

1 UNITED STATES PATENT AND TRADEMARK OFFICE
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD
3
4 MOM ENTERPRISES, LLC,)
5 Petitioner,) Case IPR2023-00726
6 vs.) Patent 9,066,958 B2
7 ELAINE AND REINHOLD W.)
8 VIETH,)
9 Patent Owner.)

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13 ATTORNEYS' EYES ONLY

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16
17 REMOTE VIDEOTAPED DEPOSITION of
18 STEVEN M. REID, Ph.D., ESQ.
19 Salem, Oregon

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24 Reporter: MaryJo O'Connor, RDR, RMR

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ATTORNEYS' EYES ONLY

Thursday, March 21, 2024

9:04 a.m. PDT

REMOTE VIDEOTAPED DEPOSITION of
STEVEN M. REID, Ph.D., ESQ. held via Zoom
videoconference in Salem, Oregon, pursuant
to notice, before MaryJo O'Connor,
Registered Diplomat Reporter, Registered
Merit Reporter and Notary Public in and for
the Commonwealth of Massachusetts.

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1	-----I N D E X-----			
2				
3	EXAMINATION of STEVEN M. REID, Ph.D.		PAGE	
4	By Mr. Conrad			6
5	* * * * *			
6	-----INSTRUCTIONS-----			
7	Page	Line	Page	Line
8	(None)			
9	* * * * *			
10	-----PREVIOUSLY MARKED EXHIBITS-----			
11	REID EXHIBIT		PAGE	
12	Exhibit 1001	United States Patent No.		23
13		9,066,958 B2		
14	Exhibit 1007	Document entitled		53
15		"Declaration of Accuracy		
16		of Translation"		
17	Exhibit 1009	Document entitled		55
18		"Declaration of Translator"		
19	Exhibit 1012	American Academy of		57
20		Pediatrics article entitled		
21		"Prevention of Rickets and		
22		Vitamin D Deficiency: New		
23		Guidelines for Vitamin D		
24		Intake"		
25				

1	-----PREVIOUSLY MARKED EXHIBITS-----		
	(continued)		
2	REID EXHIBIT		PAGE
3	Exhibit 1025	Document entitled	33
4		"Supplemental Declaration	
5		of June Ann Munford,"	
6		Bates MOM_0006341 to	
7		MOM_0006373	
8	Exhibit 2070	Document entitled	40
9		"Declaration of Carey	
10		MacKenzie"	
11	Exhibit 2072	Document entitled	7
12		"Declaration of Steven M.	
13		Reid"	
14		* * * * *	

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

2

3 STEVEN M. REID, Ph.D., ESQ.,

4 having been duly sworn by the Notary Public,

5 was examined and testified as follows:

6 EXAMINATION

09:04:14 7 BY MR. CONRAD:

09:04:14 8 Q. Good morning, Dr. Reid. How are
09:04:18 9 you?

09:04:18 10 A. Good morning. I'm well. Thank
09:04:21 11 you.

09:04:22 12 Q. Do you understand today that your
09:04:24 13 testimony is under oath, correct?

09:04:26 14 A. Yes, I do.

09:04:27 15 Q. Is there anything that would
09:04:29 16 prevent you from providing complete, truthful
09:04:32 17 and accurate testimony today?

09:04:34 18 A. No. Nothing.

09:04:35 19 Q. And I understand you've been
09:04:38 20 retained as an expert in this matter; is that
09:04:41 21 correct?

09:04:41 22 A. That's correct.

09:04:43 23 MR. CONRAD: I'm going to drop
09:04:44 24 into the Chat window what's been
09:04:47 25 previously marked as Exhibit 2072.

09:04:51 1 (Document previously marked for
09:04:59 2 identification as Exhibit 2072)
09:04:59 3 Q. And when you have a chance to open
09:05:00 4 that, please let me know.
09:05:02 5 A. Doing it now.
09:05:19 6 Q. Dr. Reid, Exhibit 2072 is the
09:05:22 7 declaration that you submitted in this IPR
09:05:25 8 proceeding; is that correct?
09:05:26 9 A. Yes, that's correct.
09:05:29 10 Q. Now, I understand that you are a
09:05:33 11 patent attorney; is that correct?
09:05:34 12 A. Yes.
09:05:35 13 Q. How long have you been practicing
09:05:38 14 as a patent attorney?
09:05:41 15 A. Since 2006.
09:05:43 16 Q. And has that been your primary job
09:05:48 17 during that entire time?
09:05:49 18 A. Yes.
09:05:50 19 Q. I understand that prior to
09:05:59 20 beginning your career as a lawyer, you were a
09:06:04 21 chemist; is that right?
09:06:05 22 A. Yes.
09:06:06 23 Q. And what subject matter did your
09:06:13 24 technical research focus on when you were a
09:06:17 25 chemist?

09:06:18 1 A. Generally, I was a synthetic

09:06:22 2 organometallic chemist.

09:06:26 3 Q. I will represent to you that I am

09:06:28 4 a computer engineer by trade, so I don't know

09:06:31 5 much about chemistry. So can you explain what

09:06:34 6 that is?

09:06:35 7 A. Yes. The field of organometallics

09:06:41 8 bridges the fields of organic and inorganic

09:06:46 9 chemistry. As the name might imply to you,

09:06:50 10 organometallic concerns organic fragments plus

09:06:56 11 metals. And so the field generally has to do

09:07:01 12 with the synthesis, the study of, or both, of

09:07:08 13 molecules that contain organic compounds, could

09:07:12 14 be even drugs or catalysts, and metals.

09:07:17 15 Q. What did your post-doctorate

09:07:28 16 research focus on?

09:07:31 17 A. Which post-doc?

09:07:35 18 Q. Good question. It looks like you

09:07:37 19 worked at or you did post-doc research at

09:07:39 20 Tulane and Texas A&M; is that right?

09:07:39 21 A. That's correct.

09:07:39 22 Q. Can you explain what your research

09:07:43 23 focused on during those time periods?

09:07:47 24 A. All right. At Texas A&M

09:07:51 25 University, the focus was on synthesis of more

09:07:55 1 traditional inorganic compounds. I believe
09:07:59 2 they were commonly referred to as molecular
09:08:02 3 wires, but strings of metal ions fastened
09:08:08 4 together by organic frameworks.
09:08:15 5 At Tulane University I was engaged
09:08:18 6 in more traditional synthetic organometallic
09:08:21 7 chemistry; for example, organopalladium
09:08:26 8 complexes useful in catalysis and activation of
09:08:31 9 chloroarenes.
09:08:33 10 Q. What kind of lab work did your
09:08:37 11 post-doc research entail?
09:08:39 12 A. Can you clarify?
09:08:44 13 Q. Sure. Was there any lab work
09:08:47 14 associated with your research?
09:08:49 15 A. Yes. 100 percent of my work was
09:08:52 16 lab work.
09:08:52 17 Q. Okay. Can you explain what that
09:08:54 18 kind of lab work entailed?
09:08:56 19 A. Sure. Generally we would consider
09:09:00 20 that or commonly refer to as wet lab work. It
09:09:05 21 was at the bench using beakers, glassware,
09:09:13 22 mixing compounds, solutions, making colors. I
09:09:16 23 hate to sound like a stereotypical chemist, but
09:09:21 24 that's what I did.
09:09:21 25 Q. I remember my high school chem

09:09:26 1 lab. It was a fun time.

09:09:28 2 Okay. You did your doctorate

09:09:34 3 research at MIT; is that correct?

09:09:36 4 A. Yes, that's correct.

09:09:37 5 Q. What research did you focus on

09:09:39 6 there?

09:09:39 7 A. That also was in the field of

09:09:41 8 organometallic chemistry, although it poked

09:09:45 9 into various subareas; for example, more

09:09:51 10 fundamental studies in organorhenium complexes

09:09:55 11 and then more applied synthetic research in

09:10:00 12 polymer catalysts.

09:10:02 13 Q. And I presume that there were

09:10:05 14 similar kind of lab work involved in that

09:10:08 15 research; is that correct?

09:10:09 16 A. That is correct. All at the

09:10:12 17 bench, or if you care to know, and what is

09:10:16 18 commonly referred to as a dry box.

09:10:18 19 Q. What's a dry box? I'm curious.

09:10:20 20 A. You've probably seen these.

09:10:22 21 Sometimes they're called glove boxes. You poke

09:10:28 22 the gloves in or hands into long gloves and

09:10:31 23 perform operations inside of a box that

09:10:33 24 contains usually an inert atmosphere. In this

09:10:39 25 case, it was scrupulously dry nitrogen and/or

09:10:45 1 argon.

09:10:46 2 Q. Your undergraduate research, did
09:10:46 3 that fall in line with the other kinds of
09:10:49 4 research and lab work that you did for your
09:10:52 5 doctorate and post-doctorate work?

09:10:55 6 A. In general terms, yes. In the
09:10:58 7 sense that my undergraduate research was under
09:10:59 8 the very large umbrella of inorganic chemistry,
09:11:02 9 more specifically it was bioinorganic
09:11:05 10 chemistry. It concerned the study of heme
09:11:12 11 catabolism, which generally refers to the
09:11:15 12 breakdown of heme in the body. So I studied
09:11:20 13 metalloporphyrins. Heme would be an example of
09:11:25 14 a porphyrin in our red blood cells.

09:11:30 15 Q. Did you have any industry
09:11:36 16 experience outside your work associated with
09:11:41 17 universities?

09:11:41 18 A. No, I did not.

09:11:44 19 Q. Did you have any work or
09:11:50 20 experience as a clinician?

09:11:54 21 A. No.

09:11:55 22 Q. I notice that the patent owners
09:12:17 23 had submitted a declaration before institution
09:12:23 24 from a partner in your firm. Are you familiar
09:12:26 25 with that?

09:12:26 1 A. Generally. Yes.

09:12:29 2 Q. My understanding is that that

09:12:32 3 declaration was withdrawn and yours was

09:12:38 4 submitted in its place; is that correct?

09:12:40 5 A. Yes, I believe that is correct.

09:12:41 6 Q. What was the reason for that?

09:12:43 7 A. I'm not exactly sure.

09:12:46 8 Q. Okay. How long did you spend

09:12:54 9 preparing your declaration in this matter?

09:12:57 10 A. I spent about 230 hours.

09:13:02 11 Q. What did that time entail?

09:13:07 12 A. Studying background documents,

09:13:14 13 cited prior art, depositions, transcripts,

09:13:21 14 declarations of other experts, the patent

09:13:24 15 itself, and formulating my opinion.

09:13:27 16 Q. Okay. Did you conduct any tests?

09:13:36 17 A. Can you clarify?

09:13:38 18 Q. Sure. I'll be more specific. And

09:13:42 19 your declaration provides some photographs of

09:13:46 20 what appears to be a test in Exhibit B with a

09:13:51 21 spoon. Is that something that you conducted?

09:13:54 22 A. Yes, I did that personally.

09:13:56 23 Q. Are there any other tests other

09:13:57 24 than those demonstrated in or depicted in

09:14:00 25 Exhibit B that you conducted as part of the

09:14:03 1 preparation for your declaration?

