

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT AND TRIAL AND APPEAL BOARD

HENKEL CORPORATION

Petitioner

v.

Certified Copy

H.B. FULLER COMPANY

Patent Owner

Case IPR2014-00606

Patent 6,833,404

DEPOSITION of SHAW LING HSU, PH.D.

Wednesday, January 14, 2015

8:55 a.m.

Finnegan, Henderson, Farabow, Garret & Dunner, LLP

Two Seaport Lane

Boston, Massachusetts 02210-2001

Michelle Keegan, Court Reporter

Henderson Legal Services, Inc.

202-220-4158

www.hendersonlegalservices.com

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18
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21
22

1 I N D E X

2 Deposition of: Page

3 SHAW LING HSU, PH.D.

4 Examination by Mr. Grimsrud 5

5 Examination by Ms. Chlebowski 263

6

7

8 E X H I B I T S

9 (Previously marked and referred to)

10 No. Page

11 Exhibit 1001 U.S. Patent No. 6,833,404 8

12 Exhibit 1002 Document entitled, "Eastotac 8

13 Hydrocarbon Resins"

14 Exhibit 1003 Document entitled, "Specialty 8

15 Polymers for Adhesives & Sealants"

16 Exhibit 1015 Declaration of Shaw Ling Hsu, Ph.D. 5

17 Exhibit 1016 Curriculum Vitae of Shaw Ling Hsu, 22

18 Ph.D.

19 Exhibit 1018 Document entitled, "Tack and 257

20 Viscoelasticity of Block Copolymer

21 Based Adhesives"

22 Exhibit 1019 U.S. Patent 5,331,033 258

1 P R O C E E D I N G S

2 SHAW LING HSU, PH.D.,

3 having been satisfactorily identified and duly sworn by
4 the Notary Public, was examined and testified as
5 follows:

6 EXAMINATION

7 BY MR. GRIMSRUD:

8 Q. Good morning, Dr. Hsu. My name is Tim
9 Grimsrud, and I'll be taking your deposition today. And
10 with me is my colleague, Linzey Erickson.

11 MR. GRIMSRUD: For the record, I just want to
12 note also that Kirsten Stone and Kristi Halloran are
13 attending by telephone from H.B. Fuller.

14 Q. Okay. Dr. Hsu, you were retained by Henkel to
15 provide expert testimony in this case. Correct?

16 **A. That is correct.**

17 Q. And I'd like to show you right at the beginning
18 here a copy of what's been marked as Henkel
19 Exhibit 1015.

20 (Exhibit Number 1015
21 marked for identification)

22 Q. Is this a copy of your expert declaration that

1 you've provided in this case?

2 **A. Yes, it is.**

3 Q. Feel free to flip through it if you want, but
4 it appears to be a correct copy?

5 **A. Correct.**

6 Q. Dr. Hsu, is it correct that Henkel asked you to
7 provide various expert opinions in this case?

8 MS. CHLEBOWSKI: Objection. Privilege.

9 You can answer to the extent you don't reveal
10 any communications with counsel. If you cannot, don't
11 answer the question.

12 Q. And, sir, you're not being represented by
13 Finnegan and Henderson in this case as a client, are
14 you?

15 **A. I'm being represented?**

16 Q. Correct.

17 **A. I don't think -- my understanding, they are the**
18 **Henkel attorneys.**

19 Q. Right. You're serving as an expert witness in
20 this case. Correct?

21 **A. That is correct.**

22 Q. So, sir, is it correct that Henkel asked you to

1 provide opinions on certain issues in this case?

2 MS. CHLEBOWSKI: Same objection.

3 And caution, don't reveal any communications
4 with attorneys.

5 MR. GRIMSRUD: Counsel, there's no basis for an
6 attorney-client privilege objection here.

7 MS. CHLEBOWSKI: With an expert witness there's
8 no --

9 MR. GRIMSRUD: You're having him testify in
10 this case, so there's no basis for attorney-client
11 privilege.

12 MR. TRIDICO: He can answer the question.

13 Q. Dr. Hsu, let me just ask you the question
14 again. Is it correct that Henkel asked you to provide
15 various expert opinions in this case?

16 A. I'm retained by Finnegan, so the initial
17 approach was by Henkel, correct.

18 Q. All right. And so either Henkel or lawyers at
19 Finnegan asked you to provide expert opinions in this
20 case. Is that fair?

21 A. That is correct.

22 Q. Okay. I'll show you also a few other exhibits.

1 The first one is Exhibit -- Henkel Exhibit 1001.

2 (Exhibit Number 1001

3 marked for identification)

4 Q. And is that a copy of the U.S. patent
5 6,833,404?

6 **A. That is correct.**

7 Q. And I will show you another exhibit we'll be
8 talking about. This is Henkel Exhibit 1002.

9 (Exhibit Number 1002

10 marked for identification)

11 Q. And is Exhibit 1002 a copy of what you referred
12 to as the Eastotac brochure?

13 **A. That is correct.**

14 Q. And Exhibit Henkel Exhibit 1003.

15 (Exhibit Number 1003

16 marked for identification)

17 Q. Is this a copy of what you referred to as the
18 Exxon reference?

19 **A. Exxon brochure, yes.**

20 Q. Exxon brochure, Exxon reference.

21 And, sir, just for the court reporter, we'll
22 just need to make sure today that your answers are

1 verbal. I know sometimes it's common to nod.

2 **A. Yes. All right. Just remind me.**

3 Q. I will. Thank you. So Exhibit 1003 is the
4 Exxon brochure or Exxon reference?

5 **A. Correct.**

6 Q. Now, Dr. Hsu, one of your opinions -- I know
7 you have multiple opinions in this case, but one of your
8 opinions is that the Eastman brochure -- the Eastotac
9 brochure anticipates Claims 22, 23, 25, 28, 31, and 32
10 of the '404 patent. Is that correct?

11 **A. May I take a look?**

12 **(Pause)**

13 Q. Okay.

14 **A. On page 17 -- I'm on declaration -- it says,**
15 **"Prior art discloses all the elements of the Claim 22,**
16 **28, 31, and 32."**

17 Q. Okay. And you see right under that where it
18 says that Eastotac brochure, which is Exhibit 1002,
19 discloses each and every element of Claims 22, 23, 25,
20 28, 31, and 32?

21 **A. Correct.**

22 Q. Okay. So is it your -- is it one of your

1 opinions in this case that the Eastotac brochure
2 anticipates Claims 22, 23, 25, 28, 31, and 32 of the
3 '404 patent?

4 **A. I didn't say the word "anticipate." I'm simply**
5 **saying Eastotac discloses each one of the claims made in**
6 **the '404 patent: 22, 23, 25, 28, 31, and 32.**

7 Q. Okay. And do you understand what
8 "anticipation" means in the context of invalidity of a
9 patent?

10 **A. I actually don't. That's why I prefer to use**
11 **my word. I do not know.**

12 Q. Okay. So sometimes we'll use the term
13 "anticipates "in referring to what you've described as
14 disclosing each and every element of a claim.

15 So if a piece of prior art, for example,
16 discloses each and every element of a claim, we say that
17 anticipates the claims.

18 **A. Okay.**

19 Q. Do you understand that?

20 **A. Thank you. Yeah.**

21 Q. And so one of your opinions in this case,
22 though, is that the Eastotac brochure discloses each and

1 every element of Claims 22, 23, 25, 28, 31, and 32 of
2 the '404 patent. Is that correct?

3 **A. Correct.**

4 Q. Okay. So one of your opinions in this case is
5 that the Eastotac brochure anticipates Claims 22, 23,
6 25, 28, 31, and 32 of the '404 patent?

7 **A. Correct.**

8 Q. And then another one of your opinions is that
9 the Exxon reference, which is Henkel Exhibit 1003,
10 discloses each and every element of Claims 22 through 25
11 and 28 of the '404 patent. Is that correct?

12 **A. That is correct.**

13 Q. So one of your other opinions in the case is
14 that the Exxon reference, Henkel Exhibit 1003,
15 anticipates Claims 22 through 25 and 28 of the
16 '404 patent. Is that correct?

17 **A. Correct.**

18 Q. And now, is it correct that you have another
19 opinion in this case -- and I'll represent to you that
20 the PTAB has instituted this proceeding for Claim 27, so
21 there's another dependent claim, Claim 27 of the
22 '404 patent, that the PTAB has instituted on the basis

1 of obviousness based on either the Eastotac brochure or
2 Exxon reference and what you referred to as the Litz
3 reference.

4 **A. I don't know what "PTAB" mean.**

5 Q. The Patent Trial and Appeal Board, the
6 governing body that's overseeing this proceeding.

7 **A. I see. I did not know that.**

8 Q. Okay. Is one of your opinions -- Is one of
9 your other opinions in this case that dependent Claim 27
10 would have been obvious based on the Eastotac brochure
11 or Exxon reference and the Litz reference?

12 **A. Are you referring to the paragraph I wrote, 83?**

13 Q. Well, I'm just -- I'm just asking you to
14 confirm that in your declaration you do have an opinion
15 that Claim 27 of the '404 patent would have been obvious
16 to a person of ordinary skill in the art.

17 **A. I do.**

18 Q. Okay. And just to be clear, today when I'm
19 asking you questions, I want to focus on your
20 anticipation opinions. So I want to focus on your
21 opinions about anticipation based on the Eastotac
22 brochure and anticipation based on the Exxon reference.

1 Okay?

2 **A. Okay.**

3 Q. So I'm not -- I don't plan to get into your
4 opinions on the obviousness of dependent Claim 27.

5 Okay?

6 **A. Okay.**

7 Q. So really when I'm asking you questions today,
8 I'll really be focusing on your opinions that the
9 Eastman Eastotac brochure anticipates Claims 22, 23, 25,
10 28, 31, and 32 of the '404 patent, and then your opinion
11 that the Exxon reference anticipates Claims 22 through
12 25 and 28 of the '404 patent. Okay?

13 **A. Okay.**

14 Q. And if you do have any questions for me, if you
15 don't understand a question today, just let me know.
16 Okay?

17 **A. If I'm not sure. Fine.**

18 Q. Now, Dr. Hsu, in your declaration did you
19 include a complete description of your opinions?

20 **A. Yes.**

21 Q. And so in other words, you endeavored to put
22 all of the opinions that you're relying on in this

1 proceeding in your expert declaration?

2 **A. Correct.**

3 Q. And did you also include the bases for your
4 opinions in your declaration?

5 **A. I did.**

6 Q. And we'll focus on your anticipation opinions
7 for now.

8 For example, on your opinion that the Eastotac
9 brochure is an anticipating reference, does your
10 declaration set forth all your opinions as to why the
11 Eastotac brochure anticipates Claims 22, 23, 25, 28, 31,
12 and 32 of the '404 patent?

13 **A. As I stated here, yes.**

14 Q. And similarly, does your declaration set forth
15 the full basis for your opinion that the Eastotac
16 brochure anticipates Claims 22, 23, 25, 28, 31, and 32
17 of the '404 patent?

18 **A. Correct.**

19 Q. And then switching to the Exxon reference,
20 which is Henkel Exhibit 1003, does your declaration set
21 forth all of your opinions as to why the Exxon reference
22 anticipates Claims 22 through 25 and 28 of the

1 '404 patent?

2 **A. Correct.**

3 Q. Does your declaration also set forth the full
4 basis for all of your opinions that the Exxon reference
5 anticipates Claims 22 through 25 and 28 of the
6 '404 patent?

7 **A. Yes.**

8 Q. Dr. Hsu, just to talk for a little bit about
9 your background, I notice in your declaration you stated
10 that you have a -- I believe you called it a technical
11 consulting role with Henkel?

12 **A. Correct.**

13 Q. And that's a consulting role other than your
14 role as an expert in this case. Is that correct?

15 **A. That is correct.**

16 Q. Could you just describe for us what your
17 technical consulting role is with Henkel?

18 **A. I have been funded by National Starch and**
19 **subsequently Henkel for 16 years. And I serve on the**
20 **science advisory board of Henkel.**

21 Q. So for how long were you funded -- And when you
22 say "funded," are you referring to your research?

1 **A. Correct.**

2 Q. And where are you employed?

3 **A. I'm employed University of Massachusetts**
4 **Polymer Science and Engineering Department, Amherst,**
5 **Massachusetts.**

6 Q. Polymer Science and Engineering Department?

7 **A. Correct.**

8 Q. So when you referred to funding by National
9 Starch and subsequently by Henkel, are you referring to
10 funding for research at the University of Massachusetts
11 Amherst?

12 **A. That is correct.**

13 Q. And approximately how long was your funding for
14 research at the University of Massachusetts Amherst
15 provided by National Starch?

16 **A. I don't quite know when National Starch was**
17 **acquired by Henkel, but continuously between National**
18 **Starch and the various subsidiaries have been 16 years.**

19 Q. Okay. So the 16 years of funding includes all
20 the funding that National Starch provided as well as the
21 funding that Henkel provided after subsequently
22 acquiring National Starch?

1 **A. That is correct.**

2 Q. And Henkel acquired National Starch sometime in
3 recent years?

4 **A. I'm not sure, but recently.**

5 Q. Like within the last five to ten years?

6 **A. Yes.**

7 Q. Okay. And when Henkel acquired National
8 Starch, all your funding that you had been receiving
9 through National Starch continued through Henkel?

10 **A. Correct.**

11 Q. So is -- Do you consider National Starch now to
12 be a part of Henkel?

13 **A. Yes.**

14 Q. Okay. So would you say -- So is it fair to
15 say, then, that for the last 16 years you have received
16 funding for research work at University of Massachusetts
17 Amherst from National Starch and Henkel?

18 **A. I have.**

19 Q. And approximately how much funding would you
20 say you've received from the National Starch/Henkel
21 relationship?

22 **A. I believe \$1.4 million.**

1 Q. Okay. What type of research have you used that
2 approximately \$1.4 million for?

3 A. We look at the miscibility behavior of various
4 adhesives, and we look at the reactivity associated with
5 the adhesives. And we've been looking at solidification
6 process in various polymers and various components of
7 polymers.

8 Q. And is any of the research that the
9 \$1.4 million, the approximate \$1.4 million, has gone to
10 include technologies other than adhesives?

11 A. I would say that one can apply some of those to
12 coatings and so on.

13 Q. And so a coating is a technology that's
14 different than adhesive technology?

15 A. No. There are similarities, adhesion to
16 surface, interstitial behavior. But to me, the research
17 is in that particular area.

18 Q. So some of the research is applicable to
19 adhesives as well as to coatings?

20 A. Correct.

21 Q. What role have you had on the science advisory
22 board of Henkel?

1 **A.** There's an annual board meeting, and they have
2 a topic that actually they would like to discuss
3 internally and externally. And my job has been to
4 invite speakers on their behalf or to suggest speakers
5 who would be able to advance some on the topic of
6 bringing new ideas to the research community.

7 **Q.** And in your own words, what would you say the
8 science advisory board of Henkel is? What does it do?

9 **A.** Discuss what the next generation of products or
10 science would be.

11 **Q.** How often does the science advisory board of
12 Henkel meet?

13 **A.** Once or twice a year.

14 **Q.** Are there professors from other universities in
15 the science advisory board?

16 **A.** Yes.

17 **Q.** And what are some of the universities that are
18 represented on the science advisory board?

19 **A.** Michigan State, University of Minnesota,
20 Cornell, University of Pennsylvania, University of
21 Massachusetts -- myself -- and some others.

22 **Q.** Have you worked with anyone from Henkel on

1 research?

2 **A. Yes.**

3 Q. Who from Henkel have you worked with on your
4 research?

5 **A. A number of individuals. So there would be**
6 **Chuck Paul. There will be George -- I don't -- I'm not**
7 **quite sure the last name. And Andrea Jordis and**
8 **Christine. There have been quite a large -- the number**
9 **of groups I work with.**

10 Q. There's been a quite large number of groups of
11 people at Henkel that you've worked with?

12 **A. Right.**

13 Q. How many -- Let me ask you this question:
14 Approximately how many people from Henkel do you think
15 that you have worked with as part of your research at
16 University of Massachusetts?

17 **A. 30.**

18 Q. So in the course -- Is this over how many years
19 that you've worked with these 30 or so people?

20 **A. 16 years.**

21 Q. So in the last 16 years, in the course of your
22 research at the University of Massachusetts Amherst,

1 you've worked with somewhere in the neighborhood of 30
2 people from Henkel?

3 **A. Correct.**

4 Q. Have the -- Has your work with the 30 or so
5 people from Henkel been limited to projects that are
6 also funded by Henkel?

7 **A. (No verbal response)**

8 Q. Do you understand my question?

9 **A. Would you rephrase -- repeat that?**

10 Q. So you've received approximately \$1.4 million
11 of funding from Henkel. Right?

12 **A. Correct.**

13 Q. Of that \$1.4 million that you've received from
14 Henkel over the last 16 years, have you worked with
15 people from Henkel on the projects that were funded by
16 that \$1.4 million?

17 **A. Yes.**

18 Q. And approximately how many people have you
19 worked with on those projects from Henkel?

20 **A. I would say 30.**

21 Q. Have you worked with people from Henkel on any
22 of your research at University of Massachusetts that

1 involves projects that are not funded by Henkel?

2 MS. CHLEBOWSKI: Objection. Form.

3 **A. No.**

4 Q. So would you say that all of the projects that
5 you have worked on -- research projects that you have
6 worked on with people from Henkel have involved projects
7 that Henkel also provided funding for?

8 MS. CHLEBOWSKI: Same objection.

9 **A. Correct.**

10 Q. Now, I'll give you a copy of your CV also, and
11 this is marked as Henkel Exhibit 116.

12 (Exhibit Number 1016
13 marked for identification)

14 Q. And my first question will just be, is
15 Exhibit 1016 a copy of your CV?

16 **A. Correct.**

17 Q. Does your CV include a complete list of your
18 publications?

19 **A. Probably not the recent one, the most recent**
20 **one.**

21 Q. So there's probably some very recent
22 publications that are not here?

1 **A. Yeah.**

2 Q. Would your -- Does your CV include all of your
3 publications from, say, 1990 through 2010?

4 **A. The referee ones.**

5 Q. So any refereed publication between 1990 and
6 2010 should be in your CV?

7 **A. Correct.**

8 Q. I noticed you have a few publications at the
9 end of your CV. These are probably recent ones that say
10 "Submitted for Publication."

11 **A. Correct.**

12 Q. How would I get a copy of the publications that
13 you've submitted for publication? Basically, it looks
14 it's ones that are listed at 211 through 214 on your CV.

15 **A. Correct. So some of them have been published
16 now so you can certainly get them online.**

17 Q. Which ones have been published?

18 **A. "Journal of Physical Chemistry" that has been
19 published. "International Journal of Adhesion and
20 Adhesives" has been published in this year, both this
21 year -- I'm sorry. 2014.**

22 Q. And how about 211 and 212?

1 **A. 211 also has been published. And 212, we're**
2 **going through the revision process.**

3 Q. Okay. So if we look online, we should be able
4 to find 211, 213, and 214?

5 **A. That is correct.**

6 Q. I notice that one of your very recent
7 publications, this would be 214, which is entitled "An
8 Analysis of the Role of Ethylene Based Additives in Hot
9 Melt Adhesives," that has an author of CW Paul. Do you
10 see that?

11 **A. Yes.**

12 Q. Is that Chuck Paul?

13 **A. That is correct.**

14 Q. And he is at Henkel?

15 **A. That is correct.**

16 Q. So even very recently you have published
17 articles in which scientists from Henkel are coauthors?

18 **A. That is correct.**

19 Q. How many articles, roughly, do you think you
20 have published with someone from Henkel as a coauthor?

21 **A. Probably 15.**

22 Q. And over what time period would those

1 publications span in which a Henkel scientist is a
2 coauthor?

3 **A. I would say 12 years or so.**

4 Q. How did the funding come about that you've
5 received from Henkel? How did you get that relationship
6 going on which you would get funding for research from
7 Henkel?

8 MS. CHLEBOWSKI: Objection to form.

9 Q. Do you understand my question?

10 Just to be clear, I'm just wondering, you
11 started receiving funding from Henkel. Right?

12 **A. Correct.**

13 Q. Roughly 16 years ago?

14 **A. Correct.**

15 Q. How did you start receiving funding from
16 Henkel?

17 **A. Actually, one of my graduate students was at a
18 meeting, gave a talk, and he met Henkel folks. And he
19 said, "You really should talk to my adviser about this
20 subject." And that's how it started.**

21 Q. What have been -- What have been other sources
22 of your funding for research over the years?

1 **A. National Science Foundation, Army Research**
2 **Office, various industrial sources, and the government**
3 **from abroad.**

4 Q. What have been your sources of funding -- let's
5 just focus on the last five years. In the last five
6 years, what have your sources of research funding at
7 University of Massachusetts been from?

8 **A. National Science Foundation, Henkel, Saint**
9 **Gobain, Abbott Pharmaceutical, and Chemtura, and so on.**
10 **NatureWorks, Dow Chemical.**

11 Q. Sorry. NatureWorks and Dow Chemical, are those
12 two separate ones?

13 **A. That's correct.**

14 Q. So in the last five years, would you say the
15 main sources of your funding have been from NSF, Henkel,
16 Saint Gobain, Abbott Pharmaceutical, Chemtura,
17 NatureWorks, and Dow?

18 MS. CHLEBOWSKI: Objection to form.

19 **A. Correct.**

20 Q. And when we say -- when you say your funding
21 over the last 16 years has been from Henkel, you're
22 referring to it being from Henkel or National Starch,

1 which has now been acquired by Henkel. Correct?

2 **A. My funding from Henkel has lasted 16 years.**

3 **Correct. And National Starch.**

4 Q. Okay. And that's the only point I wanted to
5 clarify. When you say that your funding from Henkel has
6 been over the last 16 years, has it been -- just to be
7 precise, it's been from either National Starch or
8 subsequently Henkel, after Henkel acquired National
9 Starch?

10 **A. Correct.**

11 Q. And in recent years since Henkel has acquired
12 National Starch, Henkel has continued to provide funding
13 for your research?

14 **A. That is correct.**

15 Q. Right now, today, do you receive funding for
16 your research from Henkel?

17 **A. I do.**

18 Q. Approximately how much funding are you
19 receiving right now, today, from Henkel?

20 **A. \$125,000 a year.**

21 Q. And what projects is that approximately
22 \$125,000 from Henkel being used for?

1 **A. It deal with solidification process of polymers**
2 **and blends.**

3 Q. Was the funding from Henkel that funded the
4 project that resulted in your recent publication that's
5 reflected by Article 214 in your CV?

6 **A. That is correct.**

7 Q. Do you have any patents, Dr. Hsu?

8 **A. I have a number of patents filed, I have one**
9 **patent received, and that's all I know.**

10 Q. So you have one patent that's been granted,
11 that's issued?

12 **A. I think so.**

13 Q. Is that a U.S. patent?

14 **A. Yes, it is.**

15 Q. Do you have any patents in other countries?

16 **A. No, I do not.**

17 Q. Sorry. Did you say you do not or you don't
18 know?

19 **A. I do not.**

20 Q. You do not. Okay. The one U.S. patent of
21 yours that's issued, what does that relate to generally?

22 **A. That deals with drug delivery vehicles.**

1 Q. And are there other inventors on that patent?

2 A. Yes.

3 Q. Any inventors from any scientist, inventors
4 from Henkel?

5 A. No.

6 Q. How about your patents that you have filed that
7 are pending right now? Do any of those involve
8 scientists from Henkel?

9 A. No.

10 Q. What is the general technology that your filed
11 patents relate to?

12 A. The they deal with solidification of polymers
13 and elastomeric properties of polymers.

14 Q. On your CV, if you look at Exhibit 1016, at the
15 bottom you have a description of research activities.
16 Do you see that?

17 A. Yes.

18 Q. Does that provide a general description of your
19 research activities over the years?

20 A. It does.

21 Q. Of your articles that are listed in
22 Exhibit 1016, your publications, which of those

1 publications relate specifically to hot melt adhesives?

2 **A. A number of them actually do. Because as I**
3 **said, I deal with characterizations and solidification**
4 **process. So directly, one is 214. And so the --**
5 **actually, the -- as I said, I deal with solidification**
6 **process, and that's my specialty. And so a number of**
7 **publications in that particular -- in what I've cited**
8 **here actually all have components of controlling**
9 **property hot melt adhesives.**

10 Q. One second here. I just need to make sure
11 I . . .

12 (Pause)

13 Q. You said your specialty that you focus on is --
14 did you refer to as a solidification process?

15 **A. I deal crystallization process behavior of**
16 **polymers.**

17 Q. I deal with crystallization process of
18 polymers?

19 **A. Right. That's listed in the structural**
20 **characterization, polymer structures, and so on.**

21 Q. So just to back up, if there's a -- is there
22 a -- an area that you would characterize as your

1 specialty for your research over the years?

2 **A. I would say polymer structure characterization.**

3 Q. So over the course of your career at University
4 of Massachusetts, is it fair to say that the focus of
5 your research has been on polymer structure
6 characterization?

7 **A. Correct.**

8 Q. And what do you mean by "polymer structure
9 characterization"?

10 **A. So polymers have various states. And so**
11 **depending on configuration of the polymer, they form**
12 **different morphology. I try to understand the kinetics**
13 **associated with that. I try to understand the**
14 **morphology of any form and what are the physical**
15 **properties associated with those particular morphology.**

16 Q. And you're talking about the specific
17 properties and morphologies of polymers?

18 **A. Correct.**

19 Q. Is there a specific polymer or polymers that
20 you've focused on over the years in your research?

21 **A. No. Depends on the subject matter. Different**
22 **polymers have different features. They come, new**

1 polymers always being developed, and we try to
2 characterize what their special properties would be,
3 what their special structure would be, and how do we
4 alter them to make use of them.

5 Q. So over the course of your career, in your
6 research you've worked with a number of polymers, but
7 your work has primarily focused on the polymer structure
8 characterization?

9 A. That is correct.

10 Q. In your publications that are listed on your
11 CV, which of the publications actually talk about hot
12 melt adhesives, actually refer to hot melt adhesives?

13 A. 214.

14 Q. Are there any other publications in your CV,
15 Henkel Exhibit 1016, that specifically mention hot melt
16 adhesives or hot melt adhesive?

17 A. No.

18 Q. So of the -- of all the publications in your
19 CV -- well, let me rephrase that.

20 Of all your publications in refereed journals,
21 the only one that mentions the hot melt adhesive will be
22 the article that was recently published that's shown as

1 Number 214 in your CV?

2 **A. That is correct.**

3 Q. Do any of your publications -- Well, let me ask
4 you this question: Do any of your publications in
5 nonrefereed journals mention hot melt adhesives?

6 **A. I'm not sure.**

7 Q. Sitting here today, you're not aware of a
8 publication of yours that's in a nonrefereed journal
9 that mentions a hot melt adhesive?

10 **A. I'm not sure.**

11 Q. Well, just sitting here today, can you name a
12 publication of yours in a nonrefereed journal that
13 mentions hot melt adhesives?

14 **A. No, I cannot.**

15 Q. Do any of your publications in refereed
16 journals that are shown in your CV, Henkel 1016, discuss
17 formulating hot melt adhesives?

18 **A. No.**

19 Q. Does -- And so just to be clear, does the
20 publication that's reflected as Number 214 on your CV
21 discuss formulating hot melt adhesives?

22 **A. No.**

1 Q. And during your research at University of
2 Massachusetts Amherst, have you personally formulated
3 hot melt adhesives?

4 A. No.

5 Q. During the course of your research at
6 University of Massachusetts Amherst, have you ever
7 personally made a hot melt adhesive?

8 A. No.

9 Q. So have you ever made a hot melt adhesive?

10 A. No.

11 Q. Have you ever personally formulated a hot melt
12 adhesive?

13 A. No.

14 Q. Have you ever -- at the University of
15 Massachusetts Amherst, have you ever analyzed a hot melt
16 adhesive? Have you personally analyzed a hot melt
17 adhesive?

18 A. No.

19 Q. During the course of your career, have you ever
20 done any testing on a hot melt adhesive?

21 A. No.

22 Q. During the course of your career, have you done

1 any type of experimentations on a hot melt adhesive?

2 **A.** We certainly have worked on components
3 associated hot melt adhesive. That's where the
4 structural characterization comes in, that's where the
5 solidification comes in, crystallization comes in, the
6 solving of the various components. But we have not
7 worked on directly on hot melt formulations.

8 **Q.** Okay. And understood. You've done a lot of
9 work, it sound like, over your career on polymers, as an
10 example?

11 **A.** Correct.

12 **Q.** And so I want to focus on the actual hot melt
13 adhesive itself. Okay?

14 And we'll get into this more later, but you
15 understand that a hot melt adhesive can include polymers
16 and tackifying resins and waxes and other things.
17 Right?

18 **A.** That is correct.

19 **Q.** Okay. So during the course of your career,
20 have you ever done any experiments of any kind on hot
21 melt adhesives?

22 **A.** You mean commercial formulation?

1 Q. Have you ever done any experiments of any kind
2 on an actual hot melt adhesive?

3 A. No.

4 Q. Sorry. I didn't catch your answer. I'll
5 rephrase it.

6 In the course of your career, have you ever
7 done any experiments of any of kind on an actual hot
8 melt adhesive?

9 A. No.

10 Q. And so is it correct that you have never done
11 any testing for bondability of a hot melt adhesive?

12 MS. CHLEBOWSKI: Objection to form.

13 A. Correct.

14 Q. And I'll just rephrase it just to make sure you
15 understand the question.

16 Have you ever done any testing of any kind on
17 bondability of a hot melt adhesive?

18 MS. CHLEBOWSKI: Same objection.

19 A. No.

20 Q. Have you done any experiments of any kind on
21 bondability of a hot melt adhesive?

22 MS. CHLEBOWSKI: Same objection.

1 **A. Is that the same question you asked before?**

2 **No.**

3 Q. Have you ever done any type of testing or
4 experimentation on -- Well, I'll rephrase that question.

5 Have you ever done any type of bond testing on
6 a hot melt adhesive?

7 MS. CHLEBOWSKI: Same objection.

8 **A. No.**

9 Q. Have you ever done any type of adhesive testing
10 on a hot melt adhesive?

11 **A. No.**

12 Q. Have you ever done any type of testing on a hot
13 melt adhesive for cohesive properties of the hot melt
14 adhesive?

