

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

---000---

MOTIF FOODWORKS, INC.,

Petitioner,

vs.

CASE NO. IPR2023-00206

IMPOSSIBLE FOODS INC.,

Patent Owner.

DEPOSITION OF RODRIGO TARTE, PH.D.

Los Angeles, California

Thursday, September 7, 2023

Stenographically Reported by: Ashley Soevyn,

CSR No. 12019

Job No. 6082132

Pages 1 - 122

Page 1

UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD

---000---

MOTIF FOODWORKS, INC.,

Petitioner,

vs.

CASE NO. IPR2023-00206

IMPOSSIBLE FOODS INC.,

Patent Owner.

Deposition of

RODRIGO TARTE, PH.D., taken on behalf of The Patent
Owner Impossible Foods, Inc., Pursuant to Notice, at
the offices of Quinn Emanuel Urquhart & Sullivan,
865 S Figueroa, 10th Floor, Los Angeles, California
beginning at 9:04 a.m. and ending at 1:37 p.m. on
Thursday, September 7, 2023, before me, ASHLEY
SOEVYN, Certified Shorthand Reporter No. 12019.

A P P E A R A N C E S :

For the Patent Owner Impossible Foods Inc.:

WILSON SONSINI GOODRICH & ROSATI

BY: MICHAEL T. ROSATO (REMOTE APPEARANCE)

Attorney at Law

701 5th Avenue, Suite 5100

Seattle, Washington 98104

mrosato@wsgr.com

(206) 883-2529

-AND-

WILSON SONSINI GOODRICH & ROSATI

BY: CALLIE DAVIDSON

Attorney at Law

633 West Fifth Street, Suite 1550

Los Angeles, California 90071

cdavidson@wsgr.com

(323) 210-2900

A P P E A R A N C E S:

For the Patent Owner Impossible Foods Inc.:

WILSON SONSINI GOODRICH & ROSATI
BY: WENDY DEVINE (REMOTE APPEARANCE)
Attorney at Law
One Market Plaza, Spear Tower
Suite 3300
San Francisco, California 94105
wdevine@wsgr.com
(415) 947-2027

-AND-

WILSON SONSINI GOODRICH & ROSATI
BY: TASHA THOMAS
Attorney at Law
1700 K Street N.W.
Washington, D.C. 20006
tthomas@wsgr.com
(202) 973-8800

A P P E A R A N C E S:

For the Patent Owner Impossible Foods Inc.:

WILSON SONSINI GOODRICH & ROSATI

BY: LORI WESTIN (REMOTE APPEARANCE)

BY: ALICIA UMPIERRE (REMOTE APPEARANCE)

Attorneys at Law

12235 El Camino Real, Suite 200

San Diego, California 92130

lwestin@wsgr.com

aumpierre@wsgr.com

(858) 350-2300

For the Petitioner Motif Foodworks, Inc.:

QUINN EMANUEL URQUHART & SULLIVAN

BY: RAZMIG MESSERIAN

Attorney at Law

865 S. Figueroa Street, Floor 10

Los Angeles, California 90017

razmigmesserian@quinnemanuel.com

(213) 443-3000

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

INDEX TO EXAMINATION	
WITNESS: RODRIGO TARTE, PH.D.	
EXAMINATION BY:	PAGE
MR. ROSATO	9
MR. MESSERIAN	116

INDEX TO PREVIOUSLY MARKED EXHIBITS

RODRIGO TARTE, PH.D.

MOTIF FOODWORKS, INC. V. IMPOSSIBLE FOODS INC.

Thursday, September 13, 2023

Ashley Soevyn, CSR No. 12019

EXHIBIT NO.	FIRST REFERENCED
-------------	------------------

Exhibit 1003	14
--------------	----

Exhibit 1005	16
--------------	----

Exhibit 1012	22
--------------	----

Exhibit 1015	38
--------------	----

Exhibit 1129	67
--------------	----

Exhibit 1116	90
--------------	----

INDEX TO EXHIBITS

RODRIGO TARTE, PH.D.

MOTIF FOODWORKS, INC. V. IMPOSSIBLE FOODS INC.

Thursday, September 13, 2023

Ashley Soevyn, CSR No. 12019

EXHIBIT NO.	DESCRIPTION	PAGES
Exhibit 2020	Declaration of Dr. Robert McGorrin In Support of Motif's Answering Claim Construction Brief	94
Exhibit 2021	Declaration of Dr. Jerrad Legako in Support of Motif's Answering Claim Construction Brief	103
Exhibit 2019	Defendant Motif Foodworks, Inc's Answering Claim Construction Brief	111

DEPOSITION PROCEEDINGS

SEPTEMBER 13, 2023

---000---

RODRIGO TARTE,

having been administered an oath, was examined and
testified as follows:

EXAMINATION

BY MR. ROSATO:

Q Good morning, Dr. Tarte.

A Good morning.

Q Have you been deposed before?

A I have not.

Q Okay. Since this is the first time, I'll
go through a few points that will be helpful in the
discussion today. Okay?

A Okay.

Q First, is there any reason that you
cannot provide complete and accurate testimony
today?

A No, there isn't.

Q And hopefully my questions are clear and
audible. And if you can't hear or understand the
question, I would ask that you just let me know

1 that. Okay?

2 A Okay.

3 Q And this is important. Please provide
4 answers in verbal form, rather than shaking or
5 nodding your head or anything like that. Okay?

6 A Okay.

7 Q And if you need a break, we can take a
8 break. But you need to let me know that. Okay?

9 A Okay.

10 Q And if there's a question pending, you
11 have to answer the question that's pending before we
12 break. Do you understand that?

13 A Yes.

14 Q Okay. And during breaks, you're not
15 permitted to discuss the substance of your testimony
16 with counsel. Okay?

17 A Okay.

18 Q And if you have any such conversations,
19 you need to let me know about that. Okay?

20 A Okay.

21 Q Okay. Great. Are you being compensated
22 for your testimony in this proceeding?

23 A Yes, I am.

24 Q And who is providing that compensation?

25 A Quinn Emanuel.

1 Q Are you being paid an hourly rate?

2 A Yes.

3 Q What is that rate?

4 A For a deposition, \$350 an hour.

5 Q Is there a different rate for activities
6 other than depositions?

7 A Yes. That is \$300.

8 Q Does all your compensation in this matter
9 being paid at that hourly -- at those hourly rates?

10 A Yes.

11 Q Okay. In other words, you don't have any
12 financial interest in Motif FoodWorks?

13 A I do not. Correct.

14 Q And you don't have any financial interest
15 in Ginkgo Bioworks, correct?

16 A That is correct.

17 Q Other than being a witness in this IPR or
18 any IPRs with -- between the parties, do you have
19 any affiliation with Motif FoodWorks?

20 A I do not.

21 Q And the same question regarding Ginkgo
22 Bio?

23 A Exactly, I do not.

24 Q Thank you. Besides the IPRs, are you a
25 witness in any other cases for Motif?

1 A I do not. I am not.

2 Q And other than this IPR, have you ever
3 served as a consultant for Motif or for Ginkgo?

4 A No, I have not.

5 Q Okay. And how is it you came to be
6 retained as a witness in this proceeding?

7 A I was contacted by an attorney at Quinn
8 Emanuel.

9 MR. MESSERIAN: Just to interject. I
10 just want to counsel the witness not to reveal any
11 attorney-client privileged communications between
12 counsel. You can answer the question.

13 MR. ROSATO: What attorney was that?

14 THE WITNESS: I can answer the question?

15 MR. MESSERIAN: Yes.

16 THE WITNESS: So I was -- I was contacted
17 about 13 -- about 15 months ago by an attorney from
18 Quinn Emanuel regarding this case.

19 BY MR. ROSATO:

20 Q Help me with my math. 15 months ago
21 would be roughly when?

22 A It would have been probably about March
23 or April of 2022. I don't remember exactly what
24 month.

25 MR. ROSATO: I'm going to first make

1 available to you just our Exhibit Share here. But
2 let's try to get you a copy of your declaration.
3 And let me know when you have that.

4 MR. MESSERIAN: Mike? By the way, if
5 it -- if you're okay with it, I've got printed
6 copies here, without any annotations or anything
7 like that, of his declaration. And also supporting
8 exhibits. If you think that would be easier and
9 more streamlined to use rather than Exhibit Share.
10 It's up to you.

11 MR. ROSATO: That -- that's great. If
12 you have the --

13 MR. MESSERIAN: Yeah.

14 MR. ROSATO: That'd be great. If you
15 have the documents, I'm okay with that. And it's
16 very much appreciated.

17 MR. MESSERIAN: Sure. So this is your
18 declaration.

19 THE WITNESS: Okay.

20 MR. MESSERIAN: And if it comes up, these
21 are the exhibits to them. And I will help with
22 these.

23 MR. ROSATO: Let me know when you have a
24 copy of that document, Dr. Tarte.

25 THE WITNESS: I have it in front of me.

1 MR. ROSATO: And this is Exhibit 1003.
2 (Exhibit 1003 previously marked for identification.)

3 THE WITNESS: That's my understanding.

4 MR. ROSATO: And does it say Exhibit 1003
5 on the front of the document?

6 THE STENOGRAPHIC REPORTER: Mike, we are
7 marking this today at this deposition as Exhibit
8 1003, correct?

9 MR. ROSATO: This is a document that's
10 already of record.

11 THE STENOGRAPHIC REPORTER: Okay.
12 Previously marked then.

13 MR. MESSERIAN: It does not, Mike.

14 MR. ROSATO: Okay. Actually, the -- the
15 version I have is -- doesn't have the marking on it
16 either. But we all understand this to be
17 Exhibit 1003 as filed in this IPR.

18 BY MR. ROSATO:

19 Q Dr. Tarte, why don't you tell me the
20 title of the document that you're looking at?

21 A It says:

22 (As read):

23 "United States Patent and Trademark
24 Office."

25 Well, at the very top. Oh, the title down

1 here.

2 (As read) :

3 "Declaration of Dr. Tarte in Support of
4 Petition For Inter-Partes Review."

5 Q Okay. And do you recognize this as the
6 declaration you submitted in this case?

7 A Yes.

8 Q Okay. And that declaration is -- has
9 been previously submitted as Exhibit 1003 for the
10 record. Okay? Do you understand that?

11 A Yes. Yes, I do.

12 Q And did you write this declaration
13 yourself?

14 A Yes, I did.

15 Q Did you have any help?

16 A Yes, I had help from my attorneys.

17 Q Okay. Approximately how much time did
18 you spend in the preparation of this declaration?

19 A I would say probably a total of maybe --
20 maybe 35 hours. Give or take.

21 Q You cite a number of references in your
22 declaration; is that correct?

23 A Yes.

24 Q And you considered those references in
25 formulating the opinions stated in your declaration;

1 is that correct?

2 A Yes.

3 Q In forming your declaration opinions, did
4 you rely on any references that -- that are not
5 cited in your declaration?

6 A No, I did not.

7 Q Now, one of the references you do cite in
8 your declaration is the declaration of Dr. Robert
9 McGorrin, correct?

10 A Yes.

11 MR. ROSATO: Let's get you a copy of
12 Exhibit 1005 that was previously submitted. And
13 this is the declaration of Dr. McGorrin. Let me
14 know when you have that document.
15 (Exhibit 1005 previously marked for identification.)

16 THE WITNESS: I have it.

17 BY MR. ROSATO:

18 Q And who is Dr. McGorrin?

19 A My understanding is he's a faculty member
20 at Oregon State University.

21 THE STENOGRAPHIC REPORTER: He's a what?
22 Family member?

23 THE WITNESS: Faculty member.

24 THE STENOGRAPHIC REPORTER: Oh, faculty
25 member.

1 BY MR. ROSATO:

2 Q And Dr. McGorrin is a witness in this
3 IPR; is that correct?

4 A Yes.

5 Q Do you view Dr. McGorrin as an expert?

6 A Yes, I do.

7 Q What is his area of expertise?

8 A I understand it's food chemistry. Food
9 flavor chemistry.

10 Q Do you believe that Dr. McGorrin has an
11 expert understanding of the Maillard reaction?

12 A Yes.

13 Q Okay. Do you have an understanding of
14 the Maillard reaction?

15 A I have a basic understanding.

16 Q Do you believe Dr. McGorrin to be a
17 credible witness?

18 A Yes, I do.

19 Q Do you believe him to be a credible
20 scientist?

21 A Yes.

22 Q That Paragraph 77 of your declaration,
23 you state that you rely on Dr. McGorrin's
24 declaration in forming opinions in your declaration;
25 is that correct?

1 A That's correct.

2 Q Do you know Dr. McGorrin personally?

3 A I do not.

4 Q Did you know Dr. McGorrin before you
5 started working on this case?

6 A I did not.

7 Q Have you ever spoken to Dr. McGorrin?

8 A I have not.

9 Q Did you review a copy of Dr. McGorrin's
10 declaration prior to executing your declaration?

11 A Yes, I did.

12 Q When was that?

13 A Well, this would have been when my
14 declaration was. My declaration was, I believe,
15 dated December. So it would have been about that
16 time. I don't know the exact date, but.

17 Q Your declaration is dated December 7th,
18 right?

19 A Uh-huh.

20 Q And you would have reviewed Dr.
21 McGorrin's declaration prior to December 7th?

22 A Yes, about that time. Just a few short
23 days before then.

24 Q A few days before December 7th?

25 A Yes, at some point before December 7th.

1 Q Did you review draft forms of Dr.
2 McGorrin's declaration prior to executing your
3 declaration?

4 A Yes, I believe -- I believe I did. It's
5 my -- as I recall.

6 Q Did you, when you reviewed draft forms of
7 Dr. McGorrin's declaration, did you suggest edits to
8 that declaration?

9 MR. MESSERIAN: Objection.

10 THE WITNESS: No.

11 BY MR. ROSATO:

12 Q The last page of Dr. McGorrin's
13 declaration indicates that he also executed his
14 declaration on December 7th; is that correct?

15 A I don't have that in front of me. But
16 let's see. That would be -- excuse me -- on what
17 page? Can you point that to me?

18 Q Last page of Exhibit 1005.

19 A Last page. Yes, that is correct.

20 Q Did you do a comparison between the
21 drafts of Dr. McGorrin's declaration that you
22 reviewed and his final executed version?

23 MR. MESSERIAN: Objection.

24 THE WITNESS: No, I did not.

25

1 BY MR. ROSATO:

2 Q Okay. What did you do to prepare for
3 this deposition?

4 A I reviewed my declaration again. Took a
5 cursory review of Dr. McGorrin's declaration.
6 Reviewed the patents and the pertinent documents.
7 Also met with my attorney for a few hours.

8 Q When you say "the patents", are you
9 referring to the '096 patent?

10 A The '096 patents, yeah. And other prior
11 art references.

12 Q Were those the prior art references that
13 are cited in your declaration?

14 A Right. Exactly.

15 Q Were there any documents that you
16 reviewed other than the references cited in your
17 declaration?

18 A No.

19 Q Have you identified any errors in your
20 declaration?

21 A No.

22 Q Earlier we discussed the Maillard
23 Reaction. Do you recall that?

24 A Yes.

25 Q What is a Maillard reaction?

1 A The Maillard reaction is fundamentally a
2 reaction between sugars and amino acids. That -- it
3 can take place in foods at very high -- when heated
4 up to very high temperatures.

5 Q Under what circumstances does a Maillard
6 Reaction occur?

7 A Such as when cooking at very high
8 temperatures. Generally heating at high
9 temperatures.

10 Q Cooking of what types of substances?

11 A Food substances, as long as they contain
12 the precursors for the Maillard reactions. So
13 reducing sugars and --

14 THE STENOGRAPHIC REPORTER: I'm sorry,
15 Doctor. A little slower. "Precursors for the
16 Maillard Reaction"?

17 THE WITNESS: Precursors for the Maillard
18 Reaction. Such as reducing sugars and amino acids.
19 BY MR. ROSATO:

20 Q Okay. So Maillard Reaction occur when
21 cooking meat?

22 A If cooked to a high enough temperature,
23 yes.

24 Q And you mentioned amino acids. Any type
25 of amino acids?

1 A On this, I would -- I would actually
2 defer to Dr. McGorrin. In terms of what all amino
3 acids are involved.

4 Q Does a Maillard reaction occur when
5 cooking bread?

6 A It is my understanding it does, yes.

7 Q What about when toasting marshmallows?

8 A I don't know.

9 Q Your declaration discusses a reference to
10 Brown; is that correct?

11 A Yes.

12 MR. ROSATO: Let's get you a copy of the
13 Brown reference. Which has been previously
14 submitted as Exhibit 1012 in this proceeding.
15 (Exhibit 1012 previously marked for identification.)

16 MR. MESSERIAN: That's right there.

17 THE WITNESS: Okay. I have it.

18 MR. ROSATO: You have it. Great.

19 MR. MESSERIAN: Rodrigo, when you're
20 answering the questions, try to take it slowly and
21 clearly so the court reporter can pick it up.

22 THE STENOGRAPHIC REPORTER: Thank you.

23 THE WITNESS: Okay.

24 BY MR. ROSATO:

25 Q Turn to Paragraph 363 of Brown and let me

1 know when you're there.

2 A I'm there.

3 Q Okay. The first sentence of Paragraph
4 363 reads that:

5 (As read):

6 "Some reactions that generate odorants
7 released during cooking of meat can be
8 catalyzed by iron."

9 Do you see that?

10 A Yes, I do.

11 Q Okay. In the next sentence it states
12 that:

13 (As read):

14 "In some embodiments, some of the
15 characteristic flavor and fragrant --
16 fragrance components are produced
17 during the cooking process by chemical
18 reactions catalyzed by iron."

19 Do you see that?

20 A Yes.

21 Q What chemical reactions are catalyzed by
22 iron during the cooking process?

23 A I am not sure. I would defer to Dr.
24 McGorrin on those specific reactions.

25 Q Okay. Let's turn to the discussion of

1 Brown -- of the Brown reference at Pages 37 and 38
2 of your declaration. And let me know when you're
3 there.

4 A I'm there.

5 Q At Paragraph 80 of your declaration you
6 mention:

7 (As read):

8 "Brown being generally directed to a
9 meat substitute composition."

10 Do you see that?

11 A Yes.

12 Q Okay. The last sentence in Paragraph 80
13 of your declaration states:

14 (As read):

15 "Brown discloses that the meat
16 substitute includes a heme-containing
17 protein, e.g., soy leghemoglobin."

18 Do you see that?

19 A Yes.

20 Q What is leghemoglobin?

21 A Leghemoglobin is a -- my understanding --
22 an ox -- oxygen storage protein that's found in the
23 -- in root nodules and leguminous plants. Such as
24 soy beans for example.

25 Q It's a heme containing protein?

1 A It is a heme containing protein, yes.

2 Q It's a -- and that protein is produced by
3 plants?

4 A Yes.

5 Q You reference at Paragraph 80, the
6 reference to Brown's meat substitute cites Paragraph
7 364 of Brown; is that correct?

8 A Yes.

9 Q Turn to Paragraph 364 of Brown and let me
10 know when you're there please.

11 A I'm there.

12 Q And what meat substitute in Paragraph 364
13 of Brown are you referring to?

14 A Okay.

15 Okay. So in Brown's Paragraph 364
16 there's a reference to aroma meat replicas. And --
17 and then they go on to talk about a muscle replica.
18 That contains, among other things, leghemoglobin.

19 THE STENOGRAPHIC REPORTER: Among other
20 things? Sorry, Doctor.

21 THE WITNESS: Among other things,
22 leghemoglobin.

23 BY MR. ROSATO:

24 Q There are two compositions listed in
25 Paragraph 364 of Brown; is that correct?

1 MR. MESSERIAN: Objection.

2 THE WITNESS: It is clear to me that
3 muscle replica is being talked about. They talk
4 about -- they talk about replicas. They talk about
5 muscle replica. It's not entirely clear to me what
6 that second one would be.

7 BY MR. ROSATO:

8 Q Okay. The first line of Paragraph 364
9 references meat replicas, correct?

10 A Correct.

11 Q And then the next line, there's a colon
12 followed by the next line. That refers to a:

13 (As read):

14 "Muscle replica comprising pea pro --
15 excuse me -- pea flour, sunflower oil,
16 and glucose heated in the presence of
17 leghemoglobin."

18 Do you see that?

19 A Yes.

20 Q Also mentions:

21 (As read):

22 "A muscle replica comprising pea flour,
23 sunflower oil, and glucose that's
24 heated in the presence of a mixture of
25 iron, sodium, and EDTA."

1 And do you see that?

2 MR. MESSERIAN: Objection.

3 THE WITNESS: Yes, I see that.

4 BY MR. ROSATO:

5 Q My question about two compositions was
6 whether this paragraph is listing those as alternate
7 compositions for meat replica?

8 MR. MESSERIAN: Objection. Form.

9 THE WITNESS: Can you repeat that please?

10 BY MR. ROSATO:

11 Q Now that you've looked at Paragraph 364
12 of Brown, there are two compositions listed in
13 Paragraph 364 of Brown, correct?

14 MR. MESSERIAN: Objection.

15 THE WITNESS: Yes, there would appear to
16 be two compositions listed.

17 BY MR. ROSATO:

18 Q In Paragraph 80 of your declaration,
19 you're referring to the meat composition including
20 leghemoglobin, correct?

21 A Yes.

22 Q Okay. Let's turn to the discussion of
23 Ground 1 involving the Brown reference. Which
24 begins at Paragraph 107 of your declaration. Let me
25 know when you're there.

1 A I'm there.

2 Q Okay. At Paragraph 107 you state that,
3 in your opinion, Brown discloses all the limitations
4 of Claim 1, correct?

5 A Yes.

6 Q At Paragraph 109 you state:

7 (As read):

8 "Brown provides exemplary compositions
9 for muscle replicas."

10 Do you see that?

11 A Yes.

12 Q And a few lines down you discuss Brown
13 further teaching a meat substitute product. Do you
14 see that?

15 A Yes.

16 Q What is the difference between a muscle
17 replica and meat substitute products at Brown?

18 A I think that might depend on the -- on
19 the usage. On the specific usage of it.

20 Q Paragraph 109 of your declaration refers
21 to muscle replicas, correct?

22 A Right.

23 Q Paragraph 109 also refers to a meat
24 substitute product, correct?

25 A Right.

1 Q As you were discussing those terms, what
2 do you understand the difference between muscle
3 replica and a meat substitute products at Brown to
4 be?

