

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

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NEW YORK

PAUL D. CEGLIA,)
)
Plaintiff,)
)
vs.)
)
MARK ELLIOT ZUCKERBERG,)
Individually, and)
FACEBOOK, INC.,)
)
Defendants.)
-----)

No. 1:10-cv-00569
(RJA)

August 9, 2012
10:20 a.m.

Deposition of VALERY N. AGINSKY, held
at the offices of Gibson, Dunn & Crutcher LLP,
200 Park Avenue, New York, New York, before
Laurie A. Collins, a Registered Professional
Reporter and Notary Public of the State of New
York.

1

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

3 B O L A N D L E G A L , L L C

4 A t t o r n e y s f o r P l a i n t i f f

5 1 4 7 5 W a r r e n R o a d

6 U n i t 7 7 0 7 2 4

7 L a k e w o o d , O h i o 4 4 1 0 7

8 B Y : D E A N B O L A N D , E S Q .

9 (v i a t e l e p h o n e)

10 - a n d -

11 P A U L A . A R G E N T I E R I , E S Q .

12 1 8 8 M a i n S t r e e t

13 H o r n e l l , N e w Y o r k 1 4 8 4 3

14 B Y : P A U L A . A R G E N T I E R I , E S Q .

15

16 G I B S O N , D U N N & C R U T C H E R L L P

17 A t t o r n e y s f o r D e f e n d a n t s

18 2 0 0 P a r k A v e n u e

19 N e w Y o r k , N e w Y o r k 1 0 1 6 6 - 0 1 9 3

20 B Y : A L E X A N D E R H . S O U T H W E L L , E S Q .

21 M A T T H E W B E N J A M I N , E S Q .

22 A M A N D A A Y C O C K , E S Q .

23

24 A L S O P R E S E N T :

25 J A M E S R O B E R T S , V i d e o g r a p h e r

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

THE VIDEOGRAPHER: Good morning. We're now on the record.

Please note that microphones are sensitive and may pick up whispering and private conversations. Please turn off all cell phones or place them away from the microphones, as they can interfere with the deposition audio. Recording will continue until all parties agree to go off the record.

My name is James Roberts representing Veritext with offices in New York City, New York. Today's date is August 9th, 2012. The time is approximately 10:20 a.m.

This deposition is being held at Gibson, Dunn, located at 200 Park Avenue, New York City, New York, and is being taken by counsel for the defendants. The caption of the case is Paul D. Ceglia versus Mark Elliot Zuckerberg, et al. The case is filed in the U.S. District Court, Western District of New York, Case Number 1:10-cv-00569. The name of the witness is Valery N. Aginsky, Ph.D.

At this time the attorneys will please state their appearances for the record.

1 Aginsky

2 MR. ARGENTIERI: Paul Argentieri for
3 the plaintiff.

4 Dean?

5 THE VIDEOGRAPHER: Counsel on the
6 phone?

7 MR. BOLAND: Dean Boland here by phone.

8 MR. SOUTHWELL: Alex Southwell from
9 Gibson, Dunn. Along with me is Amanda Aycock
10 and Matthew Benjamin, also Gibson, Dunn, for
11 the defendants.

12 THE VIDEOGRAPHER: Our court reporter,
13 Laurie Collins, also of Veritext, will please
14 swear in the witness.

15 V A L E R Y N. A G I N S K Y ,
16 called as a witness, having been duly sworn
17 by the notary public, was examined and
18 testified as follows:

19 THE VIDEOGRAPHER: You may proceed.

20 MR. SOUTHWELL: Thank you.

21 EXAMINATION BY

22 MR. SOUTHWELL:

23 Q. Good morning, Dr. Aginsky.

24 A. Good morning.

25 Q. Have you been deposed before?

1 Aginsky

2 A. Yes.

3 Q. The judge presiding over this case has
4 some particular rules that I need to tell you
5 about. The first is that if you need
6 clarification or a definition or explanation of
7 any words, questions, or documents throughout the
8 course of the deposition, you're to ask me as
9 opposing counsel rather than counsel for the
10 plaintiffs.

11 Do you understand that?

12 A. Yes.

13 Q. And you and plaintiff's counsel may not
14 engage in private conversation during the
15 deposition or any breaks in the deposition except
16 to determine whether to assert a privilege.

17 Do you understand that?

18 A. Yes.

19 Q. And I'd ask that you try to wait until
20 I finish my question, and I will try and wait
21 until you finish your answer so we don't overlap
22 on the record. Okay?

23 A. Okay.

24 Q. Before we begin, you received your
25 payment for your appearance as well as the travel

1 Aginsky

2 costs that we sent; correct?

3 A. Yes.

4 Q. And I think, as per your agreement, if
5 there's -- if the travel costs turn out to be
6 less, you will send us back the difference; if
7 they're more, you will let us know and we'll cover
8 that.

9 A. That's correct.

10 Q. Right?

11 A. Yes.

12 Q. I understand you met with
13 Mr. Argentieri briefly before we began. Have you
14 met with anyone else to prepare for the deposition
15 other than that?

16 A. No.

17 Q. Have you spoken to anybody else to
18 prepare for the deposition other than that?

19 A. Not today.

20 Q. When have you?

21 A. I don't remember the exact date, but it
22 was a telephone conference -- I might wrong -- but
23 maybe like three weeks ago, approximately.

24 Q. Okay. And who was on that conference?

25 A. Dean Boland and I believe Paul Ceglia.

1 Aginsky

2 Q. Okay. And was that -- is that the only
3 time that you've spoken to Mr. Ceglia or have you
4 spoken to him on other occasions?

5 A. I spoke to him only once, I believe,
6 before. That was on the day when I examined the
7 documents.

8 Q. I see. Was he there in person on that
9 day?

10 A. Yes.

11 Q. And on that occasion three weeks ago,
12 did he communicate any information about the
13 documents in question? What was his role in the
14 conversation you had?

15 A. He asked me some questions as he said
16 to understand better the capabilities of the ink-
17 aging techniques.

18 Q. I see. And this was on the
19 conversation three weeks ago or that was in the
20 first conversation?

21 A. Three weeks ago.

22 Q. I see.

23 Let me come back to that. But I guess
24 because it's been I think a long time since you
25 actually worked on the case, I want to just go

1 Aginsky

2 over your involvement very generally.

3 You were approached at some point about
4 being retained and then ultimately were retained
5 by the plaintiff in this litigation; right?

6 A. Yes.

7 Q. And at some point around January of
8 2011, you were provided with some documents at
9 your lab in Michigan, and you conducted an
10 examination; is that right?

11 A. Yes.

12 Q. The only exams that you performed were
13 a visual examination and other nondestructive
14 examinations, such as microscopic and UV and
15 infrared examinations; is that correct?

16 A. Yes, and VSC analysis.

17 Q. And VSC analysis. Okay.

18 So you did not take any physical
19 samples of the documents presented to you;
20 correct?

21 A. No. I mean, that's correct, I didn't
22 take any samples.

23 Q. So you did not conduct any chemical
24 testing?

25 A. No.

1 Aginsky

2 Q. And then you provided a declaration in
3 June of 2011 that described the work that you had
4 done as well as your preliminary analysis; right?

5 A. Yes.

6 Q. And you provided us, meaning the
7 defendants, along with the plaintiffs, some of
8 your images and responses to interrogatories in
9 the late fall of 2011, around November and
10 December; is that right?

11 A. Yes. I provided everything that I had
12 in my computer, and then what I -- I believe I
13 wrote it in my -- the answers to interrogatories
14 that the way I also -- like 13 images that I took
15 using VSC, video spectral comparator, and I didn't
16 include them on the CD. But I have them now on my
17 jump drive. If you need them, you can download
18 them from my --

19 Q. I see. Do you have them here today?

20 A. Yes.

21 Q. Okay.

22 A. (Indicating.) It's my jump.

23 Q. Great. We'll turn to that in a little
24 bit.

25 Now, other than the examination in

1 Aginsky

2 January 2011, did you do any other examination of
3 any documents in this case?

4 A. No.

5 Q. So nothing after the January 2011
6 examination; correct?

7 A. That's correct.

8 Q. Other than what is in your June 2011
9 declaration, you haven't offered any other
10 opinions or findings to the court; correct?

11 A. That's correct.

12 Q. Have you offered any opinions or
13 findings to your client?

14 MR. ARGENTIERI: I've got to object.
15 Isn't that work product?

16 MR. SOUTHWELL: Not yet, no.

17 Q. You may answer.

18 MR. ARGENTIERI: Dean? Dean, can you
19 hear me?

20 Is he on?

21 MR. SOUTHWELL: He may have us on mute.

22 MR. ARGENTIERI: Hang on.

23 (Pause.)

24 MR. ARGENTIERI: Did you hear the last
25 question from Alex?

1 Aginsky

2 MR. BOLAND: Yeah, I heard it, but it
3 didn't sound like he was asking for the
4 conversation between Dr. Aginsky and us.

5 Is that right, Alex?

6 MR. SOUTHWELL: Right. That's why I
7 said not yet. I'm just asking if it occurred.

8 MR. BOLAND: Alex and I have been
9 pretty good about that. Neither one of us
10 have asked for the contents of conversations
11 between experts and witnesses, and I don't
12 expect him to do that here.

13 MR. ARGENTIERI: He's asking
14 Dr. Aginsky if he has offered any other
15 opinions other than what he has written or
16 provided in the declaration.

17 MR. BOLAND: And I understand. But
18 he's just asking if he's offered the opinion,
19 but not what they offer.

20 MR. ARGENTIERI: Oh, all right.

21 MR. SOUTHWELL: The answer can be
22 either "yes" or "no."

23 Q. The question, Dr. Aginsky, is have you
24 offered any opinions or findings to your client
25 other than what's in your June 2011 declaration.

1 Aginsky

2 A. I have some difficulties to understand
3 what opinions, what opinions or findings mean --
4 means.

5 Q. Okay. Well, let me ask it to you in a
6 different way. Do you have any other conclusions
7 about the document that was presented to you for
8 inspection that you have not put in your June 2011
9 declaration?

10 A. No, at the time when I prepared my
11 declaration, I only evaluated the results that I
12 obtained personally. So my declaration relates to
13 only to my results. And because I have not done
14 any other examination, therefore I couldn't render
15 any other opinion based on my results.

16 Q. I see. Have you been asked to review
17 the results of any other experts in this case?

18 A. No, review, I mean some thorough study.
19 I have not reviewed any report prepared by any of
20 the experts on both sides.

21 Q. Have you seen any of the reports
22 prepared by any of the experts on either side?

23 A. Only what I've seen when I accidentally
24 ran across some information on this case in the
25 Internet.

1 Aginsky

2 Q. I see.

3 A. And simply I've seen that there were
4 reports. I'm not even sure that these are
5 reports. But I saw names of Gerald LaPorte and
6 Peter Tytell, I believe Larry Stewart. And I
7 assumed that they prepared reports, but I have not
8 reviewed their reports.

9 Q. I see. Have you -- do you have any
10 understanding about the conclusions of any of
11 those other experts in the case? Let me ask it a
12 different way.

13 Do you have any knowledge about what
14 those conclusions or findings are by other experts
15 in the case?

16 A. As I said, I have not reviewed their
17 reports, so I might -- what I've seen in the
18 Internet, I have not reviewed it carefully.
19 Therefore, no, it's better for me not to guess. I
20 don't -- I don't have any -- I should say that I
21 don't have any knowledge. I can only guess what
22 their conclusions are.

23 Q. I don't want you to guess. I'm trying
24 to just understand whether you in fact have any
25 knowledge which may have been obtained in any

1 Aginsky

2 number of ways, including reviewing the report, or
3 in other ways.

4 My question is do you have any
5 knowledge about what other experts have concluded
6 in this case.

7 A. No. Typically in a case I am asked to
8 review a report if I'm rebuttal witness, but in
9 this case I was not asked to review. And I
10 typically don't do any work if I am not being
11 paid.

12 Q. All right. I understand that. Okay.
13 Do you have any other findings related
14 to the documents that you were asked to examine at
15 this point?

