent marketing brochure, or what is this?

MR. OEHLER: Objection. Scope. Form.

BY MR. ZAMBRZYCKI:

Q. As far as you know?

A. This looks like a web page images from our

web page, from Tangent's web page.

Q. Okay. If you turn to the second page, it says "Why Tangent?" Do you see that?

A. I do.

Q. Right above that, there's a picture of -- do you know what that's a picture of?

A. Yeah. That's a two by six with wood grain.

Q. Okay. And so is that an example of a Tangent plastic lumber product having a wood grain design that's claimed in the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Do you know if the wood grain plastic lumber products are more or less expensive than the non-wood grain plastic lumber product that Tangent sells?

MR. OEHLER: Objection. Scope. Form.

THE WITNESS: I believe they are more expensive.

BY MR. ZAMBRZYCKI:

Q. The wood-grained products are?

A. Yes.

Q. Do you know how much more expensive?
MR. OEHLER: Same objections.
THE WITNESS: Don't know.
BY MR. ZAMBRZYCKI:
Q. How does -- maybe you already answered this at the beginning so I'll get an objection that you did.
But how does Tangent currently manufacture its wood-grained products?
MR. OEHLER: Objection. Form.
THE WITNESS: Some of it is made with the current components that we've seen on Figure 1, and some of it is made with the different components.
BY MR. ZAMBRZYCKI:
Q. But which components -- what do you mean by that?
Are there different models that are made one way and different models made another way?
MR. OEHLER: Objection. Form.
THE WITNESS: There is -- we do not have enough materials to make all of the components we make with wide grain for both types. So the ones that we don't have components to make it with the latest -- with the latest design, we make them with the original design or the original setup.

BY MR. ZAMBRZYCKI:

Q. Okay. And you mentioned the setup has changed due to some refinements?

A. Streamline.

Q. Streamline. Okay.

And do you use a static mixer presently?

A. We do.

Q. How many mixing elements does that static mixer have?

A. Six or seven. I don't recall if it's six or seven.

Q. Okay. And those are helical? It's a helical static mixer?

A. There's two different -- there's three different kind of mixers that are being used, one of them being the helical mixer for the -- for the wood grain throughout.

Q. Okay.

A. And different mixers for the surface of the board.

Q. What kind of mixers are used for the surface of the board?

A. The mixers that are shown on the StaMixCo pages.

Q. Okay. Let's take a look at that. So

let's go back to Exhibit 10.

A. So for the surface of the board, we use a helical mixer followed by a -- one of the two -- one of the SMB -- SMB mixers followed by another component that is not shown on this pages.

Q. When you say, "SMB mixers," which ones are you referring to?

It looks like there's several models as far as I can tell.

A. 4050-8, SMB-440/50-8.

Q. Which page are you on, sir? That would make it --

A. Page 7.

Q. And where are you reading the model -- oh, I see in the chart.

A. The bottom, bottom section of the page.

Q. Okay. So the SMB-R-type mixers, is that what you're talking about?

A. That's one of the three different mixers that are used for a surface of the board.

Q. Okay. But for the inside of the board, you're just using the static helical mixer?

MR. OEHLER: Objection. Form.

THE WITNESS: Correct.

BY MR. ZAMBRZYCKI:
Q. If you look at page 3 of this document?
A. Yep.
Q. You see there is three types of mixers there, SMB-R, SMB-GX, and SMB-H.
Do you see that?
A. Yes.
Q. Okay. If you were to use the SMB-GX mixer instead of the helical mixer, would you expect to have a wood grain pattern throughout the core of the plastic lumber products?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.
THE WITNESS: I predict that you will have lines on both directions, horizontal and vertical or layers, but this is just a hypothesis of what you will get with that.
BY MR. ZAMBRZYCKI:
Q. To your knowledge, has Tangent ever tried using a mixer, the type of SMB-GX mixer, to try to create the wood grain core of the products?
MR. OEHLER: Same objections.
THE WITNESS: I do not recall them using these mixers. We have these mixers, but I don't recall using this mixer on a -- on the core. We have used

the SMB-R.
BY MR. ZAMBRZYCKI:
Q. On the core?
A. On the core.
Q. And did using the SMB-R on the core result in a wood grain pattern?
MR. OEHLER: Same objections.
THE WITNESS: Similar.
BY MR. ZAMBRZYCKI:
Q. So if it's similar, why -- well, would using the SMB-R instead of the SMB-H result in having polymer layers that are substantially continuous along -- along the length of the board?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Misstates testimony. Form. Calls for speculation.
THE WITNESS: You will have continuous lines, but you will also have additional lines, my prediction on that, and some samples we ran with them, you'll have the horizontal lines as well as some vertical lines.
BY MR. ZAMBRZYCKI:
Q. So if you take a look at Figure 12, this is on page 6 -- okay -- there is some cross-sections being shown there of what you would

get using the SMB-R static mixer; right?