5 MR. MESSERIAN: Objection. Form.

6 THE WITNESS: Well, in the context of
7 Brown, Brown teaches that the muscle replica is
8 added to a meat substitute product. So in that
9 context they are distinct.

10 BY MR. ROSATO:

11 Q And according to your testimony here, a
12 muscle replica is added to a meat substitute,
13 correct?

14 A As taught by Brown, yes.

15 Q Okay. The claim element addressed here,
16 starting at Paragraph 108 of your declaration, is a
17 food flavor additive composition; is that right?

18 A Yes.

19 Q And what, according to your testimony, is
20 the food flavor additive composition of Brown? Is
21 it Brown's muscle replica?

22 MR. MESSERIAN: Objection. Form.

23 THE WITNESS: Yes, in this case it would
24 be. It is -- it is Brown's muscle replica.

25

1 BY MR. ROSATO:

2 Q And earlier we're -- we were discussing
3 Paragraph 364 of Brown, correct?

4 A Right.

5 Q And Paragraph 364 of Brown is cited here
6 in Paragraph 109 of your declaration; is that right?

7 A Yes.

8 Q As we discussed earlier, the first line
9 of Brown Paragraph 364 mentions meat replicas. Do
10 you recall that?

11 MR. MESSERIAN: Objection. Form.

12 THE WITNESS: Yes, it talks about
13 leghemoglobin contributing to the aroma of meat
14 replicas.

15 BY MR. ROSATO:

16 Q Okay. When you cite to Brown Paragraph
17 364 here, what meat replica composition are you
18 referring to?

19 MR. MESSERIAN: Objection. Form.

20 THE WITNESS: Repeat the question please?

21 BY MR. ROSATO:

22 Q When you cite to Brown Paragraph 364 here
23 at that Paragraph 109 of your declaration, what meat
24 replica composition are you referring to?

25 MR. MESSERIAN: Objection. Form.

1 THE WITNESS: The composition comprising
2 pea flour, sunflower oil, glucose, and
3 leghemoglobin.

4 BY MR. ROSATO:

5 Q Okay. Let's turn to Paragraph 54 of your
6 declaration, where you address the claim element 1A.
7 And let me know when you're there.

8 A I'm there.

9 Q And the claim element here is an isolated
10 heme containing protein; is that correct?

11 A Are you talk -- excuse me. Can you
12 repeat what -- which paragraph again?

13 MR. MESSERIAN: Counsel, I think you're
14 referring to Page 54.

15 MR. ROSATO: Page 54, that's correct.

16 THE WITNESS: Okay. I'm there.

17 BY MR. ROSATO:

18 Q Okay. And the claim element addressed
19 here is an isolated heme containing protein,
20 correct?

21 A Correct.

22 Q In Paragraph 116 of your declaration you
23 identify leghemoglobin; is that correct?

24 A Yes, that is correct.

25 Q And you cite to Paragraph 364 of Brown,

1 right?

2 A Yes.

3 Q And in the same paragraph you state:

4 (As read):

5 "Brown teaches extracting soy
6 leghemoglobin from plants."

7 Correct?

8 A Yes.

9 Q Go to Page 56 of your declaration where
10 you address Claim Element 1B. And let me know when
11 you're there please.

12 A Okay. I'm there.

13 Q Paragraph 119 of your declaration, you
14 cite to Paragraph 364 of Brown, correct?

15 A Yes.

16 Q And you list a quote there from Brown
17 Paragraph 364; is that right?

18 A Yes.

19 Q And in that quote you have the word
20 "glucose" in bold text. Do you see that?

21 A Yes.

22 Q What is the purpose of emphasizing the
23 word glow -- glucose in bold text?

24 A Glucose is a -- is a Maillard reaction
25 precursor.

1 Q Okay. Do you see in the heading where
2 you list the language of Claim Element 1B?

3 A Yes.

4 Q And -- and that claim language states:

5 (As read):

6 "A compound selected from glucose,
7 ribose, fructose."

8 And those other compounds. Other -- other
9 components. Do you see that?

10 A Yes.

11 Q Okay. In Paragraph 119 you've identified
12 glucose in bold text; is that right?

13 A Right.

14 Q Did you identify glucose in bold text
15 because you were matching glucose to the claim
16 language?

17 A Yes, to point out that glucose is
18 included there.

19 Q Let's turn to the next section where you
20 address Element 1C. That starts at the bottom of
21 Page 56 there. Do you see that?

22 A Yes.

23 Q On the next page at Paragraph 121 of your
24 declaration, you cite to Brown Paragraph 364; is
25 that correct?

1 A Yes.

2 Q And in Paragraph 121 you say the pea --
3 the term "pea flour" in bold text. Do you see that?

4 A Yes.

5 Q What's the significance of marking pea
6 flour in bold text?

7 A Pea flour is a source of sulfur
8 containing amino acids.

9 Q And similar to the previous Element, pea
10 flour is what you're mapping to the claim language
11 here, correct?

12 A Yes.

13 Q Let's turn to Pages 60 and 61 of your
14 declaration, where you address Claim Element 1E.
15 And let me know when you're there.

16 A I'm there.

17 Q Yeah. So down in Paragraph 134, you
18 state that it is:

19 (As read):

20 "It was well-known that heating a
21 composition containing cystine and
22 glucose produces volatile compounds
23 associated with a meaty aroma/flavor."

24 Do you see that?

25 A Yes.

1 Q And there you cite to Dr. McGorrin's
2 declaration at Sections 5E and 5D; is that correct?

3 A That's correct.

4 Q Okay. You have a copy of Dr. McGorrin's
5 declaration. Let's turn to Section 5B of Dr.
6 McGorrin's declaration. At Pages 23 to 36 of
7 Exhibit 1005. And let me know when you're there.

8 A Pages 20 -- can you repeat the page
9 numbers?

10 Q Make sure I have it right. It starts at
11 Page 23.

12 A Okay.

13 Q And it goes to Page 36.

14 A Okay.

15 Q Okay. What is the title section of 5B
16 listed at Page 23 of Dr. McGorrin's declaration?

17 A (As read):

18 "Maillard reaction and Meat Flavor."

19 Q Does Dr. McGorrin cite to the Brown
20 reference in Section 5B of his declaration?

21 A Not that I can see.

22 Q While we're at it, does Dr. McGorrin cite
23 to the Giacino reference in Section 5B of his
24 declaration?

25 THE STENOGRAPHIC REPORTER: I'm sorry,

1 Mike. Can I have you repeat that again? "Does Dr.
2 McGorrin"?

3 MR. ROSATO: Does Dr. McGorrin cite to
4 the Giacino reference in Section 5B of his
5 declaration?

6 THE WITNESS: Not that I can see.

7 BY MR. ROSATO:

8 Q Let's look at Section 5D of Dr.
9 McGorrin's declaration. It starts at Page 38. Let
10 me know when you're there.

11 A I'm there.

12 Q So we're -- we're now looking at the same
13 section. Section 5D starts at Page 38?

14 A Yes.

15 Q And goes to Page 42; is that correct?

16 A That is correct.

17 Q Okay. Does Dr. McGorrin cite to the
18 Giacino reference in Section 5D of his declaration?

19 A Not that I can see.

20 Q Does Dr. McGorrin cite to the Brown
21 reference in Section 5D of his declaration?

22 A Not that I can see.

23 Q So turn to Paragraph 80 of Dr. McGorrin's
24 declaration.

25 A I'm there.

1 Q Okay. It's a little hidden, but Dr.
2 McGorrin's declaration cites to Paragraph 364 of
3 Brown there, correct?

4 A I -- I can see that.

5 Q Okay. And there Dr. McGorrin discusses
6 Brown adding leghemoglobin, correct?

7 A Yes. I can read that, yeah.

8 Q Okay. And at that Paragraph 80, does Dr.
9 McGorrin testify that Brown generated volatiles
10 associated with a meaty aroma or flavor by virtue of
11 a heat reaction between cystine and glucose?

12 MR. MESSERIAN: Objection. Form.

13 THE WITNESS: Can you please repeat that
14 question?

15 BY MR. ROSATO:

16 Q Yeah, I with -- I'll withdraw and
17 restate.

18 That Paragraph 80, does Dr. McGorrin
19 testify that Brown generated volatiles associated
20 with meaty flavor by virtue of a heat reaction
21 between cystine and glucose?

22 A Not in those words.

23 Q Let's turn back to Brown Paragraph 364.
24 And let me know when you're there.

25 A I'm there.

1 Q And at Paragraph 364, does Brown recite
2 the amino acid cystine?

3 A No.

4 Q All right. Does Brown Paragraph 364
5 state that the -- that volatiles were generated
6 specifically due to heating cystine and glucose?

7 MR. MESSERIAN: Objection. Form.

8 THE WITNESS: It does not say that. But
9 we do know that pea flour contains cystine. And
10 that would be the outcome of heating this -- this
11 mixture.

12 BY MR. ROSATO:

13 Q And what are you basing that knowledge
14 on?

15 A I base that on -- on common knowledge in
16 food chemistry when it comes to the Maillard
17 Reaction and Maillard reaction reactants.

18 MR. ROSATO: I don't think I gave you a
19 copy of Giacino, but let's do that now. Give you a
20 copy of Exhibit 1015, which has been previously
21 introduced. Let me know when you have that.
22 (Exhibit 1015 previously marked for identification.)

23 A I have it.

24 Q Okay. And do you recognize this
25 document?

1 A I do.

2 Q What is it?

3 A Excuse me?

4 Q What is it?

5 A Well, it's -- it's a patent entitled:

6 (As read):

7 "Meat Flavor Compositions".

8 Q The Giacino Reference, correct?

9 A Right.

10 Q Turn to Grounds's 2A and 2B, which start
11 on Page 74 of your declaration. And let me know
12 when you're there.

13 A I'm there.

14 Q And for this ground, you discuss the
15 combination of Giacino and Brown, correct?

16 A Yes.

17 Q You also discuss the combination of
18 Giacino, Brown, and MacLeod. Do you see that?

19 A Yes.

20 Q Okay. Turn to Page 80 of your
21 declaration, where you address the claim term food
22 flavor additive composition, please.

23 A I'm there.

24 Q Paragraph 187, you state:

25 (As read):

1 "Giacino discloses food flavor additive
2 compositions."

3 Do you see that?

4 A Yes.

5 Q And Paragraph 187 of your declaration
6 includes several citations to Giacino; is that
7 correct?

8 A Yes, that's correct.

9 Q And in Paragraph 187 there are no
10 citations to the Brown reference; is that correct?

11 A That is correct.

12 Q Turn to Page 86 of your -- of your
13 declaration, where you address Claim Elements 1B and
14 1C. And let me know when you're there.

15 A I'm there.

16 Q You discuss Giacino in Paragraph 198; is
17 that correct?

18 A Yes.

19 Q And you also discuss Giacino in Paragraph
20 199; is that correct?

21 A That's correct.

22 Q Paragraph 199 includes several citations
23 to Giacino. Do you see that?

24 A Yes.

25 Q And in Paragraph 200, you state:

1 (As read) :

2 "Hence, Giacino discloses limitations
3 1B and 1C."

4 Correct?

5 A Yes.

6 Q Okay. Let's turn to the discussion of
7 Claim Element 1D, which starts at Page 87 of your
8 declaration. And let me know when you're there.

9 A I'm there.

10 Q Okay. And Brown is discussed at the end
11 of this section, in Paragraph 206 of your
12 declaration, correct?

13 A Yes. Looking at Paragraph 206, yes.

14 Q And Paragraph 206 discusses adding
15 leghemoglobin; is that correct?

16 MR. MESSERIAN: Objection. Form.

17 THE WITNESS: Yeah. I say that Brown
18 describes methods for obtaining leghemoglobin from
19 plants --

20 THE STENOGRAPHIC REPORTER: I'm sorry,
21 "describes method"? I can't --

22 MR. MESSERIAN: You should project
23 towards the microphone.

24 THE STENOGRAPHIC REPORTER: Yeah.

25 THE WITNESS: Brown describes methods for

1 obtaining leghemoglobin -- well, let me just back up
2 here. So I state in the declaration that Brown
3 describes, at length, methods of obtaining
4 leghemoglobin from plants and genetically modified
5 yeast. Or bacteria engineered to produce such
6 non-animal proteins.

7 BY MR. ROSATO:

8 Q In the first line of Paragraph 206, it
9 mentions:

10 (As read):

11 "Adding leghemoglobin to Giacino's
12 meaty flavoring compositions."

13 Do you see that?

14 A Yes.

15 Q And in Paragraph 207, you state:

16 (As read):

17 "Hence, Giacino's meaty flavoring
18 composition, as modified by Brown,
19 contains no animal products."

20 Do you see that?

21 A Yes.

22 Q By "as modified by Brown", that includes
23 adding leghemoglobin. Am I understanding correctly?

24 A Yes.

25 Q Okay. Let's turn to Page 90 of your

1 declaration, where you address Claim Element 1E.

2 Let me know when you're there.

3 A I'm there.

4 Q Okay. In Paragraph 208, you state:

5 (As read):

6 "A POSITA would have understood that
7 eating Giacino's meaty flavoring
8 composition produces at least two
9 volatile compounds having a
10 meat-associated aroma."

11 Do you see that?

12 A Yes.

13 Q What specifically are you referring to
14 when you say "Giacino's meaty flavoring
15 composition"?

16 A Giacino provides a -- several
17 possibilities for their composition. They talk
18 about combining thiamine and taurine potentially
19 with a hydrolyzed protein not required. Or cystine
20 not required. Or glycine not required according to
21 them. Or glutamic acid. In addition, they talk
22 about adding ribose. Okay.

23 So the combination of those, because we
24 have a sugar and the -- and the amino acids,
25 would -- would result in Maillard reaction products.

1 And a minimum of two would be produced. It's
2 actually more in the hundreds of -- or thousands.

3 Q And -- okay. So what ingredients are
4 present in the Giacino compositions you're
5 identifying?

6 A Well, Giacino mentions several things.
7 So in, for instance, Column 5 of Giacino, they talk
8 about those things I already mentioned. They talk
9 about thiamine and taurine. It -- it is important
10 to note that Giacino also allows for the inclusion
11 of other elements. And if you give me a chance, I
12 could find that.

13 So for instance in Column 3 around Line
14 20 -- well, I'll start on Paragraph Line 18.

15 (As read):

16 "It has been discovered development of
17 beef flavor is especially aided when
18 the amino acid or mixtures of amino
19 acids or proteinaceous material is
20 relatively low in amino acids such as
21 phenylalanine. Suitable materials are
22 hydrolyzed proteinaceous substances
23 illustrated by animal, fish, or
24 vegetable hydrolysates."

25 And in Column 4, 20 -- 27 or 28.

1 (As read) :

2 The pre-mix compositions of the present
3 invention which are reacted to produce
4 meaty flavor reaction --

5 THE STENOGRAPHIC REPORTER: Doctor, when
6 you're reading can I ask you to please slow down --

7 THE WITNESS: I will.

8 THE STENOGRAPHIC REPORTER: -- for the
9 record?

10 THE WITNESS: I will start again. The
11 pre-mix --

12 THE STENOGRAPHIC REPORTER: Very good.

13 THE WITNESS: (As read):

14 "The pre-mix compositions of the
15 present invention which are reacted to
16 produce meaty flavor reaction mixtures
17 thus, preferably contain taurine,
18 thiamine, and source of amino acids
19 which may be any of a free amino acid
20 or mixture of amino acids or
21 proteinaceous material such as
22 polypeptides, proteins per se, or
23 hydrolysates, and autolysates of these,
24 and the like."

25 So the way I see it is, Gia -- Giacino

1 provides a range of potential possibilities here as it
2 relates to sources of amino acids for the Maillard
3 reaction.

4 BY MR. ROSATO:

5 Q And you mention a range of possibilities;
6 is that correct?

7 A A range of different -- different sources
8 of amino acids that could be included in -- in
9 Giacino's composition.

10 Q I think I heard you reference Column 5 of
11 Giacino; is that correct?

12 A That's correct.

13 Q Okay. Are you referring to the -- the
14 Lines 1 through about 10, where it lists or it
15 identifies "Particularly suitable are mixtures
16 comprising"?

17 A Yes.

18 Q Okay. And under that heading it lists --
19 if I'm counting correctly -- six different
20 ingredients; is that right?

21 A Yes. Only two of those are required.

22 Q Which two are required?

23 A Thiamine and taurine.

24 Q And what's your basis of saying that?

25 A The other four are listed at minimum zero

1 percent. So that tells me they need not be present.
2 And that's for this particular suitable mixture that
3 they're talking about.

4 Q So some of these ingredients you
5 mentioned are optional ingredients in Giacino; is
6 that correct?

7 MR. MESSERIAN: Objection. Form.

8 THE WITNESS: Yes, they are. Although
9 Giacino does mention potential benefits as to adding
10 some of these to augment the -- the meaty flavor
11 that might be obtained. Even going as far as making
12 a distinction between pork and beef flavors. And
13 what ingredients you might add to the composition.

14 BY MR. ROSATO:

15 Q And in your declaration you mention
16 Giacino's meaty flavoring composition, correct?

17 A Yes. Correct.

18 Q Okay. And your opinion is that that
19 meaty flavoring composition would satisfy aspects of
20 the '096 patent claims; is that correct?

21 A That would be -- that would be correct.
22 Although Giacino does mention that there is also
23 room for improvement in their composition. And it's
24 set forth in several parts of this patent.

25 Q So my question was: When you're -- when

1 you're referring to Giacino's meaty flavoring
2 composition, what specifically is the list of
3 ingredients you envision being present in that
4 composition?

5 MR. MESSERIAN: Objection. Form.

6 THE WITNESS: I think it's hard to say.
7 For instance, I cite Giacino Column 6 Line 15. And
8 in it, they say the meat flavor of the compositions
9 of the present invention approval. So that would
10 lead me to believe that there -- there is isn't just
11 one particular composition, but several compositions
12 that -- that are possible under Giacino.

13 BY MR. ROSATO:

14 Q I would agree with that. Which is why
15 I'm asking what composition is it that you envision
16 being compared to the '096 claims here?

17 A Well --

18 MR. MESSERIAN: Objection. Form.

19 THE WITNESS: I hadn't really thought of
20 what I envisioned. I'm just trying to stick to the
21 verbiage of Giacino.

22 BY MR. ROSATO:

23 Q What do you mean by that, "trying to
24 stick to the verbiage of Giacino"?

25 A Well, I -- I'm commenting on -- on

1 Giacino only. I, you know, and not being a flavor
2 chemistry expert myself, I have not thought about
3 what I envisioned. But what I read in Giacino and
4 what -- and what it teaches.

5 Q In your declaration, when -- when you
6 refer to Giacino's meaty flavoring composition, do
7 you have a particular composition in mind?

8 A Again, I think -- I think Giacino
9 discloses several potential compositions using a
10 variety of different ingredients. And so that is --
11 that is the -- that is what I -- the way I look at
12 it. Sticking to what Giacino is -- is actually
13 teaching. I can't say that I have one particular
14 composition in mind because it could be several.

15 Q I think I heard you refer to several
16 potential compositions; is that correct?

17 MR. MESSERIAN: Objection. Form.

18 THE WITNESS: There could be different
19 ingredients that could be combined to achieve a
20 similar effect.

21 BY MR. ROSATO:

22 Q Well, you just referred to several
23 potential compositions in discussing Giacino. Do
24 you recall that?

25 A Yes. And that is what I meant by that.

1 Q Okay.

2 A Yeah.

3 Q In your declaration, did you have any
4 particular composition in mind?

5 MR. MESSERIAN: Objection. Form.

6 THE WITNESS: Again, Giacino teaches a
7 variety of different potential ingredients that can
8 be used in what they call the compositions. Not
9 just with an individual composition. So I had not
10 thought of any particular one, for instance.
11 Because Giacino informs me that there could be
12 various possibilities.

13 BY MR. ROSATO:

14 Q You mention a variety of different
15 ingredients, correct?

16 A Yes. And particularly as it refers to
17 sources of amino acids.

18 Q So in your declaration, when you refer to
19 Giacino's meaty flavoring composition, did you have
20 a particular list of ingredients in mind?

21 MR. MESSERIAN: Objection. Form.

22 THE WITNESS: No, I just take Giacino
23 based on what they say. They talk about different
24 compositions, the various compositions. Which can
25 be a combination of several different ingredients.

1 Combinations thereof.

2 BY MR. ROSATO:

3 Q And in re -- referring to Giacino's
4 meeting -- meaty flavoring composition, you weren't
5 envisioning any particular combination of
6 ingredients; is that right?

7 MR. MESSERIAN: Objection. Form.

8 THE WITNESS: I'm not envisioning a
9 particular one. Except to say that there's some --
10 Giacino does talk about amino acids and sugars need
11 to be present. But where those are sourced from,
12 that can vary.

13 BY MR. ROSATO:

14 Q What amino acids does Giacino say need to
15 be present?

16 MR. MESSERIAN: Objection. Form.

17 THE WITNESS: In the -- in their example
18 on Column 5, they mention taurine. They also do
19 mention the possibility of adding cystine in some
20 cases depending on the -- on the situation. Give me
21 a second and hang on. Giacino also mentions the
22 possibility of adding proteins. Protein
23 hydrolysates, polypeptide -- sorry. Yeah,
24 polypeptides and so forth.

25 So they're not necessarily limited to

1 specifically -- I think Column 5 says "particularly
2 suitable are mixtures comprising." But I don't
3 think Giacino is necessarily limiting us to that.
4 They're giving us an option that clearly state
5 different protein sources in amino acids, so.
6 Protein and polypeptide sources of amino acids that
7 could result in the -- in a meat flavor composition.

8 Q I asked about what ingredients with amino
9 acids that need to be present. Do you understand
10 that?

11 A So I refer to Giacino Column 3. And I'll
12 -- I'll start Line 52.

13 (As read):

14 "When sweet meaty flavor such a pork
15 and poultry flavors are desired, good
16 results are obtained when either the
17 pre-mix or reaction product, but
18 preferably the pre-mix, is altered to
19 include, as the source of amino acid a
20 polypeptide, preferably a sulfur
21 containing a polypeptide or at least
22 one, but preferably a mixture of amino
23 acids constituents of said
24 polypeptide."