16 A. I'm sorry, I didn't understand.

17 Q. Do you have any other findings
18 concerning the document you were asked to examine
19 at this point?

20 MR. ARGENTIERI: Other than what
21 he's --

22 Q. Other than what's in your declaration,
23 correct.

24 A. No.

25 Q. Do you have any other opinions about

1 Aginsky

2 the document you were asked to examine other than
3 what's in your declaration?

4 A. No, based on my results, no, I have no
5 other opinions.

6 Q. Based on anything else, do you have any
7 other opinions?

8 A. If I am -- if I review anything else, I
9 will probably form an additional opinion based on
10 someone else results.

11 Q. I see. So you could potentially form
12 additional opinions if you reviewed others'
13 results, but you haven't to date done that. Is
14 that a fair assessment?

15 A. Yes, yes.

16 Q. You said, for instance, in your
17 interrogatory response that as of October 2011 you
18 were, in your words, unable to respond with
19 respect to the case. So does that -- does that
20 mean you were no longer involved in the case since
21 at least October 2011?

22 A. What I said I was unable to respond?

23 Q. Uh-huh.

24 A. If I remember correct my -- that
25 document, I think that I was unable to respond by

1 Aginsky

2 a particular date because I had not been paid for
3 my time --

4 Q. I see.

5 A. -- prior to that date. So I was asked
6 to respond, but I said I will do it after I am
7 paid.

8 Q. I guess what I'm getting is were you
9 involved -- did you remain involved in the case in
10 any way after June of 2011 up until very recently
11 concerning this deposition.

12 A. Yes, the way I may be -- I don't
13 remember how many, not many, but there were some
14 discussions relating to this case, and there was
15 at least I believe it was one meeting with two
16 lawyers, two new lawyers, that were at that time
17 involved in the case.

18 Q. I see. Approximately when was that?

19 A. I don't remember. I think the one name
20 of the lawyer was Callahan.

21 MR. ARGENTIERI: Yeah, Robert Callahan
22 and Sanford Dumain.

23 A. Yes, Mr. Dumain, yes.

24 Q. And you met with them as plaintiff's
25 expert; correct?

1 Aginsky

2 A. Yes. I don't know which capacity I met
3 with them. But they came to me to my office to --
4 so I would explain what I know about my results
5 and about the field of ink analysis and dating in
6 general.

7 Q. And at that time you were an expert for
8 the plaintiff?

9 A. Yes, that was my understanding, that I
10 was still an expert.

11 Q. Right. And do you understand that
12 today you are an expert for the plaintiff?

13 A. That's not my strength. I don't know
14 judicial if I am still an expert. I know I have
15 not been designated as an expert. So it means
16 that -- I don't know what -- what my position is
17 now.

18 Q. Okay. Fair enough.

19 Let's just go back to when you were
20 first contacted for potential involvement in the
21 case. You had previously explained that that was
22 on November 24th, 2010. Do you recall who it is
23 that contacted you?

24 A. I think the name of the lawyer was
25 David Grable from was it Crow Moran [phonetic]?

1 Aginsky

2 It's a big firm. I don't remember which one.

3 Q. Fine.

4 And how did he contact you? By phone
5 or --

6 A. Yes, he called me by phone, and he said
7 that I was referred to him by another lawyer from
8 that firm and I worked on a big case that was
9 previously.

10 Q. Was that the firm Connors & Vilardo?
11 Does that sound right?

12 A. No, that was -- oh, Quinn Emanuel.

13 Q. Right, Quinn Emanuel.

14 A. Yes.

15 Q. And you had worked with other lawyers
16 at Quinn Emanuel on another case?

17 A. Yes. I worked with Mr. Quinn or
18 Mrs. Diane Hutnyan on a case, MGA versus Mattel.

19 Q. And when you were first contacted, what
20 did you understand this case was about?

21 A. Which case?

22 Q. This case that we're talking about that
23 we're here for today.

24 A. I think I was retained to do a typical
25 task what I typically do to analyze a certain

1 Aginsky

2 document to see whether it was prepared, was it as
3 old as it purports to be, and whether there were
4 any amendments or changes or page substitutions in
5 the document.

6 So this is almost every other case that
7 I'm retained is similar task.

8 Q. And in that initial conversation, did
9 you discuss the possibility of conducting an
10 examination? Was it as detailed as that in that
11 initial discussion about your involvement?

12 A. I think the only discussion that we had
13 was on the first date -- on the first day when I
14 did the examination. So my understanding was that
15 day I was asked only to do some preliminary tests,
16 nondestructive, physical, optical analysis. And
17 at that time my understanding was that at a later
18 time I will be taking samples and doing chemical
19 analysis of the samples.

20 Q. I guess what I'm trying to get at is
21 you have told us that you were retained on January
22 13, 2011, and this contact was in November. I
23 guess I'm trying to just get at whether -- so in
24 that initial conversation in November, you were
25 not actually retained.

1 Aginsky

2 Was that more of an informational
3 discussion?

4 A. Yes, I was just asked if I am available
5 to do the analysis, and I -- it was a very general
6 discussion, no specifics.

7 Q. And did you have an understanding of
8 what the document at issue was based first just on
9 that conversation in November of 2010?

10 A. No, I don't remember if any words such
11 as "contract" were mentioned. It's just a
12 document that needs to be examined to determine
13 whether it's as old as it purports to be.

14 Q. And were there any other conversations
15 between that November conversation and then when
16 you were in fact retained on January 13, I guess
17 putting aside anything leading up to that meeting
18 on January 13?

19 A. I don't remember any other
20 conversations. It might be some other calls to
21 schedule the meeting, but I don't remember if I
22 ever talked to David Grable after that.

23 Q. As you said, you were then retained
24 January 13, 2011. And I take it that was the same
25 day there was in fact an examination conducted?

1 Aginsky

2 A. Yes.

3 Q. What did you understand were the
4 circumstances that led to you being actually
5 retained on that day?

6 A. I was given a signed retainer
7 agreement. It was signed by I believe
8 Mr. Connors.

9 Q. Mr. Connors?

10 A. Yes. And a retainer check, also signed
11 by him.

12 Q. Do you have any understanding about
13 why -- what the cause of the delay between
14 November 2010 and January 2011 is?

15 A. No.

16 Q. What specifically were you engaged to
17 do?

18 A. On January 13th?

19 Q. Yes.

20 A. I was given a two-page contract, "work
21 for hire" contract, and I was asked to examine
22 this two-page document by, as I said, using
23 nondestructive optical methods -- visual,
24 microscopic, and other optical methods -- to
25 determine whether I can see any discrepancies

1 Aginsky

2 between pages 1 and 2.

3 Q. And we'll come back to your actual
4 examination in a little bit. First with respect
5 to the agreement, does the agreement include a
6 provision regarding compensation for your
7 services?

8 A. Does my retainer agreement?

9 Q. The agreement covers your being paid;
10 correct?

11 A. Yes, it was a very -- it was a
12 different agreement, not what I typically use. It
13 was -- like confidentiality was involved there. I
14 don't remember any specifics that agreement would
15 say that I will be paid for sure for my work, but
16 I assume that I should.

17 Q. And what was your fee arrangement?

18 A. My -- the rate is 400 an hour, \$400 an
19 hour.

20 Q. And that's your understanding of your
21 arrangement in this case with the plaintiff?

22 A. Yes.

23 Q. Was there ever a suggestion you would
24 work on a contingency basis?

25 A. I never work on a contingency basis.

1 Aginsky

2 Q. Okay. So my question, though, is was
3 there a suggestion that you would do that in this
4 case.

5 MR. ARGENTIERI: Go ahead.

6 A. I think there was something like that,
7 but I -- I disagreed.

8 Q. I understand that you didn't agree to
9 that. I guess what I'm trying to understand is
10 what specifically was offered in terms of that.

11 A. What was offered to me?

12 Q. Yeah.

13 A. If I remember correctly, 5 percent.

14 Q. Of the recovery?

15 A. I don't know, of something, yes.

16 Q. And do you have anybody else working on
17 the project that would -- there would be rates
18 for, like an assistant or anything like that that
19 there would be an hourly rate for?

20 A. I'm sorry, I didn't understand.

21 Q. Do you have somebody else in your lab
22 that is part of your team for which there are
23 charges?

24 A. No, I work alone. I have a
25 corporation, but it's a single-person corporation.

1 Aginsky

2 Q. I see.

3 And in your interrogatory responses you
4 had noted that you had not yet received payment
5 for outstanding invoices, at least as of December
6 2011. Have you since that time or at any point
7 have you received payment on those invoices?

8 A. Yes.

9 Q. Has plaintiff paid for all of your
10 outstanding fees at this point?

11 A. Yes.

12 Q. And you mentioned the 5 percent. Who
13 was it that made that offer to you?

14 A. The plaintiff.

15 Q. Mr. Ceglia?

16 A. Yes.

17 Q. And that was in the -- on the day that
18 the examination occurred, January 13 --

19 A. No.

20 Q. -- 2011, or at a different time?

21 A. That was at some time before I have --
22 before I was paid eventually the outstanding
23 amount, which I believe was around 5,000.

24 Q. So there was \$5,000 that was
25 outstanding you had not been paid for?

1 Aginsky

2 A. Yes.

3 Q. And what was the form of the
4 communication with plaintiff?

5 A. E-mail.

6 Q. By e-mail?

7 A. Yes.

8 Q. So he offered 5 percent of something.
9 Was it in lieu of the outstanding balance or --

10 A. That's correct.

11 Q. And you don't recall what the 5 percent
12 was of?

13 A. Of something which -- frankly I don't
14 know what was it, but if -- it's my understanding
15 if it's -- if there is a particular sum of money
16 which is at stake, then probably 5 percent of
17 that.

18 Q. Right, if there's a recovery of a
19 certain amount, 5 percent of that. Is that your
20 understanding?

21 A. There's no way I'm guessing, because I
22 don't remember the context of that e-mail.

23 Q. Fine.

24 A. I just said that that's -- I never work
25 on that -- on a contingency basis.

1 Aginsky

2 Q. I understand. So you declined that
3 offer; is that right?

4 A. Yes.

5 Q. Do you recall anybody else on that
6 e-mail?

7 A. I'm sorry?

8 Q. Was there anybody else copied on that
9 communication?

10 A. No.

11 Q. Did you have any conversation with
12 anybody else about this offer that Mr. Argentieri
13 made -- Mr. Ceglia made to you, excuse me? I'm
14 sorry.

15 A. No, I didn't talk -- didn't discuss it.

16 Q. Thank you.

17 Are you aware that plaintiff has had at
18 least nine law firms represent him in this case?

19 A. No, I understand it's apparently more
20 than one, but I don't know how many.

21 Q. Right. So I want to just try to
22 understand which law firms that have since left
23 the case you have had some involvement with.

24 So I understand that your initial
25 conversation was with Mr. Grable of Quinn Emanuel.

1 Aginsky

2 A. Yes.

3 Q. And then when you were in fact
4 retained, that was by the Connors law firm?

5 A. Yes.

6 Q. And was somebody from the Connors law
7 firm there on that day?

8 A. No.

9 Q. Was there a lawyer with the plaintiffs
10 there on that day?

11 A. Yes, Mr. Argentieri.

12 Q. Anyone else other than Mr. Argentieri
13 and Mr. Ceglia?

14 A. No, only the two of them.

15 Q. Did you have any other involvement with
16 lawyers from the law firm of Connors & Vilardo?

17 A. No, I think I sent him in an e-mail,
18 Mr. Connors, when I was going to -- when I wanted
19 to understand who is going to pay me. And he said
20 that it will not be him; it should be someone
21 else.

22 Q. That was in the later period when you
23 had the outstanding invoice?

24 A. Yes.

25 Q. I see.

1 Aginsky

2 Did you ever speak with a James Grable
3 at Connors & Vilaro, who is the brother of Dave
4 Grable, who I think you spoke to?

5 A. I might. I remember David, when he
6 called me, he mentioned the name of his brother.
7 But I don't remember whether he just mentioned his
8 name or he was on the phone in that -- at that
9 telephone conference call. He might be that.