A. Uh-huh.

MR. OEHLER: Objection. Scope. The document speaks for itself.

BY MR. ZAMBRZYCKI:

Q. And do any of those cross-sections there, would you consider any of those to have a wood-grained appearance within the meaning of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation.

THE WITNESS: Don't appear so.

BY MR. ZAMBRZYCKI:

Q. Would you consider the lines -- let me just get the right language.

Would you consider any of those cross-sections to be showing a product that would have polymer layers that are curvilinear?

MR. OEHLER: Same objections.

THE WITNESS: There's some curvilinear lines in here.

BY MR. ZAMBRZYCKI:

Q. Which -- so the cross-sections there are numbered 1 through 16. Which ones are you looking at where you believe that there's curvilinear

lines?
MR. OEHLER: Same objections.
THE WITNESS: 5, 6, and 7.
BY MR. ZAMBRZYCKI:
Q. Okay. And would you consider those lines to be substantially uninterrupted within the meaning of the '350 patent?
MR. OEHLER: Same objections.
THE WITNESS: I wouldn't.
BY MR. ZAMBRZYCKI:
Q. You would not?
A. I would not.
Q. Okay. At least in 5, 6, and 7, you would consider those to be curvilinear; right?
A. Uh-huh.
MR. OEHLER: Same objection.
BY MR. ZAMBRZYCKI:
Q. Okay. Let's take a look at Figure 17, which is two pages later. Okay. Do you see at the bottom there --
A. I'm sorry.
Q. I'm sorry. It's page 8. Page 8.
A. Okay.
Q. Okay. And at the bottom, there is a picture of the cross-sections resulting from the

SMB-GX static mixer.

Do you see that?

A. Yes.

Q. Okay. And not unlike Figure 5 in the '350 patent, first, you've got the mixing elements shown, and then under that, it appears to be the cross-sections following each mixing element.

Do you see that?

A. I do.

MR. OEHLER: Objection. Form.

BY MR. ZAMBRZYCKI:

Q. Okay. And do you see a --

MR. OEHLER: Sorry, to be clear, are you speaking to -- with the images in the very bottom of the Figure 17 or kind of in the middle?

MR. ZAMBRZYCKI: Oh, sure. So I was speaking about the images directly below the mixer, so above the COVR.

BY MR. ZAMBRZYCKI:

Q. Okay. Is that -- were we on the same page there, sir?

A. Yes.

Q. And in any of those cross-sections, would you consider the polymer layers in any of those cross-sections to be curvilinear within the meaning

of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Calls for speculation. Form.

THE WITNESS: I don't think I would consider that curvilinear, no.

BY MR. ZAMBRZYCKI:

Q. In any of those cross-sections, would you consider any of those layers to be substantially uninterrupted within the meaning of the patent?

MR. OEHLER: Same objections.

THE WITNESS: I do think that they're substantially uninterrupted.

MR. ZAMBRZYCKI: Which cross-sections?

MR. OEHLER: Same objections.

THE WITNESS: All of them. What you're seeing here is a cut view of it. So you're looking at the -- that line in the middle that is cut into two halves is the mixer itself. So as you remove the mixer, those lines are going to connect to each other.

BY MR. ZAMBRZYCKI:

Q. Okay. So on this one, you consider these to be substantially uninterrupted within the meaning of the '350 patent but not curvilinear; right?

MR. OEHLER: Same objections.
THE WITNESS: They still have a curvature on them. So I'll say those are curvilinear and uninterrupted.
BY MR. ZAMBRZYCKI:
Q. Would you consider these cross-sections to have a wood-grain-like appearance?
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. Within the meaning of the '350 patent?
A. My opinion, yes.
Q. Okay. I would like if you can go back and grab the '234 patent out from your pile there. It should be the -- it should be Exhibit 5.
I'm showing you Exhibit 14. I am handing you Exhibit 14, and Exhibit 14 is the First Amended Complaint for patent infringement in this case.
(Whereupon, Tangent (Morales) Exhibit 14 was marked for identification.)
BY MR. ZAMBRZYCKI:
Q. And I'd like you to turn to page 4, if you could, please.
Okay. You should have a bunch of -- there should be a heading with "Nature" and then a bunch

of designs under that.