15 MS. CHLEBOWSKI: Same objection.

16 **A. Cohesive property is an inherent property of**
17 **material. And that, we have done.**

18 Q. Of components?

19 **A. Of components.**

20 Q. So have you ever tested a actual hot melt
21 adhesive for its cohesive properties?

22 **A. No.**

1 Q. Have you done any peel testing on an actual hot
2 melt adhesive?

3 A. No.

4 Q. Have you done any cold crack testing on an
5 actual hot melt adhesive?

6 A. No.

7 Q. Have you done any testing on an actual hot melt
8 adhesive for brittleness?

9 A. No.

10 Q. Have you done any testing on an actual hot melt
11 adhesive for flexibility?

12 A. No.

13 Q. And have you ever done any testing of any kind
14 on an actual hot melt adhesive?

15 A. No.

16 Q. Could you describe for me the process that you
17 used for drafting your expert declaration, Exhibit 1015.

18 A. The process, what I did was -- I was initially
19 contacted, and then subsequently we held numerous
20 discussions between attorney of Henkel and myself and go
21 over the various points --

22 MS. CHLEBOWSKI: I'm going to just caution you

1 not to reveal any communications you had with counsel.

2 MR. GRIMSRUD: That's an improper instruction.

3 Q. Go ahead.

4 A. Okay. And the initial draft was supplied by
5 the attorney, and I edited it extensively over the next
6 several months.

7 Q. How much time, approximately, would you say you
8 spent on the declaration?

9 A. The declaration, probably a considerable amount
10 of time.

11 Q. More than 50 hours?

12 A. No.

13 Q. So how about more than 25 hours?

14 A. Correct.

15 Q. Somewhere in the 25- to 50-hour range?

16 A. Correct.

17 Q. The materials that you relied on in forming
18 your opinions that are in your declaration, are they all
19 cited in your declaration?

20 A. Yes.

21 Q. Did you interview any people at Henkel in
22 forming -- in creating your declaration?

1 **A. No.**

2 Q. So the -- your declaration, your opinions in
3 your declaration don't rely on any discussions with
4 scientists at Henkel, for example?

5 **A. That is correct.**

6 Q. Dr. Hsu, if you turn to Paragraph 27, I
7 believe, of your declaration, Paragraphs 27 and 28
8 relate to your opinion on who a person of ordinary skill
9 in the art is. Is that correct?

10 **A. Correct.**

11 Q. And in your opinion in this case, who is a
12 person of ordinary skill in the art for the '404 patent?

13 **A. As I stated here, it would be a graduate degree
14 in polymer science engineering, chemistry, physics, or
15 related field and subsequent some experience in this
16 particular area.**

17 Q. And by that, you mean at least two years of
18 experience in the field of polymer science and
19 engineering?

20 **A. Correct.**

21 Q. With respect to the graduate-level degree, what
22 type of graduate-level degree does a person of ordinary

1 skill in the art need to have, in your opinion?

2 A. As is stated here, polymer science and the
3 various chemical fields in physics and so on.

4 Q. Sorry. My question was actually, like, is it a
5 master's degree? Ph.D.? I assume by "graduate degree"
6 you mean it needs to be more than a bachelor's degree?

7 A. Correct.

8 Q. So in your opinion, a person with a bachelor's
9 degree is not a person of ordinary skill in the art?

10 A. Well, I thought about it quite a bit. And I
11 thought about how my own process went through that. And
12 so my feeling was -- and also the education process we
13 have at University of Massachusetts. So typically we do
14 not have the bachelor's degree. They will come in with
15 some general background of chemical science, material
16 science, physical science, and so on.

17 And they would really need to understand more
18 polymers, so the first two years they would actually
19 study that. Once they have a graduate degree, either a
20 master's or Ph.D., then they would have some practice.
21 So I would say this is the person I'm looking at
22 reflects our education process.

1 Q. Okay. And so in your opinion, to be a person
2 of ordinary skill in the art, is it fair to say that the
3 person would have to have a graduate-level degree,
4 meaning a master's degree or Ph.D., in polymer science,
5 engineering, chemistry, physics, or a related field?

6 A. Well, you said "Ph.D." I would say that some
7 graduate training in this particular area I think would
8 be good -- would be necessary, yeah.

9 Q. Okay. And I just want to get clarity on could
10 a person with just a bachelor's degree in, say,
11 chemistry, engineering, polymer science, physics, or a
12 related field qualify as a person of ordinary skill in
13 the art or not?

14 A. I didn't think so.

15 Q. Okay. So in your opinion, a person with a
16 bachelor's degree in polymer science, engineering,
17 chemistry, physics, or a related field could not qualify
18 as a person of ordinary skill in the art for the
19 '404 patent?

20 A. As I said, I thought about it quite a bit. I
21 could not imagine an undergraduate student, a bachelor's
22 degree, will have the background in doing it.

1 Q. And then you say that a person of ordinary
2 skill in the art needs to have at least two years of
3 experience in the field of polymer science and
4 engineering?

5 **A. Correct.**

6 Q. Is there any type of -- Let me ask you this
7 question: The field of polymer science and engineering
8 would include a number of different areas. Is that fair
9 to say?

10 **A. That is correct.**

11 Q. There's lots of types of polymers, for example.
12 Right?

13 **A. Correct.**

14 Q. Many applications for polymers?

15 **A. Correct.**

16 Q. To qualify as a person of ordinary skill in the
17 art for the '404 patent, in your opinion, would a person
18 of ordinary skill in the art need to have experience in
19 any particular area of polymer science and engineering?

20 **A. Well, so the one would understand, as I said,**
21 **the solidification process associated with the polymers,**
22 **the miscibility associated with various components,**

1 identify the morphology of the components, actually form
2 the mixture form, and try to understand the
3 transformation between various states in polymers,
4 physical states in polymers.

5 Q. In your opinion, Dr. Hsu, for a person to
6 qualify as a person of ordinary skill in the art for the
7 '404 patent, does the person need to have experience
8 working with hot melt adhesives?

9 A. Not necessarily.

10 Q. In your opinion, Dr. Hsu, for a person to
11 qualify as a person of ordinary skill in the art for the
12 '404 patent, does the person need to have experience
13 formulating hot melt adhesives?

14 A. No.

15 Q. In your opinion, Dr. Hsu, to qualify as a
16 person of ordinary skill in the art for the '404 patent,
17 would the person need to have experience characterizing
18 hot melt adhesives?

19 A. No.

20 Q. In your opinion, to qualify as a person of
21 ordinary skill in the art for the '404 patent, would the
22 person need to have any type of experience experimenting

1 with hot melt adhesives?

2 **A. No.**

3 Q. To qualify as a person of ordinary skill in the
4 art for the '404 patent, would a person of ordinary --
5 would a person need to have experience with bond testing
6 for hot melt adhesives?

7 **A. No.**

8 Q. To qualify as a person of ordinary skill in the
9 art for the '404 patent, would the person need to have
10 'experience analyzing the adhesive properties of hot melt
11 adhesives?

12 **A. No.**

13 Q. To qualify as a person of ordinary skill in the
14 art for the '404 patent, would the person need to have
15 experience analyzing cohesive properties of hot melt
16 adhesives?

17 **A. No.**

18 Q. And, Dr. Hsu, to qualify as a person of
19 ordinary skill in the art for the '404 patent, in your
20 opinion, would the person need to have any experience
21 formulating hot melt adhesives?

22 **A. No.**

1 Q. And the patent in this case was filed in --
2 well, a provisional patent application was filed on
3 June 30th of 1998. Is that correct?

4 A. That's my understanding.

5 Q. And on June 30th of 1998, you had no experience
6 formulating hot melt adhesives. Correct?

7 A. Correct.

8 Q. And then the patent has another filing date of
9 April 27th, 1999. Do you see that?

10 A. I see that. July -- I'm sorry. April 27,
11 1999. Correct.

12 Q. As of April 27th, 1999, you had no experience
13 formulating hot melt adhesives. Correct?

14 A. Yes.

15 Q. And even as of today, do you have any
16 experience formulating actual hot melt adhesives?

17 A. No, I do not.

18 Q. The person of ordinary skill in the art that
19 you identified in this case would have a graduate-level
20 degree in polymer science, engineering, chemistry,
21 physics, or a related field, as well as at least two
22 years of experience in the field of polymer science and

1 engineering. Correct?

2 **A. Correct.**

3 Q. At the bottom of Paragraph 28, if you'd flip
4 over to page 12 of your declaration, you state, "My
5 opinions set forth herein are from the perspective of a
6 person of ordinary skill in the art." Do you see that?

7 **A. Correct.**

8 Q. In forming your opinions in this case, did you
9 rely on -- Let me rephrase that.

10 In forming your opinions in this case, did you
11 form them all from the perspective of a person of
12 ordinary skill in the art?

13 **A. My opinions set -- my perspective.**

14 Q. And that's actually what I'm getting at. Do
15 your opinions reflect your perspective, or is it from
16 the perspective of a person of ordinary skill in the
17 art?

18 **A. I try to imagine the person of ordinary -- with
19 those background, what their opinion would be.**

20 Q. Okay. So in other words, in forming your
21 opinions in this case, did you try to put yourself in
22 the shoes of your definition of a person of ordinary

1 skill in the art?

2 **A. That's correct.**

3 Q. Okay. So in forming all of your opinions in
4 this case, did you form them from the perspective of a
5 person having a graduate-level degree in polymer
6 science, engineering, chemistry, physics, or a related
7 field as well as at least two years of experience in the
8 field of polymer science and engineering?

9 **A. That is correct.**

10 Q. And in forming your opinions in this case, did
11 you apply any other definition of "a person of ordinary
12 skill in the art"?

13 **A. No.**

14 Q. And in forming your opinions in this case, you
15 did not require the person of ordinary skill -- the
16 person of ordinary skill in the art to have any
17 experience working with hot melt adhesives. Correct?

18 **A. That is correct.**

19 Q. And, sir, as of today, is it fair to say that
20 you do not have any experience working with an actual
21 hot melt adhesive?

22 **A. Correct.**

1 Q. Sir, if we look at the '404 patent, Henkel
2 Exhibit 1001, it's titled "Hot melts utilizing a high
3 glass transition temperature of substantially aliphatic
4 tackifying resin." Did I read that correctly?

5 A. You did.

6 Q. So the title talks about hot melts?

7 A. Correct.

8 Q. And you understand hot melts in the title to be
9 referring to a hot melt adhesive?

10 A. I do.

11 Q. And if you look at the abstract, for example,
12 it says the invention -- sorry. Let me rephrase that.

13 The abstract says, "This invention relates to
14 an improved hot melt adhesive," and then it goes on. Do
15 you see that?

16 A. Correct.

17 Q. So the abstract talks about hot melt adhesive.
18 Correct?

19 A. Correct.

20 Q. And if you look at the "Field of the Invention"
21 in Column 1, at roughly line 12 or so, do you see where
22 it says, "This invention relates to improved hot melt

1 adhesive compositions"?

2 **A.** I assume the second paragraph on Column 1. It
3 relates to improved hot melt adhesive composition
4 utilizing a hydrogenated substantially aliphatic
5 tackifying resin, and so on. Yes?

6 Q. Yes?

7 **A.** You're pointing to that.

8 Q. You see in Column 1 where it says, subheading,
9 "Field of the Invention"?

10 **A.** Correct.

11 Q. And the first sentence under "Field of the
12 Invention" is, "This invention relates to improved hot
13 melt adhesive compositions utilizing hydrogenated
14 substantially aliphatic tackifying resin having a high
15 glass transition temperature"?

16 **A.** Correct.

17 Q. So in the "Field of the Invention" section of
18 the '404 patent, it talks about hot melt adhesives.
19 Fair?

20 **A.** Yes.

21 Q. And the "Background of the Invention," we're
22 not going to go through it word for word, but the

1 background of the invention in the '404 patent talks
2 about hot melt adhesives. Fair?

3 **A. That would be fair.**

4 Q. And the "Object of the Invention," if you look
5 down at Column 2, there's a section titled "Object of
6 the Invention." Do you see that?

7 **A. Correct.**

8 Q. It also talks about an improved hot melt
9 adhesive composition. Correct?

10 **A. Yes, that's correct.**

11 Q. And then right below that in Column 2, still,
12 there's a "Summary of the Invention." Do you see that?

13 **A. Yes.**

14 Q. And it says, "This invention relates to an
15 improved hot melt adhesive composition." Do you see
16 that?

17 **A. Yes.**

18 Q. And so the summary of the invention is talking
19 about a hot melt adhesive composition. Fair?

20 **A. Fair. Yes.**

21 Q. And then there's a detailed description section
22 of the invention that starts at Column 3. Do you see

1 that?

2 **A. Yes, at the bottom of the Column 3.**

3 Q. Yeah, bottom of Column 3. And we won't go
4 through all of that right now.

5 But have you read that section?

6 **A. I have.**

7 Q. And it talks about hot melt adhesives.
8 Correct?

9 **A. Correct.**

10 Q. Fair to say that detailed description section
11 of the '404 patent provides examples of hot melt
12 adhesives?

13 **A. Yes.**

14 Q. If you'd turn, sir, to Claim 22? Dr. Hsu,
15 you've read Claim 22 before. Correct?

16 **A. Correct.**

17 Q. You talk about that in your declaration?

18 **A. Correct.**

19 Q. And Claim 22 talks about "A hot melt adhesive
20 composition comprising," and then it has "a" and another
21 section underneath it, "b." Do you see that?

22 **A. Yes, I do.**

1 Q. Is it fair to say that Claim 22 is directed to
2 a hot melt adhesive composition?

3 A. It talks about that, yes.

4 Q. The first words in Claim 22 say, "A hot melt
5 adhesive composition." Correct?

6 A. Correct.

7 Q. And Claim 28 also starts off by saying, "A hot
8 melt adhesive comprising." Do you see that?

9 A. I do.

10 Q. And then it talks about various aspects of the
11 hot melt adhesive. Correct?

12 A. Correct.

13 Q. Fair to say that Claim 28 is directed to a hot
14 melt adhesive?

15 A. Correct.

16 Q. And would you agree that to -- you talked about
17 meeting all the elements of the claims earlier. Do you
18 remember that, when we were talking about your
19 anticipation opinions?

20 A. Yes.

21 Q. You talked about how -- we talked about how to
22 anticipate, something has to meet all the limitations of

1 the claim?

2 **A. Correct.**

3 Q. You agree that Claim 22 requires that the
4 composition is a hot melt adhesive?

5 **A. It describes the composition of a hot melt
6 adhesive.**

7 Q. And in other words, Claim 22 isn't talking
8 about any composition. It's talking about a hot melt
9 adhesive composition. Fair?

10 **A. That is correct.**

11 Q. So would you agree that, to meet each and every
12 element of Claim 22, the composition that you're talking
13 about needs to be a hot melt adhesive?

14 **A. Would you repeat the question?**

15 Q. Yeah. Earlier you were talking about how
16 something could anticipate if it meets each and every
17 element of the claim. Do you remember that?

18 **A. Correct.**

19 Q. To meet -- for something to meet each and every
20 element of Claim 22, would you agree that it would need
21 to be a hot melt adhesive?

22 MS. CHLEBOWSKI: Objection to form.

1 Q. Do you understand what I'm -- I'm just getting
2 at this, that Claim 22 requires the presence of a hot
3 melt adhesive composition. Correct?

4 A. It describes one, comprising.

5 MS. CHLEBOWSKI: Same objection.

6 Q. Claim 22 is not directed to compositions that
7 are not hot melt adhesives. Fair?

8 MS. CHLEBOWSKI: Same objection.

9 A. I would say yes.

10 Q. And on Claim 28, it's directed to a hot melt
11 adhesive. Correct?

12 MS. CHLEBOWSKI: Same objection.

13 A. Correct.

14 Q. And in your opinion, to meet each and every
15 element of a hot melt -- sorry -- to meet each element
16 of Claim 28, you need to have a hot melt adhesive.
17 Correct?

18 MS. CHLEBOWSKI: Same objection. Excuse me.

19 A. Not necessarily.

20 Q. So are you saying that something that's not a
21 hot melt adhesive could meet each and every element of
22 Claim 28?

1 MS. CHLEBOWSKI: Same objection.

2 A. I think that the described composition and the
3 composition, that I don't need a composition to say hot
4 melt adhesive to -- regarding that element.

5 Q. Let me ask you this as a hypothetical, because
6 you're an expert so I get to ask you hypotheticals.

7 So here is a hypothetical: Say there's a
8 composition and it meets -- let's focus on Claim 22 --
9 it meets the element of "a" in Claim 22 and it meets
10 element "b" in Claim 22. Okay?

11 A. Uh-hmm.

12 Q. So you have a composition, as a hypothetical,
13 and it meets elements "a" and it meets element "b."
14 Okay? Are you with me?

15 A. Yes.

16 Q. But it's not a hot melt adhesive. Okay?

17 A. Yes.

18 Q. So you have this composition. It meets element
19 "a," it meets element "b," but it's not a hot melt
20 adhesive. Okay? Do you understand what I'm saying?

21 A. Uh-hmm.

22 Q. Does this element -- Does this composition that

1 we're talking about, this hypothetical composition that
2 meets element "a" and element "b" but is not a hot melt
3 adhesive, does that meet each and every element of
4 Claim 22?

5 MS. CHLEBOWSKI: Objection to form. Outside
6 the scope.

7 A. I think that's a legal question. I look at the
8 composition as -- even though it's titled a hot melt
9 adhesive, I can see composition. I don't necessarily
10 depend on application. I don't necessarily need to use
11 it in hot melt adhesive.

12 Q. Okay. Let me clarify it. It's not a hot melt
13 adhesive. Okay?

14 A. Okay.

15 Q. Assume tests have been done on it and it's just
16 not a hot melt adhesive. Okay? Are you with me?

17 A. Yes.

18 Q. If this composition meets elements "a" and "b"
19 but it's not a hot melt adhesive, do you agree that it
20 does not meet each and every element of Claim 22?

21 MS. CHLEBOWSKI: Same objections.

22 A. I don't know.

1 Q. You don't know the answer to that question?

2 MS. CHLEBOWSKI: Same objections.

3 A. I don't.

4 Q. Okay. So if I ask -- Let me try this question:
5 Is it correct that if you have a composition that meets
6 elements "a" and "b" of Claim 22 but is not a hot melt
7 adhesive, sitting here today, you don't know whether or
8 not that composition would fall within the scope of
9 Claim 22?

10 MS. CHLEBOWSKI: Same objections.

11 A. Excuse me.

12 THE WITNESS: I guess when you say "same
13 objections," what are the objections?

14 MS. CHLEBOWSKI: I'm objecting to outside the
15 scope and the form.

16 A. I don't know.

17 Q. Okay. Let me try this one: If we have -- as a
18 hypothetical, we have a composition that meets
19 element "a" of Claim 22 and meets element "b" of
20 Claim 22 but is not a hot melt adhesive, do you have any
21 idea as to whether or not that composition would fall
22 within the scope of Claim 22?

1 MS. CHLEBOWSKI: Objection. Outside the scope.

2 Form.

3 A. I don't know.

4 Q. And let's do the same thing on Claim 28, the
5 other independent claim that you looked at. It also
6 has -- it says "A hot melt adhesive comprising" and then
7 it has an element "a" and an element "b." Do you see
8 that?

9 A. I do.

10 Q. As a hypothetical, if you have a composition
11 that meets the requirements of element "a" and meets the
12 requirements of element "b" of Claim 28 but is not a hot
13 melt adhesive, do you have an opinion as to whether or
14 not that composition would be covered by Claim 28?

15 MS. CHLEBOWSKI: Objection. Outside the scope.
16 Form.

17 A. I do not.

18 Q. And if there's a composition that meets
19 element "a" and meets element "b" of Claim 22, do you
20 have an opinion as to -- but it's not a -- I'll rephrase
21 that.

22 If you have a composition that meets

1 element "a" and element "b" of Claim 22 but it is not a
2 hot melt adhesive, do you have an opinion as to whether
3 or not that composition would fall within the scope of
4 Claim 22?

5 MS. CHLEBOWSKI: Objection. Outside the scope.
6 Form.

7 A. I don't know.

8 Q. If you look at Claim 31, it's called a
9 dependent claim and it depends from Claim 22.

10 A. Yes.

11 Q. And it says, "The adhesive composition of
12 Claim 22 wherein said tackifying resin concentration is
13 less than said thermoplastic base polymer
14 concentration." Do you see that?

15 A. Yes, I do.

16 Q. When it says "The adhesive composition of
17 Claim 22," what's that referring to?

18 A. The adhesive composition Claim 22, I would say
19 is the composition described here, 10 percent by weight,
20 50 percent by weight, of at least one hydrocarbon
21 tackifying resin, and so on. And also the TG, the glass
22 transition temperature, and also 10 percent to

1 80 percent of at least one thermoplastic based polymer,
2 the composition described the composition in Claim 22.

3 Q. And so Claim 31 when it says "The adhesive
4 composition of Claim 22," do you understand that to be
5 referring to the hot melt adhesive composition of
6 Claim 22?

7 A. That is correct.

8 Q. And same with Claim 32, which that's dependent
9 on Claim 28. Correct?

10 A. That is correct.

11 Q. And Claim 32 says, "The adhesive composition of
12 Claim 28 wherein said tackifying resin concentration is
13 less than said thermoplastic based polymer
14 concentration." Did I read that correctly?

15 A. That is correct.

16 Q. Do you understand the adhesive composition of
17 Claim 28 as stated in dependent Claim 32 to be referring
18 to the hot melt adhesive composition of Claim 28?

19 A. That is correct.

20 MS. CHLEBOWSKI: Objection. Outside the scope.
21 Form.

22 A. Yes.

1 MR. GRIMSRUD: Now would be a good time for a
2 quick break. I'd just ask during the break please don't
3 talk to counsel about the deposition or the substance of
4 your opinions.

5 THE WITNESS: I will not.

6 (Recess taken)

7 BY MR. GRIMSRUD:

8 Q. Dr. Hsu, do you have the Eastotac brochure,
9 which is Exhibit 1002, in front of you?

10 A. I do.

11 Q. In your opinion, you're relying -- so in -- you
12 have an opinion that the Eastotac brochure
13 anticipates -- includes each and every element of
14 Claims 22, 23, 25, 28, 31, and 32 of the '404 patent.
15 Correct?

16 A. That is correct.

17 Q. And in that opinion, you rely on the Eastotac
18 brochure disclosing that H-142R resin. Is that correct?

19 A. Correct.

20 Q. And if you look at the '404 patent, which is
21 Exhibit 1001, and if you specifically look at Column 5,
22 I believe it's roughly line 22 of the '404 patent, do

1 you see where it refers to Eastotac H-142R?

2 **A. I do.**

3 Q. And it says -- in the patent, it says, "One
4 such resin is Eastotac H-142R having a bromine number of
5 about 5 and a softening point of about 140 degrees C and
6 available from Eastman Chemical Company in Kingsport,
7 Tennessee." Did I read that correctly?

8 **A. That is correct.**

9 Q. And so do you understand the '404 patent to be
10 stating that the Eastotac H-142R resin is available from
11 Eastman Chemical Company?

12 **A. That is correct.**

13 Q. It's pretty clear in the '404 patent that the
14 H-142R resin is available from the Eastman Chemical
15 Company. Fair?

16 **A. That is fair.**

17 Q. Would you agree that a person of ordinary skill
18 in the art reading the '404 patent would understand that
19 they could get the Eastotac H-142R resin from Eastman
20 Chemical Company?

21 **A. Yes.**

22 Q. They could order H-142R from Eastman Chemical

1 Company. Correct?

2 **A. They can order without reading the '404 patent.**

3 Q. Yes.

4 **A. Okay.**

5 Q. And I'm going to get to that too.

6 **A. All right. Okay.**

7 Q. But in reading -- if a person of ordinary skill
8 in the art was reading the '404 patent, they would
9 understand that if they wanted to use Eastotac H-142R
10 resin, they can go get that resin from Eastman Chemical
11 Company. Fair?

12 **A. That is fair.**

13 Q. And so no one reading the '404 patent would
14 understand H.B. Fuller, for example, to have invented
15 H-142R resin. Fair?

16 MS. CHLEBOWSKI: Objection. Outside the scope.

17 **A. Fair.**

18 Q. You've read the '404 patent. Right?

19 **A. Correct.**

20 Q. And you've read it from the perspective of a
21 person of ordinary skill in the art?

22 **A. Yes.**

1 Q. Okay. So based on your reading of the
2 '404 patent from the perspective of a person of ordinary
3 skill in the art, you agree that a person of ordinary
4 skill in the art would understand Eastotac H-142R to be
5 available from Eastman Chemical Company?

6 A. Correct.

7 Q. And so you're not suggesting -- I just want to
8 make clear that in your declaration you're not
9 suggesting that H-142R was invented by H.B. Fuller.

10 A. No.

11 Q. And you're not suggesting that someone reading
12 the '404 patent would not have understood that they
13 could get H-142R from Eastman Chemical Company?

14 MS. CHLEBOWSKI: Same objection.

15 A. Correct.

16 Q. And you're not suggesting that the patent
17 office, for example, was under the impression that you
18 could not get Eastotac H-142R from Eastman Chemical
19 Company?

20 MS. CHLEBOWSKI: Objection. Outside the scope.

21 A. I don't know. The patent office.

22 Q. I'm just asking you what your opinions are. In

1 your declaration, you're not suggesting that the patent
2 examiner that reviewed the '404 patent was under the
3 impression that you couldn't get Eastotac H-142R resin
4 from Eastman Chemical Company?

5 MS. CHLEBOWSKI: Objection. Outside the scope.
6 Form.

7 **A. That's correct.**

8 Q. And if you look at the Eastotac brochure, which
9 is Henkel Exhibit 1002, we talked about how it lists
10 H-142 in the brochure. Right?

11 **A. Correct.**

12 Q. And if you look at the last page of the
13 Eastotac brochure, it says "Eastman Chemical Company."
14 Correct?

15 **A. Correct.**

16 Q. And it says -- it even has an address in
17 Kingsport, Tennessee. Correct?

18 **A. Correct.**

19 Q. And the specification of the '404 patent says
20 that Eastotac H-142R is available from Eastman Chemical
21 Company in Kingsport, Tennessee. Correct?

22 **A. Correct.**

1 Q. And so, Dr. Hsu, do you agree that the
2 '404 patent and the Eastotac brochure are both
3 consistent with each other insofar as they both state
4 that H-142R is available from Eastman Chemical Company?

5 MS. CHLEBOWSKI: Objection. Outside the scope.

6 A. Yes.

7 Q. And, Dr. Hsu, by the year 2000, if we just
8 focus on by the year 2000, a person of ordinary skill in
9 the art would have known that they could purchase H-142R
10 from Eastman Chemical Company. Fair?

11 MS. CHLEBOWSKI: Objection. Outside the scope.

12 A. Yes.

13 Q. By 1999, a person of ordinary skill in the art
14 would have understood that they could purchase H-142R
15 resin from Eastman Chemical Company. Correct?

16 MS. CHLEBOWSKI: Same objection.

17 A. I believe so.

18 Q. By 1998, a person of ordinary skill in the art
19 would have also known that they could purchase H-142R
20 from Eastman Chemical Company. Fair?

21 A. Yeah.

22 Q. By 1997, a person of ordinary skill in the art

1 would have known that it could purchase H-142R resin
2 from Eastman Chemical Company. Fair?

3 MS. CHLEBOWSKI: Outside the scope.

4 **A. Yes.**

5 Q. By 1996, a person of ordinary skill in the art
6 would have known that they could purchase H-142R resin
7 from Eastman Chemical Company. Correct?

8 MS. CHLEBOWSKI: Same objection.

9 **A. Correct. Correct.**

10 Q. And, sir, in your opinion, by 1995, would a
11 person of ordinary skill in the art have also known that
12 they could purchase H-142R resin from Eastman Chemical?

13 MS. CHLEBOWSKI: Same objection.

14 **A. Correct.**

15 Q. And by 1994, would a person of ordinary skill
16 in the art also have known that H-142R resin was
17 available from Eastman Chemical Company?

18 MS. CHLEBOWSKI: Same objection.

19 **A. Correct.**

20 Q. By 1993, do you agree that a person of ordinary
21 skill in the art would have known that H-142R resin
22 could be obtained from Eastman Chemical Company?

1 MS. CHLEBOWSKI: Same objection.

2 **A. Correct.**

3 Q. And by 1992, in your opinion, would a person of
4 ordinary skill in the art have known that H-142R resin
5 was available from Eastman Chemical Company?

6 MS. CHLEBOWSKI: Same objection.

7 **A. I mean, the copyright is 1992. So I don't know**
8 **exactly when during 1992.**

9 Q. For purposes of your opinion, you're assuming
10 that the Eastotac brochure, Exhibit 1002, was available
11 to the public around 1992?

12 **A. That's my opinion, yes.**

13 Q. So that's a good question. What exactly is
14 your opinion as to when the Eastotac brochure,
15 Exhibit 1002, was available to the public?

16 MS. CHLEBOWSKI: Objection. Outside the scope.

17 **A. This has a copyright of 1992, all rights**
18 **reserved.**

19 Q. And so in forming your opinions in this case,
20 what did you consider to be the approximate date by
21 which the Eastotac brochure, Exhibit 1002, was
22 published?

1 **A. 1992.**

2 Q. So you agree, then, if the Eastotac brochure
3 was available in 1992, that between 1992 and 2000,
4 throughout that entire time period, people of ordinary
5 skill in the art would have known that H-142R was
6 available through Eastman Chemical Company?

7 MS. CHLEBOWSKI: Objection. Outside the scope.

8 **A. I would imagine so.**

9 MR. GRIMSRUD: Counsel, these outside-the-scope
10 objections are starting to get a little bit over the
11 top. I'm asking him about a core issue in this case,
12 which is the brochure that he says was published in 1992
13 and available. So I'd appreciate it if you consider
14 some discretion on those objections.

15 Q. Let's do -- Let's look at the Exxon reference.
16 I think in your declaration -- I just want to make sure
17 I understand that you refer to the Exhibit 1003 as the
18 Exxon reference? Like if you look at page 25, for
19 example? Do you see that?