10 Q. Now, in March of 2011, plaintiff got a
11 different law firm involved called Kasowitz,
12 Benson. Did any of those lawyers reach out to you
13 or were you in touch with any of them at that
14 time, Kasowitz, Benson?

15 A. I don't remember these names.

16 Q. A lawyer named Adam Marks or Michael
17 Schuster, do those names ring a bell?

18 A. No, I don't remember that.

19 Q. Aaron Marks?

20 (Discussion off the record.)

21 A. No, I don't remember his name.

22 Q. And when you did your declaration in
23 June of 2011, were you aware that the law firms
24 had changed again and at that time plaintiff was
25 represented by two other law firms: DLA Piper and

1 Aginsky

2 Lippes Mathias, L-I-P-P-E-S M-A-T-H-I-A-S?

3 A. No, I have not heard of those names.

4 Q. In the course of preparing your
5 declaration in 2011, did you interact with -- what
6 lawyers did you interact with, if any?

7 A. I don't remember was it still
8 Mr. Connors or was it Mr. Trippitelli.

9 Q. So Mr. Trippitelli's a lawyer at DLA
10 Piper, and I believe they were involved by June of
11 2011. So that would make sense if that's who you
12 dealt with, but it's what your recollection is.

13 A. I don't remember the name of the firm,
14 his name, Mr. Trippitelli.

15 Q. You remember his name?

16 A. Yes.

17 Q. So was that the lawyer you worked with
18 in the course of preparing your declaration in
19 June of 2011?

20 A. I'm not positive, but yes, probably.

21 Q. Do you remember the name Dennis Vacco
22 or Kevin Cross? Did you have any interaction with
23 those lawyers?

24 A. No.

25 Q. Did you have any interactions with

1 Aginsky

2 lawyers by the names of Kip Hall or Carrie Parikh
3 or John Allcock or Robert Brownlie?

4 A. None of them.

5 Q. Are you aware that after you submitted
6 your declaration in June of 2011, DLA Piper, the
7 law firm where Jerry Trippitelli was, withdrew
8 from the case and a lawyer named Jeff Lake stepped
9 in?

10 A. I remember the name Jeff Lake, I
11 remember.

12 Q. Did you have any interactions with
13 Mr. Lake?

14 A. If I remember correctly, he sent me an
15 e-mail to introduce himself, but I don't remember
16 if we ever spoke.

17 Q. Did you have any interactions about him
18 having you attend the document examinations in
19 July of 2011?

20 A. No, I don't remember if I ever
21 discussed it with him, no.

22 Q. Did you discuss that topic with any of
23 the lawyers for the plaintiff?

24 A. You said July?

25 Q. July of 2011.

1 Aginsky

2 A. No, I think we only -- Mr. Argentieri
3 and I, we discussed my possible involvement in the
4 taking samples, but that was I believe in June.
5 After that I don't remember if any discussions
6 regarding the examination.

7 Q. Do you have an understanding of why you
8 did not take samples in this case?

9 A. I remember I was not available on a
10 particular date to come to Buffalo, and we
11 discussed a different date. But what happened
12 after that, I understand that someone else was
13 involved, not me.

14 Q. Did you ever interact with anyone named
15 Nathan Shaman, S-H-A-M-A-N, Shaman or Shaman?

16 A. No.

17 Q. Are you aware that later in the case in
18 July of 2011 another law firm called Edelson
19 McGuire got involved on the plaintiff's side?

20 A. I don't remember the name of the firm.

21 Q. Did you have any interactions with
22 lawyers by the name of Jay Edelson or Steve
23 Teppler or Rafey Balabanian?

24 A. No.

25 Q. I've mangled his last name but...

1 Aginsky

2 And then in early of 2012 another law
3 firm called Milberg came in, and I think you did
4 mention that you spoke with somebody at the
5 Milberg law firm, Sanford Dumain?

6 A. Yes.

7 Q. Did you speak with anybody else from
8 that law firm, such as Jennifer Young or Melissa
9 Clark?

10 A. No, I met with Mr. Dumain and
11 Mr. Callahan, and after that I have not spoken to
12 them.

13 Q. I see. And there was another lawyer
14 involved named Peter Skivington. Did you ever
15 interact with him?

16 A. No.

17 Q. Was it the Milberg firm or Mr. Dumain's
18 firm that paid your outstanding bills?

19 A. Yes.

20 Q. Did you meet in your offices in
21 Michigan --

22 A. Yes.

23 Q. -- with Messrs. Dumain and Callahan?

24 A. Yes.

25 Q. And approximately when was that

1 Aginsky

2 meeting?

3 A. I don't remember. For some reason it
4 escaped from my memory. But it was for
5 approximately two hours -- a three-our meeting,
6 yes.

7 Q. Well, the Milberg firm only entered
8 into the case in March of 2011, so that would be
9 this spring. If we're looking -- sorry, 2012. If
10 we're looking back from the summer, was it during
11 the summer months when you met with them or maybe
12 more in the spring months that you met with them?

13 A. Of this year?

14 Q. Yes.

15 A. I think it was earlier than that, but
16 it could not be this summer. It could be spring
17 or before that. I apologize, but I don't
18 remember. I have it in my -- I wrote it in my
19 time log, so it is on my computer. But I don't
20 have this information with me now.

21 Q. Fine. Could it have been in the winter
22 of 2012 [sic]?

23 A. It could be, yes.

24 Q. I'd like to put a blank in the
25 transcript and ask you that you provide us with

1 Aginsky

2 the approximate date after today.

3 TO BE FURNISHED: _____
4 _____.

5 A. Yes, yes.

6 Q. Could you do that?

7 A. I remember they flew to Detroit; they
8 came to my office. I remember those particulars,
9 but I don't remember when it was. It was not
10 snowing, because otherwise they will not be
11 driving.

12 Q. Yes.

13 Were you asked to do anything further
14 by way of examination in the case based on that
15 meeting?

16 A. At that meeting I still was thinking I
17 would be involved in the case, based on our
18 conversation. Apparently I was misled by my own
19 thought.

20 Q. Did you believe that you were not any
21 longer involved in the case? I mean, did there
22 come a time that you believed you were not any
23 longer involved in the case?

24 A. The longer it lasted, the more I were
25 thinking that it's too late for me to be involved.

1 Aginsky

2 Especially it was my understanding that the
3 samples had been taken already and whoever did the
4 examination, they already did it. So it's too
5 late.

6 Q. So it was the absence of contact that
7 led you to that conclusion that you were not going
8 to be involved rather than anybody saying that to
9 you or giving you some definitive confirmation.
10 Is that fair to say?

11 A. Yes.

12 MR. ARGENTIERI: I guess objection to
13 form.

14 Go ahead.

15 A. Nobody definitively told me I would not
16 be designated as an expert.

17 Q. Have you ever met or spoken with
18 somebody named Jason Holmberg?

19 A. I don't remember the name.

20 Q. And you mentioned that your thinking
21 was that it was too late for you to be involved --

22 MR. SOUTHWELL: Let's go off the record
23 a minute.

24 THE VIDEOGRAPHER: Off the record 11
25 a.m.

1 Aginsky

2 (Pause due to telephone disconnection.)

3 MR. SOUTHWELL: Mr. Aginsky, I see you
4 brought your VSC images. I would just ask
5 that if you can provide those images and we
6 make a copy of them. Thank you very much.

7 MR. ARGENTIERI: Do you want to mark
8 that or...

9 MR. SOUTHWELL: No, I mean, he's just
10 giving -- he's just producing them as part of
11 the record. If we need to, we'll mark them.

12 MR. ARGENTIERI: I don't know. I mean,
13 usually -- I don't know. You've given him
14 something...

15 MR. SOUTHWELL: Yeah, it's part of the
16 prior production.

17 (Recess taken from 11:00 to 11:07.)

18 THE VIDEOGRAPHER: Back on the record
19 11:07 a.m.

20 Q. Dr. Aginsky, I don't recall exactly
21 where we were, but let me just move on to a
22 different question here.

23 You did say that you have met with Paul
24 Ceglia or rather met or spoke with him on two
25 occasions. Are those the only two occasions?

1 Aginsky

2 There are only two occasions; is that right?

3 A. Yes, once in person and the other one
4 on the phone.

5 Q. And the once in person, that was
6 January 13th, 2011; and the once on the phone was
7 about three weeks ago; correct?

8 A. Yes.

9 Q. Have you ever spoken with Mr. Ceglia's
10 parents, Carmine or Vera Ceglia?

11 A. No.

12 Q. How about his brother, Brendan?

13 A. No.

14 Q. And in those conversations did
15 Mr. Ceglia -- well, strike that.

16 Are you aware that plaintiff has
17 retained other document examiners? You've
18 mentioned some of them, so you're certainly at
19 least aware of them.

20 Let me I guess ask you the more
21 specific question: Are you aware that John Paul
22 Osborn is involved -- was involved in this case?

23 A. Yes, I actually -- I recommended him.

24 Q. And what did you recommend him for?

25 A. I was asked if I know any qualified

1 Aginsky

2 document examiner, specifically close to the -- in
3 New York area. And I mentioned -- I said there
4 are several that -- for example, John Paul Osborn
5 and Peter Tytell.

6 Q. When you say "qualified document
7 examiner," what is your understanding of that role
8 that you're recommending people for?

9 A. That's people who are known in the
10 profession and have very good reputation.

11 Q. And specifically we're not talking
12 about chemists for sort of chemistry-like testing
13 but for other types of document examination; is
14 that right?

15 A. Yes, yes. There are other people also
16 in that area which are also very well qualified,
17 but I just mentioned the two which are very
18 well-known.

19 Q. Do you know what Mr. Osborn was
20 retained to do?

21 A. Typically it's a forensic document
22 examination that involves handwriting analysis,
23 impression, examination, and some other
24 examinations to compare -- like in this case to
25 compare multipage documents to see whether there

1 Aginsky

2 is any page substitution.

3 Q. Do you know anything about Mr. Osborn's
4 current involvement, whether he is still involved
5 in the case?

6 A. I am not aware of that.

7 Q. Are you aware that plaintiff has also
8 retained more recently Erich Speckin, Larry
9 Stewart, and Jim Blanco as document examiners?

10 A. I've seen their names on the Internet,
11 yes.

12 Q. Are you aware plaintiffs have retained
13 other experts like Mr. Tytell and Jerry LaPorte?

14 A. I have seen the names Al Lyter and Gus
15 Lesnevich and Professor Romano, yes.

16 Q. But are you also aware that Mr. Tytell
17 and Mr. LaPorte have been retained by the
18 defendants?

19 A. Yes.

20 Q. And with respect to Mr. Speckin, you
21 know him; correct?

22 A. Yes.

23 Q. You've opposed him in other cases; is
24 that right?

25 A. That's correct.

1 Aginsky

2 Q. One of those cases was the 2001 Wang
3 Wheel case in Hong Kong; right?

4 A. Yes.

5 Q. What was that case about?

6 A. It was a probate with approximately 5
7 billion at stake, and Mr. Speckin was retained by
8 the plaintiff and his -- he testified that the
9 document was backdated, was a backdated fraud, and
10 I was a rebuttal witness.

11 And I testified that his methodology
12 was not good enough to make any conclusion like
13 that, just in two words, actually. It was a
14 long -- long testimony, so my cross-examination
15 was for eight days.

16 Q. Wow.

17 A. Many technical questions were discussed
18 in that case, and eventually the judge rejected
19 his opinion, Mr. Speckin's opinion.

20 Q. Are there any other cases that you have
21 opposed Mr. Speckin on?

22 A. Yes.

23 Q. Do you recall the names or
24 circumstances?

25 A. The most recent case was in New York.

1 Aginsky

2 I don't remember the name of the plaintiff.
3 Rezende, I believe. And I was retained by
4 Citigroup. I know that I or my client won the
5 case.

6 But I didn't testify at trial; I
7 testified at deposition. And after that the
8 plaintiff withdrew that portion of Mr. Speckin's
9 testimony that related to ink-aging analysis. So
10 he only testified on something that didn't relate
11 to ink analysis and dating. And as I said, I
12 don't know how much value was put by the
13 judge. Mr. Speckin's client lost the case.