09:14:04 2 A. No.

09:14:05 3 Q. Let's turn to paragraph -- well,

09:14:40 4 yeah, let's turn to paragraph 22 in your

09:14:55 5 declaration.

09:14:55 6 A. All right. I'm there.

09:14:56 7 Q. You provided some opinions

09:14:58 8 regarding the construction of the claims of the

09:15:01 9 '958 patent, correct?

09:15:05 10 A. Yes.

09:15:05 11 Q. And what is the definition of "a

09:15:07 12 person of ordinary skill in the art" that you

09:15:10 13 were using to construe the claims?

09:15:17 14 A. That is a person who is familiar

09:15:19 15 with the field of a '958 patent, conversant in

09:15:22 16 the problems that confront the inventors of the

09:15:27 17 '958 patent, and conversant in the cited prior

09:15:33 18 art.

09:15:33 19 Q. Did you provide a description of

09:15:36 20 who a person of ordinary skill is in your

09:15:40 21 declaration? I wanted to refer to it.

09:15:55 22 Paragraph 52. And are you there?

09:15:57 23 A. I am there.

09:15:57 24 Q. Okay. It says:

09:16:02 25 "My opinion in this declaration is

09:16:04 1 premised upon consideration of the cited
09:16:06 2 prior art above and the construed claims
09:16:08 3 as viewed and understood by a person of
09:16:10 4 ordinary skill in the art at the time of
09:16:13 5 the '958 patent's effective filing
09:16:16 6 date. "

09:16:16 7 Do you see that?

09:16:17 8 A. Yes.

09:16:23 9 Q. The field -- do you agree that
09:16:25 10 "The field of the '958 patent resides in
09:16:28 11 vitamin D formulations and methods of
09:16:30 12 administering them to humans," right?

09:16:33 13 A. That is correct.

09:16:34 14 Q. And it's your opinion that such a
09:16:41 15 person would possess a "'doctorate in
09:16:47 16 Pharmaceutics or a related field with several
09:16:51 17 years of experience in formulating compositions
09:16:53 18 of and delivering medicines and nutritional
09:16:59 19 supplements'"; is that correct?

09:17:00 20 A. Yes.

09:17:01 21 Q. Do you have a doctorate in
09:17:02 22 pharmaceuticals?

09:17:03 23 A. No, I do not.

09:17:04 24 Q. Do you have a doctorate in a
09:17:07 25 related field?

09:17:07 1 A. I would consider chemistry a
09:17:09 2 related field, and so yes.

09:17:11 3 Q. And do you have several years of
09:17:15 4 experience in formulating compositions of and
09:17:21 5 delivering medicines and nutritional
09:17:24 6 supplements?

09:17:24 7 A. I do not.

09:17:25 8 Q. So you would not be a person of
09:17:28 9 ordinary skill in the art, as you would define
09:17:30 10 that for this matter; is that right?

09:17:32 11 A. I would agree with that.

09:17:47 12 Q. Go back to your section for claim
09:17:50 13 construction and go to paragraph 25, please.

09:18:00 14 A. All right. I'm there.

09:18:11 15 Q. Here you're discussing the Board's
09:18:13 16 adoption of the district court claim
09:18:16 17 construction. Do you see that?

09:18:16 18 A. Yes.

09:18:17 19 Q. There is a quotation from the
09:18:19 20 institution decision, and then there is a
09:18:26 21 portion that you added some emphasis to. Do
09:18:28 22 you see that?

09:18:32 23 A. If by "emphasis," you mean the
09:18:34 24 italicized text; is that correct?

09:18:36 25 Q. Yes.

09:18:36 1 A. Yes, I do see that, then.

09:18:37 2 Q. And the emphasized portion is:

09:18:40 3 "The drop does not coat or adhere

09:18:42 4 to the object so as to prevent efficient

09:18:46 5 removal of the drop from the object."

09:18:48 6 Do you see that?

09:18:48 7 A. Yes.

09:18:49 8 Q. Why is that emphasized?

09:19:08 9 A. I emphasized that section of the

09:19:10 10 claim construction because the Board took note

09:19:14 11 of the concept of adherence and its link to

09:19:19 12 efficient removal, or a lack thereof, from the

09:19:23 13 object.

09:19:26 14 Q. How does the fact that the Board

09:19:38 15 took note of adherence impact your opinion?

09:19:42 16 A. I explain that later in my

09:19:46 17 declaration in a section on adherence or

09:19:49 18 adhesion; that is, the relationship that must

09:19:57 19 exist for adherence or adhesion to be present,

09:20:02 20 a property of the drop and a property of the

09:20:07 21 object.

09:20:07 22 Q. Okay. So, in your view, the

09:20:16 23 claims would require that both the object has a

09:20:28 24 certain property for adherence and the drop

09:20:36 25 that is applied to it has a certain property of

09:20:38 1 adherence?

09:20:39 2 A. No. Not exactly. Rather, it is
09:20:45 3 the relationship created between a drop and
09:20:49 4 object. I have nowhere affixed to the drop a
09:20:55 5 particular property, nor have I affixed a
09:20:58 6 particular property to the object, but rather
09:20:59 7 the relationship between the two. I believe
09:21:02 8 Dr. Vieth explained this as well.

09:21:06 9 Q. So, in your opinion, the claims
09:21:12 10 require a specific drop and a specific surface
09:21:23 11 together in order to fall within the scope of
09:21:28 12 the claim?

09:21:29 13 A. Again, no, that's not quite what I
09:21:32 14 said. Rather, it is the combination of drop
09:21:34 15 plus surface or object, rather, that
09:21:40 16 facilitates efficient removal of the drop from
09:21:43 17 the object.

09:21:44 18 Q. Okay. I didn't quite understand
09:21:46 19 what you meant by that. Can you explain about
09:21:49 20 the importance of that statement that you just
09:21:53 21 made?

09:21:53 22 A. Well, that was a Board statement,
09:21:55 23 not mine.

09:21:57 24 Q. I don't believe the Board stated
09:22:08 25 that, as you just described it. So why does

09:22:14 1 the object need to have certain properties in
09:22:18 2 order to facilitate efficient removal of the
09:22:20 3 drop?

09:22:21 4 A. Again, I didn't state that.
09:22:25 5 Rather, it is the relationship between the
09:22:28 6 properties of the object and properties of the
09:22:30 7 drop that facilitate efficient removal.

09:22:34 8 Q. Okay. So, in your opinion, are
09:22:42 9 you saying that not every kind of object or
09:22:45 10 surface of an object is going to fall within
09:22:48 11 the scope of the claims?

09:22:50 12 A. I haven't an opinion on that
09:22:53 13 point.

09:22:54 14 Q. I mean, it seems to me that you
09:23:16 15 sort of do, because you are opining — let's
09:23:24 16 turn to paragraph 26, for example. You state:

09:23:28 17 "It is not enough for the vitamin
09:23:31 18 D composition simply to adhere to an
09:23:35 19 exterior surface in the sense that it
09:23:36 20 merely does not drip off, i.e., the drop
09:23:40 21 remains attached somehow no matter where
09:23:42 22 to the surface. Rather, the drop
09:23:44 23 adheres so as to remain localized to
09:23:48 24 facilitate its removal from the surface
09:23:50 25 so that a nutritional or therapeutic

09:23:54 1 effective dose of vitamin D is delivered
09:23:57 2 to a human. "
09:23:59 3 Do you see that?
09:23:59 4 A. Yes, I do.
09:24:00 5 Q. So is it your opinion that not
09:24:02 6 every surface is going to fall within the scope
09:24:04 7 of the claims?
09:24:09 8 A. No, that wasn't my opinion. It
09:24:12 9 was drop plus object combination.
09:24:16 10 Q. So the drop must be placed on a
09:24:20 11 particular surface of a particular kind of
09:24:22 12 object in order to fall within the scope of the
09:24:25 13 claims?
09:24:25 14 A. No.
09:24:27 15 Q. Okay.
09:24:28 16 A. I said nothing about a particular
09:24:30 17 surface or object.
09:24:31 18 Q. So then it doesn't matter for the
09:24:40 19 claims whether which object or surface is being
09:24:46 20 used to perform the method of administration,
09:24:48 21 correct?
09:24:50 22 MR. PALEN: Objection. Asked and
09:24:58 23 answered. You may answer, Dr. Reid.
09:25:01 24 A. Would you repeat the question,
09:25:03 25 Mr. Conrad?

09:25:04 1 Q. It doesn't matter for the claims
09:25:06 2 whether -- or which object or surface is being
09:25:12 3 used to perform the method of administration,
09:25:14 4 correct?

09:25:15 5 MR. PALEN: Same objection.

09:25:17 6 A. Well, I would adhere to the
09:25:22 7 definition of or the construction of "object."
09:25:28 8 This is a functional definition, object plus
09:25:31 9 drop so as to facilitate efficient removal of
09:25:35 10 the drop from the object. That is all the
09:25:39 11 farther I went.

09:25:46 12 Q. How would a person of ordinary
09:25:48 13 skill in the art know whether the object plus
09:25:52 14 drop facilitates efficient removal of the drop
09:25:56 15 from the object?

09:25:57 16 A. Well, they could perform
09:26:01 17 experiments like the Vieth's did, as explained
09:26:04 18 in the patent.

09:26:05 19 Q. They wouldn't know it just by
09:26:07 20 looking at it?

09:26:08 21 A. Looking at what?

09:26:09 22 Q. The object and knowing the
09:26:12 23 composition itself.

09:26:17 24 A. I'm sorry, could you clarify the
09:26:20 25 question?

09:26:20 1 Q. Sure. A person of ordinary skill
09:26:22 2 in the art wouldn't know whether the object
09:26:24 3 plus the drop facilitates efficient removal of
09:26:28 4 the drop from the object simply by knowing the
09:26:31 5 composition of the drop and knowing what the
09:26:35 6 surface of the object is?

09:26:38 7 A. I believe that's probably the
09:26:45 8 case. In fact, that seems to be the problem
09:26:47 9 confronting the Vieths when they performed a
09:26:51 10 number of experiments comparing those very two
09:26:57 11 things.

09:27:17 12 Q. So it is your opinion, then, that
09:27:20 13 not just any surface will suffice, right?

09:27:30 14 MR. PALEN: Objection. Asked and
09:27:45 15 answered.

09:27:45 16 A. Mr. Conrad, I've explained already
09:27:48 17 that it is not just the nature of the object
09:27:49 18 but rather the combination of object plus
09:27:52 19 nature of drop that would inform the efficient
09:27:57 20 removal of the drop from that object.

09:28:04 21 Q. Well, your declaration in
09:28:05 22 paragraph 26 you state that, quote "not just
09:28:09 23 any liquid triglyceride and not just any
09:28:12 24 surface will suffice."

09:28:16 25 Is that an accurate statement for

09:28:21 1 your opinion?

09:28:26 2 A. Yes. So far as that statement is
09:28:30 3 faithfully quoted in my statement, yes, I would
09:28:33 4 agree with that.

09:28:34 5 Q. Would any liquid medium chain
09:28:42 6 triglyceride suffice?