20 **A. Yes.**

21 Q. Was there -- I know earlier today you also
22 referred to it as the Exxon brochure.

1 Was there a particular reason that you called
2 the Eastotac brochure a brochure and the Exxon reference
3 a reference as opposed to a brochure?

4 **A. No, I didn't.**

5 Q. And so if we talk about the Exxon reference,
6 you understand we're talking about Henkel Exhibit 1003?

7 **A. Correct.**

8 Q. And if we talk about the Exxon brochure, we're
9 also talking about Henkel Exhibit 1003?

10 **A. That is correct.**

11 Q. In your view, there's no material difference
12 between whether we call it a brochure or a reference?

13 **A. No.**

14 Q. And in your opinion, when was the Exxon
15 reference, Exhibit 1003, published?

16 **A. The date here is October 1990.**

17 Q. So in your opinion, the Exxon reference was
18 published around October of 1990?

19 MS. CHLEBOWSKI: Objection. Outside the scope.

20 **A. I believe so.**

21 Q. And do you personally know when the Exxon
22 reference was published?

1 MS. CHLEBOWSKI: Same objection.

2 **A. I do not.**

3 MR. GRIMSRUD: What's the basis for your
4 objection on that, Counsel?

5 MS. CHLEBOWSKI: So can you point to in his
6 opinion where he specifically states he personally knows
7 that the Exxon reference was published?

8 MR. GRIMSRUD: I think you have a fundamental
9 misunderstanding of what I'm allowed to do. On
10 cross-examination I get to probe his opinions and find
11 out bases for his opinions. If things are not stated in
12 his report explicitly, I get to ask questions about it.

13 His report does confine you to what' in it, but
14 that's a different issue.

15 So these objections you're making are
16 getting -- they're over the top when you continue to say
17 "outside the scope."

18 MS. CHLEBOWSKI: This is not a litigation.
19 There are more strict rules in the PTAB proceedings.
20 His cross-examination is limited to what's in his
21 report. I continue to make the objections. He
22 continues to answer. It shouldn't be a problem.

1 MR. GRIMSRUD: I'm asking about his
2 understanding of when this was published, and he's
3 saying this is a publication.

4 MS. CHLEBOWSKI: I understand.

5 MR. GRIMSRUD: So if you're saying that's
6 outside the scope, that's just not reasonable. But
7 we'll continue.

8 MS. CHLEBOWSKI: Thank you.

9 BY MR. GRIMSRUD:

10 Q. So, Dr. Hsu, do you personally know when the
11 Exxon reference was published?

12 MS. CHLEBOWSKI: Same objection.

13 **A. No, I do not.**

14 Q. What have you relied on for saying that the
15 Exxon reference was published in October of 1990?

16 MS. CHLEBOWSKI: Same objection.

17 **A. It's on the cover page, page 1, October 1990.**

18 Q. So in saying that the Exxon reference was
19 published in October 1990, you're relying on the date
20 that's on the front page of the Exxon reference?

21 MS. CHLEBOWSKI: Same objection.

22 **A. That is correct.**

1 Q. And, Dr. Hsu, what's your basis for saying that
2 the Eastotac brochure, Exhibit 1002, was published
3 around 1992?

4 MS. CHLEBOWSKI: Same objection.

5 A. It would be on page 8, in the back. It says
6 "Eastman Kodak Company, 1992, all rights reserved."

7 Q. And on the Eastotac brochure, do you have any
8 personal knowledge of when the brochure was actually
9 published?

10 A. I do not.

11 MS. CHLEBOWSKI: Same objection.

12 Q. Now, Dr. Hsu, if you look back at the
13 '404 patent, Column 6, at line 22, do you see where it
14 talks about Escorez 5340?

15 A. Yes.

16 Q. And it says, "a substantially aliphatic
17 hydrocarbon resin having a TG at onset of about
18 76 degrees C, both available from Exxon Chemical
19 Company." Do you see that?

20 A. I do.

21 Q. Do you understand the '404 patent to state that
22 Escorez 5340 was available from Exxon Chemical Company?

1 **A. I do.**

2 Q. And the Exhibit 1003, the Exxon reference, has
3 an address on the back page for the Exxon Chemical
4 Company.

5 Do you agree that if a person of ordinary skill
6 in the art was reading the '404 patent back in the 1998
7 or 1999 time frame they'd understand that Escorez 5340
8 is available from Exxon Chemical Company?

9 **A. Correct.**

10 Q. Do you agree that it's clear in the '404 patent
11 that Escorez 5340 is available from the Exxon Chemical
12 Company?

13 **A. It does.**

14 Q. And the Exxon reference, Exhibit 1003, also
15 shows that 5340 resin is available from the Exxon
16 Chemical Company?

17 **A. It's in the brochure.**

18 Q. And so you agree that a person of ordinary
19 skill in the art looking at this brochure, Exhibit 1003,
20 would understand that Escorez 5340 is a resin that's
21 available from the Exxon Chemical Company?

22 **A. Correct.**

1 Q. So do you agree that the '404 patent and the
2 Exxon reference are consistent with each other insofar
3 as they both state that Escorez 5340 is available from
4 the Exxon Chemical Company?

5 **A. Correct.**

6 Q. And, Dr. Hsu, by -- you said that for purposes
7 of your opinion in this case, you have stated that the
8 Exxon reference, Exhibit 1003, was published in October
9 of 1990. Is that correct?

10 MS. CHLEBOWSKI: Objection. Outside the scope.

11 **A. From the cover page, that's what it says.**

12 Q. And so in forming your opinion in this case,
13 have you assumed that the publication date of the Exxon
14 reference is October 1990?

15 **A. That is correct.**

16 Q. So in your opinion, by the year 2000, for
17 example, a person of ordinary skill in the art would
18 have been aware of the Exxon reference and would have
19 known that Escorez 5340 was available from Exxon. True?

20 **A. True.**

21 Q. By 1999, in your opinion, a person of ordinary
22 skill in the art would have known that Escorez 5340 was

1 available from Exxon Chemical Company. Correct?

2 **A. Correct.**

3 Q. In 1998, in your opinion, a person of ordinary
4 skill in the art would have known that Escorez 5340
5 resin was available from Exxon Chemical Company.
6 Correct?

7 **A. Correct.**

8 Q. By 1997, in your opinion, a person of ordinary
9 skill in the art would have understood that Escorez 5340
10 is available from Exxon Chemical Company?

11 **A. Correct.**

12 Q. By 1996, in your opinion, a person of ordinary
13 skill in the art would have known that Escorez 5340 is
14 available from Exxon Chemical Company?

15 **A. Yes.**

16 Q. By 1995, in your opinion, a person of ordinary
17 skill in the art would have known that Escorez 5340 was
18 available from Exxon Chemical Company?

19 **A. Correct.**

20 Q. By 1994, in your opinion, a person of ordinary
21 skill in the art would have known that Escorez 5340 was
22 available from Exxon Chemical Company?

1 **A. Correct.**

2 Q. By 1993, a person of ordinary skill in the art,
3 in your opinion, would have known that Escorez 5340 is
4 available from Exxon Chemical Company?

5 **A. Correct.**

6 Q. And then by about October of 1992, a person of
7 ordinary skill in the art, in your opinion, would have
8 known that Escorez 5340 is available from Exxon Chemical
9 Company?

10 **A. Correct.**

11 Q. And if we talk -- look at the Eastotac
12 brochure, Exhibit 1002. Do you have it in front of you?

13 **A. Yes, I do.**

14 Q. Dr. Hsu, it's an eight-page document. Is that
15 correct?

16 **A. That is correct.**

17 Q. And the front page of the Eastotac brochure
18 says "Eastotac hydrocarbon resins"?

19 **A. Correct.**

20 Q. In, I guess, the inside of the cover page it
21 also says "Eastotac hydrocarbon resins"?

22 **A. Correct.**

1 Q. In the Eastotac brochure, the -- what's marked
2 as page 3 of Exhibit 1002 has an introduction?

3 A. Correct.

4 Q. And you've read that introduction?

5 A. Yes, I have.

6 Q. And then I just want to talk about the various
7 sections in the Eastotac brochure. There's a section
8 that spans pages 4 and 5 on applications. It's under
9 heading "Applications." Do you see that?

10 A. Yes, I do.

11 Q. And it's about, what, five paragraphs?

12 A. Seven. The applications, it's five.

13 Q. Applications is five. And then there's also a
14 packaging section on the right-hand side of page 5?

15 A. Yes.

16 Q. And an FDA status section that's one paragraph?

17 A. Correct.

18 Q. And then there's Table 1 that's entitled
19 "Typical Properties of Eastotac Hydrocarbon Resins." Is
20 that correct?

21 A. Correct.

22 Q. And that Table 1 spans pages 4 and 5 of the

1 Eastotac brochure?

2 **A. Correct.**

3 Q. And then on pages 6 and 7 of the Eastotac
4 brochure, there's a Table 2 entitled "Solubility
5 Characteristics of Eastotac Hydrocarbon Resins."

6 **A. Correct.**

7 Q. Table 4, "Compatibility of Eastotac Resins of
8 Other Products." Do you see that?

9 **A. Yes.**

10 Q. And then there's a Table 3 entitled "General
11 Composition Ranges for Eastotac Resins and Hot Melt
12 Adhesives"?

13 **A. Correct.**

14 Q. And then the last page just has it looks like
15 information about Eastman Chemical Company. Is that
16 fair?

17 **A. That's fair.**

18 Q. In your declaration, do you discuss Tables 2 or
19 Tables 4?

20 **A. No, I do not.**

21 Q. So is it fair to say that in forming your
22 opinions on the Eastotac brochure, you focused on

1 Table 1 and Table 3?

2 **A. Correct.**

3 Q. Now, Table 1 -- let's focus on Table 1.

4 Table 1 of the Eastotac brochure is titled
5 "Typical Properties of Eastotac Hydrocarbon Resins."
6 Correct?

7 **A. Correct.**

8 Q. And it lists -- Table 1 of the Eastotac
9 brochure lists 13 different resins. Correct?

10 **A. Correct.**

11 Q. There's the H-100E, H-100R, H-100L, H-100W,
12 H-100E -- sorry. I'll reread it.

13 There's the resins that are listed on Table 3
14 are the H-100E, H-100R, H-100L, H-100W, H-115E, H-115R,
15 H-115L, H-115W, H-130E, H-130R, H-130L, H-130W, and then
16 H-142R?

17 **A. Correct.**

18 Q. And your opinion on anticipation for the
19 Eastotac brochure is based on the H-142R resin. Is that
20 fair?

21 **A. That's the one that has the highest softening**
22 **point, yes.**

1 Q. What does 142 mean in H-142R?

2 A. **What's the meaning of H-142?**

3 Q. You know, the resin's name, the H-142R.

4 A. **I do not know.**

5 Q. What does 142 in the name H-142R signify?

6 MS. CHLEBOWSKI: Outside the scope.

7 A. **I do not know.**

8 Q. How about H-130W? What does 130, the number
9 130, in the name H-130W, signify?

10 MS. CHLEBOWSKI: Outside the scope.

11 A. **I do not know, but I assume this is associated**
12 **with the softening point.**

13 Q. And how about with, for example, H-100? What
14 does the 100 in the H-100L mean?

15 MS. CHLEBOWSKI: Same objection.

16 A. **I would say that is the softening point.**

17 Q. Do you agree that Table 1 lists various
18 properties for each of the 13 resins?

19 A. **Yes.**

20 Q. There's a column titled "Property." Right?

21 A. **Correct.**

22 Q. For example, it lists the ring and ball

1 softening point of each of the 13 resins. Right?

2 **A. Actually, four resins.**

3 Q. I understand that you've condensed them to
4 four, but you agree that there's 13 different resins
5 listed in Table 1?

6 **A. That is correct.**

7 Q. And Table 1 lists the ring and ball softening
8 point of each of the 13 resins. Is that correct?

9 **A. Would you repeat that question?**

10 Q. Table 1 has a column titled "Properties."
11 Right? -- or "Property."

12 **A. Correct.**

13 Q. You understand that to be referring that column
14 to various properties of the 13 different resins?

15 **A. Correct.**

16 Q. So as an example, the Table 1 discloses the
17 ring and ball softening point of the various resins?

18 **A. Correct.**

19 Q. And as another example, it discloses the
20 density of the 13 resins in Table 1. Right?

21 **A. Correct.**

22 Q. And it discloses the bromine number of each of

1 the 13 resins? Right?

2 **A. Correct.**

3 Q. And it discloses a variety of other properties
4 of the 13 different resins. Correct?

5 **A. Correct.**

6 Q. Now, the Eastotac brochure, under
7 "Applications," lists -- there's a number of
8 applications listed. Right? I'll rephrase.

9 In the Eastotac brochure in the section for
10 applications that spans pages 4 and 5, there's a number
11 of applications that are mentioned.

12 **A. That is correct.**

13 Q. For example, pressure-sensitive adhesives would
14 be an application that's listed in the Eastotac
15 brochure?

16 **A. Correct.**

17 Q. Hot melt adhesives is listed in the Eastotac
18 brochure. Correct?

19 **A. Correct.**

20 Q. And caulks is listed in the Eastotac brochure?

21 **A. Correct.**

22 Q. And sealants is listed in the Eastotac

1 brochure?

2 **A. Correct.**

3 Q. And these are various applications that are
4 listed in the Eastotac brochure. Correct?

5 **A. That is correct.**

6 Q. And if you'd jump over to page 5 of the
7 Eastotac brochure, there's some other applications
8 listed. It says, "Other applications for Eastotac
9 hydrocarbon resins include: Tackifiers and processing
10 aids for various rubber systems; additives for certain
11 types of inks, paints, and varnishes; textile sizes and
12 dry cleaning solutions; base polymers for investment
13 casting; and highway markings." Did I read those
14 correctly?

15 **A. Yes, you have.**

16 Q. So the Eastotac brochure also lists examples of
17 rubber systems, inks, paints, varnishes, textile sizes
18 and dry cleaning solutions, and base polymers for
19 investment casting and highway marking as applications.
20 Correct?

21 **A. That is correct.**

22 Q. Do you know, is investing casting and highway

1 marking, is that one application or is investment
2 casting one application and highway marking is another
3 application?

4 **A. I don't know.**

5 Q. How about textile sizes and dry cleaning
6 solutions? What's that referring to?

7 **A. I don't know.**

8 Q. How about tackifiers and processing aids for
9 various rubber systems? What would a person of ordinary
10 skill understand that to be referring to in the Eastotac
11 brochure?

12 MS. CHLEBOWSKI: Outside the scope.

13 **A. It would be the processing aids for various**
14 **rubber systems.**

15 Q. And additives for certain types of inks,
16 paints, and varnishes, what's that referring to in the
17 Eastotac brochure?

18 **A. I do not know.**

19 Q. Now, in Table 1, let's look at H-100E. So just
20 focus on Table 1 of the Eastotac brochure. In the
21 column for H-100E resin. Do you see that?

22 **A. Yes.**

1 Q. Looking at Table 1 and only at Table 1, Table 1
2 does not identify a specific application for the H-100E
3 resin. Correct?

4 A. It does not.

5 Q. And for example, Table 1 does not say whether
6 or not H-100E is suitable for use with
7 pressure-sensitive adhesives. Correct?

8 A. That's correct.

9 Q. And Table 1 does not say whether or not H-100E
10 is suitable for use with caulks. Correct?

11 A. Correct.

12 Q. Table 1 does not say whether H-100E is suitable
13 for sealants?

14 A. Correct.

15 Q. It doesn't say whether or not H-100E is
16 suitable for use in rubber systems?

17 A. Correct.

18 Q. Table 1 doesn't state whether or not H-100E is
19 suitable for use as additives for certain types of ink,
20 paints, or varnishes. Correct?

21 A. Correct.

22 Q. And Table 1 doesn't say whether or not 100E is

1 suitable for textile sizes and dry cleaning solutions?

2 **A. You're still in the same column. Right?**

3 **H-100E?**

4 **Q. 100E.**

5 **A. Correct.**

6 **Q. And Table 1 doesn't state whether or not H-100E**
7 **is suitable for use in investment casting and highway**
8 **marking?**

9 **A. Correct.**

10 **Q. Similarly, if we look at H-100R, Table 1 does**
11 **not list any applications for H-100R. Correct?**

12 **A. Correct.**

13 **Q. And Table 1 doesn't state whether or not H-100R**
14 **is suitable for a particular application. Correct?**

15 **A. Correct.**

16 **Q. So for example, H-100 -- or Table 1, rather,**
17 **does not state whether or not H-100R is suitable for**
18 **pressure-sensitive adhesives. Correct?**

19 **A. That's correct.**

20 **Q. And it doesn't state whether or not it's**
21 **suitable for caulks?**

22 **A. Correct.**

1 Q. It doesn't state whether or not it's suitable
2 for sealants?

3 A. Correct.

4 Q. And it doesn't state whether H-100 is suitable
5 for rubber systems?

6 A. Correct.

7 Q. It doesn't state whether H-100R is suitable for
8 additives in ink, paints, and varnishes. Correct?

9 A. Correct.

10 Q. It doesn't state whether H-100R is suitable in
11 dry cleaning solutions?

12 A. Correct.

13 Q. It doesn't state whether it's suitable in
14 investment casting and highway marking?

15 A. Correct.

16 Q. Same thing for H-100L. Table 1 does not state
17 whether or not H-100L is suitable for use in
18 pressure-sensitive adhesives. Correct?

19 A. Correct.

20 Q. And it doesn't state whether H-100L is suitable
21 for use in hot melt adhesives?

22 A. Correct.

1 Q. It doesn't state whether it's suitable for use
2 in caulks?

3 A. Correct.

4 Q. It doesn't state whether H-100L is suitable for
5 use in sealants?

6 A. Correct.

7 Q. It doesn't state whether H-100L is suitable for
8 use in rubber systems?

9 A. Correct.

10 Q. It doesn't state whether H-100L is suitable for
11 use in certain types of inks, paints, or varnishes.
12 Correct?

13 A. Correct.

14 Q. And it doesn't state whether or not H-100L is
15 suitable for use in investment casting and highway
16 marking. Correct?

17 A. Correct.

18 Q. And Table 1, moving on to H-100W, it does not
19 state whether H-100W is suitable for any particular
20 application. Correct?

21 A. Correct.

22 Q. It does not state, Table 1, whether or not

1 H-100W is suitable for use with pressure-sensitive
2 adhesives. Correct?

3 **A. Correct.**

4 Q. And it doesn't state whether H-100W is suitable
5 for use in hot melt adhesives. Correct?

6 **A. Correct.**

7 Q. And it doesn't state whether H-100W is suitable
8 for use in caulks?

9 **A. Correct.**

10 Q. It doesn't state whether H-100W is suitable for
11 use in sealants. Correct?

12 **A. Correct.**

13 Q. Similarly, Table 1 of the Eastotac brochure
14 does not state whether or not H-100W is suitable in
15 rubber systems. Correct?

16 **A. Correct.**

17 Q. And Table 1 doesn't state whether or not H-100W
18 is suitable for use in inks, paints, or varnishes.
19 Correct?

20 **A. Correct.**

21 Q. And Table 1 does not state whether H-100W is
22 suitable for use with textile sizes and dry cleaning

1 solutions. Correct?

2 **A. Correct.**

3 Q. And Table 1 doesn't state whether or not H-100W
4 is suitable for use as a base polymer for investment
5 casting and highway markings. Correct?

6 **A. Correct.**

7 Q. And on H-115E, Table 1 does not state whether
8 or not H-115E is suitable for any particular
9 application. Correct?

10 **A. That is correct.**

11 Q. So I'm going to just go through the same list
12 here.

13 But Table 1 does not state whether or not
14 H-115E is suitable for use in pressure-sensitive
15 adhesives. Correct?

16 **A. Correct.**

17 Q. It doesn't state whether it's suitable for use
18 in hot melt adhesives? Correct?

19 **A. Correct.**

20 Q. It does not state whether or not 115E is
21 suitable for use in caulks?

22 **A. Correct.**

1 Q. And Table 1 of the Eastotac brochure does not
2 state whether or not H-115E is suitable for use in
3 sealants. Correct?

4 A. Correct.

5 Q. Table 1 also does not state whether H-115E is
6 suitable for use in rubber systems?

7 A. Correct.

8 Q. Table 1 doesn't state if 115E is suitable for
9 use in inks, paints, or varnishes?

10 A. Correct.

11 Q. Table 1 doesn't state whether 115E is suitable
12 for textile sizes and dry cleaning solutions?

13 A. Correct.

14 Q. And Table 1 does not state whether or not
15 H-115E is suitable for use with investment casting and
16 highway marking?

17 A. Correct.

18 Q. H-115R, Table 1, moving on to H-115R column of
19 the Eastotac brochure. Are you with me?

20 A. Yes.

21 Q. In Table 1 of the Eastotac brochure, it does
22 not state any particular applications that H-115R is or

1 is not suitable for. Correct?

2 **A. That is correct.**

3 Q. And so Table 1 does not list whether or not
4 H-115R is suitable for use with pressure-sensitive
5 adhesives. Correct?

6 **A. That is correct.**

7 Q. And it doesn't state -- Table 1 doesn't state
8 whether H-115R is suitable with hot melt adhesives.
9 Correct?

10 **A. That is correct.**

11 Q. And it doesn't state whether or not H-115R is
12 suitable for use with caulks?

13 **A. Correct.**

14 Q. Table 1 doesn't state whether or not H-115R is
15 suitable for use with sealants?

16 **A. Correct.**

17 Q. Table 1 doesn't state whether or not H-115R is
18 suitable for use in rubber systems?

19 **A. Correct.**

20 Q. Table 1 doesn't state whether or not H-115R is
21 suitable for use in inks, paints, or varnishes?

22 **A. Correct.**

1 Q. Table 1 doesn't state whether or not H-115R is
2 suitable as a textile size -- for textile sizes and dry
3 cleaning solutions?

4 A. Correct.

5 Q. And it doesn't state, Table 1, whether or not
6 H-115R is suitable for use with investment casting and
7 highway marking?

8 A. Correct.

9 Q. So moving on to the H-115L, Table 1 does not
10 state whether or not H-115L is suitable for any
11 particular application. Correct?

12 A. That is correct.

13 Q. Table 1 doesn't state whether or not H-115L is
14 suitable for use with pressure-sensitive adhesives?

15 A. Correct.

16 Q. Table 1 doesn't state whether or not H-115L is
17 suitable for use with hot melt adhesives?

18 A. Correct.

19 Q. Table 1 doesn't state whether or not H-115L is
20 suitable for use with caulks?

21 A. Correct.

22 Q. Table 1 doesn't state whether or not H-115L is

1 suitable for use with sealants?

2 **A. Correct.**

3 Q. Table 1 doesn't state whether or not H-115L is
4 suitable for use in rubber systems?

5 **A. Correct.**

6 Q. Table 1 does not state whether or not H-115L is
7 suitable for use in paints, inks, or varnishes?

8 **A. Correct.**

9 Q. Table 1 doesn't state whether or not 115L is
10 suitable for textile sizes and dry cleaning solutions?

11 **A. Correct.**

12 Q. Table 1 doesn't state whether or not H-115L is
13 suitable as a base polymer for investment casting and
14 highway marking?

15 **A. Correct.**

16 Q. Okay. Moving on to H-115W. Table 1 of the
17 Eastotac brochure does not state whether or not H-115W
18 has particular applications that it's suitable for.
19 Correct?

20 **A. That is correct.**

21 Q. Table 1 does not state, for example, whether or
22 not H-115W can be used as -- in a pressure-sensitive

1 adhesive?

2 **A. Correct.**

3 Q. Table 1 does not state whether or not H-115W
4 can be used as a hot melt adhesive?

5 **A. That's correct.**

6 Q. Table 1 does not state whether or not H-115W
7 can be used for caulks?

8 **A. Correct.**

9 Q. Table 1 does not state whether or not H-115W
10 can be used for sealants?

11 **A. Correct.**

12 Q. Table 1 does not state whether or not H-115W
13 can be used for rubber systems?

14 **A. Correct.**

15 Q. Table 1 does not state whether or not H-115W
16 can be used in inks, paints, or varnishes?

17 **A. Correct.**

18 Q. And Table 1 of the Eastotac brochure does not
19 state whether or not H-130E -- sorry -- H-115W can be
20 used in investment casting and highway marking?

21 **A. Correct.**

22 Q. One second here.

1 (Pause)

2 Q. Now I'm going to move on to H-130E, and you
3 probably have a sense of what I'm going to ask.

4 But looking at Table 1, Table 1 does not
5 disclose any particular applications for the H-130E
6 resin. Correct?

7 **A. That is correct.**

8 Q. Table 1 does not disclose whether or not H-130E
9 can be used in pressure-sensitive adhesives?

10 **A. Let me just interrupt the sequence of your**
11 **questions. I think all of these resins are covering the**
12 **application above.**

13 Q. So here is my question --

14 **A. Okay.**

15 Q. And I'm just going to have to go through my
16 questions. We'll get to more later.

17 **A. Sure.**

18 Q. But H-130E, looking at Table 1, Table 1 does
19 not state whether or not H-130E can be used as a
20 pressure-sensitive adhesive?

21 **A. That is correct.**

22 Q. And Table 1 does not state whether or not

1 H-130E can be used as a hot melt adhesive?

2 **A. Correct.**

3 Q. And Table 1 does not state whether or not
4 H-130E can be used in caulks?

5 **A. Correct.**

6 Q. Table 1 does not state whether or not H-130E
7 can be used in sealants?

8 **A. Correct.**

9 Q. Table 1 does not state whether or not H-130E
10 can be used in rubber systems?

11 **A. Correct.**

12 Q. Table 1 does not disclose whether or not H-130E
13 can be used in inks, paints, or varnishes?

14 **A. Correct.**

15 Q. Table 1 does not disclose whether or not H-130E
16 can be used in dry cleaning solutions?

17 **A. Correct.**

18 Q. And Table 1 does not disclose whether or not
19 H-130E can be used in investment casting and highway
20 marking?

21 **A. Correct.**

22 Q. And with H-130R, Table 1 does not disclose any

1 particular applications for H-130R. Correct?

2 **A. Correct.**

3 Q. Table 1, for example, does not disclose whether
4 or not H-130R can be used as a pressure-sensitive
5 adhesive?

6 **A. Correct.**

7 Q. And Table 1 does not disclose whether or not
8 H-130R can be used in hot melt adhesives?

9 **A. Correct.**

10 Q. Table 1 does not disclose whether or not H-130R
11 can be used in caulks?

12 **A. Correct.**

13 Q. Table 1 does not disclose whether or not H-130R
14 can be used in sealants?

15 **A. Correct.**

16 Q. Table 1 does not disclose whether or not H-130R
17 can be used in rubber systems?

18 **A. Correct.**

19 Q. Table 1 does not disclose whether or not H-130R
20 can be used in inks, paints, or varnishes?

21 **A. Correct.**

22 Q. Table 1 does not disclose whether or not H-130R

1 can be used in dry cleaning solutions?

2 **A. Correct.**

3 Q. And Table 1 does not disclose whether or not
4 H-130R can be used in investment casting and highway
5 marking?

6 **A. Correct.**

7 Q. Looking at H-130L, and sticking with Table 1 of
8 the Eastotac brochure -- are you with me?

9 **A. I am.**

10 Q. H-130L in that column, focusing on that column,
11 Table 1 does not disclose any particular application for
12 H-130L. Correct?

13 **A. Correct.**

14 Q. For example, Table 1 does not disclose whether
15 or not H-130L can be used in pressure-sensitive
16 adhesives. Correct?

17 **A. Correct.**

18 Q. Table 1 does not disclose whether or not H-130L
19 can be used in hot melt adhesives. Correct?

20 **A. Correct.**

21 Q. Table 1 does not disclose whether or not H-130L
22 can be used in caulks?

1 **A. Correct.**

2 Q. Table 1 does not disclose whether or not H-130L
3 can be used in sealants?

4 **A. Correct.**

5 Q. Table 1 does not disclose whether or not H-130L
6 can be used in rubber systems?

7 **A. Correct.**

8 Q. Table 1 does not disclose whether or not H-130L
9 can be used in inks, paints, or varnishes?

10 **A. Correct.**

11 Q. Table 1 does not disclose whether or not H-130L
12 can be used in dry cleaning solutions?

13 **A. Correct.**

14 Q. Table 1 does not disclose whether or not H-130L
15 can be used in investment casting and highway markings?

16 **A. Correct.**

17 Q. And let's go to the column H-130W in Table 1 of
18 the Eastotac brochure.

19 **A. Correct.**

20 Q. Table 1 does not disclose any particular
21 application for H-130W. Correct?

22 **A. Correct.**

1 Q. Table 1 does not disclose, for example, whether
2 or not H-130W can be used in pressure-sensitive
3 adhesives?

4 A. Correct.

5 Q. Table 1 does not disclose whether or not H-130W
6 can be used in hot melt adhesives?

7 A. Correct.

8 Q. Table 1 does not disclose whether or not H-130W
9 can be used in caulks?

10 A. Correct.

11 Q. Table 1 does not disclose whether or not H-130W
12 can be used in sealants?

13 A. Correct.

14 Q. Table 1 does not disclose whether or not H-130W
15 can be used in rubber systems?

16 A. Correct.

17 Q. Table 1 does not disclose whether or not H-130W
18 can be used in inks, paints, or varnishes?

19 A. Correct.

20 Q. Table 1 does not disclose whether or not H-130W
21 can be used in dry cleaning solutions?

22 A. Correct.

1 Q. And Table 1 does not disclose whether or not
2 H-130W can be used in investment casting and highway
3 marking?

4 **A. Correct.**

5 Q. Now we'll go to the last column of the Table 1
6 of the Eastotac brochure, on page 5, for H-142R. Are
7 you with me?

8 **A. Yes.**

9 Q. So just looking again at Table 1 of the
10 Eastotac brochure, Table 1 does not disclose any
11 particular applications for the H-142R resin. Correct?

12 **A. Correct.**

13 Q. For example, Table 1 does not disclose whether
14 or not H-142R can be used with pressure-sensitive
15 adhesives?

16 **A. Correct.**

17 Q. Table 1 of the Eastotac brochure also does not
18 disclose whether or not H-142R can be used with hot melt
19 adhesives. Correct?