14 Q. Do you recall other cases when you have
15 been on the other side of Mr. Speckin?

16 A. There were a number of cases. Would
17 you like me to try to recall each of them?

18 Q. If you can.

19 A. I wish I could bring the list of cases.
20 That would be easier. It was a recent -- another
21 recent case, actually two recent cases. Both were
22 settled after I submitted -- in one case it was an
23 affidavit that didn't support Mr. Speckin's
24 results. And that was a case in which Gerald
25 LaPorte also was involved; and Gerald LaPorte and

1 Aginsky

2 I were on the same side, and Mr. Speckin was on
3 the other side.

4 MR. ARGENTIERI: You don't remember the
5 name of the case, Doctor?

6 THE WITNESS: I don't remember the
7 name. I have a list of cases, but I will have
8 to --

9 MR. ARGENTIERI: You don't know where
10 it was located?

11 THE WITNESS: I think it's in Florida,
12 in Florida, and it was -- the client was -- it
13 was a company from Central America, I believe.

14 Q. Are there any other cases that you had
15 with Mr. Speckin that jump out at you that are
16 more significant, perhaps, than others? Maybe
17 that's an easier way. I don't need you to list
18 them all but for others that are -- that stand out
19 to you.

20 A. There was one case in which I know that
21 he wrote on his Web site -- he mentioned this case
22 on his Web site, and he lists me there as an
23 unsuccessful expert, meaning that the challenge
24 was not successful to prevent him from testifying.
25 And that was one of the earlier cases.

1 Aginsky

2 I came to the United States in December
3 of 2000, and that was a case in 2002 in Chicago,
4 Yehuda Draiman. Draiman versus Draiman might be,
5 but one of the names was there.

6 It was a Frye challenge. I testified
7 at the Frye hearing. The judge initially allowed
8 him -- allowed Mr. Speckin to testify at trial,
9 but immediately after the Frye hearing the Hong
10 Kong decision was published.

11 And after the lawyers now aside
12 submitted a motion and attached that Hong Kong
13 decision, the judge canceled trial and ruled in
14 the favor of our client.

15 Q. Now, how about Mr. Stewart, have you
16 been involved in cases with him?

17 A. Yes, I remember one case in San
18 Francisco. One of the names was Plant
19 Installation, approximately around 2005,
20 plus/minus one year, or 2006, plus/minus one year.
21 It was a multimillion case. It's my understanding
22 that the client that retained me won the case, but
23 I have never seen the judgment.

24 Q. Are there any other cases that you were
25 involved with with Mr. Stewart that stand out to

1 Aginsky

2 you?

3 A. There was another case in California,
4 but it either didn't come to trial or it was
5 settled. I don't remember. I didn't testify at
6 trial.

7 Q. How about Jim Blanco, are you familiar
8 with him?

9 A. I only had his name, but I don't know
10 him.

11 Q. So you've never been in a case in which
12 he's been involved, to your knowledge?

13 A. No.

14 Q. And you testified earlier that you had
15 understood that sampling had occurred. Did you
16 also have the understanding that plaintiff's other
17 experts have in fact tested the ink in this case?

18 A. Yes, I think that because the samples
19 were taken, and there were at least two ink
20 chemists on the defendants' side and one ink
21 chemist on the plaintiff side, other than the
22 then -- yes, it's my understanding the chemical
23 analysis should have been done.

24 Q. Do you have any specific information
25 about it being done? I'm trying to get at whether

1 Aginsky

2 you actually have a specific knowledge about it
3 being done versus your assuming it was done
4 because of the nature of the experts.

5 A. Yes, during that telephone conference
6 three weeks ago, I was asked if I can comment on
7 one of Gerald LaPorte's results relating to the
8 ink-aging methodology that he applied in this
9 case, and I said that I can only generally comment
10 on that because I have not reviewed his report.

11 Q. I see. And what was your general
12 comment about his analysis?

13 A. I was asked regarding the capabilities
14 of the method that Gerald LaPorte used, and I said
15 first of all I don't know which method he used. I
16 assume that he probably used ink-aging method
17 which is called solvent loss ratio method.

18 Q. Let me come back to this, because I
19 will -- I do want to ask you some more specific
20 questions about this.

21 You mentioned an ink chemist other than
22 you on the plaintiff's side. Who is that that
23 you're thinking of?

24 A. Larry Stewart.

25 Q. Do you consider him an ink chemist?

1 Aginsky

2 A. I think he is saying that he's both an
3 ink chemist and a writing expert. I'm not sure
4 about his qualifications as a handwriting expert.
5 But because at some point in time he was
6 laboratory director at U.S. Secret Service.

7 In other words, I don't know what's his
8 background, whether he's a good chemist, but he
9 has some publications relating to ink chemistry.
10 Therefore I assume that he is.

11 Q. Are you aware that Mr. Stewart was
12 tasked with sort of oversight of the forensic
13 document examinations by plaintiff's experts?

14 MR. ARGENTIERI: Well, I have to I
15 guess put an objection in. It sounds -- when
16 you ask that type of question in that form it
17 presumes that that would be like an
18 attorney-client direction, I would think, the
19 way you're phrasing it, Larry Stewart being
20 the --

21 MR. SOUTHWELL: It's stated in his
22 report.

23 MR. ARGENTIERI: He hasn't read the
24 report, he testified.

25 MR. SOUTHWELL: All right. If

1 Aginsky

2 Mr. Stewart is stating it in his report, then
3 it is not some sort of privileged knowledge or
4 information. What I'm asking is simply about
5 that fact. I will just remind you,
6 Mr. Argentieri --

7 MR. ARGENTIERI: I don't mind if you
8 ask it that way.

9 MR. SOUTHWELL: I remind you of the
10 judge's instruction to not put speaking
11 objections on the record. The judge was clear
12 about that.

13 MR. ARGENTIERI: Oh, okay.

14 MR. SOUTHWELL: Okay?

15 MR. ARGENTIERI: Yeah, sure.

16 Q. Do you have any knowledge about
17 Mr. Stewart and whether he had a role in
18 overseeing the forensic document examinations by
19 plaintiff's experts?

20 A. If you -- could you maybe break it down
21 for me. Because English is my second language,
22 sometimes I have difficulties to understand.

23 Q. No problem, no problem.

24 Did you ever speak to Mr. Stewart about
25 the examination in this case?

1 Aginsky

2 A. Actually we spoke once.

3 Q. Approximately -- go ahead.

4 A. It was before taking samples in
5 Buffalo. He called me and said that he's going to
6 be there. And as he said, it was my -- it was his
7 understanding that I should be there too. And he
8 said how many samples do you think we should take
9 so we had enough.

10 So at that point I said that I don't
11 think it's a good idea for two experts on the same
12 side to take samples and split them because we
13 don't have enough. But that's the only
14 conversation that we had.

15 Q. Did you talk to him about testing
16 volatile chemicals -- volatile components or
17 phenoxyethanol in ink?

18 A. No, we didn't discuss any specific test
19 that anybody is going to take, but he knows that I
20 would -- if I would take samples I would do the
21 analysis based on the analysis of all the
22 components, for ink aging, to determine the age of
23 ink.

24 Q. Do you have an understanding about what
25 Mr. Speckin sampled and for what purpose he

1 Aginsky

2 sampled the document?

3 A. No. I only can guess, but I don't have
4 any knowledge whether even Mr. Speckin took any
5 samples. I've seen -- in the Internet I've seen I
6 think in the declaration of Dr. Lyter he mentions
7 Speckin. That's how I knew about Speckin being
8 involved in the case. But I don't know whether he
9 took samples and analyzed them.

10 Q. Earlier you were talking about
11 Mr. LaPorte's ink testing, and we'll come back to
12 that.

13 Do you have any understanding of
14 whether any of plaintiff's experts did ink
15 testing?

16 A. No, I assumed that if any of them took
17 samples -- and again it's my guess -- it could be
18 Larry Stewart. So if he took samples, he probably
19 analyzed them chemically.

20 Q. But you don't have any specific
21 knowledge about that?

22 A. No.

23 Q. Now, I understand you've at least seen
24 some things about the case on the Internet. Have
25 you generally kept up with the news in the case?

1 Aginsky

2 A. No, it's because I have been busy with
3 other cases. It's only when I accidentally came
4 across something or also there was some specific
5 interest, because I recently had a case in which I
6 testified in San Francisco area, and the other
7 side expert was Dr. Lyter.

8 So I wanted to know more about his
9 involvement in this case, maybe what he said
10 regarding the ink-aging methodology, because he
11 used the ink-aging methodology in this case in the
12 case in San Francisco and I also. So we both
13 testified, and the case is old now.

14 Other than that, I didn't do any
15 specific searches in the Internet regarding this
16 case.

17 Q. Do you understand that Mr. Ceglia,
18 who's the plaintiff, has filed a lawsuit in 2010
19 claiming an 84 percent ownership interest in
20 Facebook based on this purported contract of "work
21 for hire" document that he claims he had with
22 Mr. Zuckerberg? Do you understand that?

23 A. Yes, generally I understood that
24 Mr. Ceglia -- I didn't know the specific 84
25 percent, but -- my answer is yes.

1 Aginsky

2 Q. Are you aware the purported date on
3 that purported contract is April 28, 2003?

4 A. Yes.

5 Q. And what we're talking about, the "work
6 for hire" document, as we call it, is a two-page
7 document with purported handwriting with an
8 interlineation and initials on page 1 and
9 signatures and dates on page 2; right?

10 A. Yes.

11 Q. Are you aware that it's defendants'
12 position that Paul Ceglia's purported contract,
13 this "work for hire" document, is a recently
14 created forgery, fabricated for the purposes of
15 bringing a lawsuit?

16 A. That's -- specifically how you
17 formulated it now, yes, as of now I understand
18 that this is the defendants' position.

19 Q. Are you aware that Facebook and Mark
20 Zuckerberg have moved to dismiss the case as a
21 fraud on the court?

22 A. That's a very -- that's beyond my area
23 of expertise, so I don't know the meaning of that.

24 Q. Are you aware that the defendants have
25 moved to dismiss the case?

1 Aginsky

2 A. Dismiss means stop the case?

3 Q. Uh-huh.

4 A. Yeah, I think I've seen something like
5 that in the Internet.

6 Q. Now, just to turn back to your June
7 2011 sworn declaration, do you recall that that
8 was in support of plaintiff's cross-motion for
9 expedited discovery?

10 MR. ARGENTIERI: Objection to form.

11 You can answer.

12 A. I remember these words, "expedited
13 discovery," yes.

14 Q. Were you aware that the defendants had
15 moved the court for an order allowing them to
16 examine this physical purported contract?

17 A. Yes.

18 Q. And then the plaintiff had also sought
19 expedited discovery at the same time, and your
20 declaration was submitted in support of that?

21 MR. ARGENTIERI: Objection as to form.

22 You can answer.

23 A. Yes, I believe I knew about that.

24 Q. Are you aware that the court granted
25 defendants' motion permitting defendants to

1 Aginsky

2 examine Ceglia's physical purported contract?

3 A. I haven't seen the judgment because, as
4 I said, all information I know is what I
5 accidentally saw in the Internet. But yes,
6 apparently it was granted because it was later
7 examined.

8 Q. Are you aware that as part of that
9 submission Mark Zuckerberg submitted a sworn
10 declaration stating that he never signed the "work
11 for hire" document?

12 MR. ARGENTIERI: Objection as to form.
13 You can answer.

14 A. I'm not aware about the specific
15 declaration, no.

16 Q. And I think, as you've just testified,
17 you're aware that as part of the court ordering
18 the examination the court ordered that the parties
19 be permitted to conduct physical sampling of the
20 document for purposes of chemical testing? You
21 understand generally that is what was going on?

22 MR. ARGENTIERI: Objection to form.
23 You can answer.

24 A. Yes.

25 Q. Are you aware that in July and August

1 Aginsky

2 of 2011 both parties' experts took physical
3 examples of the ink, paper, and toner from the
4 purported "work for hire" document?