09:28:44 7 A. I don't know. It would have to be
09:28:46 8 tested. Again, it was the combination of that,
09:28:52 9 as I point out in the second part of the
09:28:55 10 sentence you did not quote, it's "the
09:28:57 11 combination of the two that establishes a
09:28:59 12 relationship of adherence so that a nutritional
09:29:03 13 or therapeutic effective dose is administered
09:29:05 14 to a human by licking or sucking."

09:29:08 15 Q. Okay. Then based on that, I
09:29:14 16 understand it to be important to your opinion
09:29:16 17 that in order to fall within the scope of the
09:29:20 18 claims, that a nutritional or therapeutic
09:29:25 19 effective dose must in fact be administered to
09:29:29 20 a human, right?

09:29:31 21 THE WITNESS: I'm going to pause.

09:29:33 22 Madam Court Reporter, we seem to have
09:29:37 23 lost Mr. Palen.

09:29:38 24 MR. CONRAD: Sure. Let's go off
09:29:40 25 the record.

09:29:41 1 (Proceedings recessed at
09:31:31 2 9:29 a.m., and reconvened at 9:34 a.m.)
09:31:31 3 BY MR. CONRAD:
09:34:37 4 Q. Dr. Reid, is it important to your
09:34:43 5 opinion that in order to fall within the scope
09:34:45 6 of the claims a nutritional or therapeutic
09:34:50 7 effective dose must in fact be administered to
09:34:53 8 a human?

09:35:01 9 A. Yes.

09:35:01 10 Q. And let me make sure I'm more
09:35:04 11 clear about that. Is it important to your
09:35:07 12 opinion that a human actually receive a
09:35:13 13 nutritional or therapeutically effective dose?

09:35:16 14 A. I believe the method is such that
09:35:38 15 it delivers a therapeutic, if I may consult the
09:35:42 16 -- well, not having the advantage of looking at
09:35:45 17 the claims at the moment, delivering a
09:35:49 18 therapeutic or nutritional dose of vitamin D.

09:35:54 19 MR. CONRAD: Let me drop in the
09:35:55 20 Chat what's previously marked as Exhibit
09:36:01 21 1001, which is the '958 patent. And you
09:36:05 22 can refer to that if you need to look at
09:36:07 23 the claim language itself.

09:36:29 24 (Document previously marked for
09:36:29 25 identification as Exhibit 1001)

09:36:10 1 Q. So with that in front of you, I
09:36:12 2 wanted to ask the question again. Is it
09:36:14 3 important to your opinion that a human actually
09:36:17 4 receive a nutritional or therapeutic effective
09:36:21 5 dose?

09:36:36 6 A. Just a moment. I am still
09:36:38 7 downloading the patent. It seems to have hung
09:36:42 8 up.

09:36:42 9 MR. CONRAD: Let's go off the
09:36:44 10 record again. We lost Mr. Palen.

09:36:47 11 (Proceedings recessed at
10:01:07 12 9:36 a.m., and reconvened at 10:01 a.m.)

10:01:07 13 BY MR. CONRAD:

10:01:16 14 Q. Dr. Reid, is it important to your
10:01:26 15 opinion that a human actually receive a
10:01:30 16 nutritional and therapeutic effective dose?

10:01:34 17 A. It's important, according to the
10:01:38 18 claim language, that a nutritional or
10:01:42 19 therapeutic amount of vitamin D is delivered to
10:01:44 20 the human being.

10:01:46 21 Q. What do you mean by that? How
10:01:50 22 does that differ from the way my question was
10:01:54 23 asked?

10:01:55 24 A. I believe the difference resides
10:01:59 25 in "delivered" versus "received." The claim

10:02:04 1 requires a -- or, rather, recites a method of
10:02:07 2 delivering such an amount to a human. The
10:02:11 3 claim does not recite the human receiving it.
10:02:15 4 Rather, my opinion is tied only to delivery of
10:02:19 5 that amount of vitamin D.

10:02:22 6 Q. Okay. Let me make sure I
10:02:24 7 understand the distinction. So if, for
10:02:26 8 example, a drop of the claim composition is put
10:02:33 9 onto a pacifier and that pacifier is given to a
10:02:41 10 baby, is it your opinion that it doesn't matter
10:02:44 11 how long the baby sucks on the pacifier in
10:02:47 12 order for the claim limitation to be met?

10:02:51 13 A. I have not tied my opinion to any
10:02:54 14 time frame.

10:03:00 15 Q. So delivery then is placing a drop
10:03:02 16 on a surface and then providing that surface to
10:03:06 17 the human, right?

10:03:14 18 A. Providing the object to the human.

10:03:15 19 Q. And it's not required to meet the
10:03:20 20 claim limitation, then, that the human actually
10:03:26 21 remove any of the composition of the drop from
10:03:30 22 the surface, right?

10:03:33 23 MR. PALEN: I'm going to object to
10:03:35 24 the extent it calls for a legal
10:03:40 25 conclusion.

10:03:40 1 A. Again, Mr. Conrad, my opinion is
10:03:43 2 tied to the method of delivering that amount to
10:03:46 3 a human. I don't wander beyond that.

10:03:52 4 Q. All right. I do want to make it
10:03:58 5 clear, though, your opinion doesn't require
10:04:02 6 that the human actually remove any of the
10:04:04 7 composition of the drop from the surface,
10:04:08 8 right?

10:04:09 9 A. Well, you're asking me, I believe,
10:04:13 10 to engage in a bit of mental gymnastics or
10:04:19 11 sophistry. I don't see how an amount would be
10:04:23 12 delivered and not received, but I am tying my
10:04:26 13 opinion to the claim language, which is a
10:04:29 14 delivery of that amount of vitamin D.

10:04:32 15 Q. Well, one distinction is that you
10:04:36 16 can deliver something but not all of it is
10:04:39 17 received, right?

10:04:41 18 So is it sufficient that the
10:04:47 19 surface with the drop on it is provided to the
10:04:52 20 human, or are you saying it's required that the
10:04:56 21 human receive all of the drop that's on the
10:04:59 22 surface?

10:05:01 23 A. I haven't opined on a human being
10:05:07 24 required to receive. Rather, my opinion was
10:05:09 25 tied, again, to that amount of vitamin D being

10:05:13 1 delivered to a human on the object.

10:05:20 2 Q. I'm not trying to get in sophistry
10:05:24 3 here. I'm trying to understand what you mean
10:05:28 4 by this.

10:05:29 5 So then your view of the claim
10:05:31 6 that you're applying your opinion is that it's
10:05:36 7 important that a nutritional and
10:05:39 8 therapeutically effective dose be provided on
10:05:46 9 the surface to the human, right?

10:05:48 10 A. No. Again, delivered to by
10:05:54 11 providing the drop on the surface or on the
10:05:57 12 object.

10:05:58 13 Q. What's the difference between
10:06:00 14 providing the drop on a surface, delivering to
10:06:04 15 the human, and receiving by the human?

10:06:07 16 A. You're asking me to speculate?

10:06:12 17 Q. No. I'm just trying to understand
10:06:14 18 how you're applying the claims. So I'm trying
10:06:16 19 to figure out the difference between those
10:06:19 20 three because it seems like you're making a
10:06:21 21 distinction, and I want to understand what that
10:06:28 22 distinction was.

10:06:28 23 A. I was not trying to make a
10:06:31 24 distinction, but rather, again, cabin my
10:06:34 25 opinion to the claim language of delivering the

10:06:39 1 amount of vitamin D, specifically the
10:06:41 2 nutritional or therapeutic amount of vitamin D.
10:06:46 3 Whether that is synonymous with receipt of that
10:06:51 4 amount or simply providing that amount, I don't
10:06:57 5 know. I haven't opined on that.

10:06:59 6 Q. Okay. What are you basing the
10:07:06 7 requirement that a certain amount of vitamin D
10:07:10 8 be delivered as part of the claim?

10:07:17 9 A. Well, the claim preamble.

10:07:26 10 Q. Anything else?

10:07:27 11 A. No.

10:07:32 12 Q. You are not proficient in the
10:07:53 13 German language, correct?

10:07:55 14 A. That's correct.

10:07:57 15 Q. And you're not -- are you even a
10:08:01 16 little bit proficient? Are you familiar with
10:08:03 17 the -- with reading German texts?

10:08:06 18 A. No.

10:08:08 19 Q. So then you would not be competent
10:08:24 20 to opine on whether a particular translation is
10:08:30 21 an accurate reflection of the text -- of a
10:08:36 22 German text in English, correct?

10:08:38 23 A. Correct.

10:08:40 24 Q. In your declaration you talk about
10:09:13 25 the differences between the various

10:09:16 1 translations of the Harder reference. In
10:09:21 2 paragraph 45 you state:
10:09:21 3 "For reasons that I discuss below,
10:09:24 4 reliance upon Sherman or Benyunes,
10:09:28 5 however ill-advised, still would not
10:09:30 6 alter my opinion on non-obviousness. "
10:09:36 7 Do you see that?
10:09:37 8 A. Yes.
10:09:38 9 Q. Part of the reason you're making
10:09:44 10 this distinction between the translations is
10:09:46 11 the presence or absence of the phrase to the
10:09:49 12 effect of "to lick off," right?
10:09:55 13 A. "To be licked off." I quote that
10:09:58 14 above.
10:09:59 15 Q. Okay. Now, if the Board decides
10:10:05 16 that an accurate translation includes that
10:10:11 17 language, why would that not affect your
10:10:13 18 opinion on non-obviousness?
10:10:18 19 A. For at least two reasons. I
10:10:20 20 explain below that Harder, whichever
10:10:24 21 translation of Harder you pick, is not a
10:10:28 22 reference that a person of ordinary skill in
10:10:33 23 the art would consult.
10:10:36 24 Q. Okay. So that's one reason.
10:10:38 25 What's the other reason?

10:10:40 1 A. And, secondly, that my experiments
10:10:49 2 refute the notion that a drop of MCT oil with
10:10:56 3 vitamin D remains on the tip of a spoon so that
10:11:02 4 it can be efficiently removed.

10:11:05 5 Q. Okay. Let's go to -- let's talk
10:11:10 6 about the first reason. I'm looking at
10:11:17 7 paragraph 55 in your declaration. I think this
10:11:19 8 is what you were referring to.

10:11:33 9 It's essentially your opinion that
10:11:34 10 a person of ordinary skill in the art would not
10:11:37 11 have consulted Harder; is that correct?

10:11:46 12 A. Which translation of Harder?

10:11:48 13 Q. Well, any translation of Harder.
10:11:50 14 The German, English, whatever. I believe what
10:11:54 15 you're saying is that it's essentially your
10:11:57 16 opinion that a person of ordinary skill in the
10:11:58 17 art would not have consulted Harder at all. Am
10:12:01 18 I misstating that?

10:12:02 19 A. No. I feel that that's generally
10:12:07 20 correct.

10:12:08 21 Q. And part of the reason is because
10:12:24 22 Harder is a text that is written by a midwife;
10:12:33 23 is that fair to say?

10:12:40 24 A. Yes. That is in part correct.