20 **A. That is correct.**

21 Q. Table 1 does not disclose whether or not H-142R
22 can be used with caulks?

1 **A. Correct.**

2 Q. And Table 1 does not disclose whether or not
3 H-142R can be used with sealants?

4 **A. Correct.**

5 Q. Table 1 also does not disclose whether or not
6 H-142R could be used in rubber systems. Correct?

7 **A. Correct.**

8 Q. Table 1 does not disclose whether or not H-142R
9 could be used in inks?

10 **A. Correct.**

11 Q. Table 1 doesn't disclose whether or not H-142R
12 could be used in paints?

13 **A. Correct.**

14 Q. Table 1 does not disclose whether or not H-142R
15 could be used in varnishes?

16 **A. Correct.**

17 Q. Table 1 does not disclose whether or not H-142R
18 could be used in dry cleaning solutions?

19 **A. Correct.**

20 Q. And Table 1 of the Eastotac brochure does not
21 disclose whether or not H-142R could be used in
22 investment casting and highway marking. Correct?

1 **A. Correct.**

2 Q. And so looking at Table 1, for the 13 resins
3 that are shown in Table 1, Table 1 does not disclose any
4 particular application for any of the 13 resins.
5 Correct?

6 **A. If you're talking about Table 1, it's not**
7 **listed there.**

8 Q. Right. So just looking at Table 1, just
9 looking at Table 1, Table 1 does not disclose any
10 applications for the resins listed in Table 1. Correct?

11 **A. Correct.**

12 Q. Now, if we turn to Column 3 -- I apologize.
13 Table 3. So Table 3 of the Eastotac brochure,
14 Exhibit 1002.

15 Table 3 of the Eastotac brochure is entitled
16 "General composition ranges for Eastotac resins in hot
17 melt adhesives." Correct?

18 **A. Correct.**

19 Q. Now, there's a column that says "Materials."
20 Do you see that?

21 **A. I do.**

22 Q. And it lists Eastotac resin. Do you see that?

1 **A. I do.**

2 Q. And it lists low molecular weight polyethylene
3 wax?

4 **A. Right.**

5 Q. Amorphous polyolefin. Do you see that?

6 **A. It says amorphous polyolefin.**

7 Q. Amorphous polyolefin?

8 **A. Correct.**

9 Q. And it lists ethylene vinyl acetate copolymer?

10 **A. Correct.**

11 Q. It next lists under "Materials" petroleum wax
12 or Fischer-Tropsch wax?

13 **A. Correct.**

14 Q. How do you pronounce that?

15 **A. Tropsch.**

16 Q. And then it lists antioxidant last under
17 "Materials"?

18 **A. Correct.**

19 Q. And then there's three columns, I guess, under
20 the overall heading of "Composition Percent by Weight."
21 Do you see that?

22 **A. I do.**

1 Q. And it says PE base is one column, APP base is
2 another column, and EVA base is another column?

3 A. Correct.

4 Q. What does PE base mean?

5 A. Polyethylene base.

6 Q. And the APP base?

7 A. Amorphous polyolefin.

8 Q. And EVA base?

9 A. Ethylene vinyl acetate base.

10 Q. And in the APP base column, if we want to know
11 how much amorphous polyolefin is in this composition,
12 you'd go down and you'd see it's 50 to 70 percent. Is
13 that correct?

14 A. That is correct.

15 Q. And on EVA base, there's no amorphous
16 polyolefin because it's not an APP base composition.
17 It's an EVA base composition. Is that correct?

18 A. It is not amorphous polyolefin base. It is an
19 EVA base.

20 Q. And you know it's an EVA base because if you go
21 down in Table 3, you can see ethylene vinyl acetate
22 copolymer and it says 30 to 50 percent. Is that

1 correct?

2 **A. That is correct.**

3 Q. So it's the existence of the ethylene vinyl
4 acetate copolymer that characterizes the composition as
5 an EVA base composition?

6 **A. That is correct.**

7 Q. And it's the existence of the amorphous
8 polyolefin that characterizes the middle column as APP
9 base composition. Is that correct?

10 **A. Correct.**

11 Q. And in your declaration, in your opinion that
12 the Eastotac brochure anticipates claims of the
13 '404 patent, including Claims 22 and 28, is it correct
14 that you have focused on the APP base composition and
15 the EVA base composition and not the PE base
16 composition?

17 **A. Would you repeat the two claims?**

18 Q. The independent claims would be Claims 22 and
19 28. But I mean, if you want, we can cover them all.
20 I'm just trying to confirm that the compositions that
21 you're relying on for your anticipation opinions on the
22 Eastotac brochure are the APP base and the EVA base

1 compositions, not the PE base composition.

2 **A. That is correct.**

3 Q. Okay. So in forming your opinions on
4 anticipation in this case based on the Eastotac
5 brochure, you've not relied on the PE base composition
6 that's disclosed in Table 3?

7 **A. I've certainly considered it, but I did not**
8 **form my specific opinion on that one.**

9 Q. Just to be clear, in this case you don't have
10 an opinion that the PE base composition shown in Table 3
11 anticipates any claims of the '404 patent? You don't
12 have that opinion in your declaration?

13 **A. Let me check.**

14 Q. Take a minute and look through it.

15 (Pause)

16 **A. That is correct.**

17 Q. So your opinions on anticipation from the
18 Eastotac brochure are based only on the APP based
19 composition and the EVA base composition?

20 **A. Amorphous polyolefin base and EVA base.**

21 Q. When you say "amorphous polyolefin," you're
22 referring to the APP base composition?

1 **A.** When I'm referring to amorphous polyolefin, I'm
2 referring to EVA base in Row 3 and Row 4.

3 **Q.** When you say "amorphous polyolefin base,"
4 you're talking about the composition that's APP base in
5 Table 3. Correct?

6 **A.** See, the way I look at it is every horizontal
7 has a corresponding vertical title. The only exception
8 is amorphous polyolefin and APP, so I just always went
9 by amorphous polyolefin.

10 **Q.** So let me ask you this: Do you understand the
11 middle column with the heading "APP base" in Table 3 to
12 be the amorphous polyolefin composition?

13 **A.** That is correct.

14 **Q.** Okay. And the column in Table 3 that's titled
15 "EVA base" is, in your opinion, the ethylene vinyl
16 acetate copolymer composition?

17 **A.** That is correct.

18 **Q.** And so for your anticipation opinion based on
19 the Eastotac brochure, the only compositions that you're
20 relying on as saying they anticipate the claims of the
21 '404 patent would be the amorphous polyolefin
22 composition in Table 3 and the ethylene vinyl acetate

1 copolymer composition in Table 3?

2 **A. Correct.**

3 Q. And then looking back at Table 1, in your
4 declaration -- so in your declaration is H-142R resin,
5 the only resin that you've identified as having a onset
6 TG of above 65 degrees C?

7 **A. Correct.**

8 Q. And TG, we mean glass transition temperature?

9 **A. Correct.**

10 Q. And you understand that in this case glass
11 transition temperature with respect to the '404 patent
12 has been interpreted to mean onset glass transition
13 temperature?

14 **A. That is correct.**

15 Q. So the only resin that you've identified in
16 Table 1 as having an onset glass transition temperature
17 of above 65 degrees centigrade is the H-142R resin?

18 **A. Correct.**

19 Q. Now, do you want a break? We've been going
20 about an hour.

21 **A. I'm good.**

22 Q. We'll keep going then.

1 So if we focus on Table 3, it says "Eastotac
2 resin" in the left-hand column under "Materials"?

3 **A. Yes.**

4 Q. Table 3 does not list any of the specific
5 resins from Table 1. Correct?

6 **A. Correct.**

7 Q. So Table 3 does not, for example, specifically
8 identify the H-100E resin?

9 **A. Correct.**

10 Q. And Table 3 of the Eastotac brochure does not
11 specifically identify the H-100R resin?

12 **A. Correct.**

13 Q. And Table 3 of the Eastotac brochure,
14 Exhibit 1002, does not specifically identify the H-100L
15 resin?

16 **A. Correct.**

17 Q. And Table 3 of the Eastotac brochure does not
18 identify the H-100W resin. Correct?

19 **A. Correct.**

20 Q. And Table 3 of the Eastotac brochure does not
21 identify the H-115E resin. Correct?

22 **A. Correct.**

1 Q. And Table 3 of the Eastotac brochure does not
2 identify the H-115R resin. Correct?

3 A. Correct.

4 Q. Table 3 of the Eastotac brochure also does not
5 identify the H-115L resin. Correct?

6 A. Correct.

7 Q. Table 3 of the Eastotac brochure does not
8 identify the H-115W resin. Correct?

9 A. Correct.

10 Q. Table 3 of the Eastotac brochure does not
11 identify the H-130E resin. Correct?

12 A. Correct.

13 Q. And Table 3 of the Eastotac brochure,
14 Exhibit 1002, does not identify H-130R. Correct?

15 A. Correct.

16 Q. And Table 3 of the Eastotac brochure does not
17 identify H-130W. Correct?

18 A. Correct.

19 Q. And Table 3 of the Eastotac brochure does not
20 identify H-130W. Correct?

21 A. You repeated that.

22 Q. It doesn't identify 130W?

1 **A. Correct.**

2 Q. And then Table 3 of the Eastotac brochure,
3 Exhibit 1002, does not identify the H-142R resin.
4 Correct?

5 **A. Correct.**

6 Q. And so in the -- in Table 3, the composition
7 that's based on amorphous polyolefin does not in Table 3
8 identify a specific Eastotac resin. Correct?

9 **A. Correct.**

10 Q. And as an example, in Table 3, for the poly --
11 sorry.

12 In Table 3 for the amorphous polyolefin based
13 composition, the table does not identify H-142R as a
14 resin that could be used. Correct?

15 **A. Correct.**

16 Q. And it doesn't identify any of the other resins
17 as resins that could be used either for the amorphous
18 polyolefin composition in Table 3. Correct?

19 **A. Correct.**

20 Q. Similarly, for the EVA base composition, which
21 is ethylene vinyl acetate copolymer composition -- are
22 you with me?

1 **A. Yes.**

2 Q. Table 3 does not identify any particular
3 Eastotac resin that can be used in the ethylene vinyl
4 acetate copolymer composition in Table 3. Correct?

5 **A. Correct.**

6 Q. Table 3 does not identify H-142R, for example,
7 as a resin that can be used in the ethylene vinyl
8 acetate copolymer composition. Correct?

9 **A. Would you rephrase -- would you ask that**
10 **question again?**

11 Q. Yup. Absolutely.

12 Table 3, just looking at Table 3, as an
13 example, does not list H-142R as a resin that can be
14 used with the ethylene vinyl acetate copolymer
15 composition?

16 **A. The fact that it lists Eastotac resin, I assume**
17 **all of them can be used.**

18 Q. My question is different. My question is, with
19 respect to the disclosure in Table 3 --

20 **A. Yes.**

21 Q. -- Table 3 does not list any specific resins
22 that can be used with the ethylene vinyl acetate

1 copolymer composition. Correct?

2 **A. I would imagine all the ones in Table 1 can be**
3 **used in this composition.**

4 MR. GRIMSRUD: Okay. And I'm going to have to
5 move to strike those as nonresponsive.

6 Q. I'm focusing -- my question is very specific.

7 **A. Yes.**

8 Q. I understand that Eastotac resin is in here.
9 It says "Eastotac resin." We've talked about that.

10 But I'm asking about specific resins being
11 identified, like H-100E, for example, H-100R, for
12 example.

13 And so Table 3 for the ethylene vinyl acetate
14 copolymer composition does not specifically identify a
15 particular resin in -- from Table 1 that can be used in
16 the ethylene vinyl acetate copolymer composition.
17 Correct?

18 **A. That is correct.**

19 Q. And as an example, Table 3 does not identify
20 H-100E as a resin that could be used with the ethylene
21 vinyl acetate copolymer composition. Correct?

22 **A. Let me understand the question. You said does**

1 not identify the resin. That, I agree. But now you
2 added to say does not identify a resin that can be used.
3 Then I disagree with the second part.

4 Q. So I'm talking about does Table 3, just to be
5 clear. Does Table 3 identify a specific resin?

6 A. No.

7 Q. Like does it identify H-100E or H-100R, for
8 example?

9 A. That does not.

10 Q. And so my question is, is it correct, then,
11 that Table 3 does not identify H-100E specifically as a
12 resin that can be used with the ethylene vinyl acetate
13 copolymer composition?

14 A. Does not identify 100E. Correct.

15 Q. Okay. Similarly, Table 3 does not identify
16 H-100R as a resin that can be used with the ethylene
17 vinyl acetate copolymer composition?

18 A. Does not identify the resin.

19 Q. Right.

20 A. But I will take it that all the resin can be
21 used in this composition as stated in Table 3.

22 Q. And my question is -- I'm focusing on what

1 resin is specifically disclosed in Table 3. Okay?

2 And my question is, does Table 3 identify
3 H-100R as a specific resin that can be used with
4 ethylene vinyl acetate copolymer composition?

5 **A. No.**

6 Q. Okay. And similarly, Table 3, does it
7 specifically identify H-100L as a resin that can be used
8 in the ethylene vinyl acetate copolymer composition?

9 **A. No.**

10 Q. Okay. And same question, Table 3 of the
11 Eastotac brochure, does it identify H-100W as a resin
12 that can be used with the ethylene vinyl acetate
13 copolymer composition?

14 **A. No.**

15 Q. Does Table 3 of the Eastotac brochure identify
16 H-115E as a resin that can be used with the ethylene
17 vinyl acetate copolymer composition?

18 **A. No.**

19 Q. Does Table 3 of the Eastotac brochure identify
20 H-115R as a resin that can be used with the ethylene
21 vinyl acetate copolymer composition?

22 **A. No.**

1 Q. Does Table 3 identify H-115L as a resin that
2 could be used with the ethylene vinyl acetate copolymer
3 composition?

4 A. No.

5 Q. Does Table 3 of the Eastotac brochure identify
6 H-115W as a resin that can be used with the ethylene
7 vinyl acetate copolymer composition?

8 A. No.

9 Q. Does the Eastotac brochure, Table 3, identify
10 H-130E as a resin that can be used with the ethylene
11 vinyl acetate copolymer composition?

12 A. No.

13 Q. Does Table 3 identify H-130R as a resin that
14 can be used with the ethylene vinyl acetate copolymer
15 composition?

16 A. No.

17 Q. Does Table 3 identify H-130L as a resin that
18 can be used with the ethylene vinyl acetate copolymer
19 composition?

20 A. No.

21 Q. Does Table 3 of the Eastotac brochure identify
22 H-130W as a resin that can be used with the ethylene

1 vinyl acetate copolymer composition?

2 **A. No.**

3 Q. And finally, does Table 3 identify H-142R as a
4 resin that can be used in an ethylene vinyl acetate
5 copolymer composition?

6 **A. No.**

7 Q. So just looking at Table 3, is it correct that
8 none of the specific resins in Table 1 are identified as
9 suitable for use in a hot melt adhesive?

10 MS. CHLEBOWSKI: Objection to form.

11 **A. The way I look at it, all the ones in Table 1,**
12 **depending on application, are included in Eastotac**
13 **resin.**

14 Q. Here so here is my question, sir: Is it
15 correct that Table 3 does not identify a specific resin
16 that can be used with a hot melt adhesive?

17 **A. It does not identify specific resin but**
18 **includes all the resin in the previous Table 1.**

19 Q. Okay. So my question is very focused. You
20 agree with me that Table 3 does not disclose a specific
21 resin from Table 1 for use in a hot melt adhesive?

22 MS. CHLEBOWSKI: Objection to form.

1 **A. Correct.**

2 Q. And nowhere in Table 3 is H-142R example
3 identified by name?

4 **A. Correct.**

5 MR. GRIMSRUD: Take a quick break.

6 (Recess taken)

7 BY MR. GRIMSRUD:

8 Q. Okay. Dr. Hsu, we were talking about the
9 Eastotac brochure, Exhibit 1002, and I want to stay on
10 that for a while yet.

11 The section on page 4 and 5 for applications,
12 under "Applications" there's the five paragraphs
13 describing the applications. Do you see that?

14 **A. Yes.**

15 Q. And we've talked about how there's various
16 applications listed, such as pressure-sensitive
17 adhesive, hot melt adhesives, caulks, sealants, rubber
18 systems, inks, paint, varnishes, dry cleaning solutions,
19 casting, and highway markings. Right?

20 **A. Correct.**

21 Q. Does the section -- Let me ask it.

22 The section in the brochure, the Eastotac

123

1 brochure on applications, does not identify any of the
2 specific resins in Table 1. Correct?

3 **A. Correct.**

4 Q. Okay. So the section on applications does not
5 specifically list H-100E, for example?

6 **A. No.**

7 Q. And the section on applications also does not
8 specifically list H-142R for any of the applications.
9 Correct?

10 **A. Correct.**

11 Q. So in the applications section there is no
12 listing of particular resins suitable for particular
13 applications. Correct?

14 **A. Correct.**

15 Q. And if you look at the page 3, this is the
16 numbered page 3 of Exhibit 1002 where there's the
17 section for introduction.

18 **A. Yes.**

19 Q. You see the last paragraph, which is the third
20 paragraph on the introduction section? Do you see that
21 paragraph?

22 **A. Yes, I do.**

1 Q. And it reads, "Eastotac resins are available in
2 four color levels with varying softening points which
3 allow the selection of the resin most suitable for a
4 particular application." Did I read that correctly?

5 A. Yes, you did.

6 Q. Now, looking at the Eastotac brochure, the
7 Eastotac brochure, Exhibit 102 -- 1002, does not
8 specifically identify H-100E as a resin that is suitable
9 for use in caulks. Correct?

10 MS. CHLEBOWSKI: Objection to form.

11 A. Correct.

12 Q. The Eastotac brochure does not specifically
13 identify H-100E as a resin that's suitable for use in
14 pressure-sensitive adhesives. Correct?

15 MS. CHLEBOWSKI: Same objection.

16 A. Correct.

17 Q. The Eastotac brochure does not specifically
18 identify H-100E as a resin that could be used with
19 sealants. Correct?

20 MS. CHLEBOWSKI: Same objections.

21 A. Correct.

22 Q. The Eastotac brochure, Exhibit 1002 -- and

1 we're looking at the entire brochure -- does not
2 specifically identify H-100E as a resin suitable for
3 rubber systems. Correct?

4 MS. CHLEBOWSKI: Same objection.

5 **A. Correct.**

6 Q. And the Eastotac brochure, Exhibit 1002, does
7 not identify H-100E as a resin that can be used in inks.
8 Correct?

9 MS. CHLEBOWSKI: Same objection.

10 **A. Correct.**

11 Q. And the Eastotac brochure does not specifically
12 identify H-100E as a resin that can be used in paints.
13 Correct?

14 **A. Correct.**

15 Q. And the Eastotac brochure does not specifically
16 identify H-100E as a resin that can be used in
17 varnishes. Correct?

18 MS. CHLEBOWSKI: Same objections. Excuse me.

19 **A. Correct.**

20 Q. The Eastotac brochure does not identify H-100E
21 as a resin that can be used in dry cleaning solutions.
22 Correct?

1 MS. CHLEBOWSKI: Same objections.

2 **A. Correct.**

3 Q. The Eastotac brochure, Exhibit 1002, does not
4 identify H-100E as a resin that can be used in
5 investment casting and highway markings. Correct?

6 MS. CHLEBOWSKI: Same objections.

7 **A. Correct.**

8 Q. The Eastotac brochure does not identify H-100E
9 as a resin that can be used in hot melt adhesives.
10 Correct?

11 MS. CHLEBOWSKI: Same objections.

12 **A. Correct.**

13 Q. Bear with me, but I'm going to ask the same
14 questions now for H-100R. So focusing on the Eastotac
15 brochure, Exhibit 1002, the Eastotac brochure does not
16 identify H-100R as a resin that can be used in
17 pressure-sensitive adhesives. Correct?

18 MS. CHLEBOWSKI: Objection to form.

19 **A. Correct.**

20 Q. The Eastotac brochure does not identify H-100R
21 as a resin that can be used in caulks. Correct?

22 MS. CHLEBOWSKI: Same objection.

1 **A. Correct.**

2 Q. The Eastotac brochure does not identify H-100R
3 as a resin that can be used in sealants. Correct?

4 MS. CHLEBOWSKI: Same objection.

5 **A. Correct.**

6 Q. The Eastotac brochure, Exhibit 1002, does not
7 identify H-100R as a resin that can be used in rubber
8 systems. Correct?

9 MS. CHLEBOWSKI: Same objection.

10 **A. Correct.**

11 Q. The Eastotac brochure does not identify H-100R
12 as a resin that can be used in inks. Correct?

13 MS. CHLEBOWSKI: Same objection.

14 **A. Correct.**

15 Q. The Eastotac brochure does not identify H-100R
16 as a resin that can be used in paints. Correct?

17 MS. CHLEBOWSKI: Same objection.

18 **A. Correct.**

19 Q. The Eastotac brochure, Exhibit 1002, does not
20 identify H-100R as a resin that can be used in
21 varnishes. Correct?

22 MS. CHLEBOWSKI: Same objection.

1 **A. Correct.**

2 Q. The Eastotac brochure does not identify H-100R
3 as a resin that can be used in dry cleaning solutions.
4 Correct?

5 MS. CHLEBOWSKI: Same objection.

6 **A. Correct.**

7 Q. The Eastotac brochure does not identify H-100R
8 as a resin that can be used in investment casting and
9 highway markings. Correct?

10 MS. CHLEBOWSKI: Same objection.

11 **A. Correct.**

12 Q. The Eastotac brochure does not identify H-100R
13 as a resin that can be used in hot melt adhesives.
14 Correct?

15 MS. CHLEBOWSKI: Same objection.

16 **A. Correct.**

17 Q. Now we'll move on to the H-100L resin. Okay?

18 **A. Mm-hmm.**

19 Q. So sticking with the Eastotac brochure,
20 Exhibit 1002, the Eastotac brochure does not identify
21 H-100L as a resin that can be used with
22 pressure-sensitive adhesives. Correct?

1 MS. CHLEBOWSKI: Same objection.

2 **A. Correct.**

3 Q. The Eastotac brochure, Exhibit 1002, does not
4 identify H-100L as a resin that can be used in caulks.
5 Correct?

6 MS. CHLEBOWSKI: Same objection.

7 **A. Does not identify the specific resin. Correct.**

8 Q. Yup. And that's what I'm asking about, the
9 specific resin.

10 **A. Okay.**

11 Q. That's what I have been asking about and I'm
12 going to continue to be asking about a specific resin.
13 Okay?

14 **A. Okay. Because you changed your wording a
15 little bit.**

16 Q. Oh, did I? Okay. Well, you're correct. I'm
17 focusing on the specific resin.

18 **A. Okay.**

19 Q. So the Eastotac brochure does not identify
20 H-100L as a resin that can be used in caulks. Correct?

21 MS. CHLEBOWSKI: Same objection.

22 **A. Correct.**

1 Q. The Eastotac brochure does not identify H-100L
2 as a resin that can be used in sealants. Correct?

3 MS. CHLEBOWSKI: Same objection.

4 **A. Correct.**

5 Q. The Eastotac brochure does not identify H-100L
6 as a resin that can be used in rubber systems. Correct?

7 MS. CHLEBOWSKI: Same objection.

8 **A. Correct.**

9 Q. The Eastotac brochure does not identify H-100L
10 as a resin that can be used in inks. Correct?

11 MS. CHLEBOWSKI: Same objection.

12 **A. Correct.**

13 Q. The Eastotac brochure does not identify H-100L
14 as a resin that can be used in paints. Correct?

15 MS. CHLEBOWSKI: Same objection.

16 **A. Correct.**

17 Q. The Eastotac brochure does not identify H-100L
18 as a resin that can be used in varnishes. Correct?

19 MS. CHLEBOWSKI: Same objection.

20 **A. Correct.**

21 Q. The Eastotac brochure does not identify H-100L
22 as a resin that can be used in dry cleaning solutions.

1 Correct?

2 MS. CHLEBOWSKI: Same objection.

3 **A. Correct.**

4 Q. And the Eastotac brochure does not identify
5 H-100L as a resin that can be used in investment casting
6 and highway markings. Correct?

7 MS. CHLEBOWSKI: Same objection.

8 **A. Correct.**

9 Q. The Eastotac brochure does not identify H-100L
10 as a resin that can be used in hot melt adhesives.
11 Correct?

12 MS. CHLEBOWSKI: Same objection.

13 **A. Correct.**

14 Q. One second.

15 (Pause)

16 Q. Okay. Dr. Hsu, we'll move on now to H-100W.

17 **A. Uh-hmm.**

18 Q. And we're focusing on the Eastotac brochure,
19 Exhibit 1002.

20 Dr. Hsu, the Eastotac brochure does not
21 specifically identify H-100W as a resin for use in
22 pressure-sensitive adhesives. Correct?

1 MS. CHLEBOWSKI: Objection to form.

2 A. Are you referring to Table 1 or the brochure
3 now?

4 Q. The brochure as a whole.

5 A. I think it does.

6 Q. Sir, here is my question: The brochure as a
7 whole --

8 A. Yes.

9 Q. -- does not specifically state that H-100W can
10 be used as a resin in pressure-sensitive adhesives.
11 Correct?

12 MS. CHLEBOWSKI: Same objection.

13 A. The way I look at it is an application that
14 gave all of these application and these candidates are
15 suitable for application, depending on the application
16 that you want.

17 Q. Okay. Here is my question: In the
18 introduction we talked about how Eastotac -- it says,
19 "Eastotac resins are available in four color levels with
20 varying softening points which allow the selection of
21 the resin most suitable for a particular application."

22 A. Correct.

1 Q. And now what I'm talking about is, does the
2 brochure specifically state that H-100W can be used with
3 pressure-sensitive adhesives?

4 MS. CHLEBOWSKI: Same objection.

5 A. It does not identify, but it says possible. It
6 says in the application include -- I assume when it says
7 Eastotac resin it includes every one of these 13
8 candidate four polymers in Table 1.

9 Q. Here is my question. I'll use the word
10 "identify."

11 A. Okay.

12 Q. Does the Eastotac brochure specifically
13 identify H-100W as a resin that can be used with
14 pressure-sensitive adhesives?

15 MS. CHLEBOWSKI: Same objection.

16 A. I think it does.

17 Q. Does -- Is there a sentence that says -- uses
18 the word "H-100W can be used with pressure-sensitive
19 adhesives"?

20 A. What I would imagine when it says Eastotac
21 resin, it includes all the candidates in Table 1.

22 Q. I understand that's what you're saying. I'm

1 just asking, is there a specific identification in the
2 Eastotac brochure of H-100W being used with
3 pressure-sensitive adhesives?

4 MS. CHLEBOWSKI: Objection.

5 Q. Specifically stating that H-100W can be used
6 with pressure-sensitive adhesives.

7 A. If I read the same thing, Eastotac resin define
8 application as tackifying resin for pressure-sensitive
9 adhesive. And that would include each candidate,
10 depending on the applications.

11 Q. And here is my question: Is there a sentence
12 that has the word "H-100W," H-100W, in the Eastotac
13 brochure, in the same sentence as "pressure-sensitive
14 adhesives"?

15 A. No.

16 Q. Okay. And so is there a sentence in the
17 Eastotac brochure that specifically identifies H-100W,
18 that specific resin, as being used in a
19 pressure-sensitive adhesive?

20 A. I would say yes.

21 Q. Okay. Is there a sentence that -- I'm talking
22 about actually identifying by name H-100W, so the letter

1 H slash 100 W. We're talking about specific
2 identification. Are you with me?

3 **A. Yes.**

4 Q. Okay. Is there a sentence in the Eastotac
5 brochure that specifically states H-100W by name can be
6 used in pressure-sensitive adhesives?

7 **A. No.**

8 Q. And is there a specific sentence that
9 identifies by name H-100W as being used in caulks?

10 **A. No.**

11 Q. Is there a specific sentence that identifies
12 H-100W by name as being used in sealants?

13 **A. No.**

14 Q. Is there a specific sentence in the Eastotac
15 brochure that identifies H-100W as being used in rubber
16 systems?

17 **A. No.**

18 Q. Is there a specific statement in the Eastotac
19 brochure identifying H-100W as being used in inks?

20 **A. No.**

21 Q. Is there a specific statement in the Eastotac
22 brochure identifying H-100W as being used in paints?

1 **A. No.**

2 Q. Is there a specific statement in the Eastotac
3 brochure of H-100W being used in varnishes?

4 **A. No.**

5 MS. CHLEBOWSKI: Objection to form.

6 Q. Is there a specific statement in the Eastotac
7 brochure identifying H-100W as being used in dry
8 cleaning solutions?

9 MS. CHLEBOWSKI: Same objection.

10 **A. No.**

11 Q. Is there a specific statement in the Eastotac
12 brochure identifying H-100W as being used in investment
13 casting and highway markings?

14 MS. CHLEBOWSKI: Same objection.

15 **A. No.**

16 Q. And is there a specific statement of H-100W
17 being used in hot melt adhesives?

18 MS. CHLEBOWSKI: Same objection.

19 **A. No.**

20 Q. Now, on H-115E -- we'll move on to the next
21 resin in the Eastotac brochure.

22 So sticking with the Eastotac brochure, is

1 there any statement in the Eastotac brochure that
2 identifies H-115E by name as being used in
3 pressure-sensitive adhesives?

4 MS. CHLEBOWSKI: Objection to form.

5 **A. No.**

6 Q. Is there a specific statement in the Eastotac
7 brochure that identifies H-115E by name as being used in
8 caulks?

9 MS. CHLEBOWSKI: Same objection.

10 **A. No.**

11 Q. Does -- anywhere in the Eastotac brochure, does
12 the brochure specifically identify H-115E by name as
13 being used in sealants?

14 MS. CHLEBOWSKI: Same objection.

15 **A. No.**

16 Q. And you understand what I'm talking about.
17 Right? I'm talking about identifying by name of the
18 resin.

19 **A. In the sentence, right.**

20 Q. Right. And in a sentence, phrase, anything
21 that identifies the H-115E by name as being used in, for
22 example, a sealant.