5 A. That's what I read in Dr. Lyter
6 declaration that I saw on the Internet.

7 Q. Are you also aware that among other
8 tests defendants' expert Mr. LaPorte conducted
9 GC/MS analysis of the ink on the "work for hire"
10 document?

11 MR. ARGENTIERI: Objection as to form.
12 You can answer.

13 A. Yes, because I had this question about
14 his results three weeks ago, then, yes, it's my
15 understanding that Gerald LaPorte had done this
16 examination.

17 Q. Are you aware that Mr. LaPorte
18 discovered a sufficiently high quantity of
19 2-phenoxyethanol to analyze using the solvent loss
20 ratio method?

21 MR. ARGENTIERI: Objection as to form.
22 Answer.

23 A. I'm not aware about that. I can assume
24 that the level of phenoxyethanol should be
25 sufficient in order to use the technology, the

1 Aginsky

2 method.

3 Q. Are you aware, based on his analysis,
4 Mr. LaPorte determines that it was highly probable
5 that the interlineation on page 2 -- sorry, the
6 interlineation on page 1 of the purported "work
7 for hire" document was created within two years of
8 the date of testing, which was in August of 2011?

9 MR. ARGENTIERI: Objection as to form.

10 You can answer.

11 A. I have not read about this, but this
12 was my understanding, that that was Mr. LaPorte's
13 conclusion based on what I heard during our
14 telephone conference three weeks ago.

15 Q. Now, in response to Mr. LaPorte's
16 conclusion, are you aware that plaintiff has
17 attacked Mr. LaPorte and the validity of his PE
18 testing?

19 MR. ARGENTIERI: Objection as to form.

20 A. Again, I've seen in the Internet -- it
21 looks like I've seen a lot on the Internet -- that
22 there was a kind of -- I don't know whether it's
23 motion or another type of documents mentioning
24 that the methodology is not valid.

25 Q. So you're aware that plaintiff has

1 Aginsky

2 attacked the validity of PE testing itself as a
3 method to date ink?

4 MR. ARGENTIERI: Objection as to form.

5 A. Yes.

6 Q. Are you aware that in fact plaintiff is
7 attacking the very scientific principles on which
8 PE testing is based?

9 MR. ARGENTIERI: Objection as to form.

10 A. I'm not aware of that.

11 Q. Are you aware that as part of the
12 attack plaintiff's attorney, Dean Boland,
13 challenged the validity of PE testing at a court
14 hearing held before the judge in this case on
15 April 4th, 2012?

16 MR. ARGENTIERI: Objection as to form.
17 I'm going to expand my objection a little bit.
18 How he answered the last question, you've
19 asked a supplemental question, and it assumes
20 that he answered the first -- the question
21 before that in the affirmative.

22 MR. SOUTHWELL: I don't think it does.

23 Q. But you can answers.

24 A. I'm not aware of that.

25 Q. So you're not aware that in this court

1 Aginsky

2 (Defendants' Exhibit 42, motion to
3 strike declaration of LaPorte, marked for
4 identification.)

5 Q. Dr. Aginsky, I'm showing you what's now
6 been marked as Defendants' 42, which is document
7 Number 386 in this litigation, a motion to strike
8 declaration report of Gerald LaPorte for fraud
9 filed on May 24th, 2012.

10 I'm trying to ascertain if this is what
11 you're referring to you saw, and I want to direct
12 your attention to the middle -- sorry, to page 3
13 to the middle of the paragraph at the bottom of
14 page 3. Could you just review that, please?

15 A. The second portion of page 3?

16 Q. Yes -- yeah, I guess --

17 MR. ARGENTIERI: Starts with
18 "background"?

19 Q. Yeah, background, sort of halfway
20 through that there's --

21 MR. ARGENTIERI: Report submission,
22 that one?

23 MR. SOUTHWELL: Yeah.

24 MR. ARGENTIERI: I just want to put on
25 the record that -- just a generalized

1 Aginsky

2 MR. ARGENTIERI: What's the question
3 again?

4 Q. Go ahead.

5 A. So generally we didn't -- I am not
6 saying about any specifics of the discussion. But
7 generally we discussed my possible involvement in
8 the case as an ink-aging specialist. And at that
9 point it was my understanding that I will be using
10 the test that are based on the analysis of PE.

11 It's actually there are two tests, and
12 I don't know whether Gerald LaPorte used both or
13 just one of them. But I am the author of two
14 tests. One is called sequential obstruction
15 technique, and the other is called solvent loss
16 ratio method.

17 They both analyze PE, but they
18 analyze -- they measure two different ink-aging
19 parameters that change as ink ages on paper. And
20 both methods has been published in peer-reviewed
21 journals. There has never been criticized as junk
22 science in scientific literature.

23 The method -- assuming that Gerald
24 LaPorte used the solvent loss ratio method in this
25 case, that specific method has been reproduced and

1 Aginsky

2 used for more than ten years by Canada Border
3 Services Agency, which is a government lab similar
4 to FBI lab in the United States. And they
5 still -- they are using this method now. So they
6 applied it to cases, to criminal cases, in Canada.

7 I know that the method was used by the
8 U.S. Secret Service. I don't know what was the
9 scope of use of that method. That was at the time
10 when Gerald LaPorte was with the U.S. Secret
11 Service.

12 But it's better to ask him what was the
13 scope of use of that method. I don't know. I
14 simply remember that they used it because there
15 was a conference in Baltimore somewhere around
16 2005 of the American Society of Questioned
17 Document Examiners.

18 And the question was -- someone did a
19 presentation from FBI, and the question from the
20 audience: When you have ink-aging -- ink-dating
21 cases do you do these cases. And they said, No,
22 we refer these cases to U.S. Secret Service, and
23 they do it for us.

24 And LaPorte, Gerald LaPorte, was there,
25 and he answered that question. He stood up, and

1 Aginsky

2 he said that we are doing cases, ink-aging cases,
3 and we -- specifically what he said, like we're
4 close to adopt or something like, with these
5 words, Valery Aginsky's methodology.

6 So that's -- this is how I knew about
7 U.S. Secret Service, whether they use it or not.

8 But other than that, because that's a
9 very specific technology, quite complex, it only
10 can be used by a large laboratory that has
11 necessary equipment or it could be used by people
12 who were trained and then started working in the
13 private sector.

14 So that's why there are only a few
15 people in the world that can -- that are
16 proficient to do it. So that's regarding the
17 solvent loss ratio method.

18 Then also a version of this method
19 which is called thermal desorption, the use of
20 thermal desorption analysis for ink aging, that's
21 a version of solvent loss ratio method. It was
22 developed by three Ph.D. chemists from Germany,
23 and their names are Jürgen Bügler, Buchner, and
24 Dallmayer. And there are other people also.
25 There is a doctor Jan -- from Sweden, Andrasko.

1 Aginsky

2 In other words, also there are some
3 work in China. They also did -- I'm not sure if
4 they used the solvent loss method, but they wanted
5 to monitor the loss of PE in ballpoint inks. They
6 used that for determining the approximate age of
7 ink on a document there.

8 In other words, there is -- there is
9 interest in different countries to these methods.
10 People are at different level of proficiency.
11 Therefore I cannot say that everybody in each
12 country can use it at the same level of
13 proficiency, if we're talking about solvent loss
14 ratio method.

15 But as for me, I use both. I use
16 sequential construction technique, S-C-T, SCT, and
17 solvent loss ratio method together. I usually use
18 them together. And I have testified in a number
19 of cases.

20 And the last case in which I testified,
21 I mentioned it previously where Dr. Lyter was on
22 the other side. We both used the ink-aging
23 methodology there. The judge preferred my
24 testimony. The judge said that my science is more
25 rigorous. But that related to both ink aging and

1 Aginsky

2 comparison ink -- in ink analysis.

3 So in short, I would say that the
4 methodology, if it's done correctly -- if it's
5 done incorrectly, then of course it is not good.
6 But if it's done correctly, then it's far from
7 being junk science.

8 It's a reliable method which has been
9 published in peer-reviewed -- peer-reviewed
10 journals, has been tested, has never been
11 criticized as a junk science. I mean, there are
12 different views of peers. In every scientific
13 area, we have different views. But that's -- as
14 for the Dalbert, I agree that it has never been
15 challenged, but never been challenged doesn't mean
16 that it never survived. That's a different
17 meaning.

18 So that might be a longer than
19 necessary, but that's my answer.

20 Q. That's fine. And as you said, you have
21 in fact been qualified by courts as an expert and
22 offered opinion testimony about ink dating;
23 correct?

24 MR. ARGENTIERI: Objection to form.

25 A. Yes. I have never been disqualified,

1 Aginsky

2 so each time I testified, I was qualified as an
3 ink chemist.

4 Q. And related specifically to the methods
5 you've just talked about that would assist you in
6 rendering conclusions about the dating of inks?

7 MR. ARGENTIERI: Objection as to form.

8 A. At least every other case that I
9 testified involved -- involved the ink-aging
10 analysis, based on the analysis of PE.

11 MR. SOUTHWELL: If I may have just a
12 minute.

13 (Pause.)

14 Q. Do you know roughly how many cases you
15 have testified in related to ink-dating analysis?

16 A. In my career or --

17 Q. Yeah.

18 A. Because there are two stages of my
19 life --

20 Q. I understand.

21 A. -- before I moved to the United States
22 and later.

23 Q. I understand.

24 A. Before I moved to the U.S., when I
25 worked for the government lab in Russia, for the

1 Aginsky

2 former Soviet Union, and Russia, it was a
3 completely different system, law system. So we
4 didn't testify in court, and we prepared reports,
5 very detailed reports, in lieu of live testimony,
6 under the penalty of perjury. And those reports
7 were used in court.

8 So I prepared overall like between 500
9 and 600 reports for court. Difficult to say, at
10 least half of them related to ink-aging analysis.
11 So that would be like roughly 300 court testimony,
12 but I didn't testify in all.

13 Q. I understand.

14 A. After -- actually even before after
15 perestroika, we started giving evidence in court
16 and I testified in Russia several times on
17 ink-aging analysis.

18 After I moved to the United States, I
19 testified in the U.S. and abroad, in Canada and
20 Hong Kong -- actually, there was a recent case in
21 Poland. The amount of cases what relates to
22 ink-aging analysis is more than ten, but I don't
23 remember how many.

24 Q. And in none of those ten you have been
25 challenged or not allowed to testify; is that

1 Aginsky

2 right?

3 A. That's right.

4 Q. Dr. Aginsky, are you aware that there
5 has been some controversy regarding the condition
6 in which the document was presented to defendants
7 pursuant to the court-ordered inspection on July
8 14th? Are you aware of that?

9 MR. ARGENTIERI: Objection as to form.
10 Objection to "controversy."

11 A. If you mean the appearance of the -- of
12 the paper and the ink, yes.

13 Q. Now, I guess actually let's take a step
14 back first. Have you ever heard of someone doing
15 something to try to artificially age ink on a
16 document?

17 A. Generally?

18 Q. Yeah.

19 A. Yes.

20 Q. Like what?

21 A. I have examined many cases in my career
22 in which people have tried to artificially age
23 documents using many -- many things like from
24 direct sunlight to use an iron, a hot iron, or
25 hair blower.

1 Aginsky

2 Sometimes I receive or many times I
3 receive a call from a potential client, if I can
4 call them this, and they would start asking me
5 questions which I would say I'm not discussing
6 this. But they would say what happened to the
7 document if I put it in the trunk of my car in the
8 middle of the Sahara Desert or if I put it in the
9 freezer, something like that.

10 But yes, there is -- there have been
11 many cases, relatively many cases, in which
12 documents -- the documents that I examined were
13 artificially aged, and some of the cases I was
14 able to determine that the documents had been aged
15 artificially.

16 Q. Did questions like those come up in
17 this case?

18 A. No, my involvement -- my involvement
19 was only on that January 13 examination. At that
20 time, no, I don't remember anything like that.

21 Q. And why would someone do something like
22 this, put it in the sun or use a hot iron? What
23 would that do?

24 MR. ARGENTIERI: Objection as to form.

25 You can answer.

1 Aginsky

2 A. The aging process is a chemical process
3 which can be accelerated by using elevated
4 temperature. So any chemical reaction is
5 temperature dependent. That's why we use
6 refrigerators to stop or slow down deterioration
7 in food. So same -- same goes in ink.