Do you see?

A. Uh-huh.

Q. Okay. And I'd like you to open up the '235 patent to Figure 2.

MR. OEHLER: Sorry. '234 or '235?

MR. ZAMBRZYCKI: Did I screw up the numbers? I might have screwed up the numbers. Let's see.

What I did hand you guys? '234 or '235?

MR. OEHLER: You told us to grab Exhibit 5, which is the '234.

MR. ZAMBRZYCKI: I see. Okay. So, I believe. No. I think I screwed up. I want to make sure I've got my numbering all straight here. Yeah. I was wrong.

BY MR. ZAMBRZYCKI:

Q. So if you can grab Exhibit 6, please, which is the '235 patent.

Okay. If you could take a look either at Figure 1 or Figure 2, whichever you prefer, in the patent, and then I want you to tell me whether you believe which, if any, of the designs on page 4 of Exhibit 14 you believe are substantially the same as the design shown in the '235 patent.

MR. OEHLER: Objection. Scope. Calls for a

legal conclusion. Form.

MR. ZAMBRZYCKI: Sorry. I misspoke on the patent number. So let me redo that. I screwed up the two patents.

BY MR. ZAMBRZYCKI:

Q. I'd like you to tell me which, if any, of the designs on page 4 of the Amended Complaint are, in your view, substantially the same as the design in the patent, the '235 patent.

MR. OEHLER: Same objections.

THE WITNESS: Can't compare.

BY MR. ZAMBRZYCKI:

Q. Why not?

A. Because the one, it hasn't been planed, and the other one is planed.

Q. I'm sorry. What do you mean by that?

A. Well, the --

MR. OEHLER: Same objections.

THE WITNESS: These pictures here were taken from bores that were planed. They were -- the skin was removed.

BY MR. ZAMBRZYCKI:

Q. You're talking about the '235 patent now; right?

A. Yes.

Q. Okay.
A. And these pictures over here don't show -- they haven't been planed. If you put the skin back on here, then they are going to look very similar to this, but now we're talking about the surface of the board. We are not talking about the core.
Q. Okay. So you're saying that the image in the '235 patent that we talked about earlier, that's actually when the board is planed; right?
A. Correct.
Q. Okay. And the images of the Nature products that we're seeing on page 4, those are not planed; right?
MR. OEHLER: Same objections.
THE WITNESS: To the best of my knowledge and based on these pictures.
BY MR. ZAMBRZYCKI:
Q. And because of that, you said you can't even compare the two; right?
A. Cannot.
Q. Okay. So looking at --
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. So it's not fair to say that the pictures we are looking at on page 4 are basically the same

as the planed surface that we're looking at in the '235 patent; right?

MR. OEHLER: Same objections.

THE WITNESS: Can't compare.

BY MR. ZAMBRZYCKI:

Q. Okay. And then just looking at page 4 of the Amended Complaint, there is two, four, six, eight, ten designs there. Would you agree with me each of those designs is substantially different from each of the other ones?

MR. OEHLER: Same objections.

THE WITNESS: "Substantially different than"?

BY MR. ZAMBRZYCKI:

Q. Let me ask it differently.

There's ten designs shown there; right?

A. Yes.

Q. Okay. Would you -- do you believe that all ten of those are basically the same as all the other ones?

MR. OEHLER: Same objections.

THE WITNESS: To each other?

BY MR. ZAMBRZYCKI:

Q. Yeah.

A. In my opinion, they were made with the same setup, with the same equipment. The one on

the top right, the Pecan Pie mixer was oriented different than the rest of them.

Q. Okay. Would you agree that each of these ten designs have different colors?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Would you agree that the -- do you believe that these look like wood grain designs?

MR. OEHLER: Same objections.

THE WITNESS: I say it's an attempt to make it look like wood grain.

BY MR. ZAMBRZYCKI:

Q. Okay. And do you think, in your view as an inventor on the '235 patent, are any of these designs ones that you would not consider to be wood grain?

MR. OEHLER: Objection. Form. Scope. Calls for a legal conclusion.

THE WITNESS: Talking about the surface of the -- surface of the boards, I think this is very similar to the '235 -- the ones from the '235.