1 MS. CHLEBOWSKI: Objection to the form.

2 Q. Are you with me?

3 A. I am.

4 Q. Okay. So anywhere in the Eastotac brochure, is
5 the H-115E resin identified by name as being used in
6 sealants?

7 A. Yes.

8 Q. Okay. Is there -- Is there a specific
9 statement in the Eastotac brochure that identifies
10 H-115E by name as being used in sealants?

11 MS. CHLEBOWSKI: Objection to form.

12 A. No.

13 Q. Okay. Is there a specific statement anywhere
14 in the Eastotac brochure that identifies H-115E by name
15 as being used in rubber systems?

16 MS. CHLEBOWSKI: Objection to form.

17 A. No.

18 Q. Is there a specific statement in the Eastotac
19 brochure identifying H-115E by name as being used in
20 inks?

21 MS. CHLEBOWSKI: Same objection.

22 A. No.

1 Q. Is there a specific statement in the Eastotac
2 brochure identifying H-115E by name as being used in
3 paints?

4 MS. CHLEBOWSKI: Same objection.

5 **A. No.**

6 Q. Is there a specific statement in the Eastotac
7 brochure identifying H-115E by name as being used in
8 varnishes?

9 MS. CHLEBOWSKI: Same objection.

10 **A. No.**

11 Q. Is there a specific statement in the Eastotac
12 brochure identifying H-115E by name as being used in dry
13 cleaning solutions?

14 MS. CHLEBOWSKI: Same objection.

15 **A. No.**

16 Q. Is there a specific statement in the Eastotac
17 brochure identifying H-115E by name as being used in
18 investment casting and highway markings?

19 MS. CHLEBOWSKI: Same objection.

20 **A. No.**

21 Q. Is there a specific statement in the Eastotac
22 brochure identifying H-115E by name as being used in hot

1 melt adhesives?

2 MS. CHLEBOWSKI: Same objection.

3 **A. No.**

4 Q. And I am going to skip to H-142R. Is there a
5 specific statement in the Eastotac brochure, anywhere in
6 the brochure, identifying H-142R by name as being used
7 in pressure-sensitive adhesives?

8 MS. CHLEBOWSKI: Objection to form.

9 **A. No.**

10 Q. Is there a specific statement anywhere in the
11 Eastotac brochure identifying H-142R by name as being
12 used in caulks?

13 MS. CHLEBOWSKI: Same objection.

14 **A. No.**

15 Q. Is there a specific statement anywhere in the
16 Eastotac brochure identifying H-142R by name as being
17 used in sealants?

18 MS. CHLEBOWSKI: Same objection.

19 **A. No.**

20 Q. Is there a specific statement in the Eastotac
21 brochure identifying H-142R by name as being used in
22 rubber systems?

1 MS. CHLEBOWSKI: Same objection.

2 A. No.

3 Q. And is there a specific statement in the
4 Eastotac brochure identifying H-142R by name as being
5 used in inks?

6 MS. CHLEBOWSKI: Same objection.

7 A. No.

8 Q. Is there a specific statement in the Eastotac
9 brochure identifying H-142R by name as being used in
10 paints?

11 MS. CHLEBOWSKI: Same objection.

12 A. No.

13 Q. Is there a specific statement in the Eastotac
14 brochure identifying H-142R by name as being used in
15 varnishes?

16 MS. CHLEBOWSKI: Same objection.

17 A. No.

18 Q. Is there a specific statement in the Eastotac
19 brochure identifying H-142R by name as being used in dry
20 cleaning solutions?

21 MS. CHLEBOWSKI: Same objection.

22 A. No.

1 Q. Is there a specific statement of H-142R --
2 sorry.

3 Is there a specific statement in the Eastotac
4 brochure, Exhibit 1002, identifying H-142R by name as
5 being used in investment casting and highway markings?

6 MS. CHLEBOWSKI: Same objection.

7 **A. Not a specific statement.**

8 Q. And in the Eastotac brochure, is there a
9 specific statement anywhere in the brochure identifying
10 H-142R as being used in hot melt adhesives?

11 MS. CHLEBOWSKI: Same objection.

12 **A. No.**

13 Q. And for H-115R, is there any statement in the
14 Eastotac brochure identifying H-115R as being used in
15 pressure-sensitive adhesives?

16 MS. CHLEBOWSKI: Objection to form.

17 **A. No.**

18 Q. And on H-115R, is there any statement in the
19 Eastotac brochure identifying it as being used in
20 caulks?

21 MS. CHLEBOWSKI: Same objection.

22 **A. No.**

1 Q. Is there any statement in the Eastotac brochure
2 identifying H-115R as being used in sealants?

3 MS. CHLEBOWSKI: Same objection.

4 A. No.

5 Q. Is there any statement in the Eastotac brochure
6 identifying H-115R as being used in rubber systems?

7 MS. CHLEBOWSKI: Same objection.

8 A. No.

9 Q. Is there any statement in the Eastotac brochure
10 identifying H-115R as being used in inks?

11 MS. CHLEBOWSKI: Same objection.

12 A. No.

13 Q. Any statement in the Eastotac brochure
14 identifying H-115R as being used in paints?

15 MS. CHLEBOWSKI: Same objection.

16 A. No.

17 Q. Is there any statement in the Eastotac brochure
18 identifying H-115R as being used in varnishes?

19 MS. CHLEBOWSKI: Same objection.

20 A. No.

21 Q. Is there any statement in the Eastotac brochure
22 identifying H-115R as being used in dry cleaning

1 solutions?

2 MS. CHLEBOWSKI: Same objection.

3 **A. No.**

4 Q. And is there any statement in the Eastotac
5 brochure identifying H-115R as being used in investment
6 casting and highway markings?

7 MS. CHLEBOWSKI: Same objection.

8 **A. No.**

9 Q. Any statement in the Eastotac brochure of
10 H-115R being used in hot melt adhesives?

11 MS. CHLEBOWSKI: Same objection.

12 **A. Could you repeat that?**

13 Q. Sure. Any statement in the Eastotac brochure
14 identifying H-115R as being used in hot melt adhesives?

15 MS. CHLEBOWSKI: Same objection.

16 **A. No.**

17 Q. Any statement in the Eastotac brochure -- is
18 there any statement in the Eastotac brochure identifying
19 H-115L as being used in pressure-sensitive adhesives?

20 MS. CHLEBOWSKI: Objection to form.

21 **A. No.**

22 Q. Any statement in the Eastotac brochure

1 identifying H-115L by name as being used in caulk?

2 MS. CHLEBOWSKI: Objection to form.

3 A. No.

4 Q. Any statement in the Eastotac brochure
5 identifying H-115L by name as being used in sealants?

6 MS. CHLEBOWSKI: Same objection.

7 A. No.

8 Q. And is there any statement in the Eastotac
9 brochure identifying H-115L as being used in rubber
10 systems?

11 MS. CHLEBOWSKI: Same objection.

12 A. No.

13 Q. And is there any statement in the Eastotac
14 brochure identifying H-115L as being used in inks,
15 paints, or varnishes?

16 MS. CHLEBOWSKI: Same objection.

17 A. No.

18 Q. Any statement in the Eastotac brochure
19 identifying H-115L as being used in dry cleaning
20 solutions?

21 MS. CHLEBOWSKI: Same objection.

22 A. No.

1 Q. Any statement of H-115L in the Eastotac
2 brochure being used as investment casting or highway
3 markings?

4 MS. CHLEBOWSKI: Same objection.

5 A. No.

6 Q. Any statement in the Eastotac brochure
7 identifying H-115L by name for use in hot melt
8 adhesives?

9 MS. CHLEBOWSKI: Same objection.

10 A. No.

11 Q. Any statement -- we're moving on to H-115W.

12 A. Okay.

13 Q. In the Eastotac brochure, is there any
14 statement in the brochure identifying H-115W as being
15 used for pressure sensitive adhesives?

16 MS. CHLEBOWSKI: Objection to form.

17 A. No.

18 Q. Any statement in the Eastotac brochure
19 identifying H-115W by name as being used in caulk?

20 MS. CHLEBOWSKI: Same objection.

21 A. No.

22 Q. Any statement in the Eastotac brochure

1 identifying H-115W as being used in sealants?

2 MS. CHLEBOWSKI: Same objection.

3 **A. No.**

4 Q. Dr. Hsu, is there any statement anywhere in the
5 Eastotac brochure identifying H-115W by name as being
6 used in rubber systems?

7 MS. CHLEBOWSKI: Same objection.

8 **A. No.**

9 Q. Is there any statement in the Eastotac brochure
10 identifying H-115W as being used in inks?

11 MS. CHLEBOWSKI: Same objection.

12 **A. Could you repeat the question?**

13 Q. Sure. Is there any statement of H-1 -- is
14 there any statement in the Eastotac brochure of H-115W
15 being used in inks?

16 MS. CHLEBOWSKI: Same objection.

17 **A. You mean by name?**

18 Q. By name.

19 **A. No.**

20 Q. And is there any statement in the Eastotac
21 brochure identifying H-115W by name for use in paints or
22 varnishes?

1 MS. CHLEBOWSKI: Same objection.

2 **A. No.**

3 Q. Is there any statement in the Eastotac brochure
4 identifying H-115W by name for use in dry cleaning
5 solutions?

6 MS. CHLEBOWSKI: Same objection.

7 **A. No.**

8 Q. And is there any statement in the Eastotac
9 brochure identifying H-115W by name for use in
10 investment casting and highway marking?

11 MS. CHLEBOWSKI: Same objection.

12 **A. No.**

13 Q. And is there any statement in the Eastotac
14 brochure identifying H-115W by name for use in hot melt
15 adhesives?

16 MS. CHLEBOWSKI: Same objection.

17 **A. By name, no.**

18 Q. And now we'll move on to H-130E. Okay?

19 **A. Uh-hmm.**

20 Q. Same questions for the Eastotac brochure. Is
21 there any statement in the Eastotac brochure identifying
22 H-130E by name for use in pressure-sensitive adhesives?

1 MS. CHLEBOWSKI: Objection to form.

2 **A. No.**

3 Q. Is there any statement in the Eastotac brochure
4 identifying H-130E by name for use in caulks?

5 MS. CHLEBOWSKI: Same objection.

6 **A. No.**

7 Q. Is there any statement in the Eastotac brochure
8 identifying H-130E by name for use in sealants?

9 MS. CHLEBOWSKI: Same objection.

10 **A. No.**

11 Q. Is there any statement in the Eastotac brochure
12 identifying H-130E by name for use in rubber systems?

13 MS. CHLEBOWSKI: Same objection.

14 **A. No.**

15 Q. Is there any statement in the Eastotac brochure
16 identifying H-130E by name for use in inks?

17 MS. CHLEBOWSKI: Same objection.

18 **A. No.**

19 Q. Is there any statement in the Eastotac brochure
20 identifying H-130E by name for use in paint?

21 MS. CHLEBOWSKI: Same objection.

22 **A. No.**

1 Q. Is there any statement in the Eastotac brochure
2 identifying H-130E by name for varnishes?

3 MS. CHLEBOWSKI: Same objection.

4 A. No.

5 Q. Is there any statement in the Eastotac brochure
6 identifying H-130E by name for use in dry cleaning
7 solutions?

8 MS. CHLEBOWSKI: Same objection.

9 A. No.

10 Q. Is there any statements in the Eastotac
11 brochure identifying H-130E by name for use in
12 investment casting and highway marking?

13 MS. CHLEBOWSKI: Same objection.

14 A. No.

15 Q. Is there any statement in the Eastotac brochure
16 identifying H-130E by name for use in hot melt adhesive?

17 MS. CHLEBOWSKI: Same objection.

18 A. No.

19 Q. Is there -- now we'll skip on to H-130R. Is
20 there any statement, Dr. Hsu, in the Eastotac brochure
21 identifying H-130R by name for use in pressure-sensitive
22 adhesives?

1 MS. CHLEBOWSKI: Objection to form.

2 A. No.

3 Q. Is there any statement in the Eastotac brochure
4 identifying H-130R by name for use in caulks?

5 MS. CHLEBOWSKI: Same objection.

6 A. No.

7 Q. Is there any statement in the Eastotac brochure
8 identifying H-130R for use in sealants?

9 MS. CHLEBOWSKI: Same objection.

10 A. No.

11 Q. Is there any statement in the Eastotac brochure
12 identifying H-130R for use in rubber systems?

13 MS. CHLEBOWSKI: Same objection.

14 A. No.

15 Q. Is there any statement in the Eastotac brochure
16 identifying H-130R by name for use in inks, paints, or
17 varnishes?

18 MS. CHLEBOWSKI: Same objection.

19 A. No.

20 Q. Is there any statement in the Eastotac brochure
21 identifying H-130R by name for use in dry cleaning
22 solutions?

1 MS. CHLEBOWSKI: Same objection.

2 **A. No.**

3 Q. Is there any statement in the Eastotac brochure
4 identifying H-130R for use in investment casting or
5 highway markings?

6 MS. CHLEBOWSKI: Same objection.

7 **A. By name?**

8 Q. By name.

9 **A. No.**

10 Q. Is there any statement identifying H-130R by
11 name for use in hot melt adhesives?

12 MS. CHLEBOWSKI: Same objection.

13 **A. No.**

14 Q. Only two more, I think, so moving on to H-130L.

15 Dr. Hsu, is there any statement in the Eastotac
16 brochure identifying H-130L by name for use in
17 pressure-sensitive adhesives?

18 MS. CHLEBOWSKI: Objection to form.

19 **A. No.**

20 Q. Is there any statement, Dr. Hsu, in the
21 Eastotac brochure identifying H-130L by name for use in
22 caulks?

1 MS. CHLEBOWSKI: Same objection.

2 A. No.

3 Q. Is there any statement in the Eastotac brochure
4 identifying H-130L for use in sealant?

5 MS. CHLEBOWSKI: Same objection.

6 A. No.

7 Q. Is there any statement in the Eastotac brochure
8 identifying H-130L by name for rubber systems?

9 MS. CHLEBOWSKI: Same objection.

10 A. No.

11 Q. Is there any statement in the Eastotac brochure
12 identifying H-130L by name for use in inks, paints, or
13 varnishes?

14 MS. CHLEBOWSKI: Same objection.

15 A. No.

16 Q. Is there any statement in the Eastotac brochure
17 identifying H-130L by name for use in dry cleaning
18 solutions?

19 MS. CHLEBOWSKI: Same objection.

20 A. No.

21 Q. Is there any statement in the Eastotac brochure
22 identifying H-130L by name for use in investment casting

1 and highway markings?

2 MS. CHLEBOWSKI: Same objection.

3 **A. No.**

4 Q. And is there any statement, Dr. Hsu, in the
5 Eastotac brochure identifying H-130L by name for use in
6 hot melt adhesives?

7 MS. CHLEBOWSKI: Same objection.

8 **A. No.**

9 Q. Dr. Hsu, the H-130W resin now we'll cover, so
10 focusing on the H-130W resin in the Eastotac brochure.

11 Is there any statement in the Eastotac
12 brochure, Exhibit 1002, identifying H-130W as a resin
13 for use in pressure-sensitive adhesives?

14 MS. CHLEBOWSKI: Objection to form.

15 **A. By name?**

16 Q. By name.

17 MS. CHLEBOWSKI: Objection to form.

18 **A. No.**

19 Q. I'll just rephrase it so it's clear.

20 Is there any statement in the Eastotac brochure
21 identifying the H-130W resin by name for use in
22 pressure-sensitive adhesive?

1 MS. CHLEBOWSKI: Same objection.

2 A. No.

3 Q. Dr. Hsu, is there any statement in the Eastotac
4 brochure identifying the H-130W resin by name for use in
5 caulks?

6 A. No.

7 MS. CHLEBOWSKI: Objection.

8 Q. Is there any statement, Dr. Hsu, in the
9 Eastotac brochure identifying 130W by name as a resin
10 that can be used in sealant?

11 MS. CHLEBOWSKI: Same objection.

12 A. No.

13 Q. Is there any statement, Dr. Hsu, in the
14 Eastotac brochure identifying H-130W by name as a resin
15 that can be used in rubber systems?

16 MS. CHLEBOWSKI: Same objection.

17 A. No.

18 Q. Is there any statement, Dr. Hsu, in the
19 Eastotac brochure identifying H-130W by name as a resin
20 that can be used in inks, paints, or varnishes?

21 MS. CHLEBOWSKI: Same objection.

22 A. No.

1 Q. Dr. Hsu, is there any statement in the Eastotac
2 brochure identifying H-130W by name for use in dry
3 cleaning solutions?

4 MS. CHLEBOWSKI: Same objection.

5 **A. No.**

6 Q. Is there any statement in the Eastotac brochure
7 identifying H-130W by name for use in investment casting
8 and highway markings?

9 MS. CHLEBOWSKI: Same objection.

10 **A. No.**

11 Q. Dr. Hsu, is there any statement in the Eastotac
12 brochure identifying H-130W by name as suitable for use
13 in hot melt adhesives?

14 MS. CHLEBOWSKI: Same objection.

15 **A. No.**

16 Q. And so looking at the entire brochure, Dr. Hsu,
17 is there any sentence in this brochure that specifically
18 identifies H-142R by name as a resin that can be used
19 with hot melt adhesives?

20 **A. Again, I go back to Eastotac resins include**
21 **H-142R.**

22 MR. GRIMSRUD: Okay. And I'm going to have to

1 move to strike as nonresponsive because my question is
2 focused on identifying H-142R by name.

3 **A. Yes.**

4 Q. So my question is, is there a sentence anywhere
5 in the Eastotac brochure, Exhibit 1002, that identifies
6 H-142R resin by name as being used in hot melt
7 adhesives?

8 **A. That sentence does not exist.**

9 Q. Have you personally worked with any of the
10 resins in Table 1?

11 **A. No.**

12 Q. Okay. So you've never worked with -- in the
13 course of your entire career, you've never worked with
14 H-142R resin?

15 **A. I don't remember.**

16 Q. Sitting here today, are you aware of any
17 instance in which you worked with H-142R resin?

18 **A. No.**

19 Q. Okay. And are you aware of any instance in
20 which you worked with H-130W resin?

21 **A. No.**

22 Q. Are you aware of any instance in which you

1 worked with H-130R resin?

2 **A. No.**

3 Q. Are you aware of any instance in which you
4 worked with H-130E resin?

5 **A. No.**

6 Q. Are you aware of any instance in which you
7 worked with H-115W resin?

8 **A. No.**

9 Q. Are you aware of any instance in which you
10 worked with H-115L resin?

11 **A. No.**

12 Q. Are you aware of any instance in which you
13 worked with H-115R resin?

14 **A. No.**

15 Q. Are you aware of any instance in which you
16 worked with H-115E resin?

17 **A. No.**

18 Q. Are you aware of any instance in which you
19 worked with H-100W resin?

20 **A. No.**

21 Q. Are you aware of any instance in which you
22 worked with H-100L resin?

1 **A. No.**

2 Q. Are you aware of any instance in which you
3 worked with H-100R resin?

4 **A. No.**

5 Q. Are you aware of any instance in which you
6 worked with H-100E resin?

7 **A. No. I'm sorry.**

8 Q. And in your declaration, Dr. Hsu, did you
9 identify any instance in which you worked with any of
10 the resins in Table 1 of the Eastotac brochure?

11 **A. I did not work with these resins, that I'm**
12 **aware of.**

13 Q. So sitting here today, you're not aware of ever
14 having worked with any of the resins that are shown in
15 Table 1 of the Eastotac brochure, including H-142R?

16 **A. That is correct.**

17 Q. Now, if we took an example from Table 3,
18 Dr. Hsu, so if you look at Table 3 of the Eastotac
19 brochure, and let's say -- I'm going to give you another
20 hypothetical where I tell you that I've made a
21 composition that has 50 percent amorphous polyolefin and
22 it has 50 percent of an Eastotac resin. Okay?

1 And you agree that 50 percent of an Eastotac
2 resin and 50 percent of a amorphous polyolefin resin
3 would mean -- that would be a composition that is shown
4 in Table 3?

5 **A. Well, you're missing the antioxidant.**

6 Q. Do you have to have antioxidant?

7 **A. Generally, it's a good idea to have in hot melt**
8 **adhesive.**

9 Q. So you'd want to have antioxidant in it, in my
10 hypothetical?

11 **A. Yes.**

12 Q. So it says up to .5 percent antioxidant. So
13 let's say in this hypothetical we have 50 percent of an
14 Eastotac resin. That's all you know. 50 percent of an
15 Eastotac resin and then you have 49.5 percent amorphous
16 polyolefin, polymer. Okay? And then you have
17 .5 percent antioxidant. So that's the hypothetical
18 composition I'm giving you.

19 I want to know specifically by name what
20 Eastotac resin I've used. Can you tell me -- based upon
21 the information I've given you, can you tell me by name
22 what the specific Eastotac resin is that I've used?

1 MS. CHLEBOWSKI: Objection. Outside the scope.

2 A. I cannot.

3 Q. Well, let me change the composition, then.

4 Let's say it's -- I'm trying to do the math here to keep
5 in that antioxidant. Let's say I change the composition
6 to 40 percent of some Eastotac resin and then it would
7 be 59.5 percent of the amorphous polyolefin. Okay?

8 A. Uh-hmm.

9 Q. And then we'll keep the antioxidant at
10 .5 percent. Okay?

11 In this hypothetical, can you identify by name
12 the specific Eastotac resin that's being used?

13 A. No, I cannot.

14 MS. CHLEBOWSKI: Excuse me. Objection.
15 Outside the scope. Form.

16 Q. Okay. And let's take one other example. Let's
17 say now the -- in this hypothetical we'll stick with
18 it's an amorphous polyolefin composition.

19 If the Eastotac resin is now at 30 percent of
20 some Eastotac resin, and I guess that would mean 69.5
21 percent of the amorphous polyolefin and then .5 percent
22 of the antioxidant -- are you with me?

1 **A. Yes.**

2 Q. So that's the composition.

3 In this hypothetical, what's the specific
4 Eastotac resin that's being used?

5 MS. CHLEBOWSKI: Same objections.

6 **A. I do not know.**

7 Q. And let's do the same thing on an example,
8 hypothetical, for an ethylene vinyl acetate composition
9 from Table 3. Okay?

10 **A. Yes.**

11 Q. So let's say we do 50 percent of some Eastotac
12 resin and 49.5 percent of ethylene vinyl acetate
13 copolymer. We're just going to choose zero for the wax
14 to keep the math sample. And the antioxidant, we'll
15 keep at .5.

16 **A. Okay.**

17 Q. So you'd agree that Table 3, just looking at
18 Table 3, a composition with some Eastotac resin of
19 50 percent and ethylene vinyl acetate copolymer of
20 49.5 percent and antioxidant of .5 percent, that would
21 fall within the general composition ranges in Table 3?

22 **A. Yes.**

1 Q. Okay. So in my hypothetical --

2 A. Wait, wait, wait. I'm sorry. Let me get the
3 math right here.

4 Q. Correct me if I'm wrong.

5 A. So you got 30 percent in the resin?

6 Q. 50.

7 A. Okay. 49.

8 Q. So we're good, I think. So we have 49. In
9 this hypothetical we have 50 percent Eastotac resin,
10 49.5 of ethylene vinyl acetate copolymer, zero wax, and
11 then we have .5 percent antioxidant.

12 A. Correct.

13 Q. So in this hypothetical, can you identify the
14 specific Eastotac resin that's being used, by name?

15 A. I cannot.

16 MS. CHLEBOWSKI: Objection. Outside the scope.
17 Form.

18 A. I cannot.

19 Q. And let's -- we'll do one more. If I say now
20 that the Eastotac resin is 40 percent and then the
21 ethylene vinyl acetate copolymer is 59.5 percent and the
22 wax is zero and the antioxidant is still .5 percent,

1 that would be a hypothetical composition having the
2 general ranges disclosed in Table 3. Correct?

3 MS. CHLEBOWSKI: Same objections.

4 **A. That's not true because the EVA is 30 to 50.**

5 Q. Okay. Good point. So we could do -- we can do
6 60 percent resin and then we'll do 39.5 percent ethyl
7 vinyl acetate copolymer and then .5 percent of the
8 antioxidant.

9 **A. Correct.**

10 Q. That would fall within the general ranges of
11 Table 3 for this hypothetical?

12 **A. 60 percent resin --**

13 Q. Yup.

14 **A. -- and 39.5 percent of the polymer and**
15 **.5 percent oxidant.**

16 Q. Exactly.

17 **A. That is correct.**

18 Q. Okay. So in this hypothetical now where we
19 have 60 percent of an Eastotac resin and 39.5 percent of
20 an ethylene vinyl acetate copolymer and .5 percent
21 antioxidant, can you tell me the specific Eastotac resin
22 by name that we're using in the hypothetical?

1 MS. CHLEBOWSKI: Same objections.

2 A. I cannot.

3 Q. Dr. Hsu, your declaration -- well, let me ask
4 it this way: In your declaration, do you identify any
5 hot melt adhesive that was in existence before the
6 filing of the patent that specifically used H-142R?

7 MS. CHLEBOWSKI: Objection to form.

8 A. Let me check.

9 Q. Sure.

10 A. Could I have the rest of the patents? The
11 '033, the '717, and the -- all the patents I've given
12 you as a reference?

13 Q. Well, let's just focus on your declaration.

14 A. Okay.

15 Q. What you have in front of you.

16 A. Right.

17 Q. Do you -- Other than -- And let's -- we'll set
18 aside the Eastotac brochure and the Exxon reference.
19 Okay? So we're setting Eastotac reference aside,
20 setting the Exxon reference aside.

21 Do you identify any commercially available hot
22 melt adhesives that used H-142R resin before the filing

1 date of the '404 patent?

2 MS. CHLEBOWSKI: Objection to form.

3 **A. I don't remember.**

4 Q. Okay. Do you want to look through your
5 declaration?

6 **A. I would.**

7 Q. Sure. You can take a few minutes.

8 (Pause)

9 **A. No, I did not include in my declaration.**

10 Q. Okay. And so just to be clear, if we say
11 April 27th -- we'll use April 27th, 1999, as an example,
12 since that's one of the filing dates in the '404 patent.

13 In your declaration did you identify any
14 commercially available hot melt adhesives that were
15 available before April 27th, 1999, and used in H-142R
16 resin?

17 **A. I did not identify in my declaration.**

18 Q. In your declaration, do you identify any
19 commercially available hot melt adhesives as of
20 June 30th, 1998, that included an H-142R resin?

21 **A. June 30th, 1998?**

22 Q. Yeah.

1 **A. No, I did not.**

2 Q. If you look back at Table 3 of the Eastotac
3 brochure -- we talked a little bit about this at the
4 beginning of the day, but the fact that hot melt
5 adhesives often included a resin, a polymer, and a wax
6 was known by 1999. Correct?

7 **A. Correct.**

8 Q. And that was known by 1998. Correct?

9 **A. Correct.**

10 Q. It had been known for years before 1998.
11 Correct?

12 **A. Correct.**

13 Q. So to the extent the Table 3 in the Eastotac
14 brochure is disclosing the use of a resin, a polymer,
15 and a wax in a hot melt adhesive, this was not new
16 information to someone of ordinary skill in the art in
17 1999. Correct?

18 **A. Correct.**

19 Q. And so even without the -- and it wasn't new
20 information in 1998 either. Correct?

21 **A. Correct.**

22 Q. So even without the existence of the Eastotac

1 brochure, a person of ordinary skill in the art in 1998
2 would have known that a hot melt adhesive often included
3 a resin, a polymer, and a wax. Correct?

4 MS. CHLEBOWSKI: Outside the scope.

5 **A. Not necessarily a wax.**

6 Q. You're saying that in 1998, in your opinion, a
7 person of ordinary skill in the art would not have
8 necessarily known that a hot melt adhesive includes wax?

9 MS. CHLEBOWSKI: Same objection.

10 **A. Some formulation may not include wax.**

11 Q. I understand you could make them without a wax.
12 I'm just saying, in 1998 a person of ordinary skill in
13 the art understood, even without the Eastotac brochure,
14 that a hot melt adhesive may include -- doesn't have to
15 necessarily include all these things but may include a
16 resin, a polymer, and a wax?

17 MS. CHLEBOWSKI: Same objection.

18 **A. Correct.**

19 Q. You understand my question?

20 **A. I do.**

21 Q. Okay. And in 1997, even without the benefit of
22 the Eastotac brochure, a person of ordinary skill in the

1 art would have known that a hot melt adhesive might
2 include a resin, a polymer, and a wax.

3 MS. CHLEBOWSKI: Outside the scope.

4 Q. Correct?

5 **A. Correct.**

6 Q. And, Dr. Hsu, in your opinion, even without the
7 benefit of the Eastotac brochure, in 1996 a person of
8 ordinary skill in the art would have understood that a
9 hot melt adhesive might include a resin, a polymer, and
10 a wax?

11 MS. CHLEBOWSKI: Outside the scope.

12 **A. Correct.**

13 Q. Dr. Hsu, even without the benefit of Eastotac
14 brochure, in 1996 a person of ordinary skill in the art
15 would have understood that a hot melt adhesive might
16 include a resin, a polymer, and a wax. True?

17 MS. CHLEBOWSKI: Same objection.

18 **A. Correct.**

19 Q. Dr. Hsu, even without the benefit of the
20 Eastotac brochure, so if you just set the Eastotac
21 brochure aside and pretended it didn't even exist, in
22 1995 a person of ordinary skill in the art would have

1 understood a that a hot melt adhesive may include a
2 resin, polymer, and a wax. Correct?

3 MS. CHLEBOWSKI: Objection.

4 **A. Correct.**

5 Q. And, Dr. Hsu, even without the benefit of the
6 Eastotac brochure, in 1994, in your opinion, a person of
7 ordinary skill in the art would have understood that a
8 hot melt adhesive could include a resin, polymer, and a
9 wax?

10 MS. CHLEBOWSKI: Same objection.

11 **A. Correct.**

12 Q. And even without the benefit of the Eastotac
13 brochure in 1993, a person of ordinary skill in the art
14 would have understood that a hot melt adhesive could
15 include a resin, a polymer, and a wax. Correct?