8 If we keep a document in a
9 refrigerator, then the document will look younger
10 than it purports to be at a certain point in time.
11 Or if we use an elevated temperature -- it could
12 be direct sunlight or it could be an oven or
13 something like that -- then we will accelerate the
14 age of the ink and the purpose to make the ink
15 look older than it purports to be.

16 Q. Or I guess to make it look older than
17 it in fact is?

18 A. Yes. I'm sorry, yes. That's -- in
19 other words, if the task is to prepare a document
20 that should look older and backdated, then, yes,
21 that's what people try to use to accelerate the
22 age of ink, by applying ink.

23 Q. Are you familiar with sort of popular
24 news accounts or literature that talk about this,
25 that this is possible to do; right?

1 Aginsky

2 MR. ARGENTIERI: Objection as to form.

3 Do you understand his question?

4 A. Are you asking me about scientific
5 literature?

6 Q. No, I guess, let me rephrase it. You
7 mentioned that there are a variety of things that
8 someone might do to artificially age a document to
9 make it look older than it in fact is. And my
10 question to you is are you aware of those ways
11 being reported in, for example, popular news
12 accounts or being -- the information being out
13 there and available.

14 MR. ARGENTIERI: Objection to form.

15 A. Yes, it was not available, easily
16 available, at the time when I -- when I worked
17 when I mentioned for the government of Russia.

18 Q. Right.

19 A. But now -- no, that's what I mean. The
20 Internet was not that -- that was -- now we can
21 easily get this information from the Internet, and
22 it will take maybe two minutes to find out.

23 Q. Okay. You may remember from our
24 interrogatories to you that we provided you with
25 an image of the "work for hire" document that

1 Aginsky

2 appeared to have faded and discolored ink and that
3 we asked you some questions about the appearance
4 of the ink when you saw the document and whether
5 the images we provided reflected the appearance
6 when you saw that.

7 Do you remember that?

8 MR. ARGENTIERI: Objection to the form.

9 A. Yes.

10 (Pause due to telephone disconnection.)

11 Q. So, Dr. Aginsky, we asked you some
12 questions about this, and you stated in your
13 interrogatory you did not observe yellowed or
14 brown or faded ink on any portion of the document
15 that you examined; correct?

16 A. Yes.

17 MR. ARGENTIERI: Objection to form.

18 Are you going to show him the document?

19 MR. SOUTHWELL: No, I'm asking him the
20 question. Stop interrupting, please.

21 Q. Go ahead.

22 A. Yes, this is what I said in my -- in
23 the answers to interrogatories, yes.

24 Q. And are you aware that it's defendant's
25 position that when plaintiff produced the "work

1 Aginsky

2 for hire" document to defendants on the morning of
3 July 14th the ink on the document was very faded,
4 almost a light tan or brown?

5 MR. ARGENTIERI: Objection as to form.

6 A. Yes, I think that I have seen it in the
7 Internet.

8 Q. That that is defendants' position?

9 A. That is defendants' position.

10 Q. Right. Do you further understand that
11 it's defendants' position that the paper -- that
12 on the front of the document was discolored and
13 off-white when it was first presented for
14 inspection on July 14th?

15 MR. ARGENTIERI: Objection.

16 A. I don't know what specifically what was
17 the position, whether the front or back was
18 discolored, but it's my understanding that at
19 least one side of each page was discolored.

20 Q. Where you aware that defendants'
21 experts Mr. Tytell and Professor Romano, who were
22 present at the inspection on the morning of July
23 14th when the "work for hire" document was first
24 produced, have submitted sworn statements
25 describing the "work for hire" document as having

1 Aginsky

2 MR. ARGENTIERI: Objection as to form.

3 A. Am I aware --

4 Q. Are you aware that's defendants'
5 position?

6 A. That's my understanding, yes, that's
7 defendants' position.

8 Q. Are you also aware that defendants'
9 experts believe that the damage to the document
10 and its ink was caused by some sort of exposure or
11 photo degradation of the "work for hire" document,
12 such as exposure to sunlight?

13 MR. ARGENTIERI: Objection to form.

14 A. I'm not aware of a source that could
15 cause this degradation, but that could be a
16 logical assumption.

17 Q. So you're not aware of the defendants'
18 experts identifying a particular source, but
19 you're aware that that could be a logical
20 conclusion for how a document could be -- have
21 faded ink; right?

22 MR. ARGENTIERI: Objection as to form.

23 A. Yes, what I know from my experience,
24 that temperature doesn't -- typically doesn't
25 cause fading. What causes fading is light. And

1 Aginsky

2 direct sunlight will be very effective to cause
3 fading.

4 Q. Fading of ink?

5 A. Fading of ink and paper. Paper cannot
6 fade, but, I mean, change the color of the paper.

7 MR. SOUTHWELL: Give me just a moment.

8 Q. I wanted to ask you, Dr. Aginsky, just
9 a few questions about your CV, which you attached
10 to your June 11th declaration. So I'm going to
11 ask that this be marked as Defendants' Exhibit 43,
12 and then I'll show it to you.

13 (Defendants' Exhibit 43, declaration of
14 Aginsky, marked for identification.)

15 Q. I'm showing you now Defendants' 43,
16 which is a document -- the top line, I'll
17 represent to you, is simply the line that gets
18 added by the court when this document is filed.
19 This is doc 66, which referred to the docket in
20 this case, and it was filed on June 17th, 2011.

21 If you can just take a moment to look
22 through this 15-page document and let us know when
23 you have done so and whether you recognize it.

24 (Pause.)

25 A. Yes, that's my declaration.

1 Aginsky

2 related to substances other than those associated
3 with documents?

4 A. No.

5 Q. So the chemical testing is related to
6 ink, paper, toner, or other such artifacts found
7 on documents; is that right?

8 A. Yes, any material, those that you
9 mentioned, plus ink jet ink, stamp padding, yes.

10 Q. But you would generally perform
11 chemical testing on all aspects of a document?

12 A. Yes.

13 Q. I believe you explained this earlier,
14 but I just want to be clear. Do you have any
15 other scientists or document examiners working
16 with the Aginsky Forensic Document Dating
17 Laboratory?

18 A. No.

19 Q. What equipment do you have in your
20 laboratory, generally speaking?

21 A. I have GC/MS, gas chromatography/mass
22 spectrometer; it keeps for the TLC analysis, which
23 stands for thin-layer chromatography; a number of
24 optical instruments including VSC, video spectral
25 comparator, from Foster & Freeman; microscopes; UV

1 Aginsky

2 cabinet; obviously a scanner; and some other
3 smaller tools which are used for both physical and
4 chemical analysis.

5 Q. And you previously testified that you
6 had been a chemist -- well, let's back up.

7 You have a Ph.D. in analytical
8 chemistry, and that's from the Military Academy of
9 Chemical Defense; correct?

10 A. Yes, in Moscow in the former Soviet
11 Union.

12 Q. And also a master's in analytical
13 chemistry; correct?

14 A. Yes.

15 Q. You testified earlier you had
16 previously worked for the ministry of the interior
17 at the forensic science center in Russia in the
18 former Soviet Republic. Was that doing ink
19 chemistry solely or other types of chemistry?

20 A. I did some other types of analysis,
21 mainly the ink -- chemical ink -- ink analysis and
22 dating, but also I did the analysis of explosives
23 and the analysis of narcotics. That was for the
24 forensic science center. It's like a federal
25 laboratory for the ministry of the interior. And

1 Aginsky

2 ministry of the interior is a law enforcement
3 agency which is similar to FBI and police in
4 the -- and U.S. Secret Service.

5 Q. And on the first page at the bottom,
6 you've got a paragraph here that states, uses
7 reliable ink-dating methods (proven through
8 outside proficiency testing) developed as a result
9 of many years of research of the methodology
10 developed and published by Dr. Antonio Cantu.

11 Did I read that correctly?

12 A. Yes.

13 Q. And is that the ink-dating methods that
14 we've talked about before the solvent loss ratio
15 method and the sequential --

16 A. Sequential construction technique.

17 Q. Thank you.

18 Those are the methods you are referring
19 to?

20 A. Yes, I would put sequential
21 construction technique in the first place because
22 that's what Dr. Cantu developed. At that time he
23 applied it to dye components, not to solvent
24 components.

25 But I simply used his ideas and further

1 Aginsky

2 developed his methodology, applying it to solvent
3 components, major of which is PE, phenoxyethanol.

4 Q. And Dr. Cantu was a pioneer in the
5 field of PE analysis; right?

6 MR. ARGENTIERI: Objection.

7 A. Not -- he was a pioneer in the field of
8 ink dating and specifically the sequential
9 construction approach. This is what Dr. Cantu
10 invented and published when he was with the U.S.
11 Secret Service.

12 Q. Do you have a high opinion of
13 Dr. Cantu?

14 A. Yes, yes. He's well-known and highly
15 recognized person in the world.

16 Q. You mentioned here, in the quote that I
17 read, outside proficiency testing. What testing
18 are you referring to?

19 A. The methodology and what I mentioned,
20 the sequential construction technique, I use it in
21 combination with solvent loss ratio method. But
22 the SCT is what I rely most of all in my ink-aging
23 cases.

24 So this methodology has been subjected
25 to outside proficiency testing, and that means as

1 Aginsky

2 for -- so I am submitted -- I was submitted
3 samples, so-called blind samples. These are like
4 portions of a document cut from a document with
5 known date of preparation. So the date of
6 preparation was not known to me.

7 And it was done -- overall it was four
8 proficiency tests; in my career, three of which
9 were outside proficiency test, which are
10 considered most important and most difficult to
11 survive because you don't know -- you have -- it's
12 a completely blind test.

13 The first test was done in Israel. I
14 was working for the forensic science center in
15 Moscow, and I was invited by Israel police
16 headquarters to come to Israel and to deliver a
17 lecture on ink-aging analysis to them.

18 And they said that as an option if I
19 want they would like -- not if I want but if I
20 don't object they would give me some samples so I
21 would examine those samples using their equipment
22 in Jerusalem. And this is what I did.

23 That was the first proficiency test.
24 They gave me three samples in Jerusalem; and then
25 when I was correct on all three of them, they gave

1 Aginsky

2 me three more; and I took them to Moscow and
3 examined them in Moscow and sent my results to
4 them. So all six results were correct.

5 When I moved to the United States,
6 there were two additional proficiency tests. The
7 first one I thought that it was outside
8 proficiency test, but it was given to me by at
9 that time my employer, Tom Riley. I was with
10 Riley Welch & Associates and became Riley Welch &
11 Aginsky.

12 At that time when it was Riley Welch &
13 Associates, Tom Riley gave me these additional
14 samples that he said that's an outside proficiency
15 test. We would like to test your method before we
16 are going to put reputation of our firm at
17 stake -- on the line.

18 So when I submitted my results, they
19 were all correct, but I submitted them to him.
20 Therefore he said that was an internal test
21 because I didn't want to take a risk. So now I
22 will order another test for you that will be
23 completely outside proficiency test, I will not
24 know the results. So that test also was positive,
25 was good.

1 Aginsky

2 And last year it was another test which
3 is -- which came actually from Russia. The
4 samples were prepared by Russia law enforcement
5 agencies. And I have not published these results
6 yet, but I am going to publish.

7 I was invited as an invited speaker to
8 Europe to Canary Island conference in October of
9 this year, and I am going to disclose completely
10 all the results with all the underlying data so
11 people would be able to review the results and it
12 will be completely transparent, the test. And the
13 results also were correct.

14 So in other words, the methodology
15 works. It's reliable if it's done correctly. And
16 obviously I'm the author. I probably am doing it
17 correctly, hopefully.

18 MR. SOUTHWELL: I think we have to take
19 a break to change the tape, so let's just take
20 a quick break, please.

21 THE VIDEOGRAPHER: Going off the record
22 12:17 p.m. This is the end of Tape 1 of the
23 deposition of Valery N. Aginsky.

24 (Recess taken from 12:17 to 12:25.)