25 The sulfur containing -- I mean, my -- my

1 comment. Sulfur containing amino acids are cystine
2 and methionine.

3 (As read):

4 "It is important to emphasize at this
5 point that the taurine-thiamine
6 reaction mixture is perfectly well
7 suited, without the inclusion of
8 additional ingredients to be used as a
9 meat flavor impart -- imparting agent
10 in its own right or as a flavor
11 enhancer when added to foods already
12 having meat flavor. The modifications
13 described herein, wherein additional
14 ingredients, in the form of various
15 amino acid containing materials are
16 provided in the compositions, are
17 directed to refinements in the basic
18 flavor compositions."

19 And then they go on to say:

20 (As read):

21 "As polypeptides there may be employed
22 a lower polypeptide such as dipeptide
23 or tripeptide. By 'sulfur containing'
24 is meant that at least one of the bound
25 amino acid components of said

1 polypeptide contains sulfur."

2 Q So earlier --

3 A So --

4 Q I'm sorry. Go ahead.

5 A No, go ahead. I'm done.

6 Q So earlier you referred to the
7 composition or listed -- actually, strike that.

8 Earlier you referred to the list of
9 ingredients listed at the column of -- at the top of
10 Column 5, correct?

11 A Yes.

12 Q And some of those ingredients are
13 identified as being at zero percent; is that
14 correct?

15 A Right.

16 Q Thiamine is not an amino -- amino acid
17 that's identified as potentially being present at
18 zero percent, correct?

19 A Correct.

20 Q And taurine is an amino acid that's not
21 identified as potentially being present at zero
22 percent, correct?

23 A Right.

24 I would point out, however, that my
25 reading of -- of Giacino, that as -- as I said, they

1 emphasize that the taurine-thiamine reaction is well
2 suited, without inclusion of additional ingredients,
3 to be used as meat flavor agent in its own right.
4 Or as a flavor enhancer when added to foods already
5 having meat flavor. And then they go on to mention
6 modifications described herein, in the form of
7 various amino acid containing materials, are
8 directed to refinement.

9 So one of the basic elements of Giacino,
10 and the way I read it, is that they open the door
11 for improvement in different ways. And if you go to
12 Columns 7, 8, 9, 10, where they talk about different
13 examples. So they're not just limiting themselves
14 to thiamine and -- and taurine. But they're adding
15 other things as well.

16 Q Okay. You mention the examples that are
17 provided in Giacino's, starting at Column 7, right?

18 A Yup.

19 Q Now, I recognize you didn't cite to many
20 of these examples. But I think I heard you mention
21 that those examples list other ingredients; is that
22 accurate?

23 A Yes.

24 Q Okay. And several of those examples of
25 Giacino list fat as an ingredient; is that correct?

1 A That is correct.

2 Q When you mentioned Giacino meaty
3 flavoring composition in your declaration, is fat an
4 ingredient of the composition you're identifying?

5 MR. MESSERIAN: Objection. Form.

6 THE WITNESS: It doesn't necessarily have
7 to be. Not all of the examples contain fat.

8 BY MR. ROSATO:

9 Q And when you envision Giacino's meaty
10 flavor composition and refer to that in your
11 declaration, are you including fat as an ingredient
12 in that composition?

13 MR. MESSERIAN: Objection. Form.

14 THE WITNESS: It would depend on the --
15 on the formulation. Specific formulation of the --
16 of that composition. It could potentially contain
17 fat. It may not, so.

18 BY MR. ROSATO:

19 Q Several of Giacino's examples list a
20 mixture of disodium inosinate and disodium
21 guanylate. Do you see that?

22 A Can you point -- point it -- point to me
23 where to find it again? Sorry.

24 Q Referring to the examples in Giacino that
25 start at Column 7 that we're discussing.

1 A Yes.

2 Q When you refer to Giacino's meaty
3 flavoring composition in your declaration, are you
4 including a mixture of disodium inosinate and
5 disodium guanylate in your composition?

6 MR. MESSERIAN: Same objection.

7 THE WITNESS: I'm not necessarily
8 considering a specific composition of specific
9 ingredients, but the general learnings -- the
10 general teachings of -- of Giacino. It is obvious
11 from Giacino that there are different ways to -- to
12 create different types of meat flavor compositions.
13 As long as you have a sugar and a source of amino
14 acids. And then the -- their teachings tell me that
15 there are improvements to be able to -- to achieve
16 different types of meat -- meaty flavors.

17 BY MR. ROSATO:

18 Q So as long as you have a sugar and a
19 source of amino acids, nothing else matters in terms
20 of other ingredients; is that correct?

21 MR. MESSERIAN: Objection. Form.

22 THE WITNESS: Could you be more specific?

23 BY MR. ROSATO:

24 Q Your statement was: "As long as you have
25 a sugar and source of amino acids, that tells you

1 that you're able to achieve meaty flavors."

2 MR. MESSERIAN: Objection. Form.

3 MR. ROSATO: My question is: Do -- is it
4 your opinion that other ingredients don't matter to
5 that outcome?

6 THE WITNESS: On that, I would -- I would
7 actually defer to Dr. McGorrin. That's getting a
8 little bit outside of my -- of my basic knowledge
9 of -- of meat flavor.

10 BY MR. ROSATO:

11 Q What about water? Is water an ingredient
12 in the geo -- Giacino composition that you're
13 identifying in your declaration?

14 MR. MESSERIAN: Objection. Form.

15 THE WITNESS: Again, there is no specific
16 list of ingredients per se. As Giacino for --
17 allows for various different meaty flavor
18 compositions.

19 BY MR. ROSATO:

20 Q Does it matter, for purposes of your
21 opinion, whether water is an ingredient to Giacino's
22 composition?

23 A I would not know. I would -- I would
24 defer to Dr. McGorrin on -- on that.

25 Q Okay.

1 MR. ROSATO: Let's take a break.

2 (Recess.)

3 BY MR. ROSATO:

4 Q Dr. Tarte, let's turn back to Paragraph
5 208 of your declaration, please.

6 A Okay. I'm there.

7 Q In Paragraph 208, you state:

8 (As read):

9 "That heating Giacino's meaty flavoring
10 composition produces at least two
11 volatile compounds having a
12 meat-associated aroma."

13 Do you see that?

14 A Yes.

15 Q You don't identify any specific volatile
16 compounds in this paragraph, correct?

17 A Correct.

18 Q What volatiles do you identify in your
19 declaration as necessarily being produced by heating
20 Giacino's composition?

21 A I'm not sure that I identify two specific
22 ones. But I do cite MacLeod, for instance, which
23 lists Paragraph 211.

24 (As read):

25 "A list of volatiles produced by

1 reacting cysteine and ribose, including
2 carbon disulfide, hydrogen sulfide,
3 methanethiol, furfural, pyrrole,
4 2,5-dimethylpyrazine, 2-methylthiazole,
5 among others. Carbon sulfur --
6 sulfide, hydrogen sulfide,
7 methanethiol, furfural, pyrrole,
8 2,5-dimethylpyrazine."

9 There's a number. And then towards the
10 bottom:

11 (As read):
12 "2-methylthiophen, 2-methylfuran,
13 hydrogen sulfide, formic acid, and
14 others."

15 So there is a number of -- there are
16 literally hundreds, if not thousands, of volatile
17 compounds that will be produced when heating this --
18 this composition.

19 Q You reference Paragraph 211 of your
20 declaration, correct?

21 A Correct.

22 Q And Paragraph 211 is citing the Compare
23 MacLeod reference?

24 A Right.

25 Q And you're referring to what the MacLeod

1 reference identifies as volatiles being produced
2 being heating their compositions, correct?

3 MR. MESSERIAN: Objection. Form.

4 THE WITNESS: Some -- some of the ones
5 that MacLeod identifies.

6 BY MR. ROSATO:

7 Q Did MacLeod heat a composition to
8 generate these volatiles?

9 A Could you be more specific on your -- on
10 that question?

11 Q Is it your position that heating
12 Giacino's composition would generate all of the
13 volatiles listed here on -- in Paragraph 211?

14 MR. MESSERIAN: Objection. Form.

15 THE WITNESS: I would not say -- I can't
16 know really. I mean, there -- there would be
17 hundreds of thousands -- hundreds or thousands.
18 Very likely all of them. But that is a subject -- I
19 think that's something that Dr. McGorrin could
20 comment on much -- much better than I can. In terms
21 of the specific reaction of products --

22 BY MR. ROSATO:

23 Q Do you --

24 A -- of the Maillard Reaction. Yeah.

25 Q Okay. You mentioned the Maillard

1 reaction, correct?

2 A Right. And --

3 Q And --

4 A Yeah, go ahead.

5 Q Do -- do you have an opinion whether
6 heating Giacino's composition would generate the
7 volatiles that you identify in Paragraph 211?

8 A Yes, I think they would produce those. I
9 think a -- a person of ordinary skill in the art
10 would recognize that heating such composition would
11 result in hundreds of thousands of these types of
12 compounds.

13 Q In the first sentence of Paragraph 211,
14 you mention heating ribose and cysteine, correct?

15 A Right.

16 Q Is it your opinion that heating any
17 composition having ribose and cysteine will generate
18 the volatiles that you list in the remainder of
19 Paragraph 211?

20 MR. MESSERIAN: Objection. Form.

21 THE WITNESS: Based on MacLeod, yes. I
22 think that it is known in the art that heating those
23 two at high enough temperatures would result in --
24 in these compounds, among many others.

25

1 BY MR. ROSATO:

2 Q And that's true of any composition having
3 ribose and cysteine. Is that your opinion?

4 MR. MESSERIAN: Objection.

5 THE WITNESS: I -- I would defer to Dr.
6 McGorrin on that.

7 BY MR. ROSATO:

8 Q Do you have -- do you have an opinion on
9 that?

10 A No, I do not.

11 Q Okay. Back in Paragraph 209 of your
12 declaration, you cite to Giacino. Do you see that?

13 A Yes.

14 Q Why don't you grab a copy of Giacino so
15 we can look at those citations? And let me know
16 when you have that.

17 A I have it.

18 Q One of the citations you make to Giacino
19 is Column 6, Lines 15 through 17, correct?

20 A Correct.

21 Q Okay. Does Column 6, Lines 15 through
22 17, mention the term "volatiles"?

23 A No, it does not. But it is well-known
24 that meat flavor compounds are volatile compounds.

25 Q But Giacino itself does not state that

1 it's producing volatiles here, correct?

2 A No, they don't go out and state it
3 directly.

4 Q Another citation you make is Column 6,
5 Lines 20 through 23. Do you see that?

6 A Yes.

7 Q Does Giacino here mention the term
8 "volatiles"?

9 A No, it doesn't. But it is known in the
10 art that heating this composition -- a
11 composition like this at those temperatures would
12 generate volatiles. Which are responsible for the
13 flavor.

14 Q Okay. And the other citation you provide
15 is -- to Giacino -- in Column 2, Lines 5 through 8,
16 correct?

17 A Yes. Correct.

18 Q Okay. And does Giacino here mention the
19 term "volatiles"?

20 A No, it -- no, it doesn't. But it is
21 known in the art that that would result in volatile
22 compounds.

23 Q Okay. And at Paragraph 211 of your
24 declaration, you state:

25 (As read):

1 "It was well-known in the art that
2 heating ribose and cysteine induces
3 reactions that produce a number of
4 volatile compounds that have been
5 associated with a meaty aroma."

6 Is that correct?

7 A Yes.

8 Q Okay. And at Paragraph 210, you indicate
9 that:

10 (As read):

11 "A POSITA would understand that heating
12 a reaction mix -- mixture would induce
13 a Maillard reaction."

14 Do you see that?

15 A Yes.

16 Q Okay. And is that what you're referring
17 to when you say earlier "it was well-known"?

18 A Yes.

19 Q Okay. And Paragraph 210 cites to Dr.
20 McGorrin's declaration at Sections 5B and 5D,
21 correct?

22 A Yes.

23 Q Next to the cite -- citations you make to
24 Dr. McGorrin's declaration, Paragraph 210 of your
25 declaration also cites to Exhibit 1017. Which is

1 identified as a reference to Mottram. Do you see
2 that?

3 A Yes, I do.

4 Q Okay. Let's turn to Page 87 of Dr.
5 McGorrin's declaration. And let me know when you're
6 there.

7 A I'm there.

8 Q At Page 87 Dr. McGorrin cites to another
9 Mottram reference. Which he identifies as
10 Exhibit 1129. Do you see that?

11 A Yes, I do.

12 Q Okay. And you list a quote to that
13 Mottram reference identifying the compound
14 2-methyl-3-furanthiol. Do you see that?

15 A Yes.

16 Q Is this one of the volatile compounds you
17 identify in your declaration?

18 A I'm not sure if I identified this
19 specific compound by name. But this compound would
20 fall under the category of sulfur containing
21 volatiles or thiols overall.

22 THE STENOGRAPHIC REPORTER: "Or thiols"?

23 THE WITNESS: Thiols.

24 THE STENOGRAPHIC REPORTER: Thiols.

25 MR. MESSERIAN: T-H-I-O-L-S.

1 THE STENOGRAPHIC REPORTER: Thanks.

2 MR. ROSATO: Let's get you a copy of
3 Exhibit 1129 to Mottram that was previously
4 submitted in this proceeding. Let me know when you
5 have that.

6 (Exhibit 1129 previously marked for identification.)

7 THE STENOGRAPHIC REPORTER: Did you say
8 1189?

9 THE WITNESS: 1129.

10 MR. ROSATO: 1129.

11 THE STENOGRAPHIC REPORTER: Thank you.

12 MR. MESSERIAN: So, Counsel, we don't
13 have that exhibit. If you could upload it to
14 Exhibit Share, we can view it on the screen here.

15 MR. ROSATO: Sure. Let me know when it
16 comes through.

17 MR. MESSERIAN: Try refreshing.

18 THE WITNESS: Okay. We have it.

19 BY MR. ROSATO:

20 Q Do you recognize Exhibit 1129?

21 THE WITNESS: Yes, I do. Excuse me, I
22 apologize. I clicked on Exhibit 1129, but something
23 else opened. It's Exhibit 1015. Let me go back
24 and --

25 MR. MESSERIAN: All right. There you go.

1 THE WITNESS: What's that? Wait. No.
2 Okay. Okay. I think I have to scroll.

3 MR. MESSERIAN: I think you've just got
4 to scroll.

5 THE WITNESS: Scroll. Sorry, it's my
6 mistake. Okay.

7 Yes, I am familiar with this -- with this
8 exhibit.

9 BY MR. ROSATO:

10 Q Okay. Just so we know we're looking at
11 the same thing. It should read on the front page:

12 (As read):

13 "Journal of Agricultural and Food
14 Chemistry."

15 A That's correct.

16 Q And the article itself starts at Page 7
17 of this document. Do you see that?

18 A I don't see the page number. But I
19 believe I am at the -- at the front page of that
20 article. Starts with a --

21 Q Do you see the -- okay. Do you see the
22 title of the article?

23 A Yes.

24 Q What's the -- what's the title that you
25 see?

1 A (As read) :

2 "Volatile Compounds from the Reaction
3 of Cysteine, Ribose, and Phospholipid
4 in Low-Moisture Systems."

5 Q You indicated you're familiar with this
6 article, right?

7 A Yes.

8 Q And what is described in this Mottram
9 article?

10 A Well, it's been on -- so they are
11 identifying head space volatiles. And I'm reading
12 from the abstract.

13 (As read) :

14 "From the Maillard reaction mixtures of
15 cysteine and ribose heated at 185
16 degrees Celsius with or without the
17 addition of phosphatidylcholine, either
18 dry or in the presence of a small
19 quantity of water, were analyzed by
20 GC-MS."

21 So I think that describes it here.

22 Q Okay. The abstract of Mottram discusses
23 the Maillard reaction mixtures of cysteine and
24 ribose.

25 A Right.

1 Q Heated with or without the addition of
2 phosphatidylcholine.

3 A Yeah.

4 Q And either dry -- dry or no water; is
5 that correct?

6 A Yes.

7 Q Turn to Table 1 on Page 9. And let me
8 know when you're there.

9 A I'm there.

10 Q What's described in Table 1?

11 A (As read):

12 "The Volatile Compounds Obtained from
13 Reactions between Cysteine and Ribose
14 in the Presence and Absence of
15 Phospholipid and Water."

16 Q And that's reflective of the title of the
17 table, correct?

18 A Right.

19 Q On the left side of Table 1 is a column
20 with the heading "Compound". Do you see that?

21 A Yes.

22 Q And what are those compounds listed in --
23 in that column?

24 A Those would be the volatile compounds
25 produced under this -- the test conditions of this

1 research.

2 Q Okay. And you mention --

3 A Go ahead.

4 Q Thank -- thank you. You mention the test
5 conditions, right?

6 A Yeah. It's a research paper, so.

7 Q In the middle column, under the heading
8 "Relative Concentration". Do you see that?

9 A Yes.

10 Q And that lists some of the test
11 conditions you're referring to?

12 A Presence --

13 MR. MESSERIAN: Objection. Form.

14 THE WITNESS: The presence or absence of
15 water. I recall that.

16 THE STENOGRAPHIC REPORTER: You said, "I
17 recall that"?

18 THE WITNESS: I recall those tests
19 conditions.

20 THE STENOGRAPHIC REPORTER: Okay.

21 THE WITNESS: Yeah.

22 BY MR. ROSATO:

23 Q Okay. So one test condition is the
24 presence or absence of water, correct?

25 A Yes.

1 Q Another test condition is the presence or
2 absence of phospholipid, correct?

3 A Yes. One column describes the addition
4 of phospholipid.

5 Q In that column there are different
6 symbols. Do you see those?

7 A Yes.

8 Q A plus sign, a minus sign, and the
9 abbreviation 'TR'?

10 A Uh-huh.

11 Q And what -- what does the plus sign
12 indicate?

13 A Plus signs indicate small amount.

14 Q One plus sign indicates a small amount?

15 A One plus sign, yes.

16 Q And two plus signs would indicate a
17 greater amount?

18 A Right.

19 Q And three plus signs would indicate an
20 even greater amount?

21 A Correct.

22 Q And that's the amount of the compounds
23 that are generated, correct?

24 A Yes.

25 Q What is indicated by the minus sign?

1 A Not detected.

2 Q The volatile is not detected, correct?

3 A Correct.

4 Q And what is indicated the abbreviation
5 'TR'?

6 A Present in trace amounts.

7 Q Okay. And understanding all of that,
8 what does this table communicate to you?

9 MR. MESSERIAN: Objection. Form.

10 THE WITNESS: Well, I would have to --
11 I'm not sure this is a -- an exhibit that I cite in
12 my declaration. So while I'm -- while I -- I am
13 familiar with it, I would need more time to delve
14 into it in detail and form an opinion. As to the --
15 what's taught in this reference.

16 BY MR. ROSATO:

17 Q Turn to Page 10 of this Mottram
18 reference. Let me know when you're there.

19 A I'm there.

20 Q Okay. Do you see at the bottom of the
21 left column where the author concludes that:

22 (As read):

23 "There are many different routes to the
24 formation of aroma compounds in the
25 Maillard and associated reactions, few

1 of which have been fully elucidated."

2 Do you see that?

3 A Are you talking about the -- the very
4 last paragraph on the left-hand side column?

5 Q Yes.

6 A Okay. Yes, I can -- I can read those
7 words. Yes.

8 Q And the second sentence in that paragraph
9 states:

10 (As read):

11 "The results reported here clearly
12 indicate that certain reactions are
13 more favored in dry conditions, whereas
14 others are more readily -- excuse me --
15 occur more readily in the presence of
16 large amounts of water."

17 Do you see that?

18 A I can read that, yes.

19 Q Okay. And when the author refers to
20 certain reactions, that includes the Maillard
21 reaction he discusses in the previous sentence,
22 correct?

23 MR. MESSERIAN: Objection. Form.

24 THE WITNESS: Can you repeat the
25 question, please?

1 BY MR. ROSATO:

2 Q Do you see in the second sentence where
3 the author re -- refers to certain reactions?

4 A Yes.

5 Q Do you see in the first sentence where he
6 refers to Maillard reactions?

7 A Right.

8 Q Okay. Okay. You can put this reference
9 aside. Going back to your declaration, look at
10 Paragraph 184, please. And let me know when you're
11 there.

12 A I'm there.

13 Q In the first sentence of Paragraph 184,
14 you discuss Brown adding leghemoglobin to a
15 preparation. Do you see that?

16 A Yes.

17 Q Okay. And in the second sentence, you
18 discuss Giacino's meaty flavoring compositions. Do
19 you see that?

20 A Yes.

21 Q Okay. And then in the third sentence of
22 Paragraph 184, you state:

23 (As read):

24 "A POSITA would reasonably expect the
25 same catalyzation to take place."

1 Do you see that?

2 A Yes.

3 Q And what catalyzation reaction are you
4 referring to?

5 A I'm referring to the same catalyzation
6 reaction that occurs in Brown would occur in
7 Giacino.

8 Q Is that a -- is that a Maillard reaction?

9 MR. MESSERIAN: Objection.

10 THE WITNESS: I don't know. I would
11 defer to Dr. McGorrin on that. Whether
12 leghemoglobin participates in the Maillard reaction.
13 BY MR. ROSATO:

14 Q Okay. So you don't know what reaction
15 occurs?

16 A I would defer to Dr. McGorrin on the
17 specific reaction that takes place.

18 Q Turn back to Paragraph 210 of your
19 declaration.

20 A I'm there.

21 Q So in Paragraph 210, we discussed this
22 earlier, but you refer to heating Giacino's
23 flavoring composition. Do you see that?

24 A Yes.

25 Q And you state:

1 (As read) :

2 "That heating Giacino's flavoring
3 composition produce a meaty flavor."

4 Right?

5 A Yes.

6 Q And on the next page at Paragraph 212,
7 you state:

8 (As read) :

9 "A POSITA would understand that adding
10 leghemoglobin to Giacino's flavoring
11 compositions would only further
12 contribute to the meaty aroma."

13 Do you see that?

14 A Yes.

15 Q Is it your opinion that adding
16 leghemoglobin to Giacino's composition is required
17 to generate a meaty flavor from the composition?