16 MS. CHLEBOWSKI: Outside the scope.

17 **A. Correct.**

18 Q. And 1992 -- let's go back to 1992. Even back
19 in 1992, a person of ordinary skill in the art, in your
20 opinion, would have understood that a hot melt adhesive
21 could include a resin, a polymer, and a wax. Right?

22 MS. CHLEBOWSKI: Outside the scope.

1 **A. Correct.**

2 Q. So a person of ordinary skill in the art in the
3 1998 to 1999 time frame did not need the Eastotac
4 brochure to tell them that the hot melt adhesive could
5 include a resin, a polymer, and a wax. Fair?

6 MS. CHLEBOWSKI: Same objection.

7 **A. Would you repeat the question?**

8 Q. Sure. In 1998, a person of ordinary skill in
9 the art did not need to read the Eastotac brochure to
10 understand that a hot melt adhesive could include a
11 resin, a polymer, and a wax. Correct?

12 MS. CHLEBOWSKI: Same objection.

13 **A. Correct.**

14 Q. And in 1999, also, a person of ordinary skill
15 in the art did not need to read the Eastotac brochure to
16 understand that a hot melt adhesive could include a
17 resin, a polymer, and a wax. Correct?

18 MS. CHLEBOWSKI: Same objection.

19 **A. Correct.**

20 MR. GRIMSRUD: Counsel, just before I keep
21 going, what is your objection?

22 MS. CHLEBOWSKI: These are outside the scope.

1 MR. GRIMSRUD: This is highly inappropriate and
2 obstructive. It really is. I got to ask him all sorts
3 of questions about what a person of ordinary skill in
4 the art would have known.

5 And your objections are not proper, so again,
6 I'm going to ask for another time that you show more
7 discretion in your objections.

8 BY MR. GRIMSRUD:

9 Q. So, Dr. Hsu, in the entirety of the 1990s --
10 let's take the entire 1909 time period. In your
11 opinion, even without having read the Eastotac brochure,
12 would a person of ordinary skill in the art know that a
13 hot melt adhesive could include a resin, a polymer, and
14 a wax?

15 A. Could, yes.

16 Q. And just to be clear, they would know that
17 without even having to read the Eastotac brochure.
18 Right?

19 A. Correct.

20 Q. And then if we talk about the Table 3
21 disclosures -- discloses general composition ranges for
22 hot melt adhesives. Correct?

1 **A. Correct.**

2 Q. Like for example, if you're looking at the --
3 let's take the amorphous polyolefin composition where it
4 discloses 30 to 50 percent of a resin, 0 to 20 percent
5 of a low molecular weight polyethylene wax, 50 to
6 70 percent of amorphous polyolefin, and then .25 to
7 .5 percent of an antioxidant. Do you see that?

8 **A. Yes, I do.**

9 Q. These general ranges for compositions of resins
10 and waxes and polymers were known to a person of
11 ordinary skill in the art in 1999. Correct?

12 MS. CHLEBOWSKI: Outside the scope.

13 **A. General ranges, yes.**

14 Q. Right. These general ranges for the resin,
15 polymer, waxes, and antioxidants disclosed in Table 3 of
16 the Eastotac brochure for the amorphous polyolefin
17 composition were known to a person of ordinary skill in
18 the art in 1998. Right?

19 MS. CHLEBOWSKI: Same objection.

20 **A. Correct.**

21 Q. And a person of ordinary skill in the art in
22 the -- in 1998, for example, wouldn't need to read the

1 Eastotac brochure to understand that these are general
2 composition ranges for hot melt adhesives. Correct?

3 MS. CHLEBOWSKI: Same objection.

4 **A. Correct.**

5 Q. And a person of ordinary skill in the art would
6 not have had to read Table 3 of the Eastotac brochure in
7 1998 to understand the general composition ranges that
8 existed for the hot melt adhesive with amorphous
9 polyolefin. Would you agree?

10 MS. CHLEBOWSKI: Same objection.

11 **A. Correct.**

12 Q. Similarly for the EVA based polymer, the one
13 that's ethylene vinyl acetate copolymer, those general
14 composition ranges of 30 to 60 percent of the resin and
15 30 to 50 percent of the polymer and 0 to 20 percent of
16 the wax and .25 to 0.5 percent antioxidant, those
17 general composition ranges were well-known in 1999.
18 Correct?

19 MS. CHLEBOWSKI: Same objection.

20 **A. Correct.**

21 Q. And those general composition ranges were
22 well-known in 1998. Correct?

1 MS. CHLEBOWSKI: Same objection.

2 **A. Correct.**

3 Q. A person of ordinary skill in the art in the
4 1998 to 1999 time frame would not have had to have read
5 the Eastotac brochure to understand that these general
6 composition ranges disclosed for the ethylene vinyl
7 acetate copolymer in Table 3 were known?

8 MS. CHLEBOWSKI: Same objection.

9 **A. Correct.**

10 Q. And the Eastotac brochure you said that you
11 assumed it was published in -- was it 1992 for Eastotac?

12 **A. That is what it says.**

13 Q. Okay. So let's take the entire 1990s time
14 period. In your opinion, throughout the entire 1990s,
15 were these general composition ranges for an ethylene
16 vinyl acetate copolymer-based hot melt adhesive
17 generally known to a person of ordinary skill in the
18 art?

19 MS. CHLEBOWSKI: Outside the scope. Form.

20 **A. Correct.**

21 Q. And so from 1993 through 1999, for example, the
22 general composition ranges disclosed for the ethylene

1 vinyl acetate copolymer in Table 3, for the general
2 composition ranges for that hot melt adhesive were known
3 to a person of ordinary skill in the art?

4 MS. CHLEBOWSKI: Same objections.

5 **A. Correct.**

6 Q. Dr. Hsu, in your declaration you state that
7 H-142R is based on DCPD?

8 **A. Dicyclo -- Yes.**

9 Q. What's your basis for saying that H-142R is
10 based on DCPD?

11 **A. Would you point out where I said that?**

12 Q. I can try. Sitting here right now, can you
13 tell me what your basis is for saying that H-142R is
14 based on dicychlopentadiene, without looking at your
15 report?

16 **A. A lot of things to memorize. I need to look
17 through my report. Would you tell me where I said that?**

18 Q. I think if you looked at Paragraph 43, that
19 would be an example of where you talked about that.

20 **A. Yes.**

21 Q. Okay. I'll give you a minute to read it.

22 **A. I have it in front of me.**

1 Q. Okay. What's your basis for saying that
2 Eastotac H-142 is derived in part from
3 dicychlopentadiene?

4 A. It says so. It is the property given in the
5 '404 patent.

6 Q. Okay. Do you have any basis other than the
7 '404 patent for saying that H-142R is based on
8 dicychlopentadiene?

9 A. That was sufficient.

10 Q. Okay. And my question is, do you -- I want to
11 know, do you have any other basis for saying that
12 Eastotac H-142R is based on dicychlopentadiene?

13 So here is my question: Other than the
14 '404 patent, do you have any other basis for stating
15 that Eastotac H-142R is based on dicychlopentadiene?

16 A. No.

17 Q. And other than what's in the '404 patent, do
18 you personally have any knowledge as to whether or not
19 Eastotac H-142R is based on dicychlopentadiene?

20 A. No.

21 MR. GRIMSRUD: All right. I think now is
22 probably a good time to break for lunch.

1 (Lunch recess)

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13 A F T E R N O O N S E S S I O N

14 BY MR. GRIMSRUD:

15 Q. Dr. Hsu, in the Eastotac brochure that we were
16 talking about, Henkel Exhibit 1002 --

17 A. Correct.

18 Q. -- in your declaration do you identify which of
19 the --

20 (Interruption)

21 Q. Dr. Hsu, looking at the Eastotac brochure,
22 Exhibit 1002, in your declaration do you identify which

1 of the specific Eastotac resins shown in Table 1 of the
2 Eastotac brochure were used in caulks before the year
3 April 27th, 1999?

4 **A. No, I did not.**

5 Q. And in forming your opinions in this case, did
6 you investigate which of the specific Eastotac resins in
7 the Eastotac brochure were used in caulks before
8 April 27th, 1999?

9 MS. CHLEBOWSKI: Objection to form.

10 **A. No, I did not.**

11 Q. You understand my question?

12 **A. I think so.**

13 Q. Okay. I'm just asking, did you investigate the
14 issue of which particular resins, if any, in the
15 Eastotac brochure were used in caulks before April 27th
16 of 1999.

17 MS. CHLEBOWSKI: Same objection.

18 Q. Do you understand the question?

19 **A. Yes.**

20 Q. Okay. So in forming your opinions, sir, did
21 you investigate which of the specific resins listed in
22 the Eastotac brochure were used in caulks before

1 April 27th, 1999?

2 MS. CHLEBOWSKI: Same objection.

3 **A. No.**

4 Q. Okay. And in your declaration, do you identify
5 which, if any, of the specific Eastotac resins in
6 Table 1 of the Eastotac brochure were used in sealants
7 before April 27th, 1999?

8 **A. No, I did not.**

9 Q. In forming your opinions, did you investigate
10 the issue of which of the specific Eastotac resins in
11 the Eastotac brochure were used in sealants before
12 April 27th of 1999?

13 MS. CHLEBOWSKI: Objection to form.

14 **A. No, I did not.**

15 MR. GRIMSRUD: Counsel, what's the basis for
16 your objecting to that question?

17 MS. CHLEBOWSKI: You want me to tell you?

18 MR. GRIMSRUD: Yes.

19 MS. CHLEBOWSKI: Your word of "investigate" is
20 unclear.

21 Q. Sir, do you understand what "investigate"
22 means?

1 **A. Did I invest some time in studying.**

2 Q. Sure. Yeah. In forming your opinions, you did
3 an investigation. Right?

4 **A. Yes.**

5 Q. You looked at materials. Right?

6 **A. I gave them -- the reference to you.**

7 Q. Right. In forming your opinions, you did an
8 investigation where you analyzed various materials.
9 Right?

10 **A. Yes.**

11 Q. And the materials, for example, that you're
12 relying on in this case are listed in your declaration.
13 Correct?

14 **A. That is correct.**

15 Q. Okay. And so is it correct that in forming
16 your opinions in this case and preparing your expert
17 declaration, you investigated various issues such as
18 anticipation by the Eastotac brochure?

19 MS. CHLEBOWSKI: Objection to form.

20 **A. I investigated the high TG material. Yes,**
21 **that's correct.**

22 Q. And what types of things did you do as part of

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1 your investigation in preparing your expert declaration?

2 MS. CHLEBOWSKI: Same objection.

3 A. I read the patents. I read the references that
4 I supplied to you. I read the brochures.

5 Q. Did you do anything else?

6 A. I read some general references.

7 Q. And the materials that you're relying on as
8 part of your opinions in this case are listed in your
9 declaration. Correct?

10 A. That is correct.

11 Q. Okay. So now in the course of -- Let me ask
12 you this question: In your declaration, do you identify
13 which, if any, of the specific Eastotac resins were used
14 in pressure-sensitive adhesives before April 27th, 1999?

15 A. Could have.

16 Q. So I'm asking, in your declaration, did you
17 specifically identify the Eastotac resins from Table 1
18 that were used in pressure-sensitive adhesives before
19 April 27th of 1999?

20 A. Not in my declaration.

21 Q. That's what I'm asking for.

22 A. Okay. Okay.

1 Q. And in forming your opinions in this case, did
2 you specifically investigate which, if any, of the
3 Eastotac resins were used in pressure-sensitive
4 adhesives before April 27th of 1999?

5 MS. CHLEBOWSKI: Objection to form.

6 A. No.

7 Q. Sir, in your expert declaration do you identify
8 which, if any, of the specific Eastotac resins disclosed
9 in the Eastotac brochure were used in rubber systems
10 before April 27th of 1999?

11 A. No, I did not.

12 Q. In forming your opinions in this -- that are in
13 your expert declaration, did you investigate which, if
14 any, of the specific Eastotac resins from the Eastotac
15 brochure were used in rubber systems before April 27th
16 of 1999?

17 MS. CHLEBOWSKI: Objection to form.

18 A. No.

19 Q. In your declaration, do you identify which, if
20 any, of the specific Eastotac resins disclosed in
21 Table 1 of the Eastotac brochure were used in inks
22 before April 27th of 1999?

1 **A. No, I did not.**

2 Q. And in forming your opinions, did you do any
3 type of investigation into which, if any, of the
4 specific Eastotac resins in the Eastotac brochure were
5 used in inks before April 27th of 1999?

6 MS. CHLEBOWSKI: Objection to form.

7 **A. No.**

8 Q. In your declaration, Dr. Hsu, do you identify
9 which, if any, of the specific Eastotac resins were used
10 in paints before the year April 27th of 1999?

11 **A. No.**

12 Q. In forming your opinions in this case, did you
13 perform any type of investigation into the issue of
14 which, if any, of the Eastotac resins disclosed in the
15 Eastotac brochure were used in paints before April 27th
16 of 1999?

17 MS. CHLEBOWSKI: Objection to form.

18 **A. No.**

19 Q. In your expert declaration, do you identify
20 which, if any, of the Eastotac resins shown in the
21 Eastotac brochure, which is Exhibit 1002, were used in
22 varnishes before the date of April 27th, 1999?

1 **A. No, I did not.**

2 Q. In forming your opinions in this proceeding,
3 did you perform any type of investigation into the issue
4 of which, if any, of the Eastotac resins shown in the
5 Eastotac brochure were used in varnishes before
6 April 27th, 1999?

7 MS. CHLEBOWSKI: Objection to form.

8 **A. I did not.**

9 Q. In your expert declaration, Dr. Hsu, do you
10 identify which, if any, of the resins in the Eastotac
11 brochure were used in dry cleaning solutions before
12 April 27th of 1999?

13 **A. No.**

14 Q. And in forming your opinions in this
15 proceeding, did you do any type of investigation of any
16 kind into the issue of which, if any, of the Eastotac
17 resins in the Eastotac brochure, Exhibit 1002, were used
18 in dry cleaning solutions before April 27th of 1999?

19 MS. CHLEBOWSKI: Objection to form.

20 **A. No.**

21 Q. In your expert declaration in this proceeding,
22 do you identify which, if any, of the specific Eastotac

1 resins shown in the Eastotac brochure were used in
2 casting and highway marking before April 27th of 1999?

3 **A. No.**

4 Q. And in forming your opinions in this case, did
5 you do any type of investigation of any kind into which,
6 if any, of the Eastotac resins shown in the Eastotac
7 brochure were used in casting and highway marking
8 applications before April 27th of 1999?

9 MS. CHLEBOWSKI: Objection to form.

10 **A. No.**

11 Q. And so is it fair to say -- So the Eastotac
12 brochure lists pressure-sensitive adhesive, caulk,
13 sealants, rubber systems, ink, paint, varnishes, dry
14 cleaning solutions, investment casting, and highway
15 marking as potential applications. Correct?

16 **A. That is correct.**

17 Q. And is it fair to say that as part of your
18 investigation in this proceeding you did not look into
19 the issue of which, if any, of the specific resins
20 identified in Table 1 of the Eastotac brochure were used
21 in applications of pressure-sensitive adhesives, caulks,
22 sealants, rubber systems, inks, paint, varnishes, dry

1 cleaning solutions, and casting and highway markings
2 before the date of April 27th, 1999?

3 MS. CHLEBOWSKI: Objection to form.

4 **A. You added the pressure-sensitive adhesive. I**
5 **may have looked at pressure-sensitive adhesive.**

6 Q. Okay. Let me ask you this question to clarify
7 that point -- Okay. Let's just first to clarify that,
8 let's take pressure-sensitive adhesive out of the
9 question.

10 **A. Okay.**

11 Q. Dr. Hsu, is it fair to say that as part of your
12 investigation in this proceeding, you did not look into
13 the issue of which, if any, of the specific resins
14 identified in Table 1 of the Eastotac brochure were used
15 before April 27th, 1999, in applications of caulks,
16 sealants, rubber systems, inks, paints, varnishes, dry
17 cleaning solutions, and casting and highway marking?

18 MS. CHLEBOWSKI: Objection to form.

19 **A. Correct.**

20 Q. You did not investigate any of those issues?

21 **A. That is correct.**

22 MS. CHLEBOWSKI: Same objection.

1 Q. And let's go back, then, to pressure-sensitive
2 adhesive, just to clear that up.

3 In your declaration, do you identify anywhere
4 in your actual declaration which, if any, of the
5 specific resins in Table 1 of the Eastotac brochure were
6 used in pressure-sensitive adhesives before April 27th
7 of 1999?

8 **A. I did not.**

9 Q. Did you investigate as part of your -- Well,
10 I'll rephrase it this way: As a retained expert in this
11 case, in forming your opinions did you perform any type
12 of expert or any type of investigation -- Let me start
13 over.

14 As an expert in this case, in forming your
15 opinions did you perform any type of investigation of
16 any type into which, if any, of the specific resins in
17 Table 1 of the Eastotac brochure were used in
18 pressure-sensitive adhesives before April 27th of 1999?

19 MS. CHLEBOWSKI: Objection to form.

20 **A. I may have read it, but I did not include it my**
21 **declaration.**

22 Q. So any issue of -- I'll try it this way: To

1 the extent you read something about pressure-sensitive
2 adhesives as part of your investigation, you did not
3 include anything in your declaration about which, if
4 any, of the specific resins in Table 1 of the Eastotac
5 brochure were used in pressure-sensitive adhesive
6 applications before April 27th of 1999?

7 **A. That is correct.**

8 Q. If we could turn now, Dr. Hsu, to the Exxon
9 reference, which is Henkel Exhibit 1003 -- Actually, I'm
10 going to go back. Let's stick on the Eastotac brochure
11 for one more minute.

12 **A. Okay. Sure.**

13 Q. So on the Eastotac brochure, Henkel
14 Exhibit 1002, in your declaration, so focusing on the
15 contents of your declaration, do you identify a single
16 instance in which H-142 specifically was used as a resin
17 in a hot melt adhesive before April 27th of 1999?

18 **A. I did not.**

19 Q. Now we can switch to the Exxon reference, which
20 is Henkel Exhibit 1003. Correct? The Exxon reference
21 is Henkel Exhibit 1003?

22 **A. Yes, that's correct.**

1 Q. Now, the Exxon reference, if you'd turn to
2 page 2 of it, does page 2 list a number of resins that
3 are offered by Exxon Chemical Company?

4 A. The title is "Escorez Tackifiers."

5 Q. So page 2 of the Exxon brochure lists a number
6 of Escorez tackifiers?

7 A. Correct.

8 Q. How many Escorez tackifiers are listed in the
9 Exxon reference?

10 A. There is a 1000 series, 2000 series, 7000
11 series, 5000 series, and 9000 series.

12 Q. So in the Exxon reference there's five series
13 of Escorez tackifiers?

14 A. Just like the Eastman Kodak brochure, there are
15 four types.

16 Q. I'm asking about the Exxon reference. So just
17 focusing on the Exxon reference, there's five different
18 series of Escorez tackifiers?

19 A. That is correct.

20 Q. And within each series, there's a number of
21 Escorez tackifiers. Correct?

22 A. Correct.

1 Q. And the Escorez tackifiers within a given
2 series have different properties. Correct?

3 **A. That is correct.**

4 Q. If we look at, like, Escorez 1000 series, for
5 example, there's six different Escorez tackifiers within
6 the Escorez 1000 series. Correct?

7 **A. That is correct.**

8 Q. And the Escorez -- so the Escorez tackifiers
9 within the 1000 series would be the 1102, the 1304, the
10 1310LC, the 1315, the 1504, and the 1580?

11 **A. Correct.**

12 Q. And among the different Escorez tackifiers in
13 the 1000 series, as an example, the tackifiers have
14 different glass transition temperatures. Correct?

15 **A. Some three are the same.**

16 Q. So there's three within that 1000 series that
17 have a TG midpoint of 51?

18 **A. That's correct.**

19 Q. And there's three that have a TG midpoint that
20 is different from 51?

21 **A. That is correct.**

22 Q. 1310LC, for example, has a TG midpoint of 46?

1 **A. Correct.**

2 Q. And I think we covered this earlier, but in
3 forming your opinions, is it correct that you -- with
4 respect to analyzing glass transition values of a given
5 tackifier, you looked at the onset glass transition
6 temperature as opposed to the midpoint glass transition
7 temperature. Correct?

8 **A. No. The onset is actually used in the**
9 **'404 patent, but the DSC in this particular case is**
10 **reported as midpoint.**

11 Q. Midpoint and onset glass transition
12 temperatures are different ways of looking at glass
13 transition temperature?

14 **A. That is correct.**

15 Q. And in forming your opinions in this case, you
16 interpreted glass transition temperature in the
17 '404 patent to mean onset glass transition temperature?

18 **A. That is correct.**

19 Q. I just wanted to make sure that we are -- I
20 know because in this brochure it talks about midpoint.
21 But in analyzing the '404 patent, you interpreted glass
22 transition temperature to be the onset glass transition

1 temperature?

2 **A. As reported in '404.**

3 Q. As stated in patent '404?

4 **A. Correct.**

5 Q. So in interpreting glass transition temperature
6 in the claims of the '404 patent, for example, you
7 interpreted glass transition temperature to mean the
8 onset glass transition temperature?

9 **A. Correct.**

10 Q. What's the range of the midpoint glass
11 transition temperatures for the various Escorez
12 tackifiers that are shown on page 2 of the Exxon
13 reference?

14 **A. In the 1000 series, it goes from 34 to 65. In**
15 **the 2000 series, it goes from, I believe, 16 or minus 16**
16 **to 48. 7000 series would be 63. 5000 series would go**
17 **from 36 to 85.**

18 Q. And then the 9000 series?

19 **A. The 9000 series will go from minus 1 to 46.**

20 Q. Okay. So in the 5000 series for Escorez
21 tackifiers, there's four different tackifiers. Correct?

22 **A. Correct.**

1 Q. There's the 5380, the 5300, the 5320, and the
2 5340 tackifiers that are part of the 5000 series for
3 Escorez. Correct?

4 A. That is correct.

5 Q. And within those four tackifiers for the 5000
6 series, the reported midpoint glass transition
7 temperature and Exxon reference varies from 36 degrees
8 centigrade for the lowest TG midpoint value and then
9 85 degrees for the highest of the TG midpoint values?

10 A. That is correct.

11 Q. And 5340 Escorez has the highest reported
12 midpoint glass transition temperature in the Exxon
13 reference. Is that correct?

14 A. That is correct.

15 Q. And in your declaration that you submitted in
16 this case, is it correct that the Escorez 5340 resin is
17 the only resin that you've identified in your
18 declaration as having an onset glass transition
19 temperature of above 65 degrees centigrade?

20 A. This is what I focus on because of high glass
21 transition temperature.

22 Q. I understand that. My question is, in your

1 declaration --

2 **A. Yes.**

3 Q. So your declaration Exhibit 1015, is it correct
4 that with respect to your opinions relating to the Exxon
5 reference, the only Escorez tackifier that you've
6 identified in the Exxon reference that has an onset
7 glass transition temperature of above 65 degrees
8 centigrade is the Escorez 5340 tackifier?

9 **A. That is correct.**

10 Q. Now, in your declaration, your opinion -- we
11 talked about this earlier, but to clarify, your opinion
12 is that the Exxon reference, Exhibit 1003, discloses
13 each and every element of Claims 22 through 25 and 28 of
14 the '404 patent. Correct?

15 **A. On page 25, I say the Exxon disclose each and
16 every element of Claim 22, 25, and 28.**

17 Q. So, Dr. Hsu, just to make the record clear,
18 your opinion for anticipation by the Exxon reference is
19 that the Exxon reference anticipates Claims 22 through
20 25 and 28 because it discloses each and every element of
21 those claims. Is that correct?

22 **A. That is correct.**

1 Q. And in your declaration, you don't offer any
2 opinion that the Exxon reference discloses each and
3 every element of any claims besides Claims 22 through 25
4 and 28. Correct?

5 A. That's correct.

6 Q. So if you'd look, for example, at Paragraph 28
7 of your declaration -- sorry. 68. I misspoke.

8 A. Okay.

9 Q. Are you there?

10 A. Yes, I'm here.

11 Q. 68 of your declaration, you state,
12 "Specifically the Exxon reference discloses a hot melt
13 composition comprising 40 percent by weight of a
14 hydrocarbon tackifying resin, 20 percent by weight of
15 Escorene UL 7750 as a thermoplastic base polymer, and
16 40 percent by weight of 158 degree F MP paraffin wax."
17 Did I read that correctly?

18 A. Yes.

19 Q. Is it correct that this composition that's --
20 that you've described in Paragraph 68 of your
21 declaration is a composition in the Exxon reference
22 that, in your opinion, discloses each and every element

1 of Claims 22 through 25 and 28?

2 **A. Not each and every element, but this is -- the**
3 **composition is what I focus on in Paragraph 68.**

4 Q. Right. And so my question is, is this
5 composition that you describe in Paragraph 68 that you
6 say comprises 40 percent by weight of a hydrocarbon
7 tackifying resin, 20 percent by weight of Escorene
8 UL 7750 thermoplastic based polymer, and 40 percent by
9 weight of 158 degree F MP paraffin wax, the composition
10 that you contend discloses each and every element of
11 Claims 22 through 25 and 28?

12 **A. It says Claim 22.**

13 Q. Okay.

14 **A. Correct.**

15 Q. So you want to focus -- For Claim 22, that's
16 correct?

17 **A. That's correct.**

18 Q. And is this the composition that's shown in
19 Footnote 1 of the Exxon reference?

20 **A. That is correct.**

21 Q. Okay. So if we just focus on Claim 20 -- and I
22 just want to make sure we're on the same page as to what

1 you're saying anticipates the claims.

2 So is it correct that your opinion in this case
3 for Claim 22 of the '404 patent is that the composition
4 disclosed in Footnote 1 of the Exxon reference discloses
5 each and every element of Claim 22 when the tackifier is
6 the Escorez 5340 tackifier?

7 **A. Would you repeat the question because I was**
8 **looking at the page of the claim.**

9 Q. Sure. So let's just start with a basic
10 question, more basic. I'll break it down.

11 For your anticipation opinions in this case,
12 you're relying on a composition that is -- that you say
13 is shown in the Exxon reference as 40 percent, 5340
14 tackifying resin, 20 percent Escorene UL 7750, and
15 40 percent 158 degree F MP paraffin wax. Is that
16 correct?

17 **A. That is correct.**

18 Q. Okay. And is that the only composition that
19 you're relying on for anticipation by the Exxon
20 reference of Claim 22?

21 **A. No. There's actually Eastotac, but that's also**
22 **the composition given the Eastman Chemical brochure.**

1 Q. Sir, I'm sorry. I'm focusing only on the Exxon
2 reference, so forget about the Eastman brochure.

3 A. You're asking. You said "the only one." I
4 said that's not.

5 Q. My mistake if I did. I'm just focusing on the
6 Exxon reference. So I understand there's the Eastotac
7 things that we've been talking about too, but let's just
8 focus on Exxon.

9 A. Sure.

10 Q. So with respect to why, in your view, the Exxon
11 reference anticipates Claim 22, is the only composition
12 that you're relying on as disclosing each and every
13 element of Claim 22 a composition that consists of
14 40 percent Escorez 5340, 20 percent Escorene UL 7750,
15 and 40 percent 158 degree F MP paraffin wax?

16 A. Correct.

17 Q. And how about for Claim 28? Are you relying on
18 the same compositions for your opinion that the Exxon
19 reference discloses each and every element of Claim 28?

20 A. Correct.

21 Q. So in other words, for your opinion with
22 respect to why, in your view, the Exxon reference

1 anticipates Claim 28, you're relying on the composition
2 that you say is disclosed in the Exxon reference as
3 including 40 percent of Escorez 5340, 20 percent of
4 Escorene UL 7750, and 40 percent 158 degree F
5 MP paraffin wax. Is that correct?

6 **A. Correct.**

7 Q. And is it correct that you're relying on the
8 same composition for your opinions that the Exxon
9 reference anticipates the dependent Claims 23, 24, and
10 25?

11 **A. Correct.**

12 Q. And so I'll start over. Let me ask you this
13 question: Dr. Hsu, is it your opinion that the
14 composition in the Exxon brochure that you say is
15 comprised of 40 percent Escorez 5340, 20 percent
16 Escorene UL 7750, and 40 percent 158 degree F
17 MP paraffin wax is the composition that you're relying
18 on as disclosing each and every element of Claims 22
19 through 25 and 28?

20 **A. That is correct.**

21 Q. And is it correct that there's no other
22 composition other than the composition comprised of 5340

1 tackifier, 20 percent Escorene UL 7750, and 40 percent
2 158 degree F MP paraffin wax that you're relying on in
3 your declaration for anticipation by the Exxon
4 reference?

5 **A. That's correct.**

6 Q. So for purposes of anticipation of Claims 22
7 through 25 and 28 of the '404 patent, the only
8 composition from the Exxon reference that you're relying
9 on for your anticipation opinion is the composition that
10 you say is comprised of 40 percent Escorez 5340
11 tackifier, 20 percent Escorene UL 7750, and 40 percent
12 158 degree F MP paraffin wax?

13 **A. Correct.**

14 Q. Now, you see when you look at -- there's a
15 Footnote 1 on the left-hand side of this table that says
16 "1" and then it says, "40 percent tackifier, 20 percent
17 Escorene UL 7750, 40 percent 158 degree F MP paraffin
18 wax."

19 **A. Yes.**

20 Q. What's -- What is this composition? What was
21 it used for in the Exxon brochure? Let me strike that.

22 The Footnote 1 corresponds to wax cloud point.

1 Is that correct? You can see at the top of the page
2 there's a wax cloud point with a Footnote 1 by it. And
3 then Footnote 1 is what discloses this general formula?

4 **A. Yes.**

5 Q. Is it your understanding that what's -- the
6 formula that's shown in Footnote 1 of 40 percent
7 tackifier, 20 percent Escorene UL 7750, and 40 percent
8 158 degree F MP paraffin wax is what -- is a composition
9 formula that was used to obtain wax cloud points?

10 **A. For this series.**

11 Q. For all of the Escorez tackifiers?

12 **A. That is correct.**

13 Q. So for a given -- So for example, in the 1000
14 series, if you looked at 1102, is it your understanding
15 that Escorez 1102 has a cloud -- wax cloud point that's
16 reported in the Exxon reference as being 155 degrees C?