10:12:42 25 Q. And then what else is the reason

10:12:45 1 why Harder would not be consulted by a POSITA
10:12:50 2 in your opinion?

10:12:51 3 A. Well, you stated one part that is
10:12:54 4 correct; that is, his reference work was
10:12:58 5 authored and/or edited by a midwife, but its
10:13:02 6 target audience is also midwives.

10:13:10 7 Q. Why does that matter? Let's
10:13:13 8 assume, for example, that a pediatrician or an
10:13:20 9 individual researching the formulation and
10:13:24 10 delivery of pharmaceuticals found Harder. Why
10:13:29 11 would it matter who authored or edited it or
10:13:32 12 what its target audience was?

10:13:35 13 A. Because, as I point out in my
10:13:39 14 declaration, the Table of Contents itself,
10:13:43 15 assuming the person of ordinary skill in the
10:13:46 16 art would read German in the first instance,
10:13:49 17 could tell exactly or at least see a fairly
10:13:53 18 detailed summary of what the reference text
10:13:56 19 addresses; the problems, the challenges that
10:14:02 20 the reference is intended to address. And none
10:14:05 21 of those, in my opinion, align with any of
10:14:11 22 delivering of vitamin D, of formulations, of
10:14:17 23 pharmaceuticals generally.

10:14:20 24 In fact, none of those that I just
10:14:22 25 recited appear in any of the topics in the

10:14:24 1 Table of Contents.

10:14:26 2 Q. Well, in paragraph 57 of your

10:14:32 3 declaration, you list the Table of Contents.

10:14:41 4 Wouldn't the delivery of vitamin D be part of

10:14:46 5 postpartum care at home?

10:14:50 6 A. I have no idea. I'm not involved,

10:14:52 7 nor am I skilled in postpartum care.

10:14:58 8 Q. Wouldn't how to administer vitamin

10:15:00 9 D, couldn't it be a frequently asked question

10:15:02 10 from parents about newborns and infant care?

10:15:12 11 A. Clarify it, please?

10:15:14 12 Q. Wouldn't a question of how to

10:15:15 13 administer vitamin D be a frequently asked

10:15:17 14 questions from parents about newborns and

10:15:22 15 infant care?

10:15:23 16 MR. PALEN: Objection to the

10:15:24 17 extent it calls for speculation.

10:15:27 18 A. Mr. Conrad, I don't know.

10:15:34 19 Q. Okay.

10:15:34 20 A. What I do know is that frequently

10:15:36 21 asked questions from parents about newborns and

10:15:39 22 infant care reading in English says nothing

10:15:45 23 about delivery of vitamin D.

10:15:56 24 MR. CONRAD: Let's go to

10:16:03 25 marking -- I'm dropping into the Chat

10:16:06 1 what's premarked as Exhibit 1025. This
10:16:10 2 is the Supplemental Declaration of June
10:16:14 3 Munford that petitioners submitted.

10:16:19 4 (Document previously marked for
10:16:21 5 identification as Exhibit 1025)

10:16:21 6 Q. Please let me know when you have
10:16:22 7 that open.

10:16:36 8 A. Okay. Mr. Conrad, I have that
10:16:38 9 open.

10:16:38 10 Q. Do you see in paragraph 15,
10:16:40 11 Ms. Munford notes that the catalog, library
10:16:44 12 catalog, for Harder lists topics of, quote
10:16:49 13 "'Postnatal Care,'" end quote, quote,
10:16:55 14 "'Postnatal Care methods,'" end quote, and,
10:17:00 15 quote, "'Postpartum Period'"?

10:17:04 16 Do you see that?

10:17:05 17 A. I see that sentence.

10:17:07 18 Q. Are you familiar with what a
10:17:09 19 person of ordinary skill in the art would
10:17:10 20 understand postnatal care to be?

10:17:16 21 A. And specifically which art are we
10:17:18 22 speaking of?

10:17:18 23 Q. A person of ordinary skill of the
10:17:21 24 art in the patent.

10:17:21 25 A. Well, Drs. Vieth and Horowitz

10:17:27 1 spoke to this, and particularly their opinion
10:17:34 2 on whether midwifery is relevant to the skill
10:17:38 3 of the art, and I believe they came down on the
10:17:40 4 side of, no, it's not.

10:17:41 5 Q. I didn't ask about midwifery. My
10:17:44 6 question was just specific to your
10:17:46 7 understanding.

10:17:47 8 Do you understand what "postnatal
10:17:49 9 care" would encompass or what a person of
10:17:52 10 ordinary skill in the art would understand it
10:17:55 11 to encompass?

10:17:56 12 A. Professionally, no. Personally
10:18:01 13 having raised two children, yes. Generally the
10:18:04 14 care of a baby following birth.

10:18:07 15 Q. And you would agree that care of a
10:18:15 16 baby following birth is the problem that is
10:18:22 17 trying to be solved by the '958 patent, right?
10:18:25 18 At least one of the things that is needed to
10:18:27 19 take care of a baby following birth, right?

10:18:29 20 A. I believe that Dr. Vieth outlined
10:18:35 21 five factors that -- interrelated factors that
10:18:40 22 concern the problem of delivering vitamin D.
10:18:43 23 That's a quite specific problem. I don't know
10:18:45 24 if that falls within your view of postnatal
10:18:51 25 care, but that is my opinion.

10:18:52 1 Q. Do you agree that one of the
10:19:47 2 problems that was trying to be solved by
10:19:51 3 Dr. Vieth was parental frustration in babies
10:19:55 4 rejecting vitamin D formulations, right?

10:19:58 5 A. I believe he did say that.

10:20:00 6 Q. And problems with infant
10:20:05 7 aspiration of vitamin D formulations
10:20:07 8 administered directly into the mouth, right?

10:20:13 9 A. I don't have the declaration right
10:20:15 10 in front of me, but as best as I can recall, he
10:20:18 11 said that.

10:20:19 12 Q. And you would agree that both of
10:20:20 13 those problems are problems associated with the
10:20:23 14 care of a baby following birth, right?

10:20:25 15 A. Again, I'm not an expert in
10:20:30 16 pediatrics, so I cannot opine on that.

10:20:38 17 Q. So I understand part of your
10:20:46 18 concern here is this a textbook by and for
10:20:51 19 midwives. What if it was an article published
10:20:54 20 in The New York Times, would that change your
10:20:57 21 opinion?

10:20:57 22 MR. PALEN: Objection. Calls for
10:21:07 23 speculation.

10:21:07 24 Q. Well, let me ask you a couple of
10:21:09 25 questions about that. So, first, you would

10:21:11 1 agree that The New York Times is a widely read

10:21:15 2 newspaper, right?

10:21:15 3 A. I believe that's the case, yes.

10:21:17 4 Q. I think we can assume that medical

10:21:19 5 doctors, pediatricians, researchers, and the

10:21:23 6 like, at least some of them are reading The New

10:21:26 7 York Times, right?

10:21:28 8 MR. PALEN: Objection. Calls for

10:21:29 9 speculation.

10:21:29 10 A. I cannot comment on anyone

10:21:36 11 specifically, Mr. Conrad. I don't read The New

10:21:41 12 York Times.

10:21:41 13 Q. What do you regularly read, as far

10:21:46 14 as news is concerned?

10:21:51 15 MR. PALEN: Objection, as

10:21:54 16 irrelevance.

10:22:00 17 Q. Do you read The Wall Street

10:22:02 18 Journal?

10:22:02 19 A. I do not.

10:22:04 20 Q. Do you read CNN.com?

10:22:07 21 A. Very irregularly.

10:22:12 22 Q. Simple question. What news do you

10:22:16 23 regularly consult?

10:22:18 24 A. When I do, it is our local paper

10:22:20 25 published in Salem.

10:22:23 1 Q. All right. So like a local
10:22:27 2 newspaper?
10:22:27 3 A. That's correct.
10:22:30 4 Q. All right. If a journalist for
10:22:35 5 that local newspaper had published the same
10:22:38 6 information that's in Harder, in which case
10:22:43 7 it's not written by a midwife, it's written by
10:22:50 8 a journalist, would that matter to you as far
10:22:54 9 as whether a person of ordinary skill in the
10:22:56 10 art would consider that information?
10:22:59 11 MR. PALEN: Objection, as
10:23:02 12 irrelevance and speculation.
10:23:09 13 A. I'm not sure I can answer that,
10:23:12 14 Mr. Conrad.
10:23:12 15 Q. Why not?
10:23:14 16 A. There are plenty of articles in
10:23:16 17 the newspaper that I see that don't concern me
10:23:19 18 in the least. I certainly don't look to them.
10:23:23 19 Stock prices, for instance. They're there.
10:23:26 20 Everyone reads those, or at least some people
10:23:29 21 do, but I don't.
10:23:30 22 Q. What if the information was
10:23:43 23 published instead by a parent in a widely
10:23:46 24 viewed blog post about child care that's
10:23:48 25 directed to new parents of newborns, would

10:23:52 1 that --

10:23:53 2 MR. PALEN: Same objection.

10:23:54 3 Q. Sorry.

10:23:55 4 -- would that change your opinion

10:23:58 5 as to whether it be considered by a person of

10:24:02 6 ordinary skill in the art?

10:24:03 7 MR. PALEN: Same objections.

10:24:04 8 A. Mr. Conrad, would you repeat or

10:24:09 9 clarify the question?

10:24:10 10 Q. Sure. Assume that the information

10:24:15 11 at Harder had been published in a widely viewed

10:24:20 12 blog post about child care in a blog that's

10:24:23 13 directed to parents of newborns and the care of

10:24:27 14 their newborns, would that change your opinion

10:24:29 15 as to whether a person of ordinary skill in the

10:24:31 16 art would consider that publication?

10:24:34 17 A. Probably not.

10:24:35 18 MR. PALEN: Same objections.

10:24:40 19 A. Probably not. After all, in my

10:24:43 20 declaration I do point out the person of

10:24:46 21 ordinary skill in the art would consult

10:24:50 22 authorities who are like-minded; that is, I

10:24:52 23 mean, doctors of pharmaceuticals and the like,

10:24:57 24 and also consult publications of those experts,

10:25:00 25 for example, treatises, primary journal

10:25:04 1 articles, review articles. I do not include
10:25:10 2 blog articles posted by and for parents.

10:25:13 3 Q. And why is it important that it be
10:25:15 4 like-minded and like-educated authorities?

10:25:23 5 A. Well, in my experience as an
10:25:25 6 expert in chemistries, those are exactly the
10:25:28 7 kind of materials that I consult. Similarly
10:25:32 8 engaged in the -- I'm putting myself in the
10:25:38 9 shoes of the hypothetical person of ordinary
10:25:40 10 skill in the art, they, too, would consult
10:25:44 11 authorities who are engaged in the similar
10:25:47 12 field.

10:25:48 13 Q. And it's your opinion that a
10:25:49 14 person of ordinary skill in the art would
10:25:52 15 reject any publication that's based on the
10:25:57 16 wisdom and experience of an individual of less
10:26:01 17 education?