18 MR. MESSERIAN: Objection. Form.

19 THE WITNESS: While it's not required, it
20 would be an additional benefit. It would -- it
21 would further augment the meaty flavor and aroma.

22 BY MR. ROSATO:

23 Q Is it your opinion that heating Giacino's
24 composition without leghemoglobin would generate a
25 meaty aroma?

1 A Yes, it would generate a meaty aroma.

2 Q And you -- and you state that at the end
3 of Paragraph 212, correct?

4 A Right. I would also point out that
5 Giacino does open the door for improvements in -- in
6 the flavor given by its meat flavor composition. So
7 leghemoglobin or any other heme-containing protein
8 could potentially come in and further improve the
9 flavor.

10 Q Right. And in Paragraph 212, you state
11 that adding leghemoglobin would only further the
12 flavor, correct?

13 A Yes.

14 Q And is that the only possible outcome of
15 positive contribution to the meaty aroma?

16 A I don't know. I would defer to Dr.
17 McGorrin on that. I would not have a good answer to
18 that.

19 Q Okay. So you would defer to Dr. McGorrin
20 as to whether it's possible that adding
21 leghemoglobin would negatively impact the meaty
22 aroma?

23 MR. MESSERIAN: Objection. Form.

24 THE WITNESS: Either negatively or in any
25 other way. It's outside my area of expertise.

1 BY MR. ROSATO:

2 Q Okay. And in that same sentence of
3 Paragraph 212, you mention Brown, correct?

4 A Yes.

5 Q Specifically you mention Brown reacting
6 leghemoglobin in the presence of pea flour and
7 gluco -- glucose. Do you see that?

8 A Yes.

9 Q Okay. Now, you mention Brown. But I
10 don't see a citation to any particular paragraph of
11 Brown, right?

12 A Yes, that's correct.

13 Q And earlier we discussed Paragraph 364 of
14 Brown. Do you recall that?

15 A Yes.

16 Q And we discussed that Brown Paragraph 364
17 discusses a composition including pea flour and
18 glucose, correct?

19 A Yes.

20 Q Okay. Okay. Let's turn to the Claim
21 Construction section of your declaration. That
22 starts at Page 48. Let me know when you're there.

23 A I'm there.

24 Q Okay. The Claim Construction section is
25 Section 10, that goes from Page 48 to Page 51. Do

1 you see that?

2 A Yes.

3 Q Okay. And you list three claim terms in
4 this section; is that accurate?

5 A Yes.

6 Q Okay. And starting at Section 10A at
7 Page 48, you address the term "contains no animal
8 products". Do you see that?

9 A Yes.

10 Q And are you familiar with -- are you
11 familiar with the term "patent specification"?

12 A Yes.

13 Q Okay. And what's your understanding of a
14 patent specification?

15 A Well, if I'm not mistaken, the teachings
16 of the patent. What the patent is actually
17 specifying. I'm afraid I can't give you a better
18 definition of that. But I think I have a fairly good
19 understanding of the term.

20 Q Okay. And in your -- do Paragraphs 97,
21 98, or 99 of your declaration include any citations
22 to the '096 patent specification?

23 A None, except a mention in Paragraph 98.
24 Where the patent owner alleges, you see there,
25 myoglobin produced by fermentation --

1 THE STENOGRAPHIC REPORTER: I'm sorry,
2 Doctor.

3 MR. MESSERIAN: Slowly. Slowly.

4 THE WITNESS: Sorry.

5 THE STENOGRAPHIC REPORTER: It's okay.

6 THE WITNESS: None, except in -- in
7 Paragraph 98. In reference to the patent owner
8 alleging a practice of Claim 1 of the '096 patent.

9 BY MR. ROSATO:

10 Q Okay. Fair -- fair enough.

11 A Yeah.

12 Q Other than claim terms themselves, did
13 Paragraphs 97, 98, or 99 of your declaration include
14 any citations to the '096 -- '096 patent
15 specifications?

16 A No.

17 Q Okay. You mention that at Paragraph 97,
18 you state:

19 (As read):

20 "I understand Patent Owner has taken
21 the position".

22 Do you see that?

23 A Yes.

24 Q Okay. Where do you believe Patent Owner
25 had taken the position you identify?

1 A I cannot recall.

2 Q Okay. Was it your understanding that --
3 were you told the Patent Owner took this position in
4 a different proceeding?

5 A Yes.

6 Q Okay. And who told you that?

7 A That would be my counsel.

8 Q Okay. And from your perspective, what's
9 the significance of a Patent Owner taking a
10 position?

11 MR. MESSERIAN: Objection. Form.

12 THE WITNESS: And are you speaking
13 generically or can you be more specific?

14 BY MR. ROSATO:

15 Q Well, paragraph -- Paragraph 97, you
16 state:

17 (As read):

18 "I understand Patent Owner has taken
19 the position that you outlined there."

20 Do you see that?

21 A Yes.

22 Q And what is your -- what is
23 your understanding of the significance of allegedly
24 taking that position?

25 MR. MESSERIAN: Objection. Form.

1 THE WITNESS: Well, as I state in the
2 declaration:

3 (As read):

4 "The term 'contains no animal products'
5 should be interpreted to allow the use
6 of proteins that are native to animal
7 species, Bos taurus (the domesticated
8 cow) but are not obtained from a
9 previously live animal."

10 Q And that's your understanding of the
11 position that you just identified, correct?

12 A Correct.

13 Q And my question is: How does your
14 understanding of Patent Owner taking a position bear
15 on your understanding of the patent?

16 MR. MESSERIAN: Objection. Form.

17 THE WITNESS: Claim 1 of the '096 patent
18 it states.

19 (As read):

20 "Wherein the flavor additive
21 composition contains no animal
22 products."

23 So to me that's -- that's for that. What
24 that refers to here.

25

1 BY MR. ROSATO:

2 Q My question goes to your statement of "I
3 understand Patent Owner has taken the position". Do
4 you see that statement in --

5 A Yes.

6 Q Okay. For purposes of your analysis, why
7 does it matter that the Patent Owner has taken a
8 position?

9 MR. MESSERIAN: Objection. Form.

10 THE WITNESS: Well, it definitely -- it
11 would matter. In order to -- you must define which
12 proteins are or not of animal products. So because
13 the limitation in Claim 1 talk about a product being
14 "no animal products", it is useful to understand
15 what is meant by "animal products". And what
16 position the Patent Owner takes on that.

17 BY MR. ROSATO:

18 Q So understanding Patent Owner's position
19 influenced your understanding of what the claim
20 meant; is that correct?

21 MR. MESSERIAN: Objection. Form.

22 THE WITNESS: My -- my analysis is based
23 on the -- on the technical merits of -- of the case.
24 And so I'm not sure that I can say that it does or
25 not inform my analysis.

1 BY MR. ROSATO:

2 Q But you do mention here in Paragraph 97
3 what you identify as the Patent Owner's position,
4 correct?

5 A Right.

6 Q And you're mentioning that in this
7 section titled "Claim Construction", right?

8 A Right.

9 Q So did your understanding of Patent
10 Owner's position influence your understanding of the
11 claim term?

12 MR. MESSERIAN: Objection.

13 THE WITNESS: Well, to the extent
14 specifically here. That the -- that the Patent
15 Owner's position is that proteins that are native to
16 animal species, but not come from previously live
17 animal are not animal products, yes.

18 BY MR. ROSATO:

19 Q Okay. In interpreting the claim term
20 "contains no animal products", did you adopt what
21 you understood to be Patent Owner's position?

22 A Yes, I would. Like I stated there. It's
23 my understanding that that's Patent Owners'
24 position, so.

25 Q And what is your understanding as to what

1 makes a position determinative of what the claim
2 means?

3 MR. MESSERIAN: Objection.

4 THE WITNESS: I do not know.

5 BY MR. ROSATO:

6 Q Okay. The next paragraph, Paragraph 98.
7 Do you see where you state:

8 (As read):

9 "I am further informed and understand
10 that a claim term such as 'contains no
11 animal products' should be given the
12 same interpretation be when determining
13 a patent's validity, as in this present
14 inter partes review proceeding, as when
15 determining whether the patent is
16 infringed (as in a district court
17 litigation)."

18 A Yes, I see that.

19 Q Okay. So is your understanding that a
20 claim term must be given the same interpretation in
21 an IPR as in district court?

22 A Yes.

23 Q Okay. And in referring to Patent Owner's
24 position, is it your understanding that a claim term
25 should be interpreted in view of the position a

1 party takes?

2 MR. MESSERIAN: Objection. Form.

3 THE WITNESS: Can you repeat the
4 question?

5 BY MR. ROSATO:

6 Q Should a claim term be interpreted in
7 view of a position a party takes?

8 MR. MESSERIAN: Objection.

9 THE WITNESS: I think it can be.

10 BY MR. ROSATO:

11 Q And you say that here with regard to the
12 Patent Owner's position, right?

13 A Yes.

14 Q And is the same true for the petitioner?

15 A I do not know.

16 Q If the petitioner takes a position about
17 the interpretation of the same claim, should that be
18 factored into the analysis?

19 MR. MESSERIAN: Objection.

20 THE WITNESS: I would say I'm really not
21 sure. I would say in part of -- in this analysis,
22 probably. Yes.

23 BY MR. ROSATO:

24 Q Okay. So if the petitioner advanced a
25 completely different interpretation of a claim you

1 were interpreting, you would want to know about
2 that, right?

3 MR. MESSERIAN: Objection.

4 THE WITNESS: Yes, I would.

5 BY MR. ROSATO:

6 Q Okay. So let's turn to Section 5B of
7 your declaration. This is where you address the
8 claim term "food flavor additive composition".

9 A Okay. I'm there.

10 Q And then, actually, just to enumerate
11 what's covered here, we'll turn next to Section 10C
12 at Paragraph 105. Do you see that?

13 A Yes.

14 Q And here your declaration addresses the
15 term "a compound", correct?

16 A Can you point me to it again? I'm sorry.

17 Q Looking at Paragraph 105 on Page 59 --

18 A Okay.

19 Q -- of your declaration.

20 A Okay. Yes.

21 Q And this is Section 10C, correct?

22 A Right. Right.

23 Q Okay. And this section is addressing the
24 term "a compound"?

25 A Right.

1 Q Okay. And here you discuss the
2 independent claim terms "a compound selected from
3 glucose" and "a compound selected from cysteine",
4 correct?

5 A Correct.

6 Q And you also address the dependent Claim
7 term "a compound selected from alanine", correct?

8 A Correct.

9 Q Okay. And are there any citations to the
10 '096 specific -- specification in Paragraph 105?

11 A No.

12 Q Okay. I should say: Other than the
13 claim terms themselves, are there any citations to
14 the '096 patent specification?

15 A No.

16 Q Thank you. In Paragraph 105, you state:

17 (As read):

18 "I understand that Patent Owner has
19 implicitly taken the position in
20 litigation that these terms are not
21 limited to free compounds of claimed
22 sugars and sulfur compounds."

23 Do you see that?

24 A Yes.

25 Q Okay. And how did you come to understand

1 that Patent Owner had implicitly taken the position
2 you identify?

3 A From my counsel.

4 Q Okay. Did you conduct an independent
5 analysis of that?

6 MR. MESSERIAN: Objection.

7 THE WITNESS: No, I did not.

8 BY MR. ROSATO:

9 Q Okay. You relied on representation by
10 counsel?

11 A Correct.

12 Q Okay. Paragraph 105 of your declaration
13 cites to Exhibit 1116. Do you see that?

14 A Yes.

15 MR. ROSATO: All right. We can give you
16 a copy of that. It was previously submitted in this
17 proceeding as Exhibit 1116.

18 (Exhibit 1116 previously marked for identification.)

19 MR. MESSERIAN: I believe I've got it
20 here.

21 THE WITNESS: Okay. We have it.

22 BY MR. ROSATO:

23 Q Okay. And do you recognize this
24 document?

25 A Yes, I do.

1 Q What is it?

2 A It is a Second Amended Complaint for
3 Damages and Injunctive Relief. United States
4 District Court, District of Delaware.

5 Q Okay. And Exhibit 1116 is the only
6 exhibit cited in Paragraph 105 of your declaration;
7 is that correct?

8 A That's correct.

9 Q All right. In Paragraph 105, do you see
10 where you state:

11 (As read):

12 "Motif's products are not made using
13 free cysteine, cystine, methionine, or
14 thiamine."

15 A Yes, I do.

16 Q And at the end of this sentence, you cite
17 to Exhibit 1116. At Paragraphs 36 and 51, correct?

18 A Correct.

19 Q And did you come to your understanding of
20 what Motif's products -- what you state about
21 Motif's products from reviewing this document?

22 MR. MESSERIAN: Objection.

23 THE WITNESS: I -- I reviewed the
24 document. And also was from my counsel as well.

25

1 BY MR. ROSATO:

2 Q So it was counsel that gave you this
3 information, correct?

4 A Yes, counsel made the document available
5 to me.

6 Q Okay. And you didn't examine any Motif
7 products to determine whether or not they were made
8 using free cysteine, cystine, methionine, or
9 thiamine, correct?

10 MR. MESSERIAN: Objection.

11 THE WITNESS: That's correct. No, I did
12 not do that.

13 BY MR. ROSATO:

14 Q Okay. Okay. So turning back to
15 Paragraph 105 of your declaration.

16 A Okay. I'm there.

17 Q Okay. There you state:

18 (As read):

19 "Based on Patent Owner's interpretation
20 of the term, Ground 1 maps 'a compound
21 selected from cysteine' and 'a compound
22 selected from alanine' to pea flour."

23 Do you see that?

24 A One second. Yes.

25 Q Okay. And Ground 1 alleges anticipation

1 based on the Brown reference, right?

2 A Yes.

3 Q And earlier we discussed Paragraph 364 of
4 Brown, correct?

5 A Right.

6 Q And that's the paragraph that -- that
7 discusses pea flour, correct?

8 A Right.

9 Q Excuse me. I lost a little bit of track
10 of time. Are you okay or do you need a break?

11 A I'm good for the next five, ten minutes.
12 Thank you.

13 MR. ROSATO: Why don't we take a break
14 now then?

15 THE WITNESS: Okay.

16 (Recess.)

17 BY MR. ROSATO:

18 Q Okay. Dr. Tarte, during the break, have
19 you had any conversations with counsel?

20 A No.

21 MR. ROSATO: We're going to give you a
22 document that's been newly marked as Exhibit 2020.
23 We'll make that available to you. This is the:

24 (As read):

25 "Declaration of Dr. Robert McGorrin in

1 Support of Motif's Answering Claim
2 Construction Brief".

3 And let me know when you have that.

4 (Exhibit 2020 marked for identification.)

5 THE WITNESS: Okay. I have it.

6 BY MR. ROSATO:

7 Q Do you have it?

8 A Yeah.

9 Q Okay. So this -- so we're looking at --
10 to make sure we're looking at the same document,
11 this document should have on the front page:

12 (As read):

13 "Declaration of Dr. Robert McGorrin in
14 Support of Motif's Answering Claim
15 Construction Brief."

16 Do you see that?

17 A Yes.

18 Q Okay. Do you recognize this document?

19 A I'm afraid I -- I don't.

20 Q Let's turn to Page 6 of Exhibit 2020.

21 And let me know when you're there.

22 A Okay. I'm there.

23 Q Do you see the last sentence of the text
24 of Paragraph 16 where Dr. McGorrin states he's --
25 he's referring to "Compound Terms"? Do you see

1 that?

2 A Yes.

3 Q Okay. And there's a chart below that.

4 Do you see the chart?

5 A Uh-huh. Yes.

6 Q Okay. And starting with the left column,
7 the left column is titled "Claim". Do you see that?

8 A Yup.

9 Q And three entries down you see '096
10 patent claim 1, 10 -- and comma ten. Do you see
11 that?

12 A Yes.

13 Q Okay. And then if we move along to the
14 far right column, that column is identified as
15 "Sulfur Compound Term". Do you see that?

16 A Yes.

17 Q And in the entry responding to the '096
18 patent claims 1 and 10, the far right entry recites:

19 (As read):

20 "A compound selected from cysteine,
21 cystine, thiamine, methionine, and
22 mixtures of two or more thereof."

23 Do you see that?

24 A Yes.

25 Q Okay. This corresponds to the language

1 of the '096 patent claims 1 and 10 according to this
2 chart, correct?

3 A I suppose you're telling me, yes.

4 Q Yes?

5 A Yes.

6 Q Paragraph 21 of Exhibit 2020, please.

7 A Okay. I'm there.

8 Q In the middle of Paragraph 21, Dr.
9 McGorrin states:

10 (As read):

11 "More specifically, where the Compound
12 Terms recite specific compounds
13 (ribose, glucose, cysteine, methionine,
14 and the like), a POSITA -- excuse me --
15 a POSITA would understand that the
16 terms refer to those free, stand-alone
17 molecules, rather than their inclusion
18 as part of a larger and more complex
19 structure such as a protein."

20 Do you see that?

21 A I can read those words, yes.

22 Q And then in the next sentence, he states:

23 (As read):

24 "A POSITA would understand that the
25 Compound Terms refer to different

1 ingredients of a replica foodstuff than
2 proteins such as plant proteins."

3 Do you see that?

4 A I can -- I read that, yes.

5 Q Okay. And then, a few paragraphs down in
6 Paragraph 23, why don't you turn there? And let me
7 know when you're there.

8 A I'm there.

9 Q Okay. So in Paragraph 23, Dr. McGorrin
10 states:

11 (As read):

12 "A POSITA would therefore recognize
13 that the Compound Term ingredients are
14 different from the separately-claimed
15 'plant protein' element of the claims."

16 Do you see that?

17 A I read that, yes.

18 Q Okay. Let's turn to Paragraph 81 of
19 Exhibit 2020. And let me know when you're there.

20 A Okay. I'm there.

21 Q In Paragraph 81 of Exhibit 2020, Dr.
22 McGorrin states:

23 (As read):

24 "A POSITA would not understand the
25 Compound Terms to cover arguable

1 'compounds' such as plant proteins."

2 Do you see that?

3 A Yes.

4 Q And you may have already answered this.

5 But your declaration does not cite to Exhibit 2020,
6 Dr. McGorrin's declaration here, correct?

7 A Correct.

8 Q Earlier we talked about Paragraph 105 of
9 your declaration. Do you recall that?

10 A Yes.

11 Q And in Paragraph 105, you discuss being
12 instructed to adopt the interpretation that Compound
13 Terms are not limited to free compounds of sugars
14 and sul -- sulfur compounds. Do you see that?

15 A Yes.

16 Q Is it fair to say that Dr. McGorrin, in
17 his Exhibit 2020 declaration, is not advocating for
18 the same interpretation of compounds as you were
19 asked to adopt in Paragraph 105 of your declaration?

20 MR. MESSERIAN: Objection.

21 THE WITNESS: Well, this is the first
22 time I've seen Exhibit 2020. So while I can read
23 those words, I would have to take some time to read
24 it. And to read the whole -- the whole document.
25 As -- as far as this construction is -- is

1 concerned, I'm informed by counsel that the board is
2 not required to adopt the construction of a district
3 court.

4 And so in as much as the -- as the Patent
5 Owner considers proteins to satisfy the sulfur
6 compound claim, then the -- the pea protein flour of
7 Brown also satisfies the protein compound claim.
8 Sorry, the sulfur compound claim. Sulfur, not
9 protein.

10 BY MR. ROSATO:

11 Q So counsel told you that the board is not
12 required to take the same construction as a district
13 court; is that correct?

14 A Yes.

15 Q Counsel told you that?

16 A Yes.

17 Q Okay. They also told you something
18 different didn't they?

19 MR. MESSERIAN: Objection.

20 THE WITNESS: How do you mean? Can you
21 explain?

22 BY MR. ROSATO:

23 Q Well, in Paragraph 98, you state:

24 (As read):

25 "I am further informed and understand

1 that a claim term such as 'contains no
2 animal products' should be given the
3 same interpretation when determining a
4 patent's validity, as in this present
5 inter partes review proceeding, as when
6 determining whether the patent is
7 infringed (as in a district court
8 proceeding)."

9 MR. MESSERIAN: Objection.

10 BY MR. ROSATO:

11 Q Do you see that?

12 A Yes. I can read that, yes.

13 Q And earlier, you indicated that by "being
14 informed", you're referring to information provided
15 to you by counsel?

16 A Yes.

17 Q Do you recall that?

18 A Yes.

19 Q It sounds like, in this case, counsel's
20 telling you two different things.

21 MR. MESSERIAN: Objection. Counsel?

22 BY MR. ROSATO:

23 Q Do you think counsel is giving you sound
24 guidance in this case?

25 A Oh, I'm sorry. I didn't realize there

1 was a question.

2 MR. MESSERIAN: That's what I was going
3 to clarify, actually, for the record. Is there a
4 question there, Counsel? Or was that a statement?

5 BY MR. ROSATO:

6 Q Do you think counsel is giving you sound
7 guidance in this case?

8 MR. MESSERIAN: Objection.

9 THE WITNESS: Yes, I do.

10 BY MR. ROSATO:

11 Q Which guidance is the sound guidance?
12 That the claim interpretation should be the same or
13 that the claim interpretations can be different?

14 MR. MESSERIAN: Objection.

15 THE WITNESS: I am not sure that I -- I'm
16 not sure that I have a -- that I can tease the
17 difference in this. Except to say I really don't
18 know the sulfur compound limitation, as it refers to
19 a district court versus the board's obligation to,
20 or not, to take that -- that construction. To
21 accept that construction.

22 BY MR. ROSATO:

23 Q Earlier, I asked you if you would want to
24 know if petitioner advanced a different
25 interpretation of the claims compared to what you

1 were asked to adopt. Do you remember that
2 discussion?

3 A Yes, I think I do.

4 Q And do you remember answering that you
5 would want to know if Motif's was arguing for a
6 different interpretation of the claims than the
7 interpretation they asked you to adopt?

8 MR. MESSERIAN: Objection.

9 THE WITNESS: In principle, I suppose.
10 Yeah.

11 BY MR. ROSATO:

12 Q Yeah. Let's look at Paragraph 69 of
13 Exhibit 2020. And let me know when you're there.

14 A I'm there.

15 Q Do you see where Dr. McGorrin states:

16 (As read):

17 "That plant proteins can -- can
18 contribute to undesirable flavors and
19 aromas".