17 **A. That is correct.**

18 Q. And what composition was used to get the
19 155 degree CE cloud point?

20 **A. I would say 40 percent tackifier, 20 percent**
21 **EVA polymer, 40 percent 150 degree melt point paraffin**
22 **wax.**

1 Q. And when you say "158 degree melt point
2 paraffin wax," that's the 158 degree F MP paraffin wax?

3 A. That's my interpretation. That's correct.

4 Q. So to get the wax cloud point of 155 degrees C,
5 composition was used of 40 percent Escorez 1102,
6 20 percent Escorene UL 7750, and 40 percent 158 degree F
7 melting point paraffin wax?

8 A. That is correct.

9 Q. And then what's your understanding of the
10 composition that's reported in the Exxon reference as
11 being used to get the wax cloud point for 5340
12 tackifier?

13 A. That would be, again, 40 percent tackifier,
14 20 percent polymer, and 40 percent wax.

15 Q. Okay. And the Escorene UL 7750 is what you
16 referred to as the polymer?

17 A. Correct.

18 Q. So Escorene UL 7750 is an example of a polymer?

19 A. Correct.

20 Q. And is that an ethylene copolymer?

21 A. That is an ethylene copolymer.

22 Q. It is?

1 **A. It is.**

2 Q. Okay. So Escorene UL 7750 is an example of an
3 ethylene copolymer?

4 **A. Yes.**

5 Q. And the 158 degree F MP paraffin wax means
6 158 degree Fahrenheit melting point paraffin wax?

7 **A. That would be my interpretation. Correct.**

8 Q. And as a shorthand, could we call it 158 degree
9 paraffin wax?

10 **A. Sure.**

11 Q. And to get the cloud point for the Escorez
12 5340, you're saying that the composition that was used
13 included 40 percent of the Escorez 5340, 20 percent
14 Escorene UL 7750, and 40 percent of the 150 degree F
15 paraffin wax?

16 **A. Correct.**

17 Q. Okay. And is that specific composition that
18 you're relying on for your opinions on anticipation of
19 Claims 22 through 25 and 28 -- namely, the 40 percent
20 Escorez 5340, 20 percent Escorene UL 7750, and
21 40 percent 158 F degree paraffin wax -- that was used
22 for the cloud point?

1 **A. Yes.**

2 Q. And as shorthand, what I'd like to do, if
3 you're okay with it, because there's multiple cloud
4 points reported -- and I'm assuming your view is that on
5 the Exxon reference a different composition would have
6 been made for each cloud point measurement by switching
7 out the particular resin that you were using in the
8 composition. Correct?

9 **A. Yes.**

10 Q. The amount of polymer and the amount of wax
11 would stay constant, but you'd change which type of
12 resin you were using to get the cloud point. Is that
13 correct?

14 **A. That is correct.**

15 Q. So for the -- And it's the 5340 Escorez wax
16 cloud point composition that we're focused on. Right?

17 **A. Okay.**

18 Q. That's what you're relying on. Right?

19 **A. Yes.**

20 Q. So can we call that, just so we don't have to
21 keep repeating the entire thing, the 5340 wax cloud
22 point composition?

1 **A. Yes.**

2 Q. And so if we say "5340 wax cloud point
3 composition," you understand that to mean the
4 composition that you're relying on in Footnote 1 of the
5 Exxon reference as including 40 percent 5340 tackifier,
6 20 percent Escorene UL 7750, and 40 percent 158 degree F
7 MP paraffin wax?

8 **A. I don't want to characterize that formulation
9 being the cloud point formulation. I think cloud point
10 is actually characteristic of that formulation. So it
11 would not be -- This is different maybe legal versus
12 scientific.**

13 I would say the cloud point measurement is a
14 characteristic of that particular mixture. So I
15 wouldn't say that's a cloud point, the mixture.

16 Q. I'm just using it as -- So the 5340 wax cloud
17 point is the composition -- refers to the composition in
18 Footnote 1?

19 **A. That is correct.**

20 Q. So if I use the word "5340 wax cloud point
21 composition," I mean the composition in Footnote 1 that
22 would be 40 percent 5340 tackifier, 20 percent Escorene

1 UL 7750, and 40 percent 158 degree F MP paraffin wax.

2 Are you with me?

3 A. I'm always with you.

4 Q. So you understand that?

5 A. Yes. And I disagree with this characterization
6 of that statement.

7 Q. Okay.

8 A. As I said before, the cloud point is a
9 characteristic of that composition. I wouldn't say
10 composition for cloud point.

11 Q. This composition in the Escorez reference was
12 used for determining cloud point. Correct?

13 A. No. This composition was used. And cloud
14 point is one of the characteristics of that composition
15 with that tackifier.

16 Q. So in the Escorez reference, though, just to be
17 clear, the only description in the Escorez reference
18 itself of what the composition in Footnote 1 was used
19 for was for determining wax cloud point. Is that
20 correct?

21 A. No. It's just simply says the cloud point of
22 those compositions is 70 degrees. The last column is a

1 characteristic of that composition. It doesn't say the
2 composition for cloud point determination.

3 Q. Okay. Do you understand that the wax cloud
4 point measurements --

5 A. Yes.

6 Q. -- were done using the composition in
7 Footnote 1?

8 A. Correct.

9 Q. So the wax cloud point was determined using the
10 reference -- using the composition formulation in
11 Footnote 1?

12 A. Well, because that's the admissibility. Yes,
13 that's true.

14 Q. So do you at least agree with me that in the
15 Exxon reference the reference indicates for 5340
16 tackifier that the composition in Footnote 1 of
17 40 percent 5340 tackifier, 20 percent Escorene UL 7750,
18 40 percent 158 degree F MP paraffin wax was the
19 composition that was used to report the wax cloud point
20 of 70 degrees for 5340?

21 A. I do.

22 Q. And other than using that composition to report

1 wax cloud points for the tackifying resins, does the
2 Exxon reference disclose any other things that the
3 composition was used for?

4 A. See, again, let me go back to this statement.
5 Was it used for versus a characteristic of that
6 formulation. So simply this -- the formulation describe
7 a characteristic of that formulation that happens to be
8 the cloud point.

9 So it's not used to determine the cloud point.
10 Characteristic of that formulation is one of the
11 characteristics is cloud point.

12 Q. The wax cloud point was determined using the
13 composition of Footnote 1. Correct?

14 A. Was determined using that formulation.
15 Correct.

16 Q. Okay. Let me ask you this question: Were any
17 of the other properties shown in the Exxon reference
18 determined using the composition in Footnote 1?

19 A. Actually, it does.

20 Q. Which one?

21 A. For example, this is the same formulation
22 really give you -- goes to the third column, the molten

1 Gardner coloring index is much smaller than one. And
2 those are the characteristics that give you the
3 miscibility to have the cloud point 70 degrees.

4 Q. Now, sir, does the Exxon reference state that
5 the molten Gardner color stability was reported using
6 the composition in Footnote 1?

7 A. No.

8 Q. Does the Exxon reference state that any of the
9 properties other than wax cloud point were determined
10 using the composition in Footnote 1?

11 A. No.

12 Q. And then on the next page, page 3, what's shown
13 there?

14 A. Page 3 shown --

15 Q. Of the Exxon reference.

16 A. Yes. So the third column, 2515 UL 75 series,
17 77 series, 78 series, 87 series, those are -- come into
18 Escorene EVAs.

19 Q. So is it your understanding that page 3 of the
20 Exxon reference is disclosing various Escorene EVAs?

21 A. The first part of it, yes.

22 Q. And the Escorene -- the first part, yeah. The

1 Escorene EVAs are ethylene copolymers?

2 **A. Ethylene copolymer. Correct.**

3 Q. And what's disclosed underneath the Escorene
4 EVAs? It says -- it looks like Optema EMA.

5 **A. I don't know.**

6 Q. Do you know what Optema EMA is?

7 **A. No.**

8 Q. How about below that it says Escomer wax?

9 **A. No.**

10 Q. Do you have any idea what that is?

11 **A. No.**

12 Q. So in forming your opinions in this case, did
13 you look into what Optema EMA is?

14 MS. CHLEBOWSKI: Objection to form.

15 **A. No.**

16 Q. And in forming your opinions, did you look into
17 what Escomer wax is?

18 MS. CHLEBOWSKI: Same objection.

19 **A. No.**

20 Q. And there's footnotes -- there's a Footnote 4
21 on page 3. Do you see Footnote 4?

22 **A. Yes.**

1 Q. What does Footnote 4 refer to?

2 A. It has a 30 percent EVA, 70 percent 158 degree
3 Fahrenheit EMP paraffin wax.

4 Q. And is that -- What was that composition used
5 for?

6 A. That composition to determine -- to blend
7 viscosity, in Column 3.

8 Q. Okay. So in Column 3 on page 3 of the Exxon
9 reference, there's a blend viscosity CPS at 1.1 degrees
10 C and there's a Footnote 4?

11 A. Correct.

12 Q. The Footnote 4, your understanding is that
13 it's -- the composition formula in Footnote 4 that was
14 used to determine the blend viscosity CPS at 121 degrees
15 C for the various polymers shown on page 3 of the Exxon
16 reference?

17 A. The polymer wax mixture, yes.

18 Q. So I'm going to refer, then -- since you don't
19 like wax cloud point composition, I'm just going to
20 refer to going back -- we're going back to the
21 Footnote 1 composition. I'm just going to refer to that
22 as the Footnote 1 composition for 5340. Okay?

1 **A. Okay.**

2 Q. So if I say "the Footnote 1 composition for
3 5340," you understand that to be the composition
4 disclosed in Footnote 1 of the Exxon reference as being
5 40 percent Escorez 5340, and 20 percent Escorene
6 UL 7750, and 40 percent 158 degree F MP paraffin wax?

7 **A. Correct.**

8 Q. And it's the Footnote 1 composition -- I'm
9 going to write it down.

10 It's the Footnote 1 composition for 5340 that
11 you're relying on for your opinion that the Exxon
12 reference anticipates Claims 22 through 25 and 28 of the
13 '404 patent?

14 **A. That is correct.**

15 Q. And there's no composition other than the
16 Footnote 1 composition for 5340 that you're relying on
17 as part of your opinion that the Exxon reference
18 anticipates Claims 22 through 25 and 28 of the
19 '404 patent?

20 **A. That is correct.**

21 Q. Now, there's no specific statement in the Exxon
22 reference that Escorez 5340 resin can be used in hot

1 melt adhesives. Correct?

2 MS. CHLEBOWSKI: Objection to form.

3 **A. That's correct.**

4 Q. So just to be clear, there's no statement of
5 any kind in the Exxon reference that specifically
6 identifies Escorez 5340 as suitable for hot melt
7 adhesives. Correct?

8 MS. CHLEBOWSKI: Same objection.

9 **A. It says "Escorez tackifier." Well, tackifier**
10 **is part of the hot melt adhesive.**

11 Q. Understood. Tackifiers are used in hot melt
12 adhesive.

13 My question is, there's nothing in the Exxon
14 reference anywhere that specifically identifies Escorez
15 5340 as being suitable for a hot melt adhesive?

16 MS. CHLEBOWSKI: Objection to form.

17 **A. I still go back to the statement. This says**
18 **"Escorez tackifier." That's a statement saying it's**
19 **suitable for hot melt adhesive.**

20 Q. Sir, so a tackifier can be used in multiple
21 applications. Correct?

22 **A. Correct.**

1 Q. Tackifiers are not only used in hot melt
2 adhesives. Correct?

3 A. Absolutely.

4 Q. There's a number of applications that
5 tackifiers can be used in. Right?

6 A. Correct.

7 Q. And in the Exxon reference, is there a specific
8 statement anywhere in the reference that Escorez 5340
9 can be used for hot melt adhesives?

10 A. You asked me previously is this the person
11 familiar with the field. And really, when I look at
12 this and see, this says "Escorez tackifier." I would
13 say that's a suitable component of hot melt adhesive.

14 Q. Okay. And you've never actually made a hot
15 melt adhesive. Correct?

16 A. No. I've looked at various components of hot
17 melt adhesives.

18 Q. But you've never made a hot melt adhesive.
19 Correct?

20 A. No.

21 Q. And so let me ask you this question: In the
22 Exxon reference, is the word -- Let me rephrase that.

1 In the Exxon reference, does the phrase "hot
2 melt adhesive" appear anywhere?

3 **A. No.**

4 Q. So the word "hot melt adhesive" is nowhere
5 in -- within any of the pages of the Exxon reference?

6 **A. Well, it says speciality polymer for adhesive
7 and sealants.**

8 Q. Sir, that wasn't my question. My question is
9 the phrase "hot melt adhesive." Focus on the word "hot
10 melt adhesive."

11 The word "hot melt adhesive, "is not found on
12 any pages of the Exxon reference. Correct?

13 **A. Hot melt is subclass adhesive.**

14 MR. GRIMSRUD: Sir, I'm going to strike that as
15 nonresponse.

16 Q. My question is the phrase "hot melt adhesive."
17 Hot melt adhesive, that's not found in any pages of the
18 Exxon reference. Correct?

19 **A. That is correct.**

20 Q. And is there a sentence anywhere in the Exxon
21 reference that states Escorez 5340 can be used in hot
22 melt adhesives?

1 **A. That sentence is not there.**

2 Q. Now, have you ever worked with Escorez 5340?

3 **A. No.**

4 Q. So throughout your entire career, you have
5 never made any compositions with Escorez 5340?

6 **A. No.**

7 Q. Have you ever analyzed Escorez 5340?

8 **A. I don't remember.**

9 Q. So in your declaration, do you identify any
10 instances in which you've analyzed Escorez 5340?

11 **A. No, I do not.**

12 Q. In your declaration, do you identify any
13 experimentation that you've done with Escorez 5340?

14 **A. No, I do not.**

15 Q. In your declaration, do you identify any tests
16 that you've ever done on Escorez 5340?

17 **A. No.**

18 Q. In your declaration, do you identify any
19 instances in which you've worked with Escorene UL 7750?

20 **A. No.**

21 Q. In your declaration, do you identify any
22 testing that you've done on Escorene UL 7750?

1 **A. I'm not sure.**

2 Q. Well, you can look through your declaration, if
3 you want.

4 My specific question is, in your declaration do
5 you identify any tests that you've done on Escorene
6 UL 7750?

7 **A. No, I did not.**

8 Q. In your declaration, do you identify any
9 experimentation of any kind that you've done with
10 Escorez -- sorry. I'll rephrase that.

11 In your declaration, do you identify any
12 experiments of any kind that you've done on Escorene
13 UL 7750?

14 **A. I have not.**

15 Q. Have you ever seen Escorez 5340?

16 MS. CHLEBOWSKI: Objection. Relevance.

17 **A. I don't know.**

18 Q. Sitting here today, do you remember ever having
19 seen a sample of Escorez 5340?

20 MS. CHLEBOWSKI: Same objection.

21 **A. You know, we have a lot of tackifiers in the**
22 **laboratory. I just don't remember.**

1 Q. Okay. And my question is, sitting here today,
2 do you have any memory of ever seeing Escorez 5340?

3 MS. CHLEBOWSKI: Same objection.

4 A. Not clearly.

5 Q. In forming your opinions in this case, you
6 didn't examine an actual sample of Escorez 5340?

7 A. No, I did not.

8 Q. In forming your opinions in this case, you
9 didn't examine an actual sample of Escorene UL 7750?

10 A. I'm not sure. We work with a lot of EVAs. It
11 could be one of the things we looked at, but I just
12 can't be sure. I don't remember.

13 Q. You mean looked at as far as your research?

14 A. That is correct.

15 Q. I'm talking about in forming your opinions in
16 this case. In forming your opinions that you rely on in
17 this case, did you analyze Escorene UL 7750?

18 A. No, I did not.

19 Q. In your declaration, you don't disclose any
20 experiments of any kind relating to Escorene UL 7750?

21 A. That is correct.

22 Q. And in your declaration, you don't disclose any

1 tests of any kind that you did on Escorene UL 7750?

2 **A. Correct.**

3 Q. In your declaration, do you describe any tests
4 of any kind that you did on 158 degree F MP paraffin
5 wax?

6 **A. No.**

7 Q. In your declaration, do you describe any
8 experiments of any kind that you did on 158 degree F
9 MP paraffin wax?

10 **A. No.**

11 Q. And, sir, in your declaration -- well, let me
12 ask you this: In forming your opinions in this case,
13 you did not actually make the Footnote 1 composition for
14 5340. Correct?

15 **A. That is correct.**

16 Q. So in forming your opinions in this case, you
17 never made a composition that had 40 percent of Escorez
18 5340, 20 percent Escorene UL 7750, and 40 percent 158
19 degree F MP paraffin wax. Correct?

20 **A. Correct.**

21 Q. And your declaration does not include any
22 experiments on the Footnote 1 composition for 5340.

1 Correct?

2 **A. Correct.**

3 Q. Your declaration does not include any tests
4 that you conducted on the Footnote 1 composition for
5 5340?

6 **A. Correct.**

7 Q. And in forming your opinions in this case, you
8 didn't do any tests of any kind on the Footnote 1
9 composition for 5340?

10 **A. That is correct.**

11 Q. In your expert declaration, for example, you
12 don't include any bonding tests for the Footnote 1
13 composition for 5340. Correct?

14 **A. Correct.**

15 Q. And in your declaration, you don't include any
16 tests that show bondability of the Footnote 1
17 composition for 5340. Correct?

18 **A. Correct.**

19 Q. And you don't show any PO value, for example,
20 for the Footnote 1 composition for 5340. Correct?

21 **A. Correct.**

22 Q. And you don't disclose any tests that would

1 indicate brittleness of the Footnote 1 composition for
2 5340. Correct?

3 **A. Correct.**

4 Q. So your declaration -- focusing on this Exxon
5 reference in the Footnote 1 composition for 5340, your
6 declaration does not include any tests that you did of
7 any kind on a composition comprised of 40 percent
8 Escorez 5340, 20 percent Escorene UL 7750, and
9 40 percent of 158 degree F MP paraffin wax. Correct?

10 **A. Correct.**

11 Q. Now, looking at the Exxon reference, in the
12 Exxon reference, Exhibit 1003, it lists various Escorez
13 tackifying resins and then it lists also Escorene EVAs
14 and the Optema EMA and the Escomer wax products. Is
15 that correct?

16 **A. Correct.**

17 Q. Would you agree that in the Exxon reference,
18 Exxon's advertising, among other things, Escorez
19 tackifiers?

20 **A. Yes.**

21 Q. And in the Exxon reference, Exxon's advertising
22 the Escorene EVA polymers. Right?

1 **A. Correct.**

2 Q. And they're also advertising Optema EMAs?

3 **A. Correct.**

4 Q. And Escomer wax?

5 **A. Yes.**

6 Q. And is it your understanding that the Escorez
7 tackifiers, for example, were tackifiers that Exxon
8 Chemical Company was selling as of October 1990?

9 **A. Correct.**

10 Q. And similarly, the Escorene EVA, for example,
11 were polymers that Exxon Chemical Company was selling as
12 of October 1990?

13 **A. Correct.**

14 Q. So on the left-hand page of the -- on the
15 left-hand side of page 2 of the Exxon reference, is it
16 your understanding that Exxon is listing tackifiers that
17 Exxon offers to sell people?

18 **A. Yes.**

19 Q. And these are all tackifiers that, in your
20 view, were available as of October 1990?

21 **A. Yes.**

22 Q. Including the Escorez 5340?

1 **A. Correct.**

2 Q. And on the right-hand side, page 3, of
3 Exhibit 1003, Exxon is advertising Escorene polymers
4 that they're offering to sell. Correct?

5 **A. Correct.**

6 Q. And Exxon is also advertising Optema EMAs?

7 **A. Correct.**

8 Q. And Exxon also is advertising the Escomer wax
9 that Exxon offers to sell. Correct?

10 **A. Correct.**

11 Q. And then what's shown on the -- What's shown on
12 the far right-hand side, I guess, as page 3 of the Exxon
13 reference?

14 **A. It's a Vistalon, V-I-S-T-A-L-O-N, EP rubber,**
15 **Exxon butyl rubber, B-U-T-Y-L, Vista, V-I-S-T-A-N-E-X**
16 **polyisobutylene.**

17 Q. And what's the Vistanex polyisobutylene?

18 **A. I have no idea.**

19 Q. What's the Exxon butyl rubber?

20 **A. Exxon butyl rubber.**

21 Q. So it's butyl rubber?

22 **A. Yeah.**

1 Q. And Vistalon EP rubber, what's that?

2 A. EP rubber.

3 Q. And do you understand that these are also
4 products that Exxon was offering to sell?

5 A. Correct.

6 Q. And then on the next page, page 4 of the Exxon
7 reference, it lists Escorene polypropylene, Extrel film
8 and Vector styrene block copolymers. Do you see those?

9 A. I do.

10 Q. And are those three things other products that
11 you understand Exxon to have been offering to sell?

12 A. Correct.

13 Q. Now, so the Exxon reference, Exhibit 1003, is a
14 reference where, in your view, Exxon is offering to sell
15 the Escorez tackifier products, the Escorene EVA polymer
16 products, and some other products of Exxon. Is that
17 fair?

18 A. That's fair.

19 Q. In the Exxon reference, Exxon is not offering
20 to sell a hot melt adhesive product. Correct?

21 A. (No verbal response)

22 Q. I'm talking about a hot melt adhesive itself

1 where everything has been combined, so it's a packaged
2 hot melt adhesive.

3 Exxon is not offering to sell, in the Exxon
4 reference, an actual hot melt adhesive. Correct?

5 **A. That is correct.**

6 Q. And so for example, if I wanted to buy a hot
7 melt adhesive, the Exxon reference does not list a
8 specific hot melt adhesive that I could purchase from
9 Exxon?

10 **A. That is correct.**

11 Q. If we turn -- And if I wanted to know whether
12 or not Exxon did have a hot melt adhesive product that
13 it was selling, I'd have to look at something other than
14 this Exxon reference, Exhibit 1003. Correct?

15 **A. Correct.**

16 Q. And if we turn to the first page, for example,
17 of the Exxon reference, Exhibit 1003, this is just the
18 first page of the brochure. And there's nothing on here
19 that would indicate Exxon's selling an actual hot melt
20 adhesive in this reference. Correct?

21 **A. That is correct. Except, again, I go back to**
22 **the title, "Speciality Polymers for Adhesive and**

1 **Sealants."**

2 Q. I'm talking about an actual hot melt adhesive.
3 There's no description on page 1 of an actual hot melt
4 adhesive that Exxon is selling.

5 **A. That's correct.**

6 Q. And on pages 2 and 3 of the Exxon reference,
7 Exhibit 1003, there's not a specific hot melt adhesive
8 that Exxon is listing as a product that it's offering to
9 sell. Correct?

10 **A. That is correct.**

11 Q. And same with the other pages, the rest of the
12 brochure, pages 4, 5, and 6. There's nothing on
13 pages 4, 5, or 6 of the Exxon reference that shows an
14 actual hot melt adhesive that Exxon is offering for
15 sale?

16 **A. That is correct.**

17 Q. Okay. So when you look at the entire Exxon
18 reference, you agree that there is not a hot melt
19 adhesive that Exxon is listing as a specific hot melt
20 adhesive that it's selling customers?

21 **A. That is correct.**

22 Q. The brochure is -- the Exxon brochure,

1 Exhibit 1003, is listing tackifiers that are for sale.

2 Correct?

3 **A. Tackifiers for adhesive and sealants.**

4 Q. Right. The Exxon reference lists tackifiers
5 that it will sell to people. Correct?

6 **A. Correct.**

7 Q. And it lists polymers that it will sell to
8 people. Correct?

9 **A. Correct.**

10 Q. But the Exxon reference does not itself list a
11 hot melt adhesive that it would sell to customers.
12 Fair?

13 **A. Fair.**

14 Q. And on the wax cloud point tests that we talked
15 about, so column -- the far right-hand column on page 2
16 of the Exxon reference shows the wax cloud point
17 properties?

18 **A. Correct.**

19 Q. Have you ever performed a wax cloud point test
20 yourself?

21 **A. Yes.**

22 Q. When was the last time you did?

1 A. I do it routinely every day.

2 Q. Okay. Could you just tell me what a wax cloud
3 point test shows?

4 A. Well, this is called wax -- we actually do
5 cloud point tests that deal with the miscibility of
6 various components. So in this particular case, this
7 says the cloud point -- my interpretation would be it's
8 trying to demonstrate the miscibility of the various
9 components between the tackifier, the wax, and the EVA
10 polymer.

11 Q. So at a general matter, a wax cloud point test
12 reflects miscibility of components?

13 A. To us, it would be.

14 Q. And for example, if you look at, like, the
15 Escorez 1102, it has a wax cloud point of 155 degrees C?

16 A. Correct.

17 Q. What does a wax cloud point of 155 degrees C
18 mean for Escorez 1102?

19 A. It -- our interpretation would be it would go
20 up to 155 before it clears.

21 Q. So above 155 degrees it would give you a clear
22 solution?

1 **A. That would be the case.**

2 Q. And this is just on Escorez 1102. Below
3 155 degrees, it would be cloudy solution?

4 **A. Correct.**

5 Q. And same thing for Escorez 1304. It lists a
6 wax cloud point of 115 degrees C. Do you see that?

7 **A. Correct. Yes.**

8 Q. And what does the wax cloud point of
9 115 degrees C mean?

10 **A. Above 115 -- it clears 115 degrees.**

11 Q. And below 115 degrees, the solution would be
12 cloudy?

13 **A. Correct.**

14 Q. And then there's a number of resins in both the
15 2000 series, the 7000 series, and the 5000 series that
16 have a wax cloud point of 70 degrees C.

17 **A. Correct.**

18 Q. Does that mean -- for wax cloud points of
19 70 degrees, does that mean above 70 degrees the solution
20 is clear?

21 **A. Yes.**

22 Q. And below 70 degrees the solution is cloudy?

1 **A. Correct.**

2 Q. How do you determine when a solution is clear
3 versus cloudy when you're doing a wax cloud point test?

4 **A. We actually do it perhaps more precisely than**
5 **most people. So we could look at optically to see what**
6 **is cloudy, but we actually do some laser scattering**
7 **experiment to see the scattering in a forward direction**
8 **and to see the degree transmission so we determine more**
9 **accurately the cloud point.**

10 Q. So you're shining a laser, did you say, through
11 the solution?

12 **A. Correct.**

13 Q. And if it -- as it gets --

14 **A. Laser pointer.**

15 Q. Oh, laser pointer?

16 **A. Cheap.**

17 Q. So laser pointer you're using to shine a light
18 through the solution?

19 **A. And we have CCD detectors. We actually measure**
20 **the transmittance through the solution.**

21 Q. And if the solution gets cloudier, does more
22 light scatter?

1 **A. Correct.**

2 Q. When you're -- when you personally are doing a
3 wax cloud point experiment, you would have a solution.
4 Is it in a test tube?

5 **A. It would be a test tube, and you heat it up to**
6 **a specific temperature and measure the transmission**
7 **associated with that.**

8 Q. So can you explain, like, just the basic setup
9 of a wax cloud point experiment. It sounds like you
10 have a test tube and some sort of heater. I don't know
11 if it's a Bunsen burner or what. Some heater. You have
12 a pointer shining a light through it. Just take us
13 through what the general procedure would be that you use
14 for doing a wax cloud point experiment.

15 **A. We would have a mantel, a heating -- we would**
16 **have a solution surrounding the base, we measure the**
17 **temperature of the melt, we have a laser pointer that**
18 **would go through it, and we measure the transmittance on**
19 **the other side.**

20 Q. And so the -- when you're doing that, there's a
21 test tube -- the heat of the test tube is being
22 carefully controlled?

1 A. Correct.

2 Q. And the mixture that you're trying to determine
3 the wax cloud point for would be in a solution?

4 A. Well, depends on the composition. It could
5 start off a solid and gradually melt. And they still
6 may exhibit phase separation. And you gradually heat.
7 And if they would become miscible, then they would
8 become clear.

9 Q. And does "miscible" means that they're, what,
10 dissolved within each other?

11 A. Not necessarily. "Scattering" means the index
12 refraction changes, particular interface. And so we're
13 looking for whether scattering occurs or not.

14 So basically in these particular case, some of
15 them may not be miscible at the molecular level, but
16 they would be sufficiently small for our eyes to
17 perceive them to be miscible or to be clear.

18 And that's what -- something we care about.
19 Because aesthetics associated with some of the hot melt
20 adhesive, and you want them to be clear. And sometimes
21 you don't -- and so it's important to kind of find out
22 what the miscibility associated with that would be.

1 Q. And so for -- And you do -- wax cloud points
2 are used for compositions that are used in various
3 applications. You might do a wax cloud point for
4 something that's a sealant or for something that's a --

5 A. As I said ---

6 Q. -- a paint or ink or something else. Correct?

7 A. Yeah. So here is a wax cloud point. What I
8 described for you is, like, generally the measurement of
9 the cloud point itself.

10 Q. Okay. And so with a wax cloud point, you're --
11 when you do wax cloud point measurements, you have some
12 composition in a test tube and you're heating it up, so
13 you are monitoring the temperature. And you're also
14 monitoring --

15 A. The transmission.

16 Q. -- the transmission of light through it. And
17 once it's miscible, then you know that's the cloud point
18 of the composition?

19 A. Well, that's what we determine that to be the
20 cloud point. Because our eyes or, in fact, the laser --
21 our eyes typically see from 3,000 to 7,000 angstroms,
22 and so we can only see certain size. Size smaller than

1 **that, we really may not care.**

2 Q. And when -- So when you do it, you determine
3 whether -- you determine when the components are
4 miscible based on the light scattering?

5 A. Yeah. As I said, we -- sometimes we look at --
6 sometimes you kind of know it's not going to happen
7 within the temperature range that we care about.
8 Sometimes we need more precise, then we use the laser
9 scattering experiment.

10 Q. And some people when they do wax cloud points
11 do they also just use their eyes to visually see when
12 it's cloudy or not cloudy, or is the light scattering
13 technique what is always used?

14 A. No. I think the more -- probably eyes test is
15 probably more commonly used.

16 Q. So with wax cloud points, it's also common for
17 someone to just visually look at the solution and see
18 whether or not it's cloudy?