BY MR. ZAMBRZYCKI:

Q. But the '235 is planed and these are not?

A. Okay. So the -- what's the other --

Q. Are you looking for the utility patent?
A. Yes.
Q. If your counsel wants to ask you about that, that's fine. I want to focus on the design that's shown -- I want to focus on a couple of things.
One is would you agree with me the designs on these ten different designs are different from one another?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.
THE WITNESS: They are different colors, the same design.
BY MR. ZAMBRZYCKI:
Q. Okay. You'd agree that the wood grain -- the graining is different on each of these designs; correct?
MR. OEHLER: Same objections.
THE WITNESS: I'll say the -- I said they are different, and they were made with the same equipment.
BY MR. ZAMBRZYCKI:
Q. Just looking at them, they all look different to one another; right?
MR. OEHLER: Same objections.

THE WITNESS: Yeah, they look different colors.
BY MR. ZAMBRZYCKI:
Q. And the graining is different amongst them; right?
MR. OEHLER: Same objections. Asked and answered.
THE WITNESS: The color makes them look different, yes.
BY MR. ZAMBRZYCKI:
Q. And the curvature of the graining is different amongst them; right?
MR. OEHLER: Same objections.
THE WITNESS: Curvature of the color.
BY MR. ZAMBRZYCKI:
Q. Curvature of the graining, sir?
MR. OEHLER: Same objection.
THE WITNESS: Pattern, pattern looks different.
BY MR. ZAMBRZYCKI:
Q. The patterns of each one are different from one another; right?
MR. OEHLER: Same objections.
THE WITNESS: They look to be different, yes.
BY MR. ZAMBRZYCKI:
Q. And the thickness of the graining is different in each one; right?

MR. OEHLER: Same objections.
THE WITNESS: I say they are similar.
BY MR. ZAMBRZYCKI:
Q. So the thickness of the graining in Pecan Pie is the same or similar as the thickness of the graining in Stone?
MR. OEHLER: Same objections.
THE WITNESS: No, they are not exactly the same. They are similar. Similar.
BY MR. ZAMBRZYCKI:
Q. What's similar about Pecan Pie and Stone, for example?
MR. OEHLER: Same objections.
THE WITNESS: Other than the color, I mean, you got blurs going on the linear direction of both of them.
BY MR. ZAMBRZYCKI:
Q. And the location of the dark versus lighter colors is different between -- actually, amongst all of these designs; right?
MR. OEHLER: Same objections.
THE WITNESS: The color makes it -- the base color is different than the accent color. So when you look at that, you see the top of the board on the Stone you're mentioning. The Pecan Pie, if you

look at it, you're going to see it is lighter color on the top on both boards and a darker color in the middle. Pecan -- Pecan Pie has a darker line towards the -- of the center to the bottom, a blur on the linear direction of the board.

BY MR. ZAMBRZYCKI:

Q. And no other design has that dark line that you just mentioned; correct?

MR. OEHLER: Same objection.

THE WITNESS: It is a lighter line, most likely, because there was less of an accent color on that one.

BY MR. ZAMBRZYCKI:

Q. Let me -- let me see if maybe I can just -- would you agree that each of these designs is unique?

MR. OEHLER: Same objections.

THE WITNESS: It's a unique color, yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And you don't think that the graining is unique?

MR. OEHLER: Same objections.

THE WITNESS: I said they are from the same family.

BY MR. ZAMBRZYCKI:

Q. I understand, sir.

So even if they are all produced using the same extrusion machine, which I don't know if they are or they are not, whatever difference happens during production, I don't know, but the end product, I think we can agree, looking at these ten designs, they are all unique designs; right?

MR. OEHLER: Objection. Scope. Form. Calls for speculation. Calls for a legal conclusion.

THE WITNESS: Different colors, yes.

BY MR. ZAMBRZYCKI:

Q. And different texturing?

MR. OEHLER: Same objections.

THE WITNESS: If you were to have that piece in front of you, you'll see the texture will be the same. You will feel -- you'll rub it on your hand. The texture will be the same.

BY MR. ZAMBRZYCKI:

Q. Different graining; right?

MR. OEHLER: Same objections.

THE WITNESS: Different graining.