20 A I can read that, yes.

21 Q And in the next sentence, he states:

22 (As read):

23 "Plant proteins are associated with
24 'planty' aromas and 'off-flavors'."

25 A I read that, yes.

1 MR. ROSATO: Okay. You can put that
2 document aside for now. We're going to make
3 available to you a newly added exhibit. It's
4 Exhibit 2021. Let me know when you have a copy of
5 that.

6 (Exhibit 2021 marked for identification.)

7 THE WITNESS: Okay. I have it.

8 BY MR. ROSATO:

9 Q To make sure we're looking at the same
10 document, the front page should read:

11 (As read):

12 "Declaration of Dr. Jerrad Legako in
13 Support of Motif's Answering Claim
14 Construction Brief".

15 A Yes, that is correct.

16 Q All right. Do you recognize this
17 document?

18 A I do not.

19 Q And do you know Dr. Legako?

20 A I do.

21 Q How do you know Dr. Legako?

22 A Dr. Legako is a meat scientist. So we
23 interact at professional conferences and such.
24 We're a small industry, so.

25 Q Understood. And did you interact with

1 Dr. Legako in the context of his declaration here?

2 A No, I wasn't aware of this declaration.

3 Q Were you aware that he's a witness in
4 this case?

5 A No.

6 Q Okay. Turn to Page 7 of Dr. Legako's
7 Exhibit 2021 declaration. Let me know when you're
8 there.

9 A Okay. I'm there.

10 Q Okay. And do you see in the table the
11 term "meat associated aroma" on the left column?

12 A I do.

13 Q Okay. And there the '096 patent is
14 identified, correct?

15 A Yes.

16 Q Okay. And the far right column is
17 labeled "Motif's Proposed Construction". Do you see
18 that?

19 A Yes.

20 Q You nodded your head. Thought I heard
21 "Okay. Yes"?

22 A Yes.

23 Q Okay.

24 THE STENOGRAPHIC REPORTER: He said
25 "Yes".

1 THE WITNESS: "Yes", I said.

2 MR. ROSATO: Thank you.

3 BY MR. ROSATO:

4 Q And this table identifies Motif's
5 proposed construction of the term "meat associated
6 aroma" of -- in the '096 patent as indefinite. Do
7 you see that?

8 A I can read that, yes.

9 Q Were you aware that Motif was arguing
10 that the claims of the '096 patent are indefinite
11 when you wrote your declaration?

12 A I don't believe I was, no.

13 Q Turn to Paragraph 128 of Exhibit 2021.
14 And let me know when you're there please.

15 A I'm there.

16 Q At Paragraph 128, Dr. Legako cites to the
17 MacLeod reference. Do you see that?

18 A Yes.

19 Q At the end of Paragraph 128, he cites
20 MacLeod. And states:

21 (As read):

22 "The scope of what constituted a 'meat'
23 flavor or aroma varied and was specific
24 to the context being explored."

25 Do you see that?

1 A I can read those words, yes.

2 Q Okay. Look down to Paragraph 130 of Dr.
3 Legako's declaration.

4 A Okay. I'm there.

5 Q In Paragraph 130, he's stating that:

6 (As read):

7 "What qualifies as specifically
8 'beef-like' or 'meat-associated' may
9 differ from one paper to the next."

10 Do you see that?

11 A Yes.

12 Q And in Paragraph 211 of your declaration,
13 you also cite to the MacLeod reference, correct?

14 A Yes.

15 Q And that's listed as Exhibit 2024 in your
16 declaration, correct?

17 A Yes. 1024, yes.

18 Q Okay. For your declaration, you weren't
19 asked to argue that the term 'meat associated aroma'
20 was indefinite; is that right?

21 A That's correct.

22 Q I think you've already answered this, but
23 for the sake of completeness: Dr. Legako's 2021
24 declaration is not cited in your declaration,
25 correct?

1 A That's correct.

2 Q You can put that document aside for now.
3 Let's turn back to your declaration. Let's start at
4 Paragraph 24, please.

5 A I'm there.

6 Q Okay. So that paragraph where you
7 discuss being informed about the perspective of a
8 person of ordinary skill in the art. Do you see
9 that?

10 A Yes.

11 Q Okay. And in Paragraph 26, you state:
12 (As read):

13 "I am informed that a patent may
14 include two types of claims."

15 And you go on. Do you see that?

16 A Yes.

17 Q Okay. And then again in Paragraph 27,
18 you discuss being informed about sources of evidence
19 that may assist in determining the meaning of the
20 claim term. Do you see that?

21 MR. MESSERIAN: Objection.

22 THE WITNESS: Okay. If you mean:

23 (As read):

24 "I am informed that dictionaries,
25 treatises, and other 'extrinsic'

1 sources of evidence may assist."

2 Yes, I can read that. Yeah.

3 BY MR. ROSATO:

4 Q And earlier, we discussed that in
5 Paragraph 98 of your declaration, you state: "I am
6 further informed". And then you go on to discuss
7 giving claim terms the same interpretation in an IPR
8 in a district court. Do you recall that?

9 MR. MESSERIAN: Objection.

10 THE WITNESS: Can you repeat the
11 question?

12 BY MR. ROSATO:

13 Q In Paragraph 98, you state: "I am
14 further informed". Do you see that?

15 A Yes.

16 Q And in Paragraph 98, you discuss giving
17 claim terms the same interpretation in an IPR as in
18 district court. Do you see that?

19 A Yes.

20 Q Okay. And we talked about this earlier,
21 but I'll ask the question again. By "you were
22 informed", are you referring to being informed by
23 Motif's counsel?

24 A Yes, I'm informed by counsel.

25 Q Okay. And turn to Paragraph 29 of your

1 declaration.

2 A Okay. I'm there.

3 Q There it says:

4 (As read):

5 "I have been informed by Motif's
6 counsel that claim construction is a
7 matter of law for the arbiter of law to
8 decide."

9 Do you see that?

10 A Are we on Page 29 or Paragraph 29?

11 Q Paragraph 29.

12 A Okay. Can you repeat the question,
13 please?

14 Q So do you see the first sentence of
15 Paragraph 29, where you state:

16 (As read):

17 "I have been informed by Motif's'
18 counsel that claim construction is a
19 matter of law for the arbiter of law to
20 decide."

21 A Yes.

22 Q Okay. Did Motif's counsel inform you who
23 they consider the arbiter of law?

24 MR. MESSERIAN: Objection.

25 THE WITNESS: I can't recall.

1 BY MR. ROSATO:

2 Q Do you recall that they told you that
3 they themselves are the arbiter of law?

4 MR. MESSERIAN: Objection.

5 THE WITNESS: I do not recall that.

6 BY MR. ROSATO:

7 Q Do you consider a PTAB an arbiter of law?

8 A Can you repeat that?

9 Q Do you consider the Patent Trial and
10 Appeal Board an arbiter of law?

11 MR. MESSERIAN: Objection.

12 THE WITNESS: I don't have an opinion on
13 that.

14 BY MR. ROSATO:

15 Q Okay.

16 A I guess I'm not as well versed in -- in
17 patent law.

18 Q Fair enough. Did Motif's' counsel inform
19 you that the Patent Trial Appeal Board is an arbiter
20 of law?

21 A I don't recall that they informed me as
22 to that.

23 Q Did they inform you that the district
24 court is an arbiter of law?

25 MR. MESSERIAN: Objection.

1 THE WITNESS: I don't recall that either.

2 BY MR. ROSATO:

3 Q Okay. Let me give you a copy of
4 Exhibit 2019, which has been introduced into this
5 proceeding. And let me know when you have a copy of
6 that.

7 (Exhibit 2019 marked for identification.)

8 A Okay. I have it.

9 Q So we're looking at the same document,
10 the front should read:

11 (As read):

12 "Defendant Motif Foodworks, Inc.'s
13 Answering Claim Construction Brief".

14 A Correct.

15 Q Okay. Do you recognize this document?

16 A I do not.

17 Q And this is not cited in your
18 declaration, correct?

19 A Correct.

20 Q Did Motif's counsel consult with you
21 about the content of this document before you signed
22 your declaration?

23 MR. MESSERIAN: Objection.

24 THE WITNESS: No. No, they didn't. My
25 declaration was a full seven months before this, so.

1 THE STENOGRAPHIC REPORTER: "Was formed
2 months before this"?

3 THE WITNESS: A full seven -- seven
4 months. Seven months before the date of this.

5 THE STENOGRAPHIC REPORTER: Okay.

6 BY MR. ROSATO:

7 Q And prior to signing your declaration,
8 did Motif's counsel inform you that they would be
9 arguing for interpretations of the claims of the
10 '096 patent that are different than what they asked
11 you to adopt?

12 MR. MESSERIAN: Objection.

13 THE WITNESS: Not that I can recall.

14 BY MR. ROSATO:

15 Q And prior to signing your declaration,
16 did Motif's counsel inform you that they'd be
17 arguing the claims of the '096 patent are
18 indefinite?

19 MR. MESSERIAN: Objection.

20 THE WITNESS: Not that I can recall.

21 BY MR. ROSATO:

22 Q Okay. Again, earlier you indicated you
23 would want to know if Motif was arguing for
24 different interpretations of the claims than what
25 they asked you to adopt?

1 MR. MESSERIAN: Objection.

2 BY MR. ROSATO:

3 Q Do you recall that?

4 A Yes, I did say that. Yes.

5 Q And then earlier, as we discussed,
6 Paragraph 105 of your declaration discusses Motif
7 asking you to adopt what they told you was Patent
8 Owner's interpretation of a claim term. Do you
9 recall that?

10 MR. MESSERIAN: Objection.

11 THE WITNESS: I don't know that I would
12 put it in those words. You know, they -- they did
13 not tell me "This is what we think as a Patent
14 Owner", so. So.

15 BY MR. ROSATO:

16 Q Yeah. They sort of left you hanging out
17 to dry on this, didn't they?

18 MR. MESSERIAN: Objection.

19 THE WITNESS: I wouldn't know. I -- I
20 didn't -- certainly didn't feel that way.

21 BY MR. ROSATO:

22 Q And in Paragraph 105, you discuss:

23 (As read):

24 "I understand Patent Owner has
25 implicitly taken the position".

1 Do you see that?

2 A Yes.

3 Q Okay. And as we talked about earlier,
4 your understanding came from what Motif's counsel
5 told you, right?

6 MR. MESSERIAN: Objection.

7 THE WITNESS: Yes.

8 BY MR. ROSATO:

9 Q Yeah. And Motif's counsel didn't tell
10 you that they'd be argue -- arguing for a different
11 interpretation of the same claims and the same terms
12 in district court, did they?

13 MR. MESSERIAN: Objection.

14 THE WITNESS: I do not recall.

15 BY MR. ROSATO:

16 Q Do you recall them telling you that?

17 MR. MESSERIAN: Same objection.

18 THE WITNESS: I don't recall. I don't
19 remember. It's been -- it would have been a long --
20 awhile ago.

21 BY MR. ROSATO:

22 Q You don't remember them telling you one
23 way or the other? Or you don't remember them ever
24 telling you that?

25 A If they did, I've forgotten. So I just,

1 honestly, cannot remember having the -- that
2 conversation.

3 Q Well, you're a credible scientist. I
4 would like to think that if you were told there's a
5 completely different interpretation, you would have
6 mentioned that in your declaration; is that fair?

7 MR. MESSERIAN: Objection. I also want
8 to counsel the witness not to reveal any
9 attorney-client privileged communications between
10 counsel and himself.

11 MR. ROSATO: Understood.

12 BY MR. ROSATO:

13 Q But the basis of your testimony is what
14 you were informed by counsel, correct?

15 MR. MESSERIAN: Objection.

16 THE WITNESS: Yes. Well, as a technical
17 expert, yeah. I work with counsel and rely on
18 counsel in this case.

19 BY MR. ROSATO:

20 Q So it's fair -- it's fair game to ask you
21 what assumptions you were asked to take, wouldn't
22 you say?

23 THE WITNESS: I suppose.

24 MR. ROSATO: Okay. Let's go off the
25 record.

1 (Lunch recess.) 8

2 BY MR. ROSATO:

3 Q Dr. Tarte, did you have any conversations
4 with counsel during the break?

5 A No.

6 MR. ROSATO: Okay. We have no further
7 questions. We can turn over for any redirect.
8 Thank you.

9 MR. MESSERIAN: Thanks, Counsel. I just
10 need about ten minutes please to gather my notes and
11 figure out whether we're going to have a redirect or
12 not.

13 (Recess.)

14 EXAMINATION

15 BY MR. MESSERIAN:

16 Q All right.

17 Dr. Tarte, do you recall that counsel
18 asked you about whether you reviewed McGorrin's
19 declaration before you signed it?

20 A Yes, I do.

21 Q And I believe you mentioned that you'd
22 seen a draft, possibly a few days or so prior to
23 signing your own declaration. Do you recall that?

24 A Yes.

25 Q Now, in reviewing his signed declaration

1 now, do you see any differences in that declaration
2 between that and what you recall reviewing a few
3 days prior to your own signature that would impact
4 any of your opinions in your declaration?

5 A No, I do not.

6 Q And do you also recall counsel asked you
7 about Paragraph 105 of your declaration?

8 A Yes, I do.

9 Q Now, what is your understanding of the
10 meaning of the term "compound" as used in the '096
11 patent claims?

12 A The meaning of the term --

13 MR. ROSATO: Objection to form.

14 THE WITNESS: Huh? I -- my understanding
15 is the word "compound" is plain meaning. And does
16 not require construction for the purpose of this --
17 of this proceeding. Any -- any person of ordinary
18 skill in the art would understand what the plain
19 meaning is.

20 BY MR. MESSERIAN:

21 Q Okay. And what's your understanding of
22 Patent Owner's interpretation of that term?

23 A My understanding of Patent Owner's --

24 MR. ROSATO: Objection to form.

25 THE WITNESS: My understanding of Patent

1 Owner's interpretation of the -- of the term is the
2 proteins satisfied the sulfur compound limitation.

3 BY MR. MESSERIAN:

4 Q Okay. Now, are there any grounds in your
5 declaration for which you apply Patent Owner's
6 interpretation?

7 A Yes, I applied Patent Owner's
8 interpretation for Ground 1.

9 Q And what interpretation do you apply for
10 Grounds 2 through 4?

11 A Grounds 2, 3, and 4 I applied a plain
12 meaning interpretation.

13 Q All right. Thank you.

14 MR. MESSERIAN: Counsel, I don't have
15 anything further.

16 MR. ROSATO: Thank you.

17 BY MR. ROSATO:

18 Q Just to clarify, Dr. Tarte, are you
19 saying you applied different interpretations of the
20 same claim term for different grounds in your
21 declaration?

22 A Yes.

23 Q Where -- where do you state in your
24 declaration that you did that?

25 A I state in Paragraph 105.

(As read) :

"Based on Patent Owner's interpretation of the term, Ground 1 maps 'a compound selected from cysteine' and 'a compound selected from alanine' to pea flour, which contains proteins having the claimed amino acids and sulfur compounds. Even if Patent Owner's interpretation is not adopted, Ground 2 through 4 are unaffected because they map these terms to free amino acids and sulfur compounds."

Q That doesn't actually say that you applied a different construction, does it?

MR. ROSATO: Objection.

THE WITNESS: Well, not using those words. But I think it's implied. It's -- it's very clear to me.

MR. ROSATO: We have no further questions.

(Whereupon the deposition concluded at 1:37 p.m.)

1 I, RODRIGO TARTE, do hereby declare under
2 penalty of perjury that I have read the foregoing
3 transcript; that I have made any corrections as
4 appear noted, in ink, initialed by me, or attached
5 hereto; that my testimony as contained herein, as
6 corrected, is true and correct.

7 EXECUTED this_____ day
8 of _____,
9 20____, at _____, _____.
(City) (State)

10
11
12

13 RODRIGO TARTE
14
15
16
17
18
19
20
21
22
23
24
25

1 I, the undersigned, a Certified Shorthand
2 Reporter of the State of California, do hereby
3 certify:

4 That the foregoing proceedings were taken
5 before me at the time and place herein set forth;
6 that any witnesses in the foregoing proceedings,
7 prior to testifying, were duly sworn; that a record
8 of the proceedings was made by me using machine
9 shorthand, which was thereafter transcribed under my
10 direction; further, that the foregoing is a true
11 record of the testimony given.

12 I further certify I am neither financially
13 interested in the action nor a relative or employee
14 of any attorney or party to this action.

15 IN WITNESS WHEREOF, I have this September
16 14, 2023 subscribed my name.

17
18
19
20 

21 ASHLEY SOEVYN
22
23 CSR No. 12019
24
25

[& - 211]

&	1015 7:11	12235 5:8	2,5 60:4,8
& 2:18 3:4,12 4:4,14 5:4,15	38:20,22 67:23	128 105:13,16 105:19	20 35:8 44:14 44:25 64:5 120:9
0	1017 65:25	13 7:4 8:4 9:2 12:17	200 5:8 40:25
096 20:9,10 47:20 48:16 80:22 81:8,14 81:14 83:17 89:10,14 95:9 95:17 96:1 104:13 105:6 105:10 112:10 112:17 117:10	1024 106:17	130 106:2,5	20006 4:18
0o0 1:3 2:3 9:3	103 8:9	134 34:17	2019 8:11 111:4,7
1	105 88:12,17 89:10,16 90:12 91:6,9 92:15 98:8,11,19 113:6,22 117:7 118:25	14 7:8 121:16	202 4:20
1 1:25 27:23 28:4 46:14 70:7,10,19 81:8 83:17 84:13 92:20,25 95:10,18 96:1 118:8 119:3	107 27:24 28:2	15 12:17,20 48:7 63:19,21	2020 8:7 93:22 94:4,20 96:6 97:19,21 98:5 98:17,22 102:13
10 5:18 46:14 55:12 73:17 79:25 95:10,18 96:1	108 29:16	16 7:9 94:24	2021 8:9 103:4 103:6 104:7 105:13 106:23
1003 7:8 14:1,2 14:4,8,17 15:9	109 28:6,20,23 30:6,23	17 63:19,22	2022 12:23
1005 7:9 16:12 16:15 19:18 35:7	10a 80:6	1700 4:17	2023 1:15 2:21 7:4 8:4 9:2 121:16
1012 7:10 22:14,15	10c 88:11,21	18 44:14	2024 106:15
	10th 2:19	184 75:10,13,22	206 3:10 41:11 41:13,14 42:8
	111 8:11	185 69:15	207 42:15
	1116 7:13 90:13,17,18 91:5,17	187 39:24 40:5 40:9	208 43:4 59:5,7
	1129 7:12 66:10 67:3,6,9 67:10,20,22	198 40:16	209 63:11
	116 6:7 31:22	199 40:20,22	21 96:6,8
	1189 67:8	1:37 2:20 119:23	210 65:8,19,24 76:18,21
	119 32:13 33:11	1a 31:6	210-2900 3:18
	12019 1:23 2:22 7:5 8:5 121:21	1b 32:10 33:2 40:13 41:3	211 59:23 60:19,22 61:13 62:7,13,19 64:23 106:12
	121 33:23 34:2	1c 33:20 40:14 41:3	
	122 1:25	1d 41:7	
		1e 34:14 43:1	
		2	
		2 60:4,12,12 64:15 66:14 118:10,11 119:9	

[212 - acid]

212 77:6 78:3 78:10 79:3 213 5:21 22 7:10 23 35:6,11,16 64:5 97:6,9 24 107:4 26 107:11 27 44:25 107:17 28 44:25 29 108:25 109:10,10,11 109:15 2a 39:10 2b 39:10	79:16 93:3 37 24:1 38 7:11 24:1 36:9,13 4 4 44:25 118:10 118:11 119:10 415 4:11 42 36:15 443-3000 5:21 48 79:22,25 80:7 5 5 44:7 46:10 51:18 52:1 54:10 64:15 51 79:25 91:17 5100 3:7 52 52:12 54 31:5,14,15 56 32:9 33:21 59 88:17 5b 35:5,15,20 35:23 36:4 65:20 88:6 5d 35:2 36:8,13 36:18,21 65:20 5e 35:2 5th 3:7 6 6 48:7 63:19,21 64:4 94:20 60 34:13	6082132 1:24 61 34:13 633 3:15 6669 121:20 67 7:12 69 102:12 7 7 1:15 2:21 55:12,17 56:25 68:16 89:7 104:6 701 3:7 74 39:11 77 17:22 7th 18:17,21,24 18:25 19:14 8 8 55:12 64:15 116:1 80 24:5,12 25:5 27:18 36:23 37:8,18 39:20 81 97:18,21 858 5:12 86 40:12 865 2:19 5:18 87 41:7 66:4,8 883-2529 3:10 9 9 6:6 55:12 70:7 90 7:13 42:25 90017 5:19	90071 3:16 92130 5:9 94 8:7 94105 4:9 947-2027 4:11 97 80:20 81:13 81:17 82:15 85:2 973-8800 4:20 98 80:21,23 81:7,13 86:6 99:23 108:5,13 108:16 98104 3:8 99 80:21 81:13 9:04 2:20 a a.m. 2:20 abbreviation 72:9 73:4 able 57:15 58:1 absence 70:14 71:14,24 72:2 abstract 69:12 69:22 accept 101:21 accurate 9:20 55:22 80:4 achieve 49:19 57:15 58:1 acid 38:2 43:21 44:18 45:19 52:19 53:15,25 54:16,20 55:7 60:13
---	---	--	---