10:26:03 18 A. Dr. Vieth and Dr. Horowitz did. I
10:26:08 19 rely on their expertise.

10:26:10 20 Q. What about your opinion? Do you
10:26:18 21 still think that a person of ordinary skill in
10:26:20 22 the art would reject any publication that's
10:26:22 23 based on the wisdom and experience of an
10:26:25 24 individual of lesser education?

10:26:27 25 A. Here I don't think it's more or

10:26:32 1 less, rather it is different education. But
10:26:33 2 lesser, yes. I believe even Harder herself
10:26:36 3 points out that she distinguishes her reference
10:26:41 4 from obstetrics, for instance, a text on
10:26:48 5 obstetrics.

10:26:49 6 I'm not a medical expert, but I
10:26:51 7 believe that is -- that that points out degrees
10:26:52 8 of education and experience.

10:27:04 9 MR. CONRAD: I'm dropping into
10:27:06 10 Chat what's previously marked as
10:27:08 11 Exhibit 2070.

10:27:09 12 (Document previously marked for
10:27:09 13 identification as Exhibit 2070)

10:27:37 14 Q. That should be uploaded now. Let
10:27:57 15 me know when you have that open.

10:27:59 16 A. Yes, I have it open now.

10:28:00 17 Q. Okay. If you can turn to page 22
10:28:11 18 of the document, which is the section titled
10:28:15 19 "Preface," and the translation that
10:28:17 20 petitioner's translator later provided.

10:28:32 21 A. Preface in English, correct?

10:28:34 22 Q. Yes.

10:28:34 23 A. I'm on that page now.

10:28:36 24 Q. Okay. The second sentence says:

10:28:38 25 "During my professional work, I

10:28:40 1 have repeatedly noticed that the
10:28:43 2 postpartum period is scarcely covered in
10:28:47 3 obstetric textbooks. To close this gap,
10:28:51 4 I wrote" the reference that we've been
10:28:55 5 referring to.

10:28:57 6 Is that what you're talking
10:28:58 7 about when you say that she distinguishes
10:29:00 8 her reference from obstetrics?

10:29:05 9 A. I'd have to look at my declaration
10:29:23 10 to see exactly what the cite is, but that seems
10:29:27 11 probably correct.

10:29:31 12 Q. She's not saying that her textbook
10:29:34 13 is different than obstetrics, but rather that
10:29:41 14 she is covering the postpartum period which is
10:29:46 15 only scarcely covered in obstetrics textbooks,
10:29:51 16 right?

10:29:51 17 MR. PALEN: Objection. Misstates
10:29:52 18 the evidence. Also calls for
10:30:03 19 speculation.

10:30:03 20 A. While you and I could read the
10:30:05 21 same sentence here, I'm hardly qualified to
10:30:08 22 comment on all obstetric textbooks. I only
10:30:12 23 note that Harder distinguishes her work from
10:30:15 24 obstetric textbooks. Presumably, that was a
10:30:20 25 motivation for her to write this or at least

10:30:22 1 edit this reference work. That is all.

10:30:26 2 Q. Okay. Apologies for talking over
10:30:29 3 you.

10:30:30 4 And she does note in the next
10:30:32 5 sentence, or in that sentence, that she -- her
10:30:38 6 text grew into a comprehensive textbook during
10:30:41 7 the editing period, right?

10:30:42 8 A. Yes, that's what it says.

10:30:47 9 Q. And then if you can go to page 21
10:31:02 10 of 28, so that's the previous page.

10:31:10 11 A. Is this the one that begins with
10:31:12 12 the words "Bibliographic information"?

10:31:17 13 Q. Yes.

10:31:17 14 A. All right. I'm on that page.

10:31:19 15 Q. Okay. She says near the top of
10:31:23 16 the right column quote:

10:31:26 17 "If a dosage or an application is
10:31:28 18 mentioned in this work, the reader can
10:31:31 19 trust that the authors, editors and
10:31:33 20 publishers have taken great care to
10:31:35 21 ensure that this information corresponds
10:31:38 22 to the state of knowledge at the time
10:31:41 23 the work was completed."

10:31:42 24 Do you see that?

10:31:43 25 A. I see that.

10:31:43 1 Q. So she is stating that she
10:31:49 2 believes that the information in her textbook
10:31:53 3 represents the state of knowledge at the time
10:31:55 4 the work was completed, right?

10:32:02 5 A. I can't comment as to what she
10:32:04 6 believed.

10:32:04 7 Q. Of course. But that's what she
10:32:06 8 states, right?

10:32:08 9 A. Yes, I agree with the words; that
10:32:10 10 they're on the page. As to what "state of
10:32:14 11 knowledge" was and "at the time," I don't know.

10:32:18 12 Q. So part of what -- well, I'm not
10:33:16 13 sure exactly where it is in your opinion, so
10:33:18 14 let me just ask you. Is it your opinion that
10:33:24 15 in order to meet the limitations of the claim,
10:33:27 16 that Harder must disclose that her method is
10:33:33 17 effective?

10:33:34 18 A. And which translation of Harder
10:33:40 19 are you referring to?

10:33:42 20 Q. Either -- any translation. It
10:33:44 21 doesn't matter. I'm just asking you generally
10:33:46 22 about how you're approaching the reference.

10:33:49 23 Is it your opinion that in order
10:33:50 24 to meet the limitations of the claim, Harder
10:33:54 25 must disclose that her method is effective?

10:34:00 1 A. It's my opinion that it's
10:34:11 2 important whether Harder discloses the delivery
10:34:15 3 of an effective or nutritional dose of
10:34:21 4 vitamin D.

10:34:23 5 Q. But I want to make sure we're
10:34:36 6 clear about this. Do you believe that the
10:34:44 7 claim requires that the human receive the
10:34:53 8 delivery of an effective or nutritional dose of
10:34:58 9 vitamin D?

10:34:59 10 A. I see we're back to that question.
10:35:06 11 I thought I've already answered this. My
10:35:09 12 opinion rests on the claim language of
10:35:13 13 "delivery of a therapeutic or nutritional
10:35:17 14 effective dose of vitamin D." That is all.

10:35:20 15 Q. Right.

10:35:21 16 A. Delivery of an amount.

10:35:23 17 Q. Okay. So let me ask you this. Is
10:35:29 18 it necessary for your opinion that that
10:35:30 19 delivery be successful? Does the claim require
10:35:37 20 that?

10:35:38 21 A. Would you define "successful"?

10:35:42 22 Q. I'm actually looking for your
10:35:44 23 opinion here. I'm not trying to define it, so
10:35:46 24 I can't do that, but feel free to explain
10:35:52 25 your -- how you would understand it to be. I'm

10:35:54 1 just trying to understand if you -- your
10:35:58 2 opinion requires that the delivery of the dose
10:36:03 3 that's in the claim be successful?

10:36:08 4 A. All right. Then I won't use the
10:36:14 5 word "successful," but "achieved" or
10:36:16 6 "completed" or "attained" I think would be
10:36:19 7 sufficient synonyms for that.

10:36:22 8 Q. Okay.

10:36:24 9 A. In supporting my opinion.

10:36:25 10 Q. Okay. So, then, you would -- you
10:36:32 11 think it's necessary that the claim requires
10:36:37 12 that the delivery be achieved or completed or
10:36:41 13 attained, right?

10:36:42 14 A. That's a fair summary.

10:36:52 15 Q. Let's turn to the subject of the
10:37:46 16 tests that you performed; okay? It looks like
10:38:00 17 you performed essentially two tests: One with
10:38:08 18 a spoon where you've measured an angle of
10:38:16 19 0 degrees for the bowl and one where you set
10:38:23 20 the spoon at an angle where the bowl has an
10:38:27 21 angle of 14.8 degrees; is that right?

10:38:37 22 A. That's correct.

10:38:38 23 Q. Did you perform any other tests at
10:38:41 24 any other angles?

10:38:43 25 A. No, I did not.

10:38:45 1 Q. Why did you choose those two
10:38:47 2 angles?

10:38:48 3 A. I explain that I chose the spoon
10:38:56 4 angle of 14.8 degrees because, in my
10:39:01 5 estimation, that would approximate the angle of
10:39:03 6 a spoon that someone would offer to as if they
10:39:08 7 were feeding or delivering, you know, a
10:39:11 8 substance to someone else at their mouth.

10:39:15 9 I chose 0 degrees, more or less,
10:39:18 10 as a baseline. A comparator, if you will.

10:39:23 11 Q. Why didn't you choose any greater
10:39:25 12 angle?

10:39:30 13 A. Because I estimated that my target
10:39:34 14 angle of 15 degrees, in this case 14.8 degrees,
10:39:40 15 was close enough based on certainly my personal
10:39:45 16 experience of feeding myself, feeding children,
10:39:47 17 and observing those others feeding other human
10:39:50 18 beings.

10:39:55 19 Q. So you did not conduct a test at a
10:39:59 20 greater angle to see if at a greater angle the
10:40:05 21 drop did not roll away at all, right?

10:40:12 22 A. These are the only two experiments
10:40:14 23 I performed, 0 degrees and 14.8 degrees.

10:40:54 24 Q. So you don't have a test that
10:41:02 25 confirms that there is no angle at which this

10:41:07 1 drop could be placed on the tip of a spoon
10:41:13 2 without a film or coating of oil extending from
10:41:19 3 the tip of the spoon, right?

10:41:21 4 MR. PALEN: Objection. Asked and
10:41:22 5 answered.

10:41:22 6 A. I can only comment on the two
10:41:25 7 experiments that I did perform at 0 degrees and
10:41:28 8 14.8 degrees, and the results that I report in
10:41:33 9 my declaration.

10:41:34 10 Q. Okay. But those conclusions --
10:41:37 11 the conclusion cannot be drawn from your
10:41:42 12 results that there is no angle at which the
10:41:45 13 drop could be placed on the spoon without
10:41:48 14 leaving a film or coating of oil extending from
10:41:50 15 the tip, right?

10:41:51 16 A. I can't speculate on the results
10:41:54 17 of experiments I haven't performed.

10:41:57 18 Q. And you didn't perform any tests
10:42:04 19 comparing the results with water and how it
10:42:06 20 performs, right?

10:42:07 21 A. I did not use water in my tests.

10:42:11 22 Q. All right. You didn't perform any
10:42:22 23 tests, even if it's not perfectly reproducible,
10:42:25 24 you didn't perform any tests simply by holding
10:42:31 25 the spoon and seeing if you can hold it at an

10:42:33 1 angle where the drop does not roll away at all,
10:42:37 2 right?

10:42:38 3 MR. PALEN: Objection. Asked and
10:42:39 4 answered.

10:42:39 5 A. By "holding," do you mean with my
10:42:43 6 hand?

10:42:44 7 Q. With your hand, right.

10:42:46 8 A. I did not use my hand in the
10:42:48 9 experiments.

10:42:51 10 Q. So you didn't see if there is an
10:42:53 11 angle that you could naturally hold the spoon
10:42:56 12 at to confirm that the drop would or would not
10:43:00 13 roll away from the tip, right?