BY MR. ZAMBRZYCKI:

Q. And that includes different amounts of graining; right?

MR. OEHLER: Same objection.
THE WITNESS: Different graining. Different graining, yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And so looking at these surfaces on page 4, because they are not planed, they are completely different than the design we are looking at in Figure 2 of the '235 patent because it is planed; right?
MR. OEHLER: Same objections.
THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. Okay. I am going to show you another exhibit.
A. Just a quick comment here --
Q. There's no question pending, sir. If your attorney wants to ask you a question, he's welcome to do that.
Handing you Exhibit 14.
MR. OEHLER: 15.
MR. ZAMBRZYCKI: Did I say 14?
MR. OEHLER: Yes.
THE WITNESS: This label is 14.
MR. OEHLER: The last one I had, unless I'm wrong --

MR. ZAMBRZYCKI: No, I am probably wrong.
MR. OEHLER: The Amended Complaint was 14.
(Whereupon, Tangent (Morales) Exhibit 15 was marked for identification.)
BY MR. ZAMBRZYCKI:
Q. Okay. So I'm handing you now Exhibit 15, which should have three images on it. Do you see that?
Okay. Would you agree that -- well, do you recognize these images?
A. I do not. They could be from an attempt to make wood grain.
Q. Okay. And do you consider the patterns on any of these three pictures here to be wood grain within the meaning of the '235 patent that we were just looking at?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.
THE WITNESS: On the surface, yes.
BY MR. ZAMBRZYCKI:
Q. And can you tell whether we're looking at the surface of these products or whether these have been planed?
MR. OEHLER: Same objections.

THE WITNESS: Surface.
BY MR. ZAMBRZYCKI:
Q. And so, again, because these are -- we're looking at the surface here, we wouldn't be able to really compare these with the design in the '235 patent because that's been planed; correct?
MR. OEHLER: Objection. Misstates testimony. Same objections.
BY MR. ZAMBRZYCKI:
Q. Okay. Would you agree with me that the designs of the three products that are on Exhibit 15, each one of them is a unique design?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.
THE WITNESS: I see it's not a unique design. I see if you were to change colors on the top one to the colors on the bottom one, the top one would look like the bottom one, and you will be able to use any one of the two on the same piece of furniture.
BY MR. ZAMBRZYCKI:
Q. Okay. But you agree that the colors for all three of those products are different?
MR. OEHLER: Same objections.
THE WITNESS: Colors are different.

BY MR. ZAMBRZYCKI:
Q. And the graining on all three is different; right?
MR. OEHLER: Same objections.
THE WITNESS: Different pattern.
BY MR. ZAMBRZYCKI:
Q. They have different patterns; right? All three?
A. Uh-huh.
Q. Okay. I'm going to show you another exhibit, if I find it. I'll get the number right this time, too. I plan on it.
Okay. So I'm now handing you Exhibit 16. Let me mark it.
(Whereupon, Tangent (Morales) Exhibit 16 was marked for identification.)
BY MR. ZAMBRZYCKI:
Q. And it's, again, images of three products. Do you recognize the products that are depicted in these pictures, sir?
A. I have not seen this pictures before.
Q. Okay. I want to focus your attention to the cross-section in these products, and I wanted to ask you whether you believe that any of these

products have polymer layers in the cross-section that are curvilinear within the meaning of the '350 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.

THE WITNESS: Picture No. 1, it does.

Picture No. 2 is close.

Picture No. 3 is farther away. It still has curvilinear lines, continuous lines, but they are in different orientations. So...

BY MR. ZAMBRZYCKI:

Q. So you said Picture No. 1, you believe, has layers that are curvilinear; right?

A. Yes.

Q. And what about Picture No. 2?

Do you believe that that has curvilinear layers in the cross-section within the meaning of the '350 patent?

MR. OEHLER: Same objections. Asked and answered.

THE WITNESS: Close, it still has the curvilinear lines.

BY MR. ZAMBRZYCKI:

Q. So when you're saying "close," that's what I'm trying to understand. So it does or it does

not have curvilinear lines within the meaning of the '350 patent?

MR. OEHLER: Same objections.

THE WITNESS: Picture No. 2, it does.

Picture No. 3, it doesn't look like it, but it's a matter of interpretation.

BY MR. ZAMBRZYCKI:

Q. Okay. But at least, as you sit here today, it doesn't look like curvilinear lines to you; right?

MR. OEHLER: Same objections.

BY MR. ZAMBRZYCKI:

Q. Is that right?

MR. OEHLER: Same objections.

THE WITNESS: Interpretation. It still has curvilinear lines on it. They don't look like the ones on Picture No. 1, which is the one described on the patent.