[acids - applied]

acids 21:2,18 21:24,25 22:3 34:8 43:24 44:19,20 45:18 45:20 46:2,8 50:17 51:10,14 52:5,6,9,23 53:1 57:14,19 57:25 119:7,11 action 121:13 121:14 activities 11:5 actually 14:14 22:1 44:2 49:12 54:7 58:7 80:16 88:10 101:3 119:13 add 47:13 added 29:8,12 53:11 55:4 103:3 adding 37:6 41:14 42:11,23 43:22 47:9 51:19,22 55:14 75:14 77:9,15 78:11,20 addition 43:21 69:17 70:1 72:3 additional 53:8 53:13 55:2 77:20	additive 29:17 29:20 39:22 40:1 83:20 88:8 address 31:6 32:10 33:20 34:14 39:21 40:13 43:1 80:7 88:7 89:6 addressed 29:15 31:18 addresses 88:14 addressing 88:23 administered 9:6 adopt 85:20 98:12,19 99:2 102:1,7 112:11 112:25 113:7 adopted 119:9 advanced 87:24 101:24 advocating 98:17 affiliation 11:19 afraid 80:17 94:19 agent 53:9 55:3 ago 12:17,20 114:20 agree 48:14	agricultural 68:13 ahead 54:4,5 62:4 71:3 aided 44:17 alanine 89:7 92:22 119:5 alicia 5:6 allegedly 82:23 alleges 80:24 92:25 alleging 81:8 allow 83:5 allows 44:10 58:17 altered 52:18 alternate 27:6 amended 91:2 amino 21:2,18 21:24,25 22:2 34:8 38:2 43:24 44:18,18 44:20 45:18,19 45:20 46:2,8 50:17 51:10,14 52:5,6,8,19,22 53:1,15,25 54:16,16,20 55:7 57:13,19 57:25 119:7,11 amount 72:13 72:14,17,20,22 amounts 73:6 74:16	analysis 84:6 84:22,25 87:18 87:21 90:5 analyzed 69:19 angeles 1:14 2:19 3:16 5:19 animal 42:6,19 44:23 80:7 83:4,6,9,21 84:12,14,15 85:16,17,17,20 86:11 100:2 annotations 13:6 answer 10:11 12:12,14 78:17 answered 98:4 106:22 answering 8:8 8:10,12 22:20 94:1,14 102:4 103:13 111:13 answers 10:4 anticipation 92:25 apologize 67:22 appeal 1:2 2:2 110:10,19 appear 27:15 120:4 appearance 3:5 4:5 5:5,6 applied 118:7 118:11,19 119:14
--	---	--	--

[apply - brief]

apply 118:5,9 appreciated 13:16 approval 48:9 approximately 15:17 april 12:23 arbiter 109:7 109:19,23 110:3,7,10,19 110:24 area 17:7 78:25 arguable 97:25 argue 106:19 114:10 arguing 102:5 105:9 112:9,17 112:23 114:10 aroma 25:16 30:13 34:23 37:10 43:10 59:12 65:5 73:24 77:12,21 77:25 78:1,15 78:22 104:11 105:6,23 106:19 aromas 102:19 102:24 art 20:11,12 62:9,22 64:10 64:21 65:1 107:8 117:18 article 68:16,20 68:22 69:6,9	ashley 1:23 2:21 7:5 8:5 121:21 aside 75:9 103:2 107:2 asked 52:8 98:19 101:23 102:1,7 106:19 112:10,25 115:21 116:18 117:6 asking 48:15 113:7 aspects 47:19 assist 107:19 108:1 associated 34:23 37:10,19 43:10 59:12 65:5 73:25 102:23 104:11 105:5 106:8,19 assumptions 115:21 attached 120:4 attorney 3:6,14 4:6,16 5:17 12:7,11,13,17 20:7 115:9 121:14 attorneys 5:7 15:16 audible 9:24 augment 47:10 77:21	aumpierre 5:11 author 73:21 74:19 75:3 autolysates 45:23 available 13:1 92:4 93:23 103:3 avenue 3:7 aware 104:2,3 105:9 awhile 114:20 b back 37:23 42:1 59:4 63:11 67:23 75:9 76:18 92:14 107:3 bacteria 42:5 base 38:15 based 50:23 62:21 84:22 92:19 93:1 119:2 basic 17:15 53:17 55:9 58:8 basing 38:13 basis 46:24 115:13 beans 24:24 bear 83:14 beef 44:17 47:12 106:8	beginning 2:20 begins 27:24 behalf 2:16 believe 17:10 17:16,19 18:14 19:4,4 48:10 68:19 81:24 90:19 105:12 116:21 benefit 77:20 benefits 47:9 better 61:20 80:17 bio 11:22 bioworks 11:15 bit 58:8 93:9 board 1:2 2:2 99:1,11 110:10 110:19 board's 101:19 bold 32:20,23 33:12,14 34:3 34:6 bos 83:7 bottom 33:20 60:10 73:20 bound 53:24 bread 22:5 break 10:7,8,12 59:1 93:10,13 93:18 116:4 breaks 10:14 brief 8:8,10,12 94:2,15 103:14 111:13
---	--	--	---

[brown - column]

brown 22:10 22:13,25 24:1 24:1,8,15 25:7 25:9,13,25 27:12,13,23 28:3,8,12,17 29:3,7,7,14,20 30:3,5,9,16,22 31:25 32:5,14 32:16 33:24 35:19 36:20 37:3,6,9,19,23 38:1,4 39:15 39:18 40:10 41:10,17,25 42:2,18,22 75:14 76:6 79:3,5,9,11,14 79:16 93:1,4 99:7 brown's 25:6 25:15 29:21,24	100:24 101:7 104:4 115:18 cases 11:25 51:20 catalyzation 75:25 76:3,5 catalyzed 23:8 23:18,21 category 66:20 cdavidson 3:17 celsius 69:16 certain 74:12 74:20 75:3 certainly 113:20 certified 2:22 121:1 certify 121:3,12 chance 44:11 characteristic 23:15 chart 95:3,4 96:2 chemical 23:17 23:21 chemistry 17:8 17:9 38:16 49:2 68:14 circumstances 21:5 citation 64:4,14 79:10 citations 40:6 40:10,22 63:15 63:18 65:23	80:21 81:14 89:9,13 cite 15:21 16:7 30:16,22 31:25 32:14 33:24 35:1,19,22 36:3,17,20 48:7 55:19 59:22 63:12 65:23 73:11 91:16 98:5 106:13 cited 16:5 20:13,16 30:5 91:6 106:24 111:17 cites 25:6 37:2 65:19,25 66:8 90:13 105:16 105:19 citing 60:22 city 120:9 claim 8:8,10,12 28:4 29:15 31:6,9,18 32:10 33:2,4 33:15 34:10,14 39:21 40:13 41:7 43:1 79:20,24 80:3 81:8,12 83:17 84:13,19 85:7 85:11,19 86:1 86:10,20,24 87:6,17,25	88:8 89:2,6,13 94:1,14 95:7 95:10 99:6,7,8 100:1 101:12 101:13 103:13 107:20 108:7 108:17 109:6 109:18 111:13 113:8 118:20 claimed 89:21 97:14 119:7 claims 47:20 48:16 95:18 96:1 97:15 101:25 102:6 105:10 107:14 112:9,17,24 114:11 117:11 clarify 101:3 118:18 clear 9:23 26:2 26:5 119:18 clearly 22:21 52:4 74:11 clicked 67:22 client 12:11 115:9 colon 26:11 column 44:7,13 44:25 46:10 48:7 51:18 52:1,11 54:9 54:10 55:17 56:25 63:19,21 64:4,15 70:19
c			
c 3:1 4:1 5:1 california 1:14 2:19 3:16 4:9 5:9,19 121:2 call 50:8 callie 3:13 camino 5:8 carbon 60:2,5 case 1:7 2:7 12:18 15:6 18:5 29:23 84:23 100:19			

[column - construction]

70:23 71:7 72:3,5 73:21 74:4 95:6,7,14 95:14 104:11 104:16 columns 55:12 combination 39:15,17 43:23 50:25 51:5 combinations 51:1 combined 49:19 combining 43:18 come 78:8 85:16 89:25 91:19 comes 13:20 38:16 67:16 comma 95:10 comment 53:1 61:20 commenting 48:25 common 38:15 communicate 73:8 communicati... 12:11 115:9 compare 60:22 compared 48:16 101:25 comparison 19:20	compensated 10:21 compensation 10:24 11:8 complaint 91:2 complete 9:20 completely 87:25 115:5 completeness 106:23 complex 96:18 components 23:16 33:9 53:25 composition 24:9 27:19 29:17,20 30:17 30:24 31:1 34:21 39:22 42:18 43:8,15 43:17 46:9 47:13,16,19,23 48:2,4,11,15 49:6,7,14 50:4 50:9,19 51:4 52:7 54:7 56:3 56:4,10,12,16 57:3,5,8 58:12 58:22 59:10,20 60:18 61:7,12 62:6,10,17 63:2 64:10,11 76:23 77:3,16 77:17,24 78:6 79:17 83:21	88:8 compositions 25:24 27:5,7 27:12,16 28:8 39:7 40:2 42:12 44:4 45:2,14 48:8 48:11 49:9,16 49:23 50:8,24 50:24 53:16,18 57:12 58:18 61:2 75:18 77:11 compound 33:6 66:13,19,19 70:20 88:15,24 89:2,3,7 92:20 92:21 94:25 95:15,20 96:11 96:25 97:13,25 98:12 99:6,7,8 101:18 117:10 117:15 118:2 119:3,4 compounds 33:8 34:22 43:9 59:11,16 60:17 62:12,24 63:24,24 64:22 65:4 66:16 69:2 70:12,22 70:24 72:22 73:24 89:21,22 96:12 98:1,13 98:14,18 119:8	119:12 comprising 26:14,22 31:1 46:16 52:2 concentration 71:8 concerned 99:1 concluded 119:22 concludes 73:21 condition 71:23 72:1 conditions 70:25 71:5,11 71:19 74:13 conduct 90:4 conferences 103:23 consider 109:23 110:7,9 considered 15:24 considering 57:8 considers 99:5 constituents 52:23 constituted 105:22 construction 8:8,10,12 79:21,24 85:7 94:2,15 98:25 99:2,12 101:20
---	--	---	--

[construction - cursory]

101:21 103:14 104:17 105:5 109:6,18 111:13 117:16 119:14 consult 111:20 consultant 12:3 contacted 12:7 12:16 contain 21:11 45:17 56:7,16 contained 120:5 containing 24:16,25 25:1 31:10,19 34:8 34:21 52:21,25 53:1,15,23 55:7 66:20 78:7 contains 25:18 38:9 42:19 54:1 80:7 83:4 83:21 85:20 86:10 100:1 119:6 content 111:21 context 29:6,9 104:1 105:24 contribute 77:12 102:18 contributing 30:13 contribution 78:15	conversation 115:2 conversations 10:18 93:19 116:3 cooked 21:22 cooking 21:7 21:10,21 22:5 23:7,17,22 copies 13:6 copy 13:2,24 16:11 18:9 22:12 35:4 38:19,20 63:14 67:2 90:16 103:4 111:3,5 correct 11:13 11:15,16 14:8 15:22 16:1,9 17:3,25 18:1 19:14,19 22:10 25:7,25 26:9 26:10 27:13,20 28:4,21,24 29:13 30:3 31:10,15,20,21 31:23,24 32:7 32:14 33:25 34:11 35:2,3 36:15,16 37:3 37:6 39:8,15 40:7,8,10,11,17 40:20,21 41:4 41:12,15 46:6 46:11,12 47:6	47:16,17,20,21 49:16 50:15 54:10,14,18,19 54:22 55:25 56:1 57:20 59:16,17 60:20 60:21 61:2 62:1,14 63:19 63:20 64:1,16 64:17 65:6,21 68:15 70:5,17 71:24 72:2,21 72:23 73:2,3 74:22 78:3,12 79:3,12,18 83:11,12 84:20 85:4 88:15,21 89:4,5,7,8 90:11 91:7,8 91:17,18 92:3 92:9,11 93:4,7 96:2 98:6,7 99:13 103:15 104:14 106:13 106:16,21,25 107:1 111:14 111:18,19 115:14 120:6 corrected 120:6 corrections 120:3 correctly 42:23 46:19 corresponds 95:25	counsel 10:16 12:10,12 31:13 67:12 82:7 90:3,10 91:24 92:2,4 93:19 99:1,11,15 100:15,21,23 101:4,6 108:23 108:24 109:6 109:18,22 110:18 111:20 112:8,16 114:4 114:9 115:8,10 115:14,17,18 116:4,9,17 117:6 118:14 counsel's 100:19 counting 46:19 court 22:21 86:16,21 91:4 99:3,13 100:7 101:19 108:8 108:18 110:24 114:12 cover 97:25 covered 88:11 cow 83:8 create 57:12 credible 17:17 17:19 115:3 csr 1:23 7:5 8:5 121:21 cursory 20:5
---	---	--	---

[cysteine - different]

cysteine 60:1 62:14,17 63:3 65:2 69:3,15 69:23 70:13 89:3 91:13 92:8,21 95:20 96:13 119:4 cystine 34:21 37:11,21 38:2 38:6,9 43:19 51:19 53:1 91:13 92:8 95:21	19:3,7,8,13,14 19:21 20:4,5 20:13,17,20 22:9 24:2,5,13 27:18,24 28:20 29:16 30:6,23 31:6,22 32:9 32:13 33:24 34:14 35:2,5,6 35:16,20,24 36:5,9,18,21,24 37:2 39:11,21 40:5,13 41:8 41:12 42:2 43:1 47:15 49:5 50:3,18 56:3,11 57:3 58:13 59:5,19 60:20 63:12 64:24 65:20,24 65:25 66:5,17 73:12 75:9 76:19 79:21 80:21 81:13 83:2 88:7,14 88:19 90:12 91:6 92:15 93:25 94:13 98:5,6,9,17,19 103:12 104:1,2 104:7 105:11 106:3,12,16,18 106:24,24 107:3 108:5 109:1 111:18	111:22,25 112:7,15 113:6 115:6 116:19 116:23,25 117:1,4,7 118:5,21,24 declare 120:1 defendant 8:11 111:12 defer 22:2 23:23 58:7,24 63:5 76:11,16 78:16,19 define 84:11 definitely 84:10 definition 80:18 degrees 69:16 delaware 91:4 delve 73:13 depend 28:18 56:14 dependent 89:6 depending 51:20 deposed 9:13 deposition 1:13 2:15 9:1 11:4 14:7 20:3 119:22 depositions 11:6 described 53:13 55:6 69:8 70:10	describes 41:18 41:21,25 42:3 69:21 72:3 description 8:6 desired 52:15 detail 73:14 detected 73:1,2 determinative 86:1 determine 92:7 determining 86:12,15 100:3 100:6 107:19 development 44:16 devine 4:5 dictionaries 107:24 diego 5:9 differ 106:9 difference 28:16 29:2 101:17 differences 117:1 different 11:5 46:7,7,19 49:10,18 50:7 50:14,23,25 52:5 55:11,12 57:11,12,16 58:17 72:5 73:23 82:4 87:25 96:25 97:14 99:18
d			
d.c. 4:18 damages 91:3 date 18:16 112:4 dated 18:15,17 davidson 3:13 day 120:7 days 18:23,24 116:22 117:3 december 18:15,17,21,24 18:25 19:14 decide 109:8,20 declaration 8:7 8:9 13:2,7,18 15:3,6,8,12,18 15:22,25 16:3 16:5,8,8,13 17:22,24,24 18:10,10,14,14 18:17,21 19:2			

[different - emanuel]

100:20 101:13 101:24 102:6 112:10,24 114:10 115:5 118:19,20 119:14 dimethylpyra... 60:4,8 dipeptide 53:22 directed 24:8 53:17 55:8 direction 121:10 directly 64:3 discloses 24:15 28:3 40:1 41:2 49:9 discovered 44:16 discuss 10:15 28:12 39:14,17 40:16,19 75:14 75:18 89:1 98:11 107:7,18 108:6,16 113:22 discussed 20:22 30:8 41:10 76:21 79:13,16 93:3 108:4 113:5 discusses 22:9 37:5 41:14 69:22 74:21 79:17 93:7	113:6 discussing 29:1 30:2 49:23 56:25 discussion 9:17 23:25 27:22 41:6 102:2 disodium 56:20 56:20 57:4,5 distinct 29:9 distinction 47:12 district 86:16 86:21 91:4,4 99:2,12 100:7 101:19 108:8 108:18 110:23 114:12 disulfide 60:2 doctor 21:15 25:20 45:5 81:2 document 13:24 14:5,9 14:20 16:14 38:25 68:17 90:24 91:21,24 92:4 93:22 94:10,11,18 98:24 103:2,10 103:17 107:2 111:9,15,21 documents 13:15 20:6,15	domesticated 83:7 door 55:10 78:5 dr 8:7,9 9:11 13:24 14:19 15:3 16:8,13 16:18 17:2,5 17:10,16,23 18:2,4,7,9,20 19:1,7,12,21 20:5 22:2 23:23 35:1,4,5 35:16,19,22 36:1,3,8,17,20 36:23 37:1,5,8 37:18 58:7,24 59:4 61:19 63:5 65:19,24 66:4,8 76:11 76:16 78:16,19 93:18,25 94:13 94:24 96:8 97:9,21 98:6 98:16 102:15 103:12,19,21 103:22 104:1,6 105:16 106:2 106:23 116:3 116:17 118:18 draft 19:1,6 116:22 drafts 19:21 dry 69:18 70:4 70:4 74:13	113:17 due 38:6 duly 121:7 e e 3:1,1 4:1,1 5:1 5:1 e.g. 24:17 earlier 20:22 30:2,8 54:2,6,8 65:17 76:22 79:13 93:3 98:8 100:13 101:23 108:4 108:20 112:22 113:5 114:3 easier 13:8 eating 43:7 edits 19:7 edta 26:25 effect 49:20 either 14:16 52:16 69:17 70:4 78:24 111:1 el 5:8 element 29:15 31:6,9,18 32:10 33:2,20 34:9,14 41:7 43:1 97:15 elements 40:13 44:11 55:9 elucidated 74:1 emanuel 2:18 5:15 10:25
--	--	---	--

[emanuel - flavor]

12:8,18 embodiments 23:14 emphasize 53:4 55:1 emphasizing 32:22 employed 53:21 employee 121:13 engineered 42:5 enhancer 53:11 55:4 entirely 26:5 entitled 39:5 entries 95:9 entry 95:17,18 enumerate 88:10 envision 48:3 48:15 56:9 envisioned 48:20 49:3 envisioning 51:5,8 errors 20:19 especially 44:17 evidence 107:18 108:1 exact 18:16 exactly 11:23 12:23 20:14	examination 6:1,5 9:9 116:14 examine 92:6 examined 9:6 example 24:24 51:17 examples 55:13 55:16,20,21,24 56:7,19,24 except 51:9 80:23 81:6 101:17 excuse 19:16 26:15 31:11 39:3 67:21 74:14 93:9 96:14 executed 19:13 19:22 120:7 executing 18:10 19:2 exemplary 28:8 exhibit 7:6,8,9 7:10,11,12,13 8:6,7,9,11 13:1 13:9 14:1,2,4,7 14:17 15:9 16:12,15 19:18 22:14,15 35:7 38:20,22 65:25 66:10 67:3,6 67:13,14,20,22 67:23 68:8 73:11 90:13,17	90:18 91:5,6 91:17 93:22 94:4,20 96:6 97:19,21 98:5 98:17,22 102:13 103:3,4 103:6 104:7 105:13 106:15 111:4,7 exhibits 7:1 8:1 13:8,21 expect 75:24 expert 17:5,11 49:2 115:17 expertise 17:7 78:25 explain 99:21 explored 105:24 extent 85:13 extracting 32:5 extrinsic 107:25 f factored 87:18 faculty 16:19 16:23,24 fair 81:10,10 98:16 110:18 115:6,20,20 fairly 80:18 fall 66:20 familiar 68:7 69:5 73:13 80:10,11	family 16:22 far 47:11 95:14 95:18 98:25 104:16 fat 55:25 56:3,7 56:11,17 favored 74:13 feel 113:20 fermentation 80:25 fifth 3:15 figueroa 2:19 5:18 figure 116:11 filed 14:17 final 19:22 financial 11:12 11:14 financially 121:12 find 44:12 56:23 first 7:6 9:15 9:19 12:25 23:3 26:8 30:8 42:8 62:13 75:5,13 98:21 109:14 fish 44:23 five 93:11 flavor 17:9 23:15 29:17,20 34:23 35:18 37:10,20 39:7 39:22 40:1
--	---	--	---

[flavor - giacino]

44:17 45:4,16 47:10 48:8 49:1 52:7,14 53:9,10,12,18 55:3,4,5 56:10 57:12 58:9,17 63:24 64:13 77:3,17,21 78:6,6,9,12 83:20 88:8 105:23 flavoring 42:12 42:17 43:7,14 47:16,19 48:1 49:6 50:19 51:4 56:3 57:3 59:9 75:18 76:23 77:2,10 flavors 47:12 52:15 57:16 58:1 102:18,24 floor 2:19 5:18 flour 26:15,22 31:2 34:3,6,7 34:10 38:9 79:6,17 92:22 93:7 99:6 119:5 followed 26:12 follows 9:7 food 17:8,8 21:11 29:17,20 38:16 39:21 40:1 68:13 88:8	foods 1:8 2:8 2:17 3:3 4:3 5:3 7:3 8:3 21:3 53:11 55:4 foodstuff 97:1 foodworks 1:5 2:5 5:14 7:3 8:3,11 11:12 11:19 111:12 foregoing 120:2 121:4,6 121:10 forgotten 114:25 form 10:4 27:8 29:5,22 30:11 30:19,25 37:12 38:7 41:16 47:7 48:5,18 49:17 50:5,21 51:7,16 53:14 55:6 56:5,13 57:21 58:2,14 61:3,14 62:20 71:13 73:9,14 74:23 77:18 78:23 82:11,25 83:16 84:9,21 87:2 117:13,24 formation 73:24 formed 112:1 formic 60:13	forming 16:3 17:24 forms 19:1,6 formulating 15:25 formulation 56:15,15 forth 47:24 51:24 121:5 found 24:22 four 46:25 fragrance 23:16 fragrant 23:15 francisco 4:9 free 45:19 89:21 91:13 92:8 96:16 98:13 119:11 front 13:25 14:5 19:15 68:11,19 94:11 103:10 111:10 fructose 33:7 full 111:25 112:3 fully 74:1 fundamentally 21:1 furanthiol 66:14 furfural 60:3,7 further 28:13 77:11,21 78:8 78:11 86:9	99:25 108:6,14 116:6 118:15 119:19 121:10 121:12 g game 115:20 gather 116:10 gc 69:20 general 57:9,10 generally 21:8 24:8 generate 23:6 61:8,12 62:6 62:17 64:12 77:17,24 78:1 generated 37:9 37:19 38:5 72:23 generically 82:13 genetically 42:4 geo 58:12 getting 58:7 gia 45:25 giacino 35:23 36:4,18 38:19 39:8,15,18 40:1,6,16,19,23 41:2 43:16 44:4,6,7,10 45:25 46:11 47:5,9,22 48:7 48:12,21,24 49:1,3,8,12,23
--	---	--	--