25 THE VIDEOGRAPHER: Going back on the

1 Aginsky

2 record at 12:25 p.m. This is the beginning of
3 Disk 2 in the deposition of Valery N. Aginsky.

4 MR. SOUTHWELL: Thank you.

5 Q. Dr. Aginsky, when we broke we were
6 reviewing your CV, and I wanted to turn your
7 attention to page 3 of 6 at the bottom where you
8 start your professional publications.

9 A. Yes.

10 Q. And there you indicate that you have
11 more than 20 peer-reviewed articles on ink
12 analysis and dating, including chapters in three
13 books and two encyclopedias; is that right?

14 A. Yes.

15 Q. On the pages that follow, there are a
16 number of books and peer-reviewed articles and
17 presentations at scientific conferences, and a
18 number of these are specific to ink dating and
19 analysis of PE and ink and the solvent loss ratio
20 method; correct?

21 A. Yes.

22 Q. And the latest paper at least on the CV
23 here is number 34, which is a paper on the solvent
24 loss ratio method presented at the American
25 Society of Questioned Document Examiners meeting

1 Aginsky
2 in 2010 that you presented along with
3 Mr. Gaudreau; correct?

4 A. Yes.

5 Q. And Mr. Gaudreau was also -- would you
6 characterize him as a pioneer in the field of PE
7 analysis?

8 MR. ARGENTIERI: Objection.

9 A. Mr. Gaudreau -- Mark Gaudreau and Luc
10 Brazeau, these are two ink chemists from Canada
11 Border Services Agency, CBSA, which is what I
12 mentioned earlier similar to FBI in the U.S. And
13 these are two chemists along with the other from
14 the lab who have been using the solvent loss ratio
15 method for over ten years.

16 MR. ARGENTIERI: Did he answer your
17 question?

18 MR. SOUTHWELL: Uh-huh.

19 MR. ARGENTIERI: You asked him if they
20 were pioneers. I think that was your
21 phraseology.

22 MR. SOUTHWELL: Yeah, and he answered
23 it as he answered it. That's his answer.

24 That's fine.

25 MR. ARGENTIERI: He answered -- well --

1 Aginsky

2 A. I wouldn't call him a pioneer, but he
3 is one -- one of those who has been involved in
4 this field for a long time and has been using this
5 method.

6 Q. Fine. And what is your opinion of
7 Mr. Gaudreau?

8 A. He's a qualified forensic document
9 examiner and ink chemist.

10 Q. I want to ask you some specific
11 questions about the scans, photographs, and other
12 images that you took during your forensic document
13 examination in this case, and you comment on some
14 of this in your interrogatory responses that are
15 dated December 2nd.

16 MR. SOUTHWELL: So why don't you go
17 ahead and have this marked as Defendants'
18 Exhibit 44.

19 (Defendants' Exhibit 44, interrogatory
20 responses of Aginsky, marked for
21 identification.)

22 Q. I have put before you Defendants'
23 Exhibit 44 which again has this line up at the top
24 which simply reflective of the document having
25 been filed. This was filed, this document 332 in

1 Aginsky

2 this case.

3 Can you just take a moment to look
4 through this and let us know when you have done so
5 and if you recognize it?

6 A. Yeah, that's the document -- a copy of
7 the document that I prepared and assembled last
8 year.

9 Q. And on the last page of that is a copy
10 of your signature; correct?

11 A. Yes.

12 Q. Now, I'd like to direct your attention
13 to page 5 using the numbers at the bottom of the
14 document. The paragraph there where you state,
15 The circumstances and manner in which I took each
16 scan and photograph were, A, typical of a
17 nondestructive examination of documents that I
18 have been conducting routinely for about 28 years;
19 and B, in accordance with the recommendation
20 outlined in the American Society for Testing and
21 Materials, ASTM, international standard guide
22 E1422-05.

23 Did I read that correctly?

24 A. Yes.

25 Q. So it sounds like, based on your

1 Aginsky

2 practice as well as the independent international
3 standards, you have developed a standard operating
4 procedure with regard to taking scans and
5 photographs during a forensic document
6 examination; is that correct?

7 MR. ARGENTIERI: Objection.

8 A. Yes.

9 Q. And did you follow this standard
10 operating procedure in this case?

11 MR. ARGENTIERI: Objection to the form.

12 A. Yes, I did.

13 Q. Now, scans, images and photographs of a
14 document such as the ones in this case can be used
15 to record various characteristics of a document;
16 correct?

17 A. Yes.

18 Q. So, for instance, photographs could
19 document close-ups of handwritten ink lines, scans
20 could document the placement and appearance of ink
21 and text on a package, and VSC images could
22 document infrared luminescence of ink, for
23 example?

24 MR. ARGENTIERI: Objection.

25 A. Yes.

1 Aginsky

2 Q. Is one of the purposes of scanning and
3 photographing and taking images to record as best
4 as possible -- and of course understanding the
5 limitations of each medium -- a true and accurate
6 representation of characteristics you observe
7 firsthand?

8 A. Yes.

9 Q. Another purposes of scans and imagery
10 is to record the condition of a document at the
11 time you receive it for examination; correct?

12 MR. ARGENTIERI: Objection to form.

13 A. Yes, that's standard procedure, and I
14 use it to take pictures and/or scans before I do
15 anything to the document and after I complete the
16 examination.

17 Q. In order to have a record of the
18 document as it came to you and as it left you, so
19 to speak; is that right?

20 A. Yes.

21 Q. Now, in November of 2011, you provided
22 the defendants with a CD of all of your scans and
23 photographs, as you mentioned, putting aside the
24 VSC imagery; right?

25 A. Yes, that's correct.

1 Aginsky

2 Q. And some of those are discussed here in
3 your interrogatory answer that we've just been
4 reviewing at page 5 of Defendants' Exhibit 44.

5 I'm going to now show you what I'd like
6 to be marked as Defendants' Exhibit 45, which I
7 will represent to you is a copy of -- an exact
8 copy of the CD that you in fact produced to us.

9 (Discussion off the record.)

10 (Defendants' Exhibit 45, copy of CD
11 from Aginsky, marked for identification.)

12 Q. I'm going to now put this into the
13 computer to pull up the imagery that you provided
14 us so that we can ask you a few questions about
15 that? Okay? And it will be displayed on the
16 screen that's right behind you.

17 A. Okay.

18 MR. ARGENTIERI: Do you want to move
19 that back?

20 THE VIDEOGRAPHER: (Complies.)

21 THE WITNESS: I'll take this
22 opportunity to get some water.

23 MR. ARGENTIERI: I'll get I.

24 Q. Now let's just start with the
25 interrogatory responses here on page 5,

1 Aginsky

2 Defendants' Exhibit 44. At the top of that page
3 you note the document was scanned using a Canon
4 Canoscan LIDE 200 scanner during a particular time
5 frame. Do you see that?

6 A. Yes.

7 Q. And were those scans taken using your
8 standard settings?

9 MR. ARGENTIERI: Objection as to form.

10 A. Yes, yes. There was a particular
11 resolution which I believe what I typically use.

12 Q. You have a typical resolution that you
13 use when you conduct an examination?

14 A. Yes, when I scan a page of a document
15 and I don't need a high resolution, I typically
16 use 300 DPI, or less, maybe 200 DPI.

17 Q. Do you recall if you changed the
18 contrast setting to be more intense or something?

19 A. No. That was a standard. No, I didn't
20 change any -- I didn't do any what I would call
21 manipulation. It was not necessary. Everything
22 was black, so I didn't need to. Plus everything
23 was standard.

24 Q. Because the toner you observed was
25 black and the ink was black as well; correct?

1 Aginsky

2 A. That's correct.

3 Q. Now, if you look up on the screen,
4 you'll see that there are four file folders on the
5 disk. One is labeled two thousand -- well,
6 they're each labeled 2011-1-13. The top is Canon
7 images, then DiniLitr images, then Scans_QD, and
8 Zarbeco images are the last.

9 THE VIDEOGRAPHER: I'm sorry, counsel,
10 do you need me to video that or just stay on
11 the witness?

12 MR. SOUTHWELL: No, just stay on the
13 witness.

14 THE VIDEOGRAPHER: Thank you.

15 Q. Do you recall these are the folders on
16 the CD that you provided to us?

17 A. Yes, I do.

18 Q. Let's first go to the Canon images,
19 which I understand from your interrogatories are
20 your scanner images. And as you just said, your
21 scans were taken in accordance with your standard
22 operating procedure; correct?

23 MR. ARGENTIERI: Well...

24 A. Yes, at that time I scanned them using
25 Photoshop. Recently, maybe last year, I tried to

1 Aginsky

2 scan using the Canon software, not to use
3 Photoshop, because files with PSD extension tend
4 to be too large.

5 Q. Too large?

6 A. Too large. And for the purpose of just
7 recording an image of a document, it was not
8 necessary in most cases to get -- to obtain large
9 files.

10 Q. So my question with respect to these is
11 what was -- what were you aiming to capture with
12 these specific scans using your Canon scanner?

13 A. It was simply to scan the document
14 using standard parameters to record the appearance
15 of the document as I received it.

16 Q. And these scans are true and accurate
17 representations of what you observed when you
18 first received the documents?

19 A. Yes.

20 Q. So let's go back to your interrogatory
21 answers on page 5. The next item is 7 images of
22 portions of the document using -- that you took
23 using your Canon digital camera. And if we could
24 just go back to the folder. I just want to make
25 sure we've identified that.

1 Aginsky

2 Oh, okay so the Canon folder has the
3 Canon digital camera picture. Let me make sure --
4 I may have messed up. Let me clarify the record.
5 If we can just go back. So the scans we referred
6 to before are in that Scans_QD two pages folder.
7 Is that correct, Dr. Aginsky?

8 A. Yes.

9 Q. That's the scan that was taken with
10 your Canon Canoscan scanner?

11 A. That's correct.

12 Q. Now, the images of portions of the
13 document taken using the Canon digital camera are
14 in the folder that says Canon images; correct?

15 A. Yes, those are images, if I remember
16 correctly, I compared the paper, specifically the
17 left upper corners of two pages that contained,
18 yes, staple holes, and also the paper -- the
19 appearance of the paper, the opacity, what I
20 called.

21 MR. ARGENTIERI: Are you sure you don't
22 want this videotaped, what he's looking at?

23 MR. SOUTHWELL: I think the record
24 is -- the record is clear as to what it is.
25 We're now looking at image 0531.JPG.

1 Aginsky

2 MR. ARGENTIERI: I don't mean to ask
3 the question you're going to ask, but are you
4 going to have him comment on what we're
5 looking at without the video shooting it?

6 MR. SOUTHWELL: I'm asking the
7 questions.

8 Q. Dr. Aginsky, what was your aim in
9 taking these photographs? What were you aiming to
10 capture?

11 MR. ARGENTIERI: Objection, asked and
12 answered.

13 A. That's what I typically do. If -- if
14 my task is to compare a two-page document, any
15 two-page document, or multipage document but --
16 and to see whether there's any evidence of page
17 substitution, then I would analyze the examined
18 paper and any other material on the document, like
19 in this case it is toner and ballpoint ink.

20 This specific, particular image, it
21 compares the two pages that show, number one, the
22 staple folds on both pages; number two, it showed
23 that both pages were folded in that corner. And
24 there is a -- there is like a line that shows that
25 where they were folded. And I arranged two pages

1 Aginsky

2 so we can see that line on one page on the other
3 page.

4 And also this image, it was taken on a
5 table that has a light from -- a lighting table.
6 Therefore we can see like how the page -- the
7 paper looks trans -- the transparency of the
8 paper.

9 We can compare the opacity like the
10 paper contains what are called on my -- I have
11 work notes, and they call it cloudness on my work
12 note. I said the cloudness is approximately the
13 same.

14 So this is just a page, because it's
15 impossible to remember what I saw at that time,
16 and therefore I took some notes and I took a
17 picture to use it at a later time if I am called
18 to testify to explain what I -- what that level of
19 analysis allowed me to determine.