19 A. Yeah, I would say probably.

20 Q. Okay. And a wax cloud point test is not itself
21 a bonding test. Correct?

22 A. That is correct.

1 Q. And a wax cloud point test is not a test of the
2 adhesive strength of a composition. Correct?

3 A. That is correct.

4 Q. And a wax cloud point test is not a test of
5 cohesive strength. Correct?

6 A. That's correct.

7 Q. A wax cloud point test is not a test of tensile
8 strength of a composition. Correct?

9 A. This is where I have to be careful because the
10 miscibility behavior between the various components
11 could affect the cohesive property, could affect the
12 tensile strength. So I don't want to say arbitrarily
13 cloud point test is not a test of either the cohesive or
14 the tensile tests, but certainly it gives you some idea
15 whether components in fact are miscible or not miscible.

16 Q. But the wax cloud point test itself is not a
17 measure of tensile strength. Correct?

18 A. That's correct.

19 Q. And if we look, Dr. Hsu, at the -- keeping on
20 the Exxon reference, you mentioned that Escorene UL 7750
21 is an ethylene copolymer. Correct?

22 A. That is correct.

1 Q. And the Footnote 1 composition for the 5340
2 tackifier is comprised of 40 percent Escorez 5340,
3 20 percent Escorene 7750, and 40 percent 158 degree F
4 MP paraffin wax. Correct?

5 A. Yes.

6 Q. And in your declaration, you do not provide any
7 type of tests of any kind on bondability of the
8 Footnote 1 composition for 5340. Correct?

9 A. Correct.

10 Q. And you did not provide any tests in your
11 declaration for the adhesive strength of the Footnote 1
12 composition for 5340. Correct?

13 A. Correct.

14 Q. And in your declaration, you didn't do any
15 tests of any kind that analyze how the bondability of
16 the Footnote 1 composition for 5340 would be affected by
17 changing the amount of paraffin wax. Correct?

18 A. Correct.

19 Q. And you didn't, in your declaration, provide
20 any types of tests of any kind relating to how changing
21 the amount of paraffin wax in the Footnote 1 composition
22 for 5340 in the Exxon reference would affect the

1 adhesive properties of the composition. Correct?

2 **A. Correct.**

3 Q. So for the Exxon reference in the Footnote 1
4 composition of -- for 5340 of 40 percent 5340 tackifier,
5 20 percent Escorene UL 7750, and 40 percent 158 degree F
6 MP paraffin wax, you did not do any experiments of any
7 kind relating to the bondability of that composition.
8 Correct?

9 **A. Correct.**

10 Q. And in your declaration, you didn't do any
11 experiments of any kind relating to how the bondability
12 of the Footnote 1 composition for 5340 in the Exxon
13 reference would be affected by changing the amount of
14 paraffin wax in that composition. Correct?

15 **A. Correct.**

16 Q. In analyzing the Exxon reference, Exhibit 1003,
17 you did not perform any experiments of any kind relating
18 to the adhesive properties of the Footnote 1 composition
19 for 5340, which is comprised of 40 percent Escorez 5340,
20 20 percent Escorene UL 7750, and 40 percent 158 degree F
21 MP paraffin wax. Correct?

22 **A. Correct.**

1 MR. GRIMSRUD: We can take a quick break.

2 (Recess taken)

3 BY MR. GRIMSRUD:

4 Q. Dr. Hsu, if you could, look at the '404 patent,
5 which is Henkel Exhibit 1001. Do you have it?

6 A. Yes.

7 Q. And if you look at Column 9, at about -- the
8 paragraph -- the paragraph that starts at about line 46
9 where it says "Waxes are useful." Do you see that?

10 A. Yes.

11 Q. And generally, this paragraph is talking about
12 waxes and their use in hot melt adhesives. Okay?

13 A. Yes.

14 Q. You see -- So it says, "Waxes are useful in any
15 combination from zero percent by weight to about
16 40 percent by weight of the hot melt composition,
17 preferably from about 15 percent by weight to about
18 35 percent by weight and most preferably from about
19 20 percent by weight to about 30 percent by weight of
20 the hot melt composition." Did I read that correctly?

21 A. You did.

22 Q. And then it says, "At higher wax levels,

1 bondability of the adhesive system may be affected."

2 Did I read that correctly?

3 **A. You did.**

4 Q. And so that sentence is referring to the fact
5 that at higher wax levels, the higher amount of wax can
6 adversely affect the bondability of an adhesive system.
7 Correct?

8 **A. Correct.**

9 Q. At lower levels, the adhesive -- the next
10 sentence starting at line 54 says, "At lower levels, the
11 adhesive may set too slowly or heat resistance may
12 adversely be affected." Did I read that correctly?

13 **A. Yes, you did.**

14 Q. So the paragraph here is also saying that at
15 lower levels of wax concentration the adhesive may be
16 adversely affected with -- by setting too slowly or
17 having poor heat resistance. Is that correct?

18 MS. CHLEBOWSKI: Objection. Outside the scope.

19 **A. Yes.**

20 Q. And so you agree that as a general matter, the
21 patent here is saying that at higher wax levels
22 bondability of the adhesive system could be adversely

1 affected?

2 MS. CHLEBOWSKI: Objection. Outside the scope.

3 **A. It's not in the claim.**

4 Q. No. I'm just talking about this portion of the
5 specification. You agree that a person of ordinary
6 skill in the art, reading the sentence that higher wax
7 levels bondability of the adhesive system may be
8 affected, would understand that at higher wax levels the
9 higher amount of wax could have an adverse effect on
10 bondability?

11 MS. CHLEBOWSKI: Same objection.

12 **A. May be affected.**

13 Q. Right. And so, sir, you agree that as a
14 general matter, as wax levels increase, a higher amount
15 of wax could potentially adversely affect the hot melt
16 adhesive?

17 MS. CHLEBOWSKI: Same objection.

18 **A. Potentially. Correct.**

19 Q. Okay. Similarly, if you're using lower levels
20 of wax, the lower level of wax may adversely affect the
21 hot melt adhesive. Correct?

22 MS. CHLEBOWSKI: Same objection.

1 **A. May.**

2 Q. And some of that would probably depend on the
3 type of wax you're using, for example. Right?

4 MS. CHLEBOWSKI: Same objection.

5 **A. It doesn't say here.**

6 Q. Okay. Well, I'm just asking your opinion as an
7 expert. Depending on the type of wax you're using, the
8 amount of that wax could adversely affect hot melt
9 adhesive composition. Correct?

10 MS. CHLEBOWSKI: Same objection.

11 **A. Correct.**

12 Q. And so if -- for a particular wax, there could
13 be some point at which the amount of wax adversely
14 affects the system?

15 MS. CHLEBOWSKI: Outside the scope.

16 **A. I don't know.**

17 Q. You don't know?

18 **A. No.**

19 MS. CHLEBOWSKI: Same objection.

20 Q. I'm just asking you, sir, just general
21 principles based on Column 9. Do you agree that a
22 person of ordinary skill in the art would understand

1 that if you're working with a wax there could be a
2 concentration of wax that is at a level that is such
3 that it adversely affects the hot melt adhesive?

4 MS. CHLEBOWSKI: Same objection.

5 **A. That's what the Column 9 says.**

6 Q. So you agree that a person of ordinary skill in
7 the art reading this section of Column 9 starting at
8 line 52 that says "At higher wax levels bondability of
9 the adhesive system may be affected," would understand
10 that if the wax concentration is too high, that could
11 adversely affect bondability of the hot melt adhesive?

12 MS. CHLEBOWSKI: Same objection.

13 **A. Correct.**

14 Q. Similarly, is it correct that a person of
15 ordinary skill in the art, in your view, would
16 understand the specification to be saying at lower
17 levels the adhesive may set too slowly or heat
18 resistance may be adversely affected?

19 MS. CHLEBOWSKI: Same objection.

20 **A. Those are statements made here, yes.**

21 Q. In your opinion, Dr. Hsu, would a person of
22 ordinary skill in the art understand from this that if a

1 wax concentration gets too low, then, in the hot melt
2 adhesive, that may also he adversely affect the
3 composition?

4 MS. CHLEBOWSKI: Same objection.

5 **A. May. Correct.**

6 Q. And is this section of the specification that
7 says, "At higher wax levels bondability of adhesive
8 system may be affected. At lower levels, the adhesive
9 may set too slowly or heat resistance may adversely be
10 affected."

11 Is that discussed in your declaration, that
12 section from the '404 patent?

13 MS. CHLEBOWSKI: Outside the scope.

14 **A. No.**

15 Q. So in your declaration, you don't discuss this
16 portion of the '404 patent that talks about, "At higher
17 wax levels, bondability of the adhesive system may be
18 affected. At lower levels, the adhesives may set too
19 slowly or heat resistance may adversely be affected"?

20 MS. CHLEBOWSKI: Same objection.

21 **A. I only discuss the elements contained in the**
22 **claims.**

1 Q. So this section of the specification is not
2 discussed in your declaration?

3 MS. CHLEBOWSKI: Same objection.

4 **A. Correct.**

5 Q. Now, if you look at line -- stick with Column 9
6 of the '404 patent. This is at lines, like, 57 to about
7 59. There's a sentence that says, "When the
8 thermoplastic polymer is an ethylene copolymer, it is
9 preferable to use from about 10 percent by weight to
10 about 30 percent by weight of the composition." Did I
11 read that correctly?

12 **A. Yes.**

13 Q. And so you understand that right here, this
14 sentence of the patent is talking about if you're using
15 an ethylene copolymer, it's preferable to use about
16 10 percent by weight to about 30 percent by weight of
17 the wax in the composition?

18 MS. CHLEBOWSKI: Outside the scope.

19 Q. Are you with me, Dr. Hsu?

20 **A. Yes. I'm fine. I'm with you. I got it.**

21 Q. Okay. You agree with that?

22 **A. Yes.**

1 Q. Okay. And so you agree that a person of
2 ordinary skill in the art, reading this sentence that
3 says, "When the thermoplastic polymer is an ethylene
4 copolymer, it is preferable to use from about 10 percent
5 by weight to about 30 percent by weight of the
6 composition," you agree that a person of ordinary skill
7 in the art would understand that sentence to be saying
8 that if you're using an ethylene copolymer, it's
9 preferable to use from about 10 percent by weight to
10 about 30 percent by weight of the wax?

11 MS. CHLEBOWSKI: Same objection.

12 **A. About 10 percent by weight to about 30 percent**
13 **by weight.**

14 Q. Of the wax?

15 **A. No. Of the ethylene copolymer.**

16 Q. So is it your understanding, though, that this
17 section of this Paragraph 9 is talking about waxes?

18 **A. No. The statement says that when the thermal**
19 **plastic polymer, the ethylene copolymer, it is**
20 **preferable to use from about 10 percent by weight to**
21 **about 30 percent weight of the composition.**

22 Q. Okay. Let me ask you this question: Does this

1 section in paragraph -- or Column 9, rather, that begins
2 at line 47, beginning at line 47, it's talking about
3 waxes that are useful. Correct?

4 **A. Correct.**

5 Q. And it's talking -- throughout Paragraph 9, it
6 talks about waxes. Correct?

7 MS. CHLEBOWSKI: Outside the scope.

8 Q. You can read Paragraph 9 if you want. Sorry.
9 Read the Column 9 starting -- the paragraph
10 that starts at line 47.

11 **A. Yes.**

12 Q. Do you agree that this paragraph in Column 9 is
13 talking about the use of waxes in the composition?

14 MS. CHLEBOWSKI: Same objection.

15 **A. All I know is I've read the sentence that you**
16 **read to me. When the thermoplastic polymer is an**
17 **ethylene copolymer, that doesn't have to be wax.**

18 Q. Ethylene copolymer is not a wax. Is that what
19 you're saying?

20 **A. No, it doesn't have to be the wax.**

21 Q. So let me ask you this: In your opinion, would
22 a person of ordinary skill in the art, reading this

1 sentence in Column 9 that says, "When the thermoplastic
2 polymer is an ethylene copolymer, it's preferable to use
3 from about 10 percent by weight to about 30 percent by
4 weight of the composition," in your opinion, would a
5 person of ordinary skill in the art understand the
6 10 percent by weight to about 30 percent by weight as
7 referring to the percent of wax to be used in the
8 composition?

9 MS. CHLEBOWSKI: Objection. Outside the scope.

10 Q. And if you don't have an opinion, that's okay.
11 I'm just asking what your opinion is.

12 A. I'm just saying -- I'm reading here. This says
13 "thermoplastic polymer." It doesn't say "wax."

14 Q. I understand it says "When the thermoplastic
15 polymer is an ethylene copolymer."

16 A. Yes.

17 Q. That's what you're you focusing on?

18 And my question is simply, in your opinion,
19 would a person of ordinary skill in the art understand
20 the phrase "it is preferable to use from about
21 10 percent by weight to about 30 percent by weight of
22 the composition" to be referring to the percentage of

1 wax?

2 MS. CHLEBOWSKI: Same objection.

3 **A. Not necessarily.**

4 Q. Okay. You said "not necessarily." In your
5 opinion, do you think a person of ordinary skill in the
6 art might read this sentence to refer to when a
7 thermoplastic polymer is an ethylene copolymer it's
8 preferable to use from about 10 percent by weight to
9 about 30 percent by weight of wax?

10 MS. CHLEBOWSKI: Same objection.

11 **A. Not necessarily.**

12 Q. Okay. So you keep saying "not necessarily."

13 **A. Because ethylene copolymer does not necessarily**
14 **mean it's a wax.**

15 Q. So in your view, Dr. Hsu, would a person of
16 ordinary skill in the art understand that it's
17 preferable to use from about 10 percent by weight to
18 about 30 percent by weight as referring to the percent
19 of wax that should be used in the composition when
20 you're dealing with ethylene copolymer?

21 MS. CHLEBOWSKI: Outside the scope.

22 **A. I keep saying ethylene copolymer could mean**

250

1 **EVA. It just simply said "ethylene copolymer" here. It**
2 **doesn't say "wax."**

3 Q. Okay. And my question -- So let's take EVA as
4 an example. In your view, would a person of ordinary
5 skill in the art interpret this section of Column 9 as
6 saying if you're using EVA, you should use about
7 10 percent by weight to about 30 percent by weight of
8 wax with that composition that includes the EVA?

9 MS. CHLEBOWSKI: Same objection.

10 **A. I don't know.**

11 Q. You just don't know?

12 **A. I don't.**

13 Q. So for example, Dr. Hsu, the next sentence,
14 starting toward the end of it looks like line 59, says
15 that "When the thermoplastic polymer is a homopolymer or
16 copolymer of propylene it may be preferable to use less
17 wax, for example, less than about 10 percent or no wax
18 at all as it changes the compatibility of the system."
19 Did I read that correctly?

20 **A. Correct.**

21 Q. In your view, would a person of ordinary skill
22 in the art understand that sentence to be stating that

1 if you're going to use a thermoplastic polymer that's a
2 homopolymer or a copolymer of propylene, then it may be
3 preferable to use less wax; for example, less than about
4 10 percent or no wax at all?

5 MS. CHLEBOWSKI: Objection. Outside the scope.

6 **A. That's the sentence.**

7 Q. You agree that that's what the sentence says?

8 **A. I don't know.**

9 Q. Okay. Do you have any idea, sitting here
10 today, whether or not a person of ordinary skill in the
11 art would interpret Column 9, starting at line 59,
12 interpret the phrase "When the thermoplastic polymer is
13 a homopolymer or copolymer of propylene it may be
14 preferable to use less wax, for example, less than
15 10 percent wax or no wax at all," to mean that if you're
16 making a composition that has a thermoplastic polymer
17 of -- that's a homopolymer or copolymer of propylene, it
18 may be preferable to use less wax; for example, less
19 than about 10 percent?

20 MS. CHLEBOWSKI: Same objection.

21 **A. That's what the sentence says.**

22 Q. Okay. And would a person of ordinary skill in

1 the art understand that to mean if you're using, for
2 example, a homopolymer or copolymer of propylene, you
3 should use less wax?

4 MS. CHLEBOWSKI: Same objection.

5 **A. Correct.**

6 Q. Similarly, if we back up to the previous
7 sentence, when it says "When the thermoplastic polymer
8 is an ethylene polymer," in your view, would a person of
9 ordinary skill in the art consider that sentence to be
10 saying that in that situation it's preferable to use
11 from about 10 percent by weight to about 30 percent by
12 weight of wax?

13 MS. CHLEBOWSKI: Same objection.

14 **A. Ethylene copolymer. Correct.**

15 Q. Okay. That's all I'm trying to show.

16 The patent -- a person of ordinary skill in the
17 art would understand if you're using an ethylene
18 copolymer in your composition, then it's preferable to
19 use from about 10 percent by weight to about 30 percent
20 by weight of wax?

21 MS. CHLEBOWSKI: Objection. Outside the scope.

22 **A. That's what the sentence says.**

1 Q. Okay. So you agree that someone of skill in
2 the art -- you've read this patent through the
3 perspective of someone of skilled in the art. Right?

4 **A. Correct.**

5 Q. So through that perspective, someone of skill
6 in the art reading this sentence starting at line 57 of
7 Column 9 would understand it to be saying that when the
8 thermoplastic polymer is an ethylene copolymer -- so if
9 you're using ethylene copolymer in your composition --
10 then it's preferable to use from about 10 percent by
11 weight to about 30 percent by weight of wax with that
12 ethylene copolymer?

13 MS. CHLEBOWSKI: Outside the scope.

14 **A. It depends on the use. It depends on the**
15 **composition of the ethylene copolymer.**

16 Q. So the amount of wax you'd use might depend on
17 the type of ethylene copolymer?

18 MS. CHLEBOWSKI: Same objection.

19 **A. I'd speculate. Maybe I don't want to**
20 **speculate. I don't know.**

21 Q. So sitting here today, you don't know whether
22 or not the amount of wax that you use would depend on

1 the type of ethylene copolymer that you use?

2 MS. CHLEBOWSKI: Outside the scope.

3 **A. I don't.**

4 Q. And just focusing on Column 9, line 57, do you
5 agree that as a general matter someone of ordinary skill
6 in the art reading this sentence would, as a general
7 matter, understand the patent to be saying if you're
8 using an ethylene copolymer, it's generally preferable
9 to use about 10 percent by weight to about 30 percent by
10 weight of wax with the polymer?

11 MS. CHLEBOWSKI: Same objection.

12 **A. That's what the sentence says.**

13 Q. Now, does your declaration describe this
14 sentence in Column 9 at line 57 that says, "When the
15 thermoplastic polymer is an ethylene copolymer, it is
16 preferable to use from about 10 percent by weight to
17 about 30 percent by weight of the composition"?

18 Is that sentence quoted in your declaration?

19 **A. That sentence is not quoted.**

20 Q. Now, in forming your opinion on the Exxon
21 reference, you did not conduct any type of experiments
22 to determine how bondability of the Footnote 1

1 composition for 5340 would be affected -- Strike that.

2 In forming your opinions on the Exxon
3 reference, you did not do any type of bondability
4 testing for the Footnote 1 composition for 5340.
5 Correct?

6 **A. Correct.**

7 Q. And the 5340 Footnote 1 composition, that
8 includes 40 percent of Escorez 5340, 20 percent Escorene
9 UL 7750, and 40 percent of 158 degree MP paraffin wax is
10 an ethylene copolymer composition. Correct?

11 **A. Correct.**

12 Q. The Escorene UL 7750 is a ethylene copolymer?

13 **A. Correct.**

14 Q. And you did not do any type of testing to see
15 how the bondability of this Footnote 1 composition for
16 5340 in the Exxon reference, Exhibit 1003, was affected
17 by having 40 percent of the paraffin wax in it.
18 Correct?

19 **A. Correct.**

20 Q. And in forming your opinions in this case, you
21 did not do any type of experimentation to determine how
22 the bondability of the Footnote 1 composition for 5340

1 in the Exxon reference would change if the paraffin wax
2 was at 30 percent as opposed to 40 percent. Correct?

3 **A. Correct.**

4 Q. And you didn't do any experimentation of any
5 kind to determine how the bondability of the Footnote 1
6 composition for 5340 would be affected if the wax
7 concentration was at 20 percent instead of 40 percent.
8 Correct?

9 **A. Correct.**

10 Q. You didn't do any type of experimentation in
11 forming your opinions in this case to analyze how the
12 bondability of the Footnote 1 composition for 5340 would
13 be affected by adjusting the percentage of paraffin wax.
14 Correct?

15 **A. Correct.**

16 Q. And similarly, you didn't do any type of
17 experimentation in forming your opinions to show how the
18 adhesive properties of the Footnote 1 composition for
19 5340 in the Exxon reference would be affected by
20 changing the wax concentration. Correct?

21 **A. Correct.**

22 Q. And in forming your opinions in this case, you

1 didn't do any testing or experimentation of any kind to
2 determine the adhesive properties of the Footnote 1
3 composition for 5340 in the Exxon reference. Correct?

4 **A. Correct.**

5 **(Exhibit Number 1018**
6 **marked for identification)**

7 Q. I want to show you Henkel Exhibit 1018, which
8 is another reference that you cited in your declaration.
9 Is that correct?

10 **A. Correct.**

11 Q. In your declaration, did you identify any resin
12 in Exhibit 1018? The author is Kraus. Did you identify
13 any resin in Exhibit 1018 that has a onset glass
14 transition temperature of above 65 degrees C?

15 **A. I did not.**

16 Q. Is there a resin disclosed in the Henkel
17 Exhibit 1018 Kraus reference that discloses a resin with
18 an onset glass transition temperature of above
19 65 degrees centigrade?

20 **A. I don't know.**

21 Q. So sitting here today, you cannot tell me
22 whether or not any resins in Henkel Exhibit 1018 include

1 an onset glass transition temperature of above
2 56 degrees centigrade?

3 **A. In this reference, correct.**

4 **(Exhibit Number 1019**

5 **marked for identification)**

6 Q. I also want to show you -- I want to show you
7 Exhibit 1019, which you also cite. Dr. Hsu, this is
8 U.S. Patent 5,331,033. It's marked as Henkel
9 Exhibit 1019, and it's titled "Hot Melt Adhesive."

10 Is this a patent that you've cited in your
11 declaration?

12 **A. That is correct.**

13 Q. Do you know any of the inventors listed on this
14 patent?

15 **A. No, I don't.**

16 Q. Okay. The patent is assigned to National
17 Starch and Chemical. Is that right?

18 **A. That is correct.**

19 Q. That's the same company that was subsequently
20 acquired by Henkel. Is that correct?

21 **A. That is correct.**

22 Q. Okay. Do you know whether or not any of the

1 inventors listed on the '033 patent, Exhibit 1019, are
2 working at Henkel today?

3 **A. I have no idea.**

4 Q. Okay. The '033 patent was filed on February
5 23rd of 1993. Is that correct?

6 **A. That is correct.**

7 Q. And so when the '033 patent was filed, the
8 Eastotac brochure, Exhibit 1002, was publicly available,
9 in your opinion?

10 **A. Would you repeat the question? I'm sorry.**

11 Q. Sure. Just to back up, the Eastotac brochure
12 that we talked about earlier today, Exhibit 1002, you
13 talked about how your understanding was that it was
14 published around August of 1992. Is that correct?

15 **A. Correct.**

16 Q. And the Exxon reference, which is Exhibit 1003,
17 your understanding is that it was published around
18 October of 1990. Correct?

19 **A. That is correct.**

20 Q. So when the '033 patent, Exhibit 1019, was
21 filed, the Eastotac brochure, Exhibit 1002, was publicly
22 available. Correct?

1 **A. That would be my interpretation. Correct.**

2 Q. And when the '033 patent, Exhibit 119 --
3 1019 -- was filed on February 23rd, 1993, the Exxon
4 reference, which is Exhibit 1003, was also publicly
5 available. Correct?

6 **A. Correct.**

7 Q. If you turn -- I think it's Paragraph 23 of
8 your declaration. In Paragraph 23 of your declaration,
9 Exhibit 1015, it begins by saying -- stating, "For
10 example, U.S. Patent 5,331,033 (issued July 19, 1994)
11 (the '033 patent) (Exhibit 1019) is directed to high
12 heat resistance hot melt adhesives." Did I read that
13 correctly?

14 **A. Correct.**

15 Q. So in your opinion, the '033 patent,
16 Exhibit 1019, is directed to high heat resistant hot
17 melt adhesives?

18 **A. Correct.**

19 Q. And when the '033 patent was filed, people of
20 ordinary skill in the art knew about both the Eastotac
21 brochure and the Exxon reference. Correct?

22 **A. Correct.**

1 Q. Now, if you'd turn to Column 3 of the
2 '033 patent. So this is Column 3 of Exhibit 1019.

3 A. Correct.

4 Q. Do you see it's listing examples of tackifying
5 resins that you can use in connection with the
6 '033 patent? Do you see that?

7 A. Yes, I do.

8 Q. And it lists Escorez 5300. Do you see that?

9 A. Where do you see that?

10 Q. Column 3, line 2. Do you see where it says
11 "Escorez 5300"?

12 A. Yes.

13 Q. Does the '033 patent mention Escorez 5340?

14 A. I don't remember.

15 Q. And at Column 3, it also lists Eastman resins.
16 Column 3, starting at line 4, do you see where it says
17 "Eastman resin H 100 and/or H 130"?

18 A. Which line?

19 Q. Column 3, at line 4, do you see where it says
20 "Eastman resin H 100 and/or H 130"?

21 A. Correct.

22 Q. So the '033 patent that's directed to high heat

1 resistance, hot melt adhesives, lists "Eastman resin
2 H 100 and/or H 130." Correct?

3 **A. That's correct.**

4 Q. Does the '033 patent specifically list the
5 Eastotac H-142R resin?

6 **A. It does not.**

7 Q. Did you perform any sort of investigation with
8 Henkel or anyone working with Henkel as to why the
9 H-142R resin is not listed in the '033 patent?

10 MS. CHLEBOWSKI: Objection to form.

11 **A. No. No, I did not.**

12 Q. Did you try to make any sort of inquiries of
13 any kind with Henkel to figure out why the H-142R resin
14 is not listed in the '033 patent?

15 MS. CHLEBOWSKI: Objection to form.

16 **A. No.**

17 Q. Did you make any sort of inquiries of any kind
18 with Henkel as to why the Escorez 5340 resin is not
19 listed in the '033 patent?

20 MS. CHLEBOWSKI: Same objection.

21 **A. No.**

22 Q. So in forming your opinions in this case, did

1 you do any sort of investigation of any kind into why
2 the Escorez 5340 resin is not listed in the '033 patent?

3 MS. CHLEBOWSKI: Same objection.

4 **A. No.**

5 Q. In forming your opinions in this case, did you
6 do any type of investigation of any kind into the issue
7 of why the Eastotac H-142R resin is not listed in the
8 '033 patent?

9 MS. CHLEBOWSKI: Same objection.

10 **A. I did not.**

11 MR. GRIMSRUD: Thank you, Dr. Hsu. I don't
12 have any further questions for you.

13 MS. CHLEBOWSKI: Could we maybe take a little
14 bit of a break before we come back?

15 MR. GRIMSRUD: Sure.

16 MR. TRIDICO: We may want to ask a few
17 redirect.

18 (Recess taken)

19 EXAMINATION

20 BY MS. CHLEBOWSKI:

21 Q. So, Dr. Hsu, in your last 16 years of advising
22 companies such as Henkel, have you advised on

1 tackifiers, polymers, and waxes as a component of hot
2 melt adhesives?

3 MR. GRIMSRUD: Objection to form.

4 **A. I have looked at the waxes in the polymers.**

5 Q. Okay.

6 **A. As components of polymer adhesive.**

7 Q. Okay.

8 MR. GRIMSRUD: No further questions.

9 (Whereupon the deposition
10 was concluded at 3:22 p.m.)
11
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ACKNOWLEDGMENT OF DEPONENT

I, _____, do hereby
acknowledge that I have read and examined the
foregoing testimony, and the same is a true, correct
and complete transcription of the testimony given by
me, and any corrections appear on the attached Errata
Sheet signed by me.

(DATE)

(SIGNATURE)

1 COMMONWEALTH OF MASSACHUSETTS

2 SUFFOLK, SS.

3

4 I, Michelle Keegan, Registered Professional
5 Reporter and Notary Public in and for the Commonwealth
6 of Massachusetts, the officer before whom the
7 proceedings were taken, do hereby certify that prior to
8 the commencement of the deposition of Shaw Ling Hsu,
9 Ph.D., the witness was by me first duly sworn to testify
10 the truth; that said deposition were taken in stenotype
11 notes by me on the 14th of January, 2015 at the Law
12 Offices of Finnegan, Henderson, Farabow, Garret &
13 Dunner, LLP, Two Seaport Lane, Boston, Massachusetts
14 02210-2001, commencing at 8:55 a.m. and ending at
15 3:22 p.m. and was thereafter reduced to typewritten form
16 under my supervision and that the foregoing pages 1-264
17 constitute a true and accurate record of the said
18 witness.

11 I further certify that present on behalf of Party
12 Henkel Corporation was Mary E. Chlebowski, Esq. and
13 Anthony C. Tridico, Esq., of Finnegan, Henderson,
14 Farabow, Garrett & Dunner, LLP;
15 and present on behalf of Party H.B. Fuller Company was
16 Timothy E. Grimsrud, Esq. and Linzey Erickson, Esq., of
17 Faegre Baker Daniels LLP.

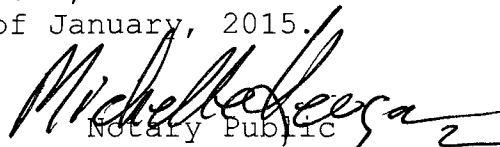
15 I further certify that the original deposition will
16 be transmitted to counsel for Henkel Corporation for
17 transmission to Shaw Ling Hsu, Ph.D., for reading and
18 execution. If Read and Sign is waived, state the
19 reason.

17 I further certify that I am not related to, nor
18 associated with any of the parties or their attorneys,
19 nor do I have any disqualifying interest, personal or
20 financial, in the actions within.

20 In witness whereof, I have hereunto set my hand and
21 seal this 15th day of January, 2015.

21

22


Notary Public
My commission expires:

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