BY MR. ZAMBRZYCKI:

Q. Okay. So you're -- so you're thinking of the image that's described in the '350 patent; is that right?

A. I'm thinking of the description of them.

Q. Okay. Okay. So I'm not sure if I follow. Let me see. So, one, you said, yes; two, you said,

yes; and three, you said, it's open to interpretation whether those are curvilinear lines within the meaning of the patent; is that right?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. And so whose interpretation is it up to to decide whether those are curvilinear within the meaning of the patent or not?

MR. OEHLER: Same objections.

THE WITNESS: The majority of the people that look at that.

BY MR. ZAMBRZYCKI:

Q. So whoever looks at it can make their own determination of whether it's curvilinear or not?

MR. OEHLER: Same objections and mischaracterizes testimony.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. Okay. Looking at these three pictures, which of them, if any, in your view, have polymer layers that are substantially uninterrupted going from one side or -- to the other side, close to going from one side to the other side?

A. Definitely --

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.
THE WITNESS: -- 1 and 2.
BY MR. ZAMBRZYCKI:
Q. Okay.
A. And not 3.
THE STENOGRAPHER: What did you say?
THE WITNESS: And not 3.
THE STENOGRAPHER: Not 3.
BY MR. ZAMBRZYCKI:
Q. And what about in 2?
I thought to be substantially uninterrupted, you could have some specified number of interruptions that we weren't able to arrive at, but aren't there interruptions in layers shown in the second one?
MR. OEHLER: Same objections.
THE WITNESS: To me, they are uninterrupted.
BY MR. ZAMBRZYCKI:
Q. Okay. If we had a clearer picture and you could see interruptions, would that maybe change your opinion?
MR. OEHLER: Same objections. Calls for speculation.
THE WITNESS: Maybe.

BY MR. ZAMBRZYCKI:
Q. Okay. Which, if any of these pictures, do you believe has a wood grain appearance in its core?
MR. OEHLER: Same objections.
BY MR. ZAMBRZYCKI:
Q. Within the meaning of the '350 patent?
MR. OEHLER: Same objections.
THE WITNESS: 1 and 2, and I don't know about 3.
BY MR. ZAMBRZYCKI:
Q. All right. So the only ones you're sure about are 1 and 2; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes.
BY MR. ZAMBRZYCKI:
Q. Okay. And what is it about 3 that makes you hesitate?
MR. OEHLER: Same objections.
THE WITNESS: The different pattern of the lines.
BY MR. ZAMBRZYCKI:
Q. If you could take out the '234 patent -- and I'd give you the exhibit number, but I'd just make more of a mess if I do that. I want to say it

was Exhibit 5 at the bottom.

A. I got it.

Q. Okay. If you could -- so sorry -- hold on to the exhibit we just had, you were just looking at, and if you could open to Figure 1 in the '234 patent, please.

Okay. Are any of the patterns on the cross-sections of the three products we were just looking at in Exhibit 16, do you believe any of those are substantially the same as the pattern shown in exhibit -- sorry -- in the '234 patent?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Calls for speculation.

THE WITNESS: 1 and 2 are substantially the same. No. 3, I do not know.

BY MR. ZAMBRZYCKI:

Q. Well, 3 is really different; right?

MR. OEHLER: Same objections.

THE WITNESS: I don't know.

BY MR. ZAMBRZYCKI:

Q. You don't know?

A. (Witness nodding head.)

MR. OEHLER: Same objections.

BY MR. ZAMBRZYCKI:

Q. Do you think it's the same?

MR. OEHLER: Same objections.
THE WITNESS: Don't know.
BY MR. ZAMBRZYCKI:
Q. Well, who would know, sir?
If you're an inventor on the '234 patent and you don't know, who would know?
MR. OEHLER: Same objections.
THE WITNESS: I have to see an actual piece to make that determination. That picture is really a poor picture.
BY MR. ZAMBRZYCKI:
Q. Okay. So it's not immediately obvious to you, just looking at the picture of the third product here, that the pattern is substantially the same as what's shown in the '234 patent; right?
MR. OEHLER: Same objections.
THE WITNESS: Not substantially the same. It's not the same.
BY MR. ZAMBRZYCKI:
Q. It's not the same?
I'm sorry. You're saying it's not the same?
A. It's not the same.
Q. And it's not substantially the same?
MR. OEHLER: Same objection.