[giacino - hydrolysates]

50:6,11,22 51:10,14,21 52:3,11 54:25 55:9,25 56:2 56:24 57:10,11 58:12,16 63:12 63:14,18,25 64:7,15,18 76:7 78:5 giacino's 42:11 42:17 43:7,14 46:9 47:16 48:1 49:6 50:19 51:3 55:17 56:9,19 57:2 58:21 59:9,20 61:12 62:6 75:18 76:22 77:2,10 77:16,23 ginkgo 11:15 11:21 12:3 give 15:20 38:19 44:11 51:20 80:17 90:15 93:21 111:3 given 78:6 86:11,20 100:2 121:11 giving 52:4 100:23 101:6 108:7,16 glow 32:23	gluco 79:7 glucose 26:16 26:23 31:2 32:20,23,24 33:6,12,14,15 33:17 34:22 37:11,21 38:6 79:7,18 89:3 96:13 glutamic 43:21 glycine 43:20 go 9:16 25:17 32:9 53:19 54:4,5 55:5,11 62:4 64:2 67:23,25 71:3 107:15 108:6 115:24 goes 35:13 36:15 79:25 84:2 going 12:25 47:11 75:9 93:21 101:2 103:2 116:11 good 9:11,12 45:12 52:15 78:17 80:18 93:11 goodrich 3:4,12 4:4,14 5:4 grab 63:14 great 10:21 13:11,14 22:18	greater 72:17 72:20 ground 27:23 39:14 92:20,25 118:8 119:3,9 grounds 118:4 118:10,11,20 grounds's 39:10 guanylate 56:21 57:5 guess 110:16 guidance 100:24 101:7 101:11,11 h h 66:25 hand 74:4 hang 51:21 hanging 113:16 hard 48:6 head 10:5 69:11 104:20 heading 33:1 46:18 70:20 71:7 hear 9:24 heard 46:10 49:15 55:20 104:20 heat 37:11,20 61:7 heated 21:3 26:16,24 69:15 70:1	heating 21:8 34:20 38:6,10 59:9,19 60:17 61:2,11 62:6 62:10,14,16,22 64:10 65:2,11 76:22 77:2,23 help 12:20 13:21 15:15,16 helpful 9:16 heme 24:16,25 25:1 31:10,19 78:7 hereto 120:5 hidden 37:1 high 21:3,4,7,8 21:22 62:23 honestly 115:1 hopefully 9:23 hour 11:4 hourly 11:1,9,9 hours 15:20 20:7 huh 18:19 72:10 95:5 117:14 hundreds 44:2 60:16 61:17,17 62:11 hydrogen 60:2 60:6,13 hydrolysates 44:24 45:23 51:23
---	---	--	---

[hydrolyzed - interpretation]

hydrolyzed 43:19 44:22	implied 119:17 important 10:3 44:9 53:4	indicate 65:8 72:12,13,16,19 74:12	ingredients 44:3 46:20 47:4,5,13 48:3 49:10,19 50:7 50:15,20,25 51:6 52:8 53:8 53:14 54:9,12 55:2,21 57:9 57:20 58:4,16 97:1,13
i	impossible 1:8 2:8,17 3:3 4:3 5:3 7:3 8:3	indicated 69:5 72:25 73:4 100:13 112:22	initialed 120:4 injunctive 91:3 ink 120:4 inosinate 56:20 57:4
identification 14:2 16:15 22:15 38:22 67:6 90:18 94:4 103:6 111:7	improve 78:8 improvement 47:23 55:11	indicates 19:13 72:14	instance 44:7 44:13 48:7 50:10 59:22
identified 20:19 33:11 54:13,17,21 66:1,18 83:11 95:14 104:14	improvements 57:15 78:5	individual 50:9 induce 65:12 induces 65:2	instructed 98:12
identifies 46:15 61:1,5 66:9 105:4	inc's 8:11 inc.'s 111:12 include 52:19 80:21 81:13 107:14	industry 103:24 influence 85:10 influenced 84:19	inter 15:4 86:14 100:5
identify 31:23 33:14 59:15,18 59:21 62:7 66:17 81:25 85:3 90:2	included 33:18 46:8 includes 24:16 40:6,22 42:22 74:20	inform 84:25 109:22 110:18 110:23 112:8 112:16	interact 103:23 103:25
identifying 44:5 56:4 58:13 66:13 69:11	including 27:19 56:11 57:4 60:1 79:17	information 92:3 100:14 informed 86:9 99:1,25 100:14 107:7,13,18,24 108:6,14,22,22 108:24 109:5 109:17 110:21 115:14	interest 11:12 11:14
illustrated 44:23	inclusion 44:10 53:7 55:2 96:17	informs 50:11 infringed 86:16 100:7	interested 121:13
impact 78:21 117:3	indefinite 105:6,10 106:20 112:18	ingredient 55:25 56:4,11 58:11,21	interject 12:9
impart 53:9 imparting 53:9	independent 89:2 90:4		interpretation 86:12,20 87:17 87:25 92:19 98:12,18 100:3 101:12,25 102:6,7 108:7
implicitly 89:19 90:1 113:25	index 6:1 7:1 8:1		

[interpretation - lists]

108:17 113:8 114:11 115:5 117:22 118:1,6 118:8,9,12 119:2,9 interpretations 101:13 112:9 112:24 118:19 interpreted 83:5 86:25 87:6 interpreting 85:19 88:1 introduced 38:21 111:4 invention 45:3 45:15 48:9 involved 22:3 involving 27:23 ipr 11:17 12:2 14:17 17:3 86:21 108:7,17 ipr2023-00206 1:7 2:7 iprs 11:18,24 iron 23:8,18,22 26:25 isolated 31:9 31:19	k k 4:17 know 9:25 10:8 10:19 13:3,23 16:14 18:2,4 18:16 22:8 23:1 24:2 25:10 27:25 31:7 32:10 34:15 35:7 36:10 37:24 38:9,21 39:11 40:14 41:8 43:2 49:1 58:23 61:16 63:15 66:5 67:4,15 68:10 70:8 73:18 75:10 76:10,14 78:16 79:22 86:4 87:15 88:1 94:3,21 97:7,19 101:18 101:24 102:5 102:13 103:4 103:19,21 104:7 105:14 111:5 112:23 113:11,12,19 knowledge 38:13,15 58:8 known 34:20 62:22 63:23 64:9,21 65:1 65:17	l l 66:25 labeled 104:17 language 33:2 33:4,16 34:10 95:25 large 74:16 larger 96:18 law 3:6,14 4:6 4:16 5:7,17 109:7,7,19,19 109:23 110:3,7 110:10,17,20 110:24 lead 48:10 learnings 57:9 left 70:19 73:21 74:4 95:6,7 104:11 113:16 legako 8:9 103:12,19,21 103:22 104:1 105:16 legako's 104:6 106:3,23 leghemoglobin 24:17,20,21 25:18,22 26:17 27:20 30:13 31:3,23 32:6 37:6 41:15,18 42:1,4,11,23 75:14 76:12 77:10,16,24 78:7,11,21	79:6 leguminous 24:23 length 42:3 likely 61:18 limitation 84:13 101:18 118:2 limitations 28:3 41:2 limited 51:25 89:21 98:13 limiting 52:3 55:13 line 26:8,11,12 30:8 42:8 44:13,14 48:7 52:12 lines 28:12 46:14 63:19,21 64:5,15 list 32:16 33:2 48:2 50:20 54:8 55:21,25 56:19 58:16 59:25 62:18 66:12 80:3 listed 25:24 27:12,16 35:16 46:25 54:7,9 61:13 70:22 106:15 listing 27:6 lists 46:14,18 59:23 71:10
j jerrad 8:9 103:12 job 1:24 journal 68:13			

[literally - meaty]

literally 60:16 litigation 86:17 89:20 little 21:15 37:1 58:8 93:9 live 83:9 85:16 long 21:11 57:13,18,24 114:19 look 36:8 49:11 63:15 75:9 102:12 106:2 looked 27:11 looking 14:20 36:12 41:13 68:10 88:17 94:9,10 103:9 111:9 lori 5:5 los 1:14 2:19 3:16 5:19 lost 93:9 low 44:20 69:4 lower 53:22 lunch 116:1 lwestin 5:10	121:8 maillard 17:11 17:14 20:22,25 21:1,5,12,16,17 21:20 22:4 32:24 35:18 38:16,17 43:25 46:2 61:24,25 65:13 69:14,23 73:25 74:20 75:6 76:8,12 make 12:25 35:10 63:18 64:4 65:23 93:23 94:10 103:2,9 makes 86:1 making 47:11 map 119:11 mapping 34:10 maps 92:20 119:3 march 12:22 marked 7:1 14:2,12 16:15 22:15 38:22 67:6 90:18 93:22 94:4 103:6 111:7 market 4:7 marking 14:7 14:15 34:5 marshmallows 22:7	matching 33:15 material 44:19 45:21 materials 44:21 53:15 55:7 math 12:20 matter 11:8 58:4,20 84:7 84:11 109:7,19 matters 57:19 mcgorrin 8:7 16:9,13,18 17:2,5,10,16 18:2,4,7 22:2 23:24 35:19,22 36:2,3,17,20 37:5,9,18 58:7 58:24 61:19 63:6 66:8 76:11,16 78:17 78:19 93:25 94:13,24 96:9 97:9,22 98:16 102:15 mcgorrin's 17:23 18:9,21 19:2,7,12,21 20:5 35:1,4,6 35:16 36:9,23 37:2 65:20,24 66:5 98:6 116:18 mean 48:23 52:25 61:16 99:20 107:22	meaning 107:19 117:10 117:12,15,19 118:12 means 86:2 meant 49:25 53:24 84:15,20 meat 21:21 23:7 24:9,15 25:6,12,16 26:9 27:7,19 28:13,17,23 29:3,8,12 30:9 30:13,17,23 35:18 39:7 43:10 48:8 52:7 53:9,12 55:3,5 57:12 57:16 58:9 59:12 63:24 78:6 103:22 104:11 105:5 105:22 106:8 106:19 meaty 34:23 37:10,20 42:12 42:17 43:7,14 45:4,16 47:10 47:16,19 48:1 49:6 50:19 51:4 52:14 56:2,9 57:2,16 58:1,17 59:9 65:5 75:18 77:3,12,17,21
m			
machine 121:8 macleod 39:18 59:22 60:23,25 61:5,7 62:21 105:17,20 106:13 made 91:12 92:4,7 120:3			

[meaty - mottram]

77:25 78:1,15 78:21 meeting 51:4 member 16:19 16:22,23,25 mention 24:6 46:5 47:9,15 47:22 50:14 51:18,19 55:5 55:16,20 62:14 63:22 64:7,18 71:2,4 79:3,5,9 80:23 81:17 85:2 mentioned 21:24 44:8 47:5 56:2 61:25 115:6 116:21 mentioning 85:6 mentions 26:20 30:9 42:9 44:6 51:21 merits 84:23 messerian 5:16 6:7 12:9,15 13:4,13,17,20 14:13 19:9,23 22:16,19 26:1 27:2,8,14 29:5 29:22 30:11,19 30:25 31:13 37:12 38:7 41:16,22 47:7	48:5,18 49:17 50:5,21 51:7 51:16 56:5,13 57:6,21 58:2 58:14 61:3,14 62:20 63:4 66:25 67:12,17 67:25 68:3 71:13 73:9 74:23 76:9 77:18 78:23 81:3 82:11,25 83:16 84:9,21 85:12 86:3 87:2,8,19 88:3 90:6,19 91:22 92:10 98:20 99:19 100:9,21 101:2,8,14 102:8 107:21 108:9 109:24 110:4,11,25 111:23 112:12 112:19 113:1 113:10,18 114:6,13,17 115:7,15 116:9 116:15 117:20 118:3,14 met 20:7 methanethiol 60:3,7 methionine 53:2 91:13 92:8 95:21	96:13 method 41:21 methods 41:18 41:25 42:3 methyl 66:14 methylfuran 60:12 methylthiazole 60:4 methylthioph... 60:12 michael 3:5 microphone 41:23 middle 71:7 96:8 mike 13:4 14:6 14:13 36:1 mind 49:7,14 50:4,20 minimum 44:1 46:25 minus 72:8,25 minutes 93:11 116:10 mistake 68:6 mistaken 80:15 mix 45:2,11,14 52:17,18 65:12 mixture 26:24 38:11 45:20 47:2 52:22 53:6 56:20 57:4 65:12	mixtures 44:18 45:16 46:15 52:2 69:14,23 95:22 modifications 53:12 55:6 modified 42:4 42:18,22 moisture 69:4 molecules 96:17 month 12:24 months 12:17 12:20 111:25 112:2,4,4 morning 9:11 9:12 motif 1:5 2:5 5:14 7:3 8:3,11 11:12,19,25 12:3 92:6 105:9 111:12 112:23 113:6 motif's 8:7,10 91:12,20,21 94:1,14 102:5 103:13 104:17 105:4 108:23 109:5,17,22 110:18 111:20 112:8,16 114:4 114:9 mottram 66:1,9 66:13 67:3 69:8,22 73:17
--	--	---	--

[move - okay]

move 95:13	notes 116:10	111:23 112:12	17:13 20:2
mrosato 3:9	notice 2:17	112:19 113:1	21:20 22:17,23
muscle 25:17	number 15:21	113:10,18	23:3,11,25
26:3,5,14,22	60:9,15 65:3	114:6,13,17	24:12 25:14,15
28:9,16,21	68:18	115:7,15	26:8 27:22
29:2,7,12,21,24	numbers 35:9	117:13,24	28:2 29:15
myoglobin	o	119:15	30:16 31:5,16
80:25	o 66:25	obligation	31:18 32:12
n	oath 9:6	101:19	33:1,11 35:4
n 3:1 4:1 5:1	objection 19:9	obtained 47:11	35:12,14,15
n.w. 4:17	19:23 26:1	52:16 70:12	36:17 37:1,5,8
name 66:19	27:2,8,14 29:5	83:8	38:24 39:20
121:16	29:22 30:11,19	obtaining	41:6,10 42:25
native 83:6	30:25 37:12	41:18 42:1,3	43:4,22 44:3
85:15	38:7 41:16	obvious 57:10	46:13,18 47:18
necessarily	47:7 48:5,18	occur 21:6,20	50:1 55:16,24
51:25 52:3	49:17 50:5,21	22:4 74:15	58:25 59:6
56:6 57:7	51:7,16 56:5	76:6	61:25 63:11,21
59:19	56:13 57:6,21	occurs 76:6,15	64:14,18,23
need 10:7,8,19	58:2,14 61:3	odorants 23:6	65:8,16,19
47:1 51:10,14	61:14 62:20	office 1:1 2:1	66:4,12 67:18
52:9 73:13	63:4 71:13	14:24	68:2,2,6,10,21
93:10 116:10	73:9 74:23	offices 2:18	69:22 71:2,20
negatively	76:9 77:18	oh 14:25 16:24	71:23 73:7,20
78:21,24	78:23 82:11,25	100:25	74:6,19 75:8,8
neither 121:12	83:16 84:9,21	oil 26:15,23	75:17,21 76:14
newly 93:22	85:12 86:3	31:2	78:19 79:2,9
103:3	87:2,8,19 88:3	okay 9:15,17	79:20,20,24
nodded 104:20	90:6 91:22	9:18 10:1,2,5,6	80:3,6,13,20
nodding 10:5	92:10 98:20	10:8,9,14,16,17	81:5,10,17,24
nodules 24:23	99:19 100:9,21	10:19,20,21	82:2,6,8 84:6
non 42:6	101:8,14 102:8	11:11 12:5	85:19 86:6,19
note 44:10	107:21 108:9	13:5,15,19	86:23 87:24
noted 120:4	109:24 110:4	14:11,14 15:5	88:6,9,18,20,23
	110:11,25	15:8,10,17	89:1,9,12,25

[okay - paragraph]

90:4,9,12,21,23 91:5 92:6,14 92:14,16,17,25 93:10,15,18 94:5,9,18,22 95:3,6,13,25 96:7 97:5,9,18 97:20 99:17 103:1,7 104:6 104:9,10,13,16 104:21,23 106:2,4,18 107:6,11,17,22 108:20,25 109:2,12,22 110:15 111:3,8 111:15 112:5 112:22 114:3 115:24 116:6 117:21 118:4 ones 59:22 61:4 open 55:10 78:5 opened 67:23 opinion 28:3 47:18 58:4,21 62:5,16 63:3,8 73:14 77:15,23 110:12 opinions 15:25 16:3 17:24 117:4 option 52:4 optional 47:5	order 84:11 ordinary 62:9 107:8 117:17 oregon 16:20 outcome 38:10 58:5 78:14 outlined 82:19 outside 58:8 78:25 overall 66:21 own 53:10 55:3 116:23 117:3 owner 1:9 2:9 2:17 3:3 4:3 5:3 80:24 81:7 81:20,24 82:3 82:9,18 83:14 84:3,7,16 89:18 90:1 99:5 113:14,24 owner's 84:18 85:3,10,15,21 86:23 87:12 92:19 113:8 117:22,23 118:1,5,7 119:2,8 owners 85:23 ox 24:22 oxygen 24:22 p p 3:1,1 4:1,1 5:1,1 p.m. 2:20 119:23	page 6:5 19:12 19:17,18,19 31:14,15 32:9 33:21,23 35:8 35:11,13,16 36:9,13,15 39:11,20 40:12 41:7 42:25 66:4,8 68:11 68:16,18,19 70:7 73:17 77:6 79:22,25 79:25 80:7 88:17 94:11,20 103:10 104:6 109:10 pages 1:25 8:6 24:1 34:13 35:6,8 paid 11:1,9 paper 71:6 106:9 paragraph 17:22 22:25 23:3 24:5,12 25:5,6,9,12,15 25:25 26:8 27:6,11,13,18 27:24 28:2,6 28:20,23 29:16 30:3,5,6,9,16 30:22,23 31:5 31:12,22,25 32:3,13,14,17 33:11,23,24	34:2,17 36:23 37:2,8,18,23 38:1,4 39:24 40:5,9,16,19,22 40:25 41:11,13 41:14 42:8,15 43:4 44:14 59:4,7,16,23 60:19,22 61:13 62:7,13,19 63:11 64:23 65:8,19,24 74:4,8 75:10 75:13,22 76:18 76:21 77:6 78:3,10 79:3 79:10,13,16 80:23 81:7,17 82:15,15 85:2 86:6,6 88:12 88:17 89:10,16 90:12 91:6,9 92:15 93:3,6 94:24 96:6,8 97:6,9,18,21 98:8,11,19 99:23 102:12 105:13,16,19 106:2,5,12 107:4,6,11,17 108:5,13,16,25 109:10,11,15 113:6,22 117:7 118:25
---	--	---	--

[paragraphs - positive]

paragraphs 80:20 81:13 91:17 97:5 part 87:21 96:18 partes 15:4 86:14 100:5 participates 76:12 particular 47:2 48:11 49:7,13 50:4,10,20 51:5,9 79:10 particularly 46:15 50:16 52:1 parties 11:18 parts 47:24 party 87:1,7 121:14 patent 1:1,2,9 2:1,2,9,16 3:3 4:3 5:3 14:23 20:9 39:5 47:20,24 80:11 80:14,16,16,22 80:24 81:7,8 81:14,20,24 82:3,9,18 83:14,15,17 84:3,7,16,18 85:3,9,14,21,23 86:15,23 87:12 89:14,18 90:1 92:19 95:10,18	96:1 99:4 100:6 104:13 105:6,10 107:13 110:9 110:17,19 112:10,17 113:7,13,24 117:11,22,23 117:25 118:5,7 119:2,8 patent's 86:13 100:4 patents 20:6,8 20:10 pea 26:14,15,22 31:2 34:2,3,5,7 34:9 38:9 79:6 79:17 92:22 93:7 99:6 119:5 penalty 120:2 pending 10:10 10:11 percent 47:1 54:13,18,22 perfectly 53:6 perjury 120:2 permitted 10:15 person 62:9 107:8 117:17 personally 18:2 perspective 82:8 107:7	pertinent 20:6 petition 15:4 petitioner 1:6 2:6 5:14 87:14 87:16,24 101:24 ph.d. 1:13 2:16 6:2 7:2 8:2 phenylalanine 44:21 phosphatidyl... 69:17 70:2 phospholipid 69:3 70:15 72:2,4 pick 22:21 place 21:3 75:25 76:17 121:5 plain 117:15,18 118:11 plant 97:2,15 98:1 102:17,23 plants 24:23 25:3 32:6 41:19 42:4 planty 102:24 plaza 4:7 please 10:3 25:10 27:9 30:20 32:11 37:13 39:22 45:6 59:5 74:25 75:10 96:6 105:14	107:4 109:13 116:10 plus 72:8,11,13 72:14,15,16,19 point 18:25 19:17 33:17 53:5 54:24 56:22,22,22 78:4 88:16 points 9:16 polypeptide 51:23 52:6,20 52:21,24 53:22 54:1 polypeptides 45:22 51:24 53:21 pork 47:12 52:14 posita 43:6 65:11 75:24 77:9 96:14,15 96:24 97:12,24 position 61:11 81:21,25 82:3 82:10,19,24 83:11,14 84:3 84:8,16,18 85:3,10,15,21 85:24 86:1,24 86:25 87:7,12 87:16 89:19 90:1 113:25 positive 78:15
---	--	--	--