10:43:02 14 A. I can't answer that. But I can
10:43:04 15 say I had to use two spoon angles, 0 and 14.8
10:43:11 16 degrees, using an angle finder and two
10:43:15 17 machinist blocks.

10:43:26 18 Q. And it is true, though, that you
10:43:28 19 did not see any results in which the drop
10:43:36 20 rolled off the spoon, right?

10:43:38 21 A. In fact, I state in my declaration
10:43:41 22 that I designed the experiment so that it would
10:43:45 23 be, in my estimation, impossible for the drop
10:43:48 24 to separate in whole or in part from the spoon.

10:43:51 25 Q. So you don't have a test, then,

10:43:58 1 that demonstrates that at any particular angle
10:44:01 2 the drop would roll off the spoon, right?
10:44:04 3 A. Would you clarify, please?
10:44:08 4 Q. Sure. You don't have any test
10:44:12 5 that shows that there is an angle at which when
10:44:16 6 you put the drop on the tip of a spoon, that
10:44:20 7 drop would roll off the spoon?
10:44:23 8 A. I have only the two angles that I
10:44:25 9 reported on, 0 and 14.8 degrees.
10:44:29 10 Q. So that's a no, right?
10:44:32 11 A. I did not observe the drop
10:44:35 12 dropping off the spoon at either of those two
10:44:39 13 angles.
10:44:57 14 MR. CONRAD: Let's take a break.
10:44:59 15 (Proceedings recessed at
10:44:59 16 10:44 a.m., and reconvened at 10:56
10:56:30 17 a.m.)
10:56:30 18 BY MR. CONRAD:
10:56:35 19 Q. Dr. Reid, can you turn to your
10:56:41 20 declaration paragraph 78.
10:56:56 21 A. All right. I'm there.
10:56:57 22 Q. You point to Dr. Vieth for facts
10:57:01 23 as to whether or not infants possess the
10:57:04 24 ability to lick anything from surfaces or
10:57:07 25 whether it's possible for an infant to lick a

10:57:10 1 dose of anything from a spoon, right?

10:57:12 2 A. Yes, that is the gist of that
10:57:15 3 paragraph.

10:57:17 4 Q. Now, you agree that Dr. Vieth is
10:57:19 5 not an expert in pediatric care, right?

10:57:23 6 A. I do not agree or disagree on that
10:57:28 7 point. I don't think I said anything about
10:57:30 8 that.

10:57:30 9 Q. You don't know one way or the
10:57:33 10 other?

10:57:33 11 A. Dr. Vieth, without having seen his
10:57:38 12 declaration in front of me, speaks to
10:57:41 13 experience in feeding infants.

10:57:44 14 Q. I understand he speaks to it. I'm
10:57:48 15 just asking your understanding of his expertise
10:57:52 16 in that area. You don't understand him to be
10:57:56 17 an expert in pediatric care, right?

10:57:59 18 A. I'm not sure how I would define an
10:58:02 19 expert in pediatric care, but he opines on
10:58:06 20 infant behavior and I would look to him as an
10:58:11 21 expert in this area.

10:58:14 22 Q. An expert in infant behavior?

10:58:17 23 A. Yes.

10:58:18 24 Q. And what makes you say that?

10:58:24 25 A. Well, I cite to a number of his

10:58:30 1 statements in paragraph 78. I don't have
10:58:37 2 those -- again, I don't have the benefit of his
10:58:42 3 declaration in front of me, but he speaks to
10:58:45 4 experience in feeding infants. Moreover, his
10:58:51 5 statements are consistent I see with those of
10:58:55 6 Dr. Horowitz, who is an admitted expert.

10:59:05 7 Q. And paragraph 79 you point to the
10:59:14 8 testimony of Dr. Williams, Petitioner's expert,
10:59:18 9 who you state "was unable to state how many
10:59:22 10 licks an infant would need to perform to
10:59:25 11 receive an efficacious dose."

10:59:28 12 Do you see that?

10:59:29 13 A. Yes, I do.

10:59:32 14 Q. Is it your opinion that the claim
10:59:37 15 requires a certain number of licks to receive
10:59:39 16 an efficacious dose?

10:59:42 17 A. That was my opinion. I was simply
10:59:45 18 reinforcing what Dr. Williams testified to.

10:59:53 19 Q. Let me make sure your testimony is
10:59:55 20 correct. Your opinion is that the claim -- the
11:00:00 21 claims require that the human licks the surface
11:00:14 22 a certain number of times to receive an
11:00:16 23 efficacious dose; is that correct?

11:00:18 24 A. I said nothing about number of
11:00:21 25 times.

11:00:21 1 Q. Okay. That's what I'm trying to

11:00:23 2 understand.

11:00:23 3 A. Mm-hmm.

11:00:24 4 Q. But it's not your opinion that the

11:00:26 5 claim requires a certain number of licks to

11:00:32 6 receive an efficacious dose, right?

11:00:37 7 A. No, I'm not opining on the number

11:00:39 8 of licks or whether the claim requires a

11:00:42 9 certain number of licks.

11:00:43 10 Q. And the same would be true with

11:00:46 11 sucking. So you wouldn't -- it's not your

11:00:50 12 opinion that the claim requires that the human

11:00:54 13 suck on the surface for a certain number of --

11:01:02 14 certain amount of time, right?

11:01:02 15 A. I have not opined on a prescribed

11:01:18 16 amount of time.

11:01:18 17 Q. Let's turn to Harder. We have --

11:01:28 18 do you have Exhibit 1007 in front of you? If

11:01:37 19 not, I can drop it in the Chat. I can't recall

11:01:40 20 if we have already discussed it.

11:01:42 21 A. I do not believe it's in Chat. I

11:01:44 22 have a stack of printed materials next to me

11:01:47 23 that I have not yet consulted. It would be

11:01:50 24 easiest if you threw it in the Chat.

11:01:53 25 Q. Will do.

11:01:54 1 MR. CONRAD: I'm dropping in Chat
11:01:55 2 what's been premarked as Exhibit 1007.
11:01:58 3 (Document previously marked for
11:02:09 4 identification as Exhibit 1007)
11:02:09 5 Q. Please let me know when you have
11:02:12 6 it open.
11:02:18 7 A. All right. I've opened the
11:02:20 8 attachment.
11:02:20 9 Q. Can you turn to page on the
11:02:23 10 bottom, center bottom there are page number
11:02:27 11 markings. Please turn to page 6.
11:02:35 12 A. I'm on page 6 now.
11:02:38 13 Q. Do you see that Harder discloses
11:02:39 14 that one drop of Vigantol oil contains 500 IU,
11:02:48 15 correct?
11:02:49 16 A. Yeah, I would note this is the
11:02:51 17 Sherman translation of Harder, and I believe
11:02:54 18 you were referring to the first sentence under
11:02:57 19 "Option 3"; is that correct?
11:03:00 20 Q. Yes.
11:03:01 21 A. I see where it does say "1 drop
11:03:04 22 contains 500 IU."
11:03:11 23 Q. You have a conversion in your
11:03:24 24 declaration for converting IU per drop to
11:03:32 25 micrograms per milliliter in paragraph 103.

11:03:57 1 A. Was that a question, Mr. Conrad?

11:04:00 2 Q. Yes. In your paragraph you use
11:04:02 3 the conversions of 0.025 micrograms per IU and
11:04:07 4 1 drop per 0.033 milliliters, correct?

11:04:11 5 A. Yes, that's correct.

11:04:12 6 Q. And using those conversions with
11:04:15 7 the disclosure of Harder's 500 IU, Harder
11:04:22 8 discloses approximately 378 micrograms per
11:04:28 9 milliliter per drop -- per dose, right?

11:04:33 10 A. I've done the calculation in my
11:04:39 11 head, but that looks like a good estimate.

11:04:44 12 Q. Okay. Claim 1 of the patent has a
11:04:48 13 range of 9 to 9,000 micrograms per milliliter
11:05:02 14 of vitamin D, correct?

11:05:07 15 A. Yes.

11:05:07 16 Q. So Harder's disclosure of 500 IU
11:05:11 17 in a dose is within that range, correct?

11:05:17 18 A. Yes.

11:05:20 19 Q. And the same is true in Claim 4,
11:05:25 20 which has a range of 150 to 450 micrograms per
11:05:30 21 milliliter vitamin D. Harder falls within that
11:05:34 22 range, too, correct?

11:05:36 23 A. Assuming she's reporting
11:05:40 24 correctly, that number 378 I believe does fall
11:05:44 25 within that range.

11:05:51 1 MR. CONRAD: Let's turn to Wolf.

11:05:54 2 I'm dropping in Chat Exhibit 1009.

11:06:06 3 (Document previously marked for
11:06:16 4 identification as Exhibit 1009)

11:06:16 5 Q. Let me know when you have that
11:06:19 6 opened.

11:06:19 7 A. I believe you uploaded a copy of
11:06:21 8 the Sherman translation of Harder again. No,
11:06:26 9 my mistake. Beg your pardon.

11:06:41 10 Okay. I have open the translation
11:06:43 11 of Wolf.

11:06:46 12 Q. Okay. You see on page 8 there is
11:06:50 13 a table and one of the preparation's name is
11:06:54 14 Vigantol, correct?

11:06:58 15 A. Yes, I do see that.

11:07:00 16 Q. Okay. And you see the daily dose
11:07:03 17 disclosed there for Vigantol is 1 drop, right?

11:07:07 18 A. Yes, I see that.

11:07:08 19 Q. And then there is a description of
11:07:12 20 the formulation where 300 [sic] drops is 20,000
11:07:22 21 IU of D3.

11:07:25 22 Do you see that?

11:07:27 23 A. Yes.

11:07:27 24 Q. Okay. Now, I'm happy to walk
11:07:30 25 through the math, but I did some of the math

11:07:33 1 already, and Wolf's calculation there discloses
11:07:39 2 that 1 drop contains 505 micrograms per
11:07:44 3 milliliter of vitamin D, right?

11:07:47 4 A. I don't know if you're right or
11:07:51 5 not. I haven't done that calculation.

11:07:52 6 Q. Would you like me to walk through
11:07:54 7 it for you to be comfortable with that? Do you
11:07:59 8 have a calculator on your computer that you can
11:08:02 9 use that we can walk through it?

11:08:05 10 A. I do. Let's go through it.

11:08:08 11 Q. Okay. 20,000 IU divided by 30
11:08:21 12 drops is approximately 666 IU per drop,
11:08:33 13 correct?

11:08:33 14 A. I agree.

11:08:34 15 Q. Multiplied by .025 micrograms per
11:08:40 16 IU is approximately 16.67 micrograms per drop,
11:08:49 17 right?

11:08:50 18 A. Yes.

11:08:54 19 Q. And then dividing by .033
11:09:07 20 milliliters per drop results in approximately
11:09:10 21 505 micrograms per milliliter of vitamin D in a
11:09:16 22 drop, right?

11:09:17 23 A. Yes. I arrived at the same
11:09:18 24 number.

11:09:19 25 Q. All right. So Wolf discloses a

11:09:25 1 concentration of vitamin D in the drop within
11:09:29 2 the range of Claim 1, right?