THE WITNESS: Correct.
BY MR. ZAMBRZYCKI:
Q. And would you agree that all three of these cross-sections in Exhibit 16 are substantially different from one another?
MR. OEHLER: Same objections.
THE WITNESS: I wouldn't say that. I'd say 1 and 2 are very similar to each other. I would say 3 is substantially different than the other two.
BY MR. ZAMBRZYCKI:
Q. Okay. As between 1 and 2, would you agree that the grain pattern is different; right?
MR. OEHLER: Same objections.
THE WITNESS: It looks like a black-and-white picture. Hard to -- but what I can tell is that the lines are curvilinear, and they go from side to side.
BY MR. ZAMBRZYCKI:
Q. There's a different -- there's a different quantity of lines in those two products; right?
MR. OEHLER: Same objections.
THE WITNESS: Yes, appears to be a different count of lines.

BY MR. ZAMBRZYCKI:
Q. And the patterns in which those lines travel are different too; right?
MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form. Calls for speculation.
THE WITNESS: Different pattern. Similar, but different, yes.
BY MR. ZAMBRZYCKI:
Q. You wouldn't confuse one for the other; right?
MR. OEHLER: Same objections.
THE WITNESS: You can put it on the same piece of furniture. That's what I would say.
BY MR. ZAMBRZYCKI:
Q. What you won't say is that they're different; right?
MR. OEHLER: Same objections. Mischaracterizes testimony.
THE WITNESS: I would say people accept it on the same piece of furniture.
BY MR. ZAMBRZYCKI:
Q. I understand. I'm not disagreeing with you there, perhaps. Maybe I am. I don't know.
But the question is when you just look at these patterns, they are different patterns in

Product 1 and 2; right?

MR. OEHLER: Objection.

THE WITNESS: Similar. Yes.

MR. OEHLER: Outside the scope. Form. Asked and answered.

BY MR. ZAMBRZYCKI:

Q. How similar are we talking?

A. Similar. I would say they follow the same pattern. It's not the same pattern, but it's very similar.

MR. OEHLER: Same objections.

BY MR. ZAMBRZYCKI:

Q. When you look at the two, then, you can tell right away that they are not substantially the same; right?

MR. OEHLER: Same objections. Asked and answered.

THE WITNESS: They are not the same. They are similar.

BY MR. ZAMBRZYCKI:

Q. You'd agree that the graining in the second one is more jagged than the graining in the first one, which is more smooth; right?

MR. OEHLER: Objection. Scope. Calls for a legal conclusion. Form.

THE WITNESS: Yes.
MR. OEHLER: It's been about an hour and a half.
MR. ZAMBRZYCKI: I was actually about to say I'm done, but I have just one more question. So if you don't mind, let's just finish up.
BY MR. ZAMBRZYCKI:
Q. When we looked at the figure in the '350 patent of the -- of what you said was the figure that you got from StaMixCo -- do you remember that?
MR. OEHLER: Objection. Scope.
THE WITNESS: Yes.
MR. OEHLER: Form.
BY MR. ZAMBRZYCKI:
Q. Why didn't anyone inform -- from Tangent, why didn't anyone inform the Patent Office that that figure was actually from the prior art?
MR. OEHLER: Objection. Form.
THE WITNESS: Don't know that answer.
BY MR. ZAMBRZYCKI:
Q. But you agree that as we -- we looked at the '350 patent, and that figure was in a section that was describing the invention and how the invention is made; right?

MR. OEHLER: Same objections. Calls for speculation.

THE WITNESS: What am I agreeing to?

BY MR. ZAMBRZYCKI:

Q. You agree that when we looked at the '350 patent, we talked about the different sections of the patent, and the Figure 5 was described and shown in a section that was describing the invention and how the invention was made; right?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

BY MR. ZAMBRZYCKI:

Q. We didn't see anything in the '350 patent that suggested that that figure was actually from the prior art; right?

MR. OEHLER: Objection. Scope. Form. Calls for speculation. Calls for a legal conclusion.

THE WITNESS: Don't know. I didn't read the whole patent.

BY MR. ZAMBRZYCKI:

Q. Okay. Would you like to take a look at it?

Do you believe there's some section in the '350 patent that identifies Figure 5 as being from the prior art instead of a part of the invention?

MR. OEHLER: Same objections.
THE WITNESS: You read it.
BY MR. ZAMBRZYCKI:
Q. I did, but, you know, I -- we, I'm sure, disagree on a lot of that, but it doesn't help me testifying to it.
So the question to you, sir, is are you aware of anything in the specification of the '350 patent that would have told the examiner that Figure 5 was actually the prior art and not part of your invention?
MR. OEHLER: Same objections.
THE WITNESS: Not aware of it.
MR. ZAMBRZYCKI: Subject to any questions your counsel may have, that's all I have for you today, sir, and I know this is not the circumstances to meet each other, but I do appreciate your time.