[possibilities - question]

possibilities 43:17 46:1,5 50:12	48:3,9 51:11 51:15 52:9 54:17,21 73:6	produce 42:5 45:3,16 62:8 65:3 77:3	proteinaceous 44:19,22 45:21
possibility 51:19,22	86:13 100:4	produced 23:16 25:2 44:1 59:19,25 60:17 61:1 70:25 80:25	proteins 42:6 45:22 51:22 83:6 84:12 85:15 97:2,2 98:1 99:5 102:17,23 118:2 119:6
possible 48:12 78:14,20	previous 34:9 74:21	produces 34:22 43:8 59:10	provide 9:20 10:3 64:14
possibly 116:22	previously 7:1 14:2,12 15:9 16:12,15 22:13 22:15 38:20,22 67:3,6 83:9 85:16 90:16,18	producing 64:1	provided 53:16 55:17 100:14
potential 46:1 47:9 49:9,16 49:23 50:7	principle 102:9	product 28:13 28:24 29:8 52:17 84:13	provides 28:8 43:16 46:1
potentially 43:18 54:17,21 56:16 78:8	printed 13:5	products 28:17 29:3 42:19 43:25 61:21 80:8 83:4,22 84:12,14,15 85:17,20 86:11 91:12,20,21 92:7 100:2	providing 10:24
poultry 52:15	prior 18:10,21 19:2 20:10,12 112:7,15 116:22 117:3 121:7		ptab 110:7
practice 81:8	privileged 12:11 115:9	professional 103:23	purpose 32:22 117:16
pre 45:2,11,14 52:17,18	pro 26:14	project 41:22	purposes 58:20 84:6
precursor 32:25	probably 12:22 15:19 87:22	proposed 104:17 105:5	pursuant 2:17
precursors 21:12,15,17	proceeding 10:22 12:6 22:14 67:4 82:4 86:14 90:17 100:5,8 111:5 117:17	protein 24:17 24:22,25 25:1 25:2 31:10,19 43:19 51:22 52:5,6 78:7 96:19 97:15 99:6,7,9	put 75:8 103:1 107:2 113:12
preferably 45:17 52:18,20 52:22	proceedings 9:1 121:4,6,8		pyrrole 60:3,7
preparation 15:18 75:15	process 23:17 23:22		q
prepare 20:2			qualifies 106:7
presence 26:16 26:24 69:18 70:14 71:12,14 71:24 72:1 74:15 79:6			quantity 69:19
present 44:4 45:2,15 47:1			question 9:25 10:10,11 11:21 12:12,14 27:5 30:20 37:14 47:25 58:3 61:10 74:25

[question - reference]

83:13 84:2 87:4 101:1,4 108:11,21 109:12 questions 9:23 22:20 116:7 119:20 quinn 2:18 5:15 10:25 12:7,18 quinnemanue... 5:20 quote 32:16,19 66:12	45:4,16 46:3 52:17 53:6 55:1 61:21,24 62:1 65:12,13 69:2,14,23 74:21 76:3,6,8 76:12,14,17 reactions 21:12 23:6,18,21,24 65:3 70:13 73:25 74:12,20 75:3,6 read 14:22 15:2 23:5,13 24:7 24:14 26:13,21 28:7 32:4 33:5 34:19 35:17 37:7 39:6,25 41:1 42:10,16 43:5 44:15 45:1,13 49:3 52:13 53:3,20 55:10 59:8,24 60:11 64:25 65:10 68:11,12 69:1,13 70:11 73:22 74:6,10 74:18 75:23 77:1,8 81:19 82:17 83:3,19 86:8 89:17 91:11 92:18 93:24 94:12 95:19 96:10,21 96:23 97:4,11	97:17,23 98:22 98:23,24 99:24 100:12 102:16 102:20,22,25 103:10,11 105:8,21 106:1 106:6 107:12 107:23 108:2 109:4,16 111:10,11 113:23 119:1 120:2 readily 74:14 74:15 reading 45:6 54:25 69:11 reads 23:4 real 5:8 realize 100:25 really 48:19 61:16 87:20 101:17 reason 9:19 reasonably 75:24 recall 19:5 20:23 30:10 49:24 71:15,17 71:18 79:14 82:1 98:9 100:17 108:8 109:25 110:2,5 110:21 111:1 112:13,20 113:3,9 114:14	114:16,18 116:17,23 117:2,6 recess 59:2 93:16 116:1,13 recite 38:1 96:12 recites 95:18 recognize 15:5 38:24 55:19 62:10 67:20 90:23 94:18 97:12 103:16 111:15 record 14:10 15:10 45:9 101:3 115:25 121:7,11 redirect 116:7 116:11 reducing 21:13 21:18 refer 49:6,15 50:18 52:11 56:10 57:2 76:22 96:16,25 reference 22:9 22:13 24:1 25:5,6,16 27:23 35:20,23 36:4,18,21 39:8 40:10 46:10 60:19,23 61:1 66:1,9,13 73:15,18 75:8
r			
r 3:1 4:1 5:1 range 46:1,5,7 rate 11:1,3,5 rates 11:9 rather 10:4 13:9 96:17 razmig 5:16 razmigmisse... 5:20 reactants 38:17 reacted 45:3,15 reacting 60:1 79:5 reaction 17:11 17:14 20:23,25 21:1,2,6,16,18 21:20 22:4 32:24 35:18 37:11,20 38:17 38:17 43:25			

[reference - robert]

81:7 93:1 105:17 106:13 referenced 7:6 references 15:21,24 16:4 16:7 20:11,12 20:16 26:9 referred 49:22 54:6,8 referring 20:9 25:13 27:19 30:18,24 31:14 43:13 46:13 48:1 51:3 56:24 60:25 65:16 71:11 76:4,5 86:23 94:25 100:14 108:22 refers 26:12 28:20,23 50:16 74:19 75:3,6 83:24 101:18 refinement 55:8 refinements 53:17 reflective 70:16 refreshing 67:17 regard 87:11 regarding 11:21 12:18 relates 46:2	relative 71:8 121:13 relatively 44:20 released 23:7 relied 90:9 relief 91:3 rely 16:4 17:23 115:17 remainder 62:18 remember 12:23 102:1,4 114:19,22,23 115:1 remote 3:5 4:5 5:5,6 repeat 27:9 30:20 31:12 35:8 36:1 37:13 74:24 87:3 108:10 109:12 110:8 replica 25:17 26:3,5,14,22 27:7 28:17 29:3,7,12,21,24 30:17,24 97:1 replicas 25:16 26:4,9 28:9,21 30:9,14 reported 1:23 74:11 reporter 2:22 14:6,11 16:21 16:24 21:14	22:21,22 25:19 35:25 41:20,24 45:5,8,12 66:22,24 67:1 67:7,11 71:16 71:20 81:1,5 104:24 112:1,5 121:2 representation 90:9 require 117:16 required 43:19 43:20,20 46:21 46:22 77:16,19 99:2,12 research 71:1,6 responding 95:17 responsible 64:12 restate 37:17 result 43:25 52:7 62:11,23 64:21 results 52:16 74:11 retained 12:6 reveal 12:10 115:8 review 15:4 18:9 19:1 20:5 86:14 100:5 reviewed 18:20 19:6,22 20:4,6 20:16 91:23	116:18 reviewing 91:21 116:25 117:2 ribose 33:7 43:22 60:1 62:14,17 63:3 65:2 69:3,15 69:24 70:13 96:13 right 18:18 20:14 22:16 28:22,25 29:17 30:4,6 32:1,17 33:12,13 35:10 38:4 39:9 46:20 51:6 53:10 54:15,23 55:3,17 60:24 62:2,15 67:25 69:6,25 70:18 71:5 72:18 75:7 77:4 78:4 78:10 79:11 85:5,7,8 87:12 88:2,22,22,25 90:15 91:9 93:1,5,8 95:14 95:18 103:16 104:16 106:20 114:5 116:16 118:13 robert 8:7 16:8 93:25 94:13
--	--	--	---

[rodrigo - sentence]

rodrigo 1:13 2:16 6:2 7:2 8:2 9:5 22:19 120:1,13 room 47:23 root 24:23 rosati 3:4,12 4:4,14 5:4 rosato 3:5 6:6 9:10 12:13,19 12:25 13:11,14 13:23 14:1,4,9 14:14,18 16:11 16:17 17:1 19:11 20:1 21:19 22:12,18 22:24 25:23 26:7 27:4,10 27:17 29:10 30:1,15,21 31:4,15,17 36:3,7 37:15 38:12,18 42:7 46:4 47:14 48:13,22 49:21 50:13 51:2,13 56:8,18 57:17 57:23 58:3,10 58:19 59:1,3 61:6,22 63:1,7 67:2,10,15,19 68:9 71:22 73:16 75:1 76:13 77:22 79:1 81:9	82:14 84:1,17 85:1,18 86:5 87:5,10,23 88:5 90:8,15 90:22 92:1,13 93:13,17,21 94:6 99:10,22 100:10,22 101:5,10,22 102:11 103:1,8 105:2,3 108:3 108:12 110:1,6 110:14 111:2 112:6,14,21 113:2,15,21 114:8,15,21 115:11,12,19 115:24 116:2,6 117:13,24 118:16,17 119:15,19 roughly 12:21 routes 73:23 s s 2:19 3:1 4:1 5:1,18 66:25 sake 106:23 san 4:9 5:9 satisfied 118:2 satisfies 99:7 satisfy 47:19 99:5 saying 46:24 118:19	says 14:21 52:1 109:3 scientist 17:20 103:22 115:3 scope 105:22 screen 67:14 scroll 68:2,4,5 se 45:22 58:16 seattle 3:8 second 26:6 51:21 74:8 75:2,17 91:2 92:24 section 33:19 35:5,15,20,23 36:4,8,13,13,18 36:21 41:11 79:21,24,25 80:4,6 85:7 88:6,11,21,23 sections 35:2 65:20 see 19:16 23:9 23:19 24:10,18 26:18 27:1,3 28:10,14 32:20 33:1,9,21 34:3 34:24 35:21 36:6,19,22 37:4 39:18 40:3,23 42:13 42:20 43:11 45:25 56:21 59:13 63:12 64:5 65:14	66:1,10,14 68:17,18,21,21 68:25 70:20 71:8 72:6 73:20 74:2,17 75:2,5,15,19 76:1,23 77:13 79:7,10 80:1,8 80:24 81:22 82:20 84:4 86:7,18 88:12 89:23 90:13 91:9 92:23 94:16,23,25 95:4,7,9,10,15 95:23 96:20 97:3,16 98:2 98:14 100:11 102:15 104:10 104:17 105:7 105:17,25 106:10 107:8 107:15,20 108:14,18 109:9,14 114:1 117:1 seen 98:22 116:22 selected 33:6 89:2,3,7 92:21 92:22 95:20 119:4,5 sentence 23:3 23:11 24:12 62:13 74:8,21
---	---	--	---

[sentence - stated]

75:2,5,13,17,21 79:2 91:16 94:23 96:22 102:21 109:14 separately 97:14 september 1:15 2:21 7:4 8:4 9:2 121:15 served 12:3 set 47:24 121:5 seven 111:25 112:3,3,4 several 40:6,22 43:16 44:6 47:24 48:11 49:9,14,15,22 50:25 55:24 56:19 shaking 10:4 share 13:1,9 67:14 short 18:22 shorthand 2:22 121:1,9 side 70:19 74:4 sign 72:8,8,11 72:14,15,25 signature 117:3 121:20 signed 111:21 116:19,25 significance 34:5 82:9,23	signing 112:7 112:15 116:23 signs 72:13,16 72:19 similar 34:9 49:20 situation 51:20 six 46:19 skill 62:9 107:8 117:18 slow 45:6 slower 21:15 slowly 22:20 81:3,3 small 69:18 72:13,14 103:24 sodium 26:25 soevyn 1:23 2:22 7:5 8:5 121:21 sonsini 3:4,12 4:4,14 5:4 sorry 21:14 25:20 35:25 41:20 51:23 54:4 56:23 68:5 81:1,4 88:16 99:8 100:25 sort 113:16 sound 100:23 101:6,11 sounds 100:19	source 34:7 45:18 52:19 57:13,19,25 sourced 51:11 sources 46:2,7 50:17 52:5,6 107:18 108:1 soy 24:17,24 32:5 space 69:11 speaking 82:12 spear 4:7 species 83:7 85:16 specific 23:24 28:19 56:15 57:8,8,22 58:15 59:15,21 61:9,21 66:19 76:17 82:13 89:10 96:12 105:23 specifically 38:6 43:13 48:2 52:1 79:5 85:14 96:11 106:7 specification 80:11,14,22 89:10,14 specifications 81:15 specifying 80:17	spend 15:18 spoken 18:7 stand 96:16 start 39:10 44:14 45:10 52:12 56:25 107:3 started 18:5 starting 29:16 55:17 80:6 95:6 starts 33:20 35:10 36:9,13 41:7 68:16,20 79:22 state 16:20 17:23 28:2,6 32:3 34:18 38:5 39:24 40:25 42:2,15 43:4 52:4 59:7 63:25 64:2,24 75:22 76:25 77:7 78:2,10 81:18 82:16 83:1 86:7 89:16 91:10,20 92:17 99:23 107:11 108:5 108:13 109:15 118:23,25 120:9 121:2 stated 15:25 85:22
---	--	---	--

[statement - taurine]

statement 57:24 84:2,4 101:4 states 1:1 2:1 14:23 23:11 24:13 33:4 74:9 83:18 91:3 94:24 96:9,22 97:10 97:22 102:15 102:21 105:20 stating 106:5 stenographic 14:6,11 16:21 16:24 21:14 22:22 25:19 35:25 41:20,24 45:5,8,12 66:22,24 67:1 67:7,11 71:16 71:20 81:1,5 104:24 112:1,5 stenographic... 1:23 stick 48:20,24 sticking 49:12 storage 24:22 streamlined 13:9 street 3:15 4:17 5:18 strike 54:7 structure 96:19 subject 61:18	submitted 15:6 15:9 16:12 22:14 67:4 90:16 subscribed 121:16 substance 10:15 substances 21:10,11 44:22 substitute 24:9 24:16 25:6,12 28:13,17,24 29:3,8,12 sugar 43:24 57:13,18,25 sugars 21:2,13 21:18 51:10 89:22 98:13 suggest 19:7 suitable 44:21 46:15 47:2 52:2 suite 3:7,15 4:8 5:8 suited 53:7 55:2 sul 98:14 sulfide 60:2,6,6 60:13 sulfur 34:7 52:20,25 53:1 53:23 54:1 60:5 66:20 89:22 95:15	98:14 99:5,8,8 101:18 118:2 119:7,12 sullivan 2:18 5:15 sunflower 26:15,23 31:2 support 8:7,10 15:3 94:1,14 103:13 supporting 13:7 suppose 96:3 102:9 115:23 sure 13:17 23:23 35:10 59:21 66:18 67:15 73:11 84:24 87:21 94:10 101:15 101:16 103:9 sweet 52:14 sworn 121:7 symbols 72:6 systems 69:4 t t 3:5 66:25 table 70:7,10 70:17,19 73:8 104:10 105:4 take 10:7 15:20 21:3 22:20 50:22 59:1 75:25 93:13 98:23 99:12	101:20 115:21 taken 2:16 81:20,25 82:18 84:3,7 89:19 90:1 113:25 121:4 takes 76:17 84:16 87:1,7 87:16 talk 25:17 26:3 26:4,4 31:11 43:17,21 44:7 44:8 50:23 51:10 55:12 84:13 talked 26:3 98:8 108:20 114:3 talking 47:3 74:3 talks 30:12 tarte 1:13 2:16 6:2 7:2 8:2 9:5 9:11 13:24 14:19 15:3 59:4 93:18 116:3,17 118:18 120:1 120:13 tasha 4:15 taught 29:14 73:15 taurine 43:18 44:9 45:17 46:23 51:18
---	--	--	--

[taurine - transcript]

53:5 54:20 55:1,14 taurus 83:7 teaches 29:7 32:5 49:4 50:6 teaching 28:13 49:13 teachings 57:10 57:14 80:15 tease 101:16 technical 84:23 115:16 tell 14:19 57:14 113:13 114:9 telling 96:3 100:20 114:16 114:22,24 tells 47:1 57:25 temperature 21:22 temperatures 21:4,8,9 62:23 64:11 ten 93:11 95:10 116:10 term 34:3 39:21 63:22 64:7,19 80:7 80:11,19 83:4 85:11,19 86:10 86:20,24 87:6 88:8,15,24 89:7 92:20 95:15 97:13 100:1 104:11	105:5 106:19 107:20 113:8 117:10,12,22 118:1,20 119:3 terms 22:2 29:1 57:19 61:20 80:3 81:12 89:2,13,20 94:25 96:12,16 96:25 97:25 98:13 108:7,17 114:11 119:11 test 70:25 71:4 71:10,23 72:1 testified 9:7 testify 37:9,19 testifying 121:7 testimony 9:20 10:15,22 29:11 29:19 115:13 120:5 121:11 tests 71:18 text 32:20,23 33:12,14 34:3 34:6 94:23 thank 11:24 22:22 67:11 71:4,4 89:16 93:12 105:2 116:8 118:13 118:16 thanks 67:1 116:9 that'd 13:14	thereof 51:1 95:22 thiamine 43:18 44:9 45:18 46:23 53:5 54:16 55:1,14 91:14 92:9 95:21 thing 68:11 things 25:18,20 25:21 44:6,8 55:15 100:20 think 13:8 28:18 31:13 38:18 46:10 48:6 49:8,8,15 52:1,3 55:20 61:19 62:8,9 62:22 68:2,3 69:21 80:18 87:9 100:23 101:6 102:3 106:22 113:13 115:4 119:17 thiols 66:21,22 66:23,24 third 75:21 thomas 4:15 thought 48:19 49:2 50:10 104:20 thousands 44:2 60:16 61:17,17 62:11	three 72:19 80:3 95:9 thursday 1:15 2:21 7:4 8:4 time 9:15 15:17 18:16,22 73:13 93:10 98:22,23 121:5 title 14:20,25 35:15 68:22,24 70:16 titled 85:7 95:7 toasting 22:7 today 9:17,21 14:7 told 82:3,6 99:11,15,17 110:2 113:7 114:5 115:4 took 20:4 82:3 top 14:25 54:9 total 15:19 towards 41:23 60:9 tower 4:7 tr 72:9 73:5 trace 73:6 track 93:9 trademark 1:1 2:1 14:23 transcribed 121:9 transcript 120:3
--	---	--	---

[treatises - washington]

treatises 107:25	type 21:24	83:15 84:18,19	vary 51:12
trial 1:2 2:2 110:9,19	types 21:10 57:12,16 62:11 107:14	85:9,10,23,25 86:19,24 91:19 114:4 117:9,14 117:21,23,25	vegetable 44:24
tripeptide 53:23	u	understood 43:6 85:21 103:25 115:11	verbal 10:4
true 63:2 87:14 120:6 121:10	uh 18:19 72:10 95:5	undesirable 102:18	verbiage 48:21 48:24
try 13:2 22:20 67:17	umpierre 5:6	united 1:1 2:1 14:23 91:3	versed 110:16
trying 48:20,23	unaffected 119:10	university 16:20	version 14:15 19:22
tthomas 4:19	under 21:5 46:18 48:12 66:20 70:25 71:7 120:1 121:9	upload 67:13	versus 101:19
turn 22:25 23:25 25:9 27:22 31:5 33:19 34:13 35:5 36:23 37:23 39:10,20 40:12 41:6 42:25 59:4 66:4 70:7 73:17 76:18 79:20 88:6,11 94:20 97:6,18 104:6 105:13 107:3 108:25 116:7	undersigned 121:1	urquhart 2:18 5:15	view 17:5 67:14 86:25 87:7
turning 92:14	understand 9:24 10:12 14:16 15:10 17:8 29:2 52:9 65:11 77:9 81:20 82:18 84:3,14 86:9 89:18,25 96:15 96:24 97:24 99:25 113:24 117:18	usage 28:19,19	virtue 37:10,20
two 25:24 27:5 27:12,16 43:8 44:1 46:21,22 59:10,21 62:23 72:16 95:22 100:20 107:14	understanding 14:3 16:19 17:11,13,15 22:6 24:21 42:23 73:7 80:13,19 82:2 82:23 83:10,14	used 50:8 53:8 55:3 117:10	volatile 34:22 43:9 59:11,15 60:16 63:24 64:21 65:4 66:16 69:2 70:12,24 73:2
		useful 84:14	volatiles 37:9 37:19 38:5 59:18,25 61:1 61:8,13 62:7 62:18 63:22 64:1,8,12,19 66:21 69:11
		using 49:9 91:12 92:8 119:16 121:8	vs 1:7 2:7
		v	w
		v 7:3 8:3	wait 68:1
		validity 86:13 100:4	want 12:10 88:1 101:23 102:5 112:23 115:7
		varied 105:23	washington 3:8 4:18
		variety 49:10 50:7,14	
		various 50:12 50:24 53:14 55:7 58:17	

[water - zero]

water 58:11,11 58:21 69:19 70:4,15 71:15 71:24 74:16 way 13:4 45:25 49:11 55:10 78:25 113:20 114:23 ways 55:11 57:11 wdevine 4:10 wendy 4:5 west 3:15 westin 5:5 whereof 121:15 wilson 3:4,12 4:4,14 5:4 withdraw 37:16 witness 6:2 11:17,25 12:6 12:10,14,16 13:19,25 14:3 16:16,23 17:2 17:17 19:10,24 21:17 22:17,23 25:21 26:2 27:3,9,15 29:6 29:23 30:12,20 31:1,16 36:6 37:13 38:8 41:17,25 45:7 45:10,13 47:8 48:6,19 49:18 50:6,22 51:8	51:17 56:6,14 57:7,22 58:6 58:15 61:4,15 62:21 63:5 66:23 67:9,18 67:21 68:1,5 71:14,18,21 73:10 74:24 76:10 77:19 78:24 81:4,6 82:12 83:1,17 84:10,22 85:13 86:4 87:3,9,20 88:4 90:7,21 91:23 92:11 93:15 94:5 98:21 99:20 101:9,15 102:9 103:7 104:3 105:1 107:22 108:10 109:25 110:5,12 111:1 111:24 112:3 112:13,20 113:11,19 114:7,14,18 115:8,16,23 117:14,25 119:16 121:15 witnesses 121:6 word 32:19,23 117:15 words 11:11 37:22 74:7 96:21 98:23	106:1 113:12 119:17 work 115:17 working 18:5 write 15:12 wrote 105:11 wsgr.com 3:9 3:17 4:10,19 5:10,11
		y
		yeah 13:13 20:10 34:17 37:7,16 41:17 41:24 50:2 51:23 61:24 62:4 70:3 71:6 71:21 81:11 94:8 102:10,12 108:2 113:16 114:9 115:17 yeast 42:5 yup 55:18 95:8
		z
		zero 46:25 54:13,18,21

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.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted

fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at www.veritext.com.