11:09:31 3 A. Yes. 505 falls within the range
11:09:47 4 of 9 to 9,000 micrograms per milliliter.

11:09:53 5 MR. CONRAD: I'm dropping in the
11:09:55 6 Chat Exhibit 1012.

11:10:05 7 (Document previously marked for
11:10:10 8 identification as Exhibit 1012)

11:10:10 9 Q. And when you get that, can you
11:10:13 10 please open it to page 3?

11:10:29 11 A. I'm on page 3.

11:10:31 12 Q. In the first paragraph of the
11:10:34 13 text, the "Background" section, the article
11:10:36 14 states that:

11:10:37 15 "The new recommended adequate
11:10:39 16 intake of vitamin D by the National
11:10:43 17 Academy of Sciences (NAS) to prevent
11:10:44 18 vitamin D deficiency in normal infants,
11:10:47 19 children, and adolescents is 200 IU per
11:10:51 20 day. This differs from the 400 IU per
11:10:55 21 day that has been recommended in
11:10:57 22 previous editions of the Pediatric
11:10:59 23 Nutrition Handbook of the American
11:11:02 24 Academy of Pediatrics (AAP)."

11:11:03 25 Do you see that?

11:11:04 1 A. Yes, I do.

11:11:05 2 Q. Okay. Let's do this math for

11:11:08 3 400 IU and 200 IU. Do you have your calculator

11:11:14 4 handy?

11:11:15 5 A. I do.

11:11:15 6 Q. All right. 400 IU divided by --

11:11:21 7 I'm sorry, times .025 micrograms per IU is

11:11:35 8 approximately 10 micrograms -- I'm sorry, let's

11:11:42 9 start over. I did my math wrong. Scratch

11:11:45 10 that.

11:11:46 11 400 IU times .025 micrograms per

11:11:56 12 IU is 10 micrograms per drop, per dose, right?

11:12:09 13 A. Yes.

11:12:09 14 Q. And if one dose is 1 drop, then

11:12:18 15 divide that by .033 milliliters per drop, and

11:12:27 16 you result in approximately 303 micrograms per

11:12:31 17 milliliter in each dose, correct?

11:12:34 18 A. Yes, I agree.

11:12:36 19 Q. So you agree that Glass's

11:12:41 20 disclosure of 400 IU falls within the range of

11:12:46 21 Claim 1, right?

11:12:47 22 A. Whose disclosure?

11:12:51 23 Q. I'm sorry, did I say Glass?

11:12:54 24 Gartner. Gartner.

11:12:55 25 A. Yes, the 303 falls within the

11:12:58 1 recited range of Claim 1.

11:13:01 2 Q. And it also falls within the range

11:13:04 3 of Claim 4 as well, right?

11:13:15 4 A. Yes.

11:13:19 5 Q. All right. Gartner also discloses

11:13:22 6 the recommendation of 200 IU per dose, which is

11:13:25 7 half. So Gartner also discloses approximately

11:13:31 8 151 micrograms per milliliter in each dose,

11:13:34 9 right?

11:13:35 10 A. Yes.

11:13:38 11 Q. And so both of Gartner's

11:13:41 12 disclosures fall within claim -- the ranges of

11:13:46 13 Claims 1 and 4, correct?

11:13:51 14 A. Yes, I would agree.

11:13:52 15 Q. So we didn't actually go through

11:13:54 16 the math for Harder, but we can do that if you

11:13:58 17 want, or you can agree that 500 IU is

11:14:02 18 approximately 378 micrograms per milliliter of

11:14:07 19 vitamin D in each drop.

11:14:09 20 Do you want to go through that

11:14:10 21 exercise, or do you want to agree to that?

11:14:14 22 A. I'm comfortable with agreeing with

11:14:16 23 that. That sounds about right to my

11:14:19 24 estimation.

11:14:19 25 Q. Okay, thank you. That's a lot of

11:14:23 1 math for one day.

11:14:24 2 Dr. Reid, you also opine on some

11:14:30 3 secondary considerations; is that correct?

11:14:33 4 A. I opine on the existence of them,

11:14:36 5 yes.

11:14:36 6 Q. First you talked about "a

11:14:52 7 long-felt but unmet need to deliver a

11:14:56 8 therapeutically effective and correct amount of

11:15:00 9 vitamin D in a formulation that is acceptable

11:15:03 10 to infants," right?

11:15:04 11 A. To what part are you referring,

11:15:10 12 Mr. Conrad?

11:15:11 13 Q. Sure. Let's turn to paragraph 99

11:15:14 14 of your declaration.

11:15:15 15 A. Okay.

11:15:15 16 Q. You talk about "a long-felt but

11:15:15 17 unmet need to deliver a therapeutically

11:15:27 18 effective and correct amount of vitamin D in a

11:15:30 19 formulation that is acceptable to infants,"

11:15:34 20 right?

11:15:34 21 A. Yes.

11:15:36 22 Q. Harder discloses a method of

11:15:41 23 delivering an amount of vitamin D to infants,

11:15:47 24 right?

11:15:47 25 A. She discloses in any of the

11:16:05 1 translations the offering of a drop to an
11:16:09 2 infant.
11:16:10 3 Q. Okay. So the disclosure of Harder
11:16:29 4 helps solve an infant's need for vitamin D,
11:16:31 5 right?
11:16:32 6 A. I'm turning to Harder.
11:16:50 7 Specifically, the German -- excuse me, Sherman
11:16:55 8 translation. Would you repeat your question,
11:16:58 9 Mr. Conrad?
11:16:59 10 Q. Sure. You agree that the
11:17:02 11 disclosure of Harder helps solve an infant's
11:17:08 12 need for vitamin D, correct?
11:17:10 13 A. Which part of Harder?
11:17:13 14 Q. Any of it.
11:17:15 15 A. Well, I discuss or rather
11:17:18 16 acknowledge that she presents four options for
11:17:21 17 delivering therapeutically -- therapeutic
11:17:26 18 amounts of vitamin D to an infant.
11:17:31 19 Q. And one of those options is
11:17:33 20 delivering a drop of Vigantol oil on a spoon,
11:17:37 21 correct?
11:17:38 22 A. That is correct.
11:17:43 23 Q. And that method of delivering a
11:18:02 24 drop of Vigantol oil on a spoon helps solve an
11:18:06 25 infant's need for vitamin D, correct?

11:18:08 1 A. I don't know if it solves that
11:18:10 2 need.
11:18:11 3 Q. You don't know one way or the
11:18:13 4 other?
11:18:13 5 A. I don't.
11:18:14 6 Q. All right.
11:18:17 7 A. In fact, my experiments were
11:18:18 8 designed to show that it very well may not.
11:18:23 9 Q. Okay. But your experiments didn't
11:18:25 10 confirm that it doesn't, right?
11:18:27 11 A. I can't prove a negative,
11:18:30 12 Mr. Conrad.
11:18:35 13 Q. Well, your experiments don't
11:18:37 14 confirm that it's impossible to deliver a drop
11:18:42 15 of Vigantol oil to an infant on a spoon, right?
11:18:44 16 A. I wasn't dealing in the possible.
11:18:48 17 I just showed what was possible.
11:18:54 18 Q. In paragraph 101 you point out
11:19:29 19 that:
11:19:29 20 "The inventors of the '958 patent
11:19:32 21 solved problems attendant to
11:19:32 22 'then-available options such as cod
11:19:34 23 liver oil, Vigantol oil, and injectable
11:19:36 24 vitamin D. '"
11:19:38 25 And you point to Dr. Horowitz

11:19:40 1 for that, right?

11:19:43 2 A. In part, yes.

11:19:48 3 Q. And that problem was solved by a
11:19:51 4 formulation and method of delivery, right?

11:19:55 5 A. That's what I wrote. That's
11:19:58 6 correct.

11:19:58 7 Q. I don't believe it's your opinion
11:20:01 8 that Vigantol oil's formulation differs from
11:20:06 9 the formulation in the claims of the '958
11:20:12 10 patent; is that correct?

11:20:14 11 A. Well, we -- I have not examined a
11:20:18 12 sample of Vigantol oil, as it is unavailable to
11:20:21 13 me and, as far as I know, anyone in this
11:20:25 14 country. So I'm unable to make that rigorous
11:20:30 15 comparison.

11:20:31 16 Q. Sure. I asked you a bad question.
11:20:35 17 I don't believe it's your opinion that Harder's
11:20:38 18 disclosure of Vigantol oil's formulation
11:20:42 19 differs from the formulation in the claims of
11:20:45 20 the '958 patent, correct?

11:20:47 21 A. No, I don't opine on differences
11:20:51 22 or similarities.

11:20:53 23 Q. And Harder does disclose in any
11:21:07 24 translation placing one drop of the formulation
11:21:19 25 to an exterior surface of an object, correct?

11:21:22 1 A. The words "exterior," "surface,"
11:21:32 2 and "object," and "placing" don't appear in any
11:21:35 3 translation of Harder to my knowledge.

11:21:42 4 Q. Is placing a drop on the tip of a
11:21:47 5 spoon not placing one drop of the formulation
11:22:01 6 to an exterior surface of an object?

11:22:01 7 A. I'm reading Harder now, as I have
11:22:03 8 in the past, and I would disagree that she
11:22:07 9 states any specific method of placing a drop.
11:22:13 10 Simply one drop is given and from the tip of a
11:22:25 11 spoon.

11:22:26 12 Q. How did that drop get to the tip
11:22:29 13 of a spoon?

11:22:30 14 A. Well, you'd have to ask Harder.
11:22:32 15 I'm simply bound by the words here.

11:22:40 16 I don't mean to be cagey here. I
11:22:44 17 used common sense when attempting to replicate
11:22:46 18 the procedure in my own experiments by putting
11:22:50 19 a drop onto the tip of a spoon.

11:22:55 20 Q. That was how you understood that
11:22:58 21 that disclosure would be achieved, right?

11:23:01 22 A. That was my understanding.

11:23:03 23 Q. Let's go to your second point on
11:23:21 24 secondary considerations where you talk about
11:23:25 25 Mommy's Bliss copying Ddrops's Baby Ddrops

11:23:39 1 vitamin D drop formulation, right?

11:23:39 2 A. I'm sorry, what was your question?

11:23:41 3 Q. That was a bad question. Part of

11:23:44 4 your consideration is an allegation that

11:23:46 5 Mommy's Bliss copied Ddrops's Baby Ddrops

11:23:52 6 vitamin D drop formulation, right?

11:23:55 7 A. Yes, I took note of facts that

11:23:58 8 support that conclusion.

11:23:59 9 Q. Okay. The claims don't cover just

11:24:06 10 a formulation, right?

11:24:07 11 A. I'm sorry, would you clarify?

11:24:16 12 Q. The claims of the '958 patent are

11:24:19 13 not claiming just a formulation, correct?

11:24:21 14 A. Do you mean directed to a

11:24:25 15 formulation?

11:24:26 16 Q. No. It's claiming a method of

11:24:29 17 delivery, not a formulation, correct?

11:24:31 18 A. I see what you mean. Yes, I would

11:24:33 19 agree the claims are method claims.