EXAMINATION

BY MR. OEHLER:
Q. Mr. Morales, could you open Exhibit 14 again, the Amended Complaint?
A. 14?
Q. Yes.
Can you turn to page 4, please?
Do you have any additional comments you

wanted to make regarding the images on page 4?

MR. ZAMBRZYCKI: Objection to the form.

BY MR. OEHLER:

Q. In addition to the testimony that you previously gave?

MR. ZAMBRZYCKI: That's improper. Hold on one second. That's not even a question. What's the question?

BY MR. OEHLER:

Q. Do you have any additional comments you wanted to make in regard to the images on page 4 in addition to the testimony you previously gave?

MR. ZAMBRZYCKI: Objection to form.

THE WITNESS: If any of these colors were switched over in between each other, those probably would look -- would look to a point where you can put them on the same piece of furniture. If this white is -- instead of making this white, you make that white without the browning, they would look like the same board, and vice versa, if you make the Walnut with the Pecan Pie, the Walnut will be -- you will be able to put on the Pecan Pie.

It's just a -- the colors in here deceive you and make you think that they are different, they are unique, but if you change those colors,

I mean, that board, if we change them all to a Walnut, it will all be able to be used on the same piece of furniture without seeing a difference. That's it.

MR. OEHLER: No further questions.

FURTHER EXAMINATION

BY MR. ZAMBRZYCKI:

Q. So I have just one piece of follow-up.

You are aware that on page 4 of Exhibit 14 that we're looking at, you are aware that the colors shown here are the actual colors that are on the market; right?

MR. OEHLER: Objection. Form. Scope, speculation.

THE WITNESS: I wasn't aware.

BY MR. ZAMBRZYCKI:

Q. So as long as the colors are different, so as long as there are these ten different colors, you agree these all look unique from one another; right?

MR. OEHLER: Same objections.

THE WITNESS: Yes.

MR. ZAMBRZYCKI: Okay. No further questions.

MR. OEHLER: That's all I have.

THE VIDEOGRAPHER: Off the record at 4:32.

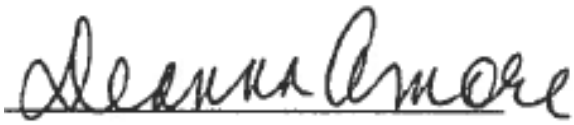
C E R T I F I C A T E

I, DEANNA AMORE, a Shorthand Reporter and notary public, within and for the State of Illinois, County of DuPage, do hereby certify:

That FRANCISCO MORALES, the witness whose examination is hereinbefore set forth, was first duly sworn by me and that this transcript of said testimony is a true record of the testimony given by said witness.

I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 16th day of March 2024.



Deanna M. Amore, CRR, RPR, CSR

James Oehler
joehler@mwe.com

March 20, 2024

RE: Tangent Technologies v. Recycled Plastics Industries
3/12/2024, 30b6/Individually Francisco Morales (#6504524)

The above-referenced transcript is available for review.

Within the applicable timeframe, the witness should read the testimony to verify its accuracy. If there are any changes, the witness should note those with the reason, on the attached Errata Sheet.

The witness should sign the Acknowledgment of Deponent and Errata and return to the deposing attorney. Copies should be sent to all counsel, and to Veritext at cs-carolinas@veritext.com.

Return completed errata within 30 days from receipt of testimony.

If the witness fails to do so within the time allotted, the transcript may be used as if signed.

Yours,
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Tangent Technologies v. Recycled Plastics Industries

30b6/Individually Francisco Morales (#6504524)

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30b6/Individually Francisco Morales Date

Tangent Technologies v. Recycled Plastics Industries

30b6/Individually Francisco Morales (#6504524)

ACKNOWLEDGEMENT OF DEPONENT

I, 30b6/Individually Francisco Morales, do hereby declare that I have read the foregoing transcript, I have made any corrections, additions, or changes I deemed necessary as noted above to be appended hereto, and that the same is a true, correct and complete transcript of the testimony given by me.

_____ _____

30b6/Individually Francisco Morales Date

*If notary is required

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265:6,12,20
266:4,7,15,21
267:4,12,20
268:3,14 269:2
269:6,13 270:7
270:16,23
zoom 42:19
43:3,24

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

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