11:24:41 20 Q. So even if Mommy's Bliss copied

11:24:45 21 Ddrops's vitamin D drop formulation, that

11:24:49 22 wouldn't make Mommy's Bliss's product

11:24:55 23 coextensive the claims of the '958 patent,

11:25:01 24 right?

11:25:02 25 A. Yeah, I took note of facts that

11:25:12 1 commercial formulations of Mommy's Bliss and
11:25:19 2 Ddrops were essentially superimposable. That
11:25:24 3 is all the farther I went.

11:25:27 4 Q. Well, let me ask you one more
11:25:31 5 general question, then, concerning both of
11:25:33 6 those products.

11:25:34 7 Each of those products and their
11:25:36 8 formulation is not coextensive with the claims
11:25:39 9 of the '958 patent, right?

11:25:42 10 A. Well, I state that they are
11:25:45 11 embodiments of the formulation recited in the
11:25:48 12 claims.

11:25:48 13 Q. Right. But the claims are not
11:25:51 14 claiming a formulation, correct?

11:25:53 15 A. Correct. They recite a
11:25:56 16 formulation.

11:25:57 17 Q. So then you would agree that the
11:26:01 18 claims of the '958 patent are not coextensive
11:26:05 19 with the formulations of each of those
11:26:08 20 products, right?

11:26:09 21 A. I believe we're arguing about
11:26:12 22 semantics, Mr. Conrad. I simply assert that
11:26:16 23 the commercial formulations are embodiments of
11:26:19 24 the formulations recited in the claims, of the
11:26:24 25 method claims.

11:26:25 1 Q. And you also agree that each of
11:26:28 2 those products can be used in a way that is not
11:26:31 3 claimed by the '958 patent, right?
11:26:33 4 A. I don't agree or disagree.
11:26:36 5 Q. Can you turn to Exhibit B of your
11:26:44 6 declaration.
11:26:55 7 A. Yes, I'm there.
11:26:56 8 Q. Figure 3 of Exhibit B is a picture
11:27:00 9 of the instruction label on Ddrops's vitamin D
11:27:08 10 product. Do you see that?
11:27:09 11 A. Yes, I see that.
11:27:10 12 Q. And you see that one of the
11:27:12 13 methods that can be used in the directions
11:27:14 14 listed there is to "mix one drop daily with
11:27:17 15 milk, juice or other food."
11:27:21 16 Do you see that?
11:27:22 17 A. Yes, I see that.
11:27:24 18 Q. And you agree that that method of
11:27:27 19 administration is not covered by the claims of
11:27:31 20 the '958 patent, right?
11:27:33 21 A. I didn't opine on that at all.
11:27:35 22 Q. You have no opinion on that at
11:27:38 23 all?
11:27:39 24 A. As I look at it here now?
11:27:41 25 Q. Sure.

11:27:41 1 A. No, I -- I don't have an opinion
11:27:47 2 on that.

11:27:47 3 Q. Let's go to paragraph 105 of your
11:28:12 4 declaration.

11:28:22 5 A. Okay. I'm there.

11:28:23 6 Q. The last sentence you say:

11:28:25 7 "In other words, the Patent Owner
11:28:26 8 and Petitioner each markets a commercial
11:28:29 9 product that shares identity with each
11:28:31 10 other and are embodiments of the '958
11:28:35 11 patent claims at issue."

11:28:37 12 Did I read that right?

11:28:38 13 A. That was a faithful reading of my
11:28:42 14 sentence.

11:28:42 15 Q. Okay. But if I understand your
11:28:44 16 testimony here today, that is more accurately
11:28:47 17 stated as that they are embodiments of the
11:28:50 18 formulation within the '958 patent claims at
11:28:55 19 issue, right?

11:28:56 20 A. I believe that is correct, the
11:29:03 21 commercial product -- products that I refer to
11:29:09 22 are embodiments of the formulations recited in
11:29:14 23 the '958 patent claims.

11:29:15 24 Q. Now, can you -- so you also talk
11:29:31 25 about in this section that there is a

11:29:33 1 significance to the number of servings and the
11:29:36 2 number of single drop servings in the products.
11:29:41 3 I believe you discuss this in paragraph 108; is
11:29:51 4 that correct?

11:29:51 5 A. There I do refer to servings
11:29:54 6 generally, yes.

11:29:55 7 Q. Why does it matter whether the
11:30:01 8 servings or the fact that they are single drop
11:30:04 9 servings, why does it matter for your secondary
11:30:12 10 considerations opinion?

11:30:13 11 A. I am simply recounting a
11:30:21 12 chronology of facts showing that the commercial
11:30:26 13 embodiments of Mommy's Bliss and Ddrops were
11:30:32 14 essentially superimposable.

11:30:44 15 Q. It doesn't matter to the claims
11:30:45 16 that there are 90 servings in the product,
11:30:49 17 right?

11:30:52 18 A. No. The claim does not provide
11:30:55 19 for -- or, rather, I'll say is silent on the
11:31:00 20 number of servings.

11:31:01 21 Q. And the fact that they were single
11:31:17 22 drop servings, I mean, that's no different than
11:31:20 23 Harder's disclosure or Wolf's disclosure of a
11:31:24 24 serving of one drop of Vigantol oil, right?

11:31:26 25 A. No, I disagree. Wolf did not

11:31:31 1 advocate administration of a single drop.

11:31:34 2 Rather, it was a single drop, or any of the

11:31:37 3 liquids disclosed with additional liquid. In

11:31:40 4 other words, a dilution of that single drop.

11:31:43 5 Q. Well, Wolf did disclose that a

11:31:46 6 daily dose of Vigantol would be one drop,

11:31:49 7 right?

11:31:49 8 A. That may be true, but it's not

11:31:51 9 administered as a single drop.

11:31:53 10 Q. Well, that wasn't my question. My

11:31:56 11 question is that the serving size of Vigantol

11:32:00 12 as disclosed in Wolf was one drop, right?

11:32:03 13 A. No, I disagree. I don't think

11:32:05 14 Wolf had anything to say about serving size,

11:32:09 15 rather it was dose.

11:32:10 16 Q. Okay. Let's talk about dose,

11:32:13 17 then. Do you agree that the dose of both

11:32:17 18 Ddrops's and Mommy's Bliss's products was one

11:32:22 19 drop, right?

11:32:22 20 A. Yes.

11:32:23 21 Q. And the dose disclosed in Wolf was

11:32:25 22 one drop, right?

11:32:26 23 A. Dose 400, or what was it, 500 -- I

11:32:30 24 forget offhand. So many IU in one drop.

11:32:34 25 Q. Right. But it was one drop,

11:32:36 1 right?

11:32:36 2 A. It was one drop.

11:32:37 3 Q. And the dose disclosed in Harder

11:32:40 4 was also one drop, right?

11:32:41 5 A. Yes.

11:32:45 6 Q. How did you take into account the

11:32:57 7 fact that Mommy's Bliss advertised organic

11:33:05 8 ingredients, whereas Ddrops's products did not

11:33:08 9 initially advertise organic ingredients?

11:33:11 10 A. I did not comment on that

11:33:15 11 distinction.

11:33:16 12 Q. How did you take into account the

11:33:22 13 fact that Mommy's Bliss engages in marketing

11:33:27 14 and advertising of its vitamin D products?

11:33:30 15 A. I did not account for that. I

11:33:34 16 don't believe any of the facts that I cited

11:33:40 17 accounted for that.

11:33:41 18 Q. You note in paragraph 114 that

11:33:45 19 Ddrops does not market and advertise its

11:33:49 20 product, or at least that's what it asserts.

11:33:55 21 A. Yes, I believe that's what

11:33:56 22 Mr. Temovsky testified to or declared.

11:34:01 23 Q. How did you account for the fact

11:34:03 24 that Mommy's Bliss vitamin D drops were

11:34:10 25 advertised and marketed, but Ddrops says its

11:34:14 1 product wasn't advertised and marketed?

11:34:21 2 A. I did not account for that.

11:34:33 3 Q. How did you separate the

11:34:44 4 commercial success of each of the products...

11:35:00 5 How did you separate the product

11:35:01 6 from the method when considering the commercial

11:35:04 7 success of each of the products?

11:35:09 8 A. I relied only on the facts that I

11:35:15 9 have stated here in my declaration, not

11:35:19 10 necessarily the methods or methodologies.

11:35:24 11 Q. Okay. At least from your

11:35:28 12 perspective, the facts that you relied on

11:35:35 13 don't, to your understanding at least, don't

11:35:40 14 distinguish between success based on the

11:35:43 15 commercial product as opposed to the method of

11:35:48 16 use, right?

11:35:53 17 A. Yeah, I believe that's correct.

11:36:00 18 Q. And you also don't take into

11:36:04 19 account the actual delivery mechanism of the

11:36:10 20 drop itself, right? That the bottle or the

11:36:14 21 dropper.

11:36:15 22 A. Can you clarify that, please,

11:36:17 23 Mr. Conrad?

11:36:18 24 Q. Sure. You don't consider whether

11:36:20 25 commercial success is due to the delivery

11:36:24 1 mechanism itself, whether that be the bottle
11:36:32 2 containing the vitamin D product or the way the
11:36:34 3 drop is dispensed?

11:36:36 4 A. I don't discuss that aspect.

11:36:40 5 Q. So you don't know if success of
11:36:41 6 Mommy's Bliss was due to the customer's ease of
11:36:45 7 use based upon the physical product itself.

11:36:50 8 A. I can only attest to what I
11:36:53 9 commented on in my declaration.

11:37:32 10 MR. CONRAD: Okay. I will pass
11:37:33 11 the witness.

11:37:38 12 MR. PALEN: I have no redirect.

11:37:40 13 MR. CONRAD: All right. Dr. Reid,
11:37:43 14 thank you for your time.

11:37:45 15 MR. PALEN: We will review and
11:37:47 16 sign.

11:37:49 17 (Time Noted: 11:37 a.m.)

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C E R T I F I C A T E

I, STEVEN M. REID, Ph.D., ESQ., do
hereby certify that I have read the
foregoing transcript of my testimony, and
further certify that it is a true and
accurate record of my testimony (with the
exception of the corrections listed below):

Page	Line	Correction
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Signed under the pains and penalties of
perjury this day of ,
2024.

STEVEN M. REID, Ph.D., ESQ.

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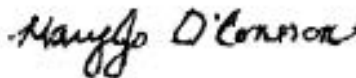
C E R T I F I C A T E

COMMONWEALTH OF MASSACHUSETTS
SUFFOLK, SS.

I, MaryJo O'Connor, a Notary Public
in and for the Commonwealth of
Massachusetts, do hereby certify:

That STEVEN M. REID, Ph.D., ESQ.,
the witness whose testimony is hereinbefore
set forth, was duly sworn by me and that
such testimony is a true and accurate record
of my stenotype notes taken in the foregoing
matter to the best of my knowledge, skill
and ability.

IN WITNESS WHEREOF, I have hereunto
set my hand and Notarial Seal this 2nd day
of April 2024.



MARYJO O'CONNOR, RDR/RMR
Notary Public

My Commission expires:
September 12, 2025