20 Q. Okay. The image that we've been --

21 MR. ARGENTIERI: If I can interrupt.

22 I'd like to have the videographer shoot the
23 screen. He's obviously looking at the screen
24 and commenting on these images, and we don't
25 have that on film, we're just shooting the

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

Aginsky

head shot?

MR. SOUTHWELL: I was going to establish that this is IMG_0531.JPG, on Defendants' Exhibit 45, but I am happy to have the videographer pan over and show the screen.

MR. ARGENTIERI: If you don't mind.

Q. Dr. Aginsky, have I identified correctly the image that you're referring to?

A. Yes.

Q. The photographs that you took with your Canon digital camera, did you take those photographs using standard settings that you use on that camera?

MR. ARGENTIERI: Objection as to form.

A. Well, yes, probably I changed it to a settings that is applicable to take pictures in a close proximity.

Q. So were these photographs from your Canon digital camera true and accurate representations of what you observed?

A. Yes.

Q. Let's turn back to Defendants' Exhibit 44, your interrogatories. After the Canon digital camera, you've got a paragraph that describes 24

1 Aginsky

2 microphotographs of portions of the document taken
3 using a Zarbeco MiScope 2MP digital microscope.

4 Can you explain in a little more detail
5 what a Zarbeco MiScope 2MP digital microscope is?

6 A. It's a portable digital microscope. It
7 looks like a mouse computer that we use with
8 computers -- with computers, just a little bigger,
9 and it allows to capture a picture through this
10 microscope at a resolution to 2 megapixel.

11 Q. And that digital microscope attaches to
12 a computer?

13 A. Yes. It has a USB cord.

14 Q. And what do you use that for
15 specifically as part of your examination?

16 A. It is very useful tool or microscope
17 that is used as I know by many colleagues in the
18 field. It is used to take and enhance the image
19 of, for example, a printed element on a document
20 or handwritten element. Or it also can be used if
21 a document contains some security features.

22 They also can be -- let's say some
23 documents printed on a color printer, they may
24 contain yellow dots which would allow it to
25 determine the type of printer that was used and

1 Aginsky

2 even the date when it was done.

3 So it's a large scale of possibilities
4 that can be -- can be examined using this small
5 device.

6 Q. Let's look up on the screen --

7 MR. SOUTHWELL: If you want to pan.

8 Q. -- to the folder that contains Zarbeco
9 images, these are the images that you took with
10 your Zarbeco microscope; right? If you can click
11 into that.

12 A. Yes.

13 Q. And there are 24 BMP files. Those are
14 the photographs; is that right?

15 A. Yes.

16 Q. So specifically as to these, what were
17 you trying to capture by taking these photographs
18 using your Zarbeco microscope?

19 A. The reason for this particular image
20 was to capture the image of M and Z to compare it
21 as the appearance of the ink and ink lines with
22 the other handwritten portions on the same page
23 and on the other page.

24 Sometimes if a pen has -- is
25 malfunctioning, has some defect, then that would

1 Aginsky

2 be very good demonstrative to determine that the
3 same pen was used.

4 Unfortunately most pens behave normally
5 and therefore it is -- it cannot be -- like in
6 this case I didn't find any specific defects that
7 would allow it to determine that the same pen was
8 used for the initials, for the interlineation, or
9 on the second page.

10 But I took those images just for
11 comparison so I would remember this if I need to
12 refresh my memory at a later time.

13 Q. And up on the screen is image file
14 001.BMP in a preview screen to the right, and it's
15 got the letters MZ; is that right?

16 A. Yes.

17 Q. And if I could turn to image file
18 002.BMP, that appears to have -- well, I would
19 describe it as a reddish tint. Can you describe
20 that image and explain it, please?

21 A. Yes, that -- the second image is the
22 same image as the first one, simply the first one
23 was in the visible range and the second one in the
24 near infrared range. And we can see that via the
25 ink disappeared, and we only can see some

1 Aginsky

2 indentations where the ink is on paper.

3 Q. And that's a setting that you've used
4 with the Zarbeco microscope is to allow the -- to
5 see the imagery only with the near infrared range?

6 A. Yes, the Zarbeco microscope has a
7 switch I can switch from visible range to near
8 infrared.

9 Q. And is that true, then, throughout the
10 24 images that are your Zarbeco images, that there
11 is -- there are captures, if you will, of the
12 visible range and then the near infrared range for
13 the image?

14 A. Not all images have both visible and
15 infrared, but many of them they do have.

16 Q. And you're referring to I think you
17 called them your work notes in front of you. Can
18 you just describe what that is?

19 A. This is just a -- they are two pages of
20 my work notes, and I wrote some information which,
21 again, would be useful if I need to refresh my
22 memory at a later time.

23 So I wrote that I didn't notice any
24 yellow dots on pages 1 or 2, meaning that the
25 printer or copier was not a color printer or

1 Aginsky

2 copier, because most of them they contain the
3 yellow dots pattern.

4 Then all these 24 images I have some
5 description. So I would know that, for example,
6 image number 1 is page 1 and then what I captured
7 is MZ. And resolution is 40 times, 40X. And it's
8 visible range.

9 And image number 2 is the same but it's
10 in the infrared range.

11 Q. Great. Just so that the record is
12 clear, I think -- maybe at a next break I'll ask
13 to make a quick copy of those notes so we can have
14 those as part of the record.

15 A. Okay.

16 Q. The images you have here, the 24 that
17 you produced from your Zarbeco digital microscope,
18 are those true and accurate representations of
19 what you observed using the aspects of Zarbeco
20 that you testified to?

21 A. Yes, this is what I observed using this
22 particular digital microscope.

23 Q. Now, you also used a DinoLite digital
24 microscope; right?

25 A. Yes.

1 Aginsky

2 Q. Can you explain a little what a
3 DinoLite is and how it's different from the
4 Zarbeco?

5 A. It's another type of digital
6 microscope, simply it has a different -- different
7 lighting characteristics. Sometimes it's
8 important because when we change even an angle of
9 incident light we can see more -- we might see
10 different features depending on the angle.

11 And therefore it's better to use
12 different microscopes if the task is to find
13 any -- like any difference between any materials,
14 again, to find out if there is any evidence of
15 page substitution.

16 Also the DinoLite microscope has a
17 larger magnification, so it's possible to capture
18 images at a higher magnification. And I found it
19 useful for a specific test to determine the
20 sequence of when different materials were placed
21 on the document. Actually I published a paper in
22 peer-reviewed journals.

23 It uses a different equipment, not a
24 DinoLite microscope, but I used a more
25 sophisticated large microscope when I worked in

1 Aginsky

2 Moscow, and it allowed me to develop a procedure
3 to determine what came first, what came second
4 when we have toner and ball point ink in case
5 where there is no intersection. In this case it
6 is easier. There is an intersection.

7 Q. Right.

8 A. But even when there is no intersection,
9 it's possible to determine whether a blank page
10 was signed and then something -- some information
11 was printed on it without an interaction with the
12 signature.

13 But in this case I used this microscope
14 to determine whether the ink was on top of toner
15 or whether the toner was on top of ink. And I
16 determined that in all instances where we have
17 intersection of ink and toner the ink is on top of
18 toner.

19 Q. Looking up on the screen, the folder
20 that has the D-I-N-I-L-I-T-R images, that's the
21 folder where you have these 11 microphotographs;
22 correct?

23 A. Yes.

24 Q. Those are the names of the portions
25 that you have captured; is that right?

1 Aginsky

2 A. Yes. For each image I -- instead of
3 writing it on work notes on a page, I wrote it as
4 a file, as a name of the file, so it's like
5 self-explanatory what intersection is captured.

6 Q. The first one which is there on the
7 previous screen on the right is initials PC
8 crossed the S.JPG; is that right?

9 A. Yes, that's correct.

10 Q. And were these microphotographs taken
11 in accordance with your standard operating
12 procedure?

13 MR. ARGENTIARI: Objection as to form.

14 A. Yes, I not always use DinoLite
15 microscope. But in a case like this when the task
16 is to determine whether the ink or toner came
17 first on a document, yes, I would use this
18 microscope, and that's part of my standard
19 operating procedure.

20 Q. The Zarbeco images we looked at before,
21 are those also taken in accordance with your
22 standard operating procedure?

23 A. Yes.

24 Q. These DinoLite microphotographs, the 11
25 of them, are they true and accurate

1 Aginsky

2 representations of what you observed using the
3 capabilities of the microscope?

4 A. Yes.

5 MR. SOUTHWELL: Okay. We can take that
6 off the screen, then.

7 Q. I want to go back to your January 13,
8 2011, examination. The only document you examined
9 was the two-page "work for hire" document; is that
10 correct?

11 A. That's correct.

12 Q. Were you aware at the time in January
13 of 2011 there was another questioned document in
14 the case referred to as the technical back-end
15 specifications?

16 MR. ARGENTIERI: Objection as to form.

17 A. I don't remember such a name of a
18 document.

19 Q. Are you aware that this was another --
20 a second questioned document in the case?

21 MR. ARGENTIERI: Objection.

22 A. I think another document was mentioned,
23 a six-page document? Yes, it was, but I have not
24 examined.

25 Q. When you say it was mentioned, it was

1 Aginsky

2 mentioned at this January 13th examination? Is
3 that what you mean?

4 MR. ARGENTIERI: Objection as to form.

5 A. I don't remember if we discussed it on
6 that -- on that date. It could be that we
7 discussed it on the date. But it was just
8 mentioned to me. I was not asked to examine it,
9 or I have not seen the document, the original.

10 Q. Did you have any discussions with
11 plaintiff's other expert, John Paul Osborn, prior
12 to your examination on January 13th or during the
13 examination?

14 A. Definitely I didn't discuss -- didn't
15 have any discussions before. I shouldn't say
16 "definitely," because I might forget something.
17 But I doubt it very much that I had any discussion
18 with him before that date. I spoke to him briefly
19 maybe two times after that, but not before.

20 Q. Were you aware of the fact that he
21 examined documents in this case, specifically two
22 documents, about a week prior to you on January
23 5th, 2011?

24 A. I think that -- it wasn't positive, but
25 that was my understanding, because I recommended

1 Aginsky

2 John Paul. Standard procedure is to do first the
3 indentation analysis. So that was my
4 understanding. I wasn't sure, but that was my
5 understanding, that John Paul had already done his
6 examination --

7 Q. I see.

8 A. -- before January 13 of 2011.

9 Q. Just so that it's clear, you don't --
10 do you have a specific knowledge of that or you're
11 assuming that's the case because you understand he
12 would do an indentation analysis and that would
13 typically come before your examination as a
14 chemist?

15 MR. ARGENTIERI: Objection to form.

16 A. Because it's a typical procedure, then
17 I don't remember -- as of today I don't remember
18 if I knew for sure that he had done it. But I
19 would say it is highly probably that he had done
20 it before I did my examination.

21 Q. And do you recall anything about, as
22 you mentioned, the six-page document? Do you
23 recall anything about hearing that Mr. Osborn had
24 examined it or what do you recall about that other
25 document?

1 Aginsky

2 MR. ARGENTIERI: Objection to form.

3 A. This I don't know at all if he had ever
4 examined it, no.

5 Q. Who provided you the "work for hire"
6 documents on January 13th, 2011?

7 A. Mr. Argentieri.

8 Q. And that's fine. He's here. As he
9 provided on July 14th, 2011, when we did our
10 inspection.

11 Now, before Mr. Argentieri handed you
12 the document, had you seen images of the "work for
13 hire" document?

14 A. I believe that PDF copies were sent to
15 me, yes.

16 Q. Are you aware if that was the image
17 attached to the complaint in the case?

18 A. At that time I didn't know anything. I
19 didn't want to know any specifics. I wasn't even
20 sure whether I would be involved or retained for
21 the case.

22 Q. Do you recall at that time whether you
23 had seen the complaint in the case?

24 A. That I had seen what?

25 Q. The complaint, the document that begins

1 Aginsky

2 the lawsuit.

3 A. No, I don't remember. And again, as I
4 said, the complaint is a specific judicial --

5 Q. Yes.

6 A. -- document. No, I only just had
7 general discussion about what I could or could not
8 do typically.

9 Q. Do you recall at any time having seen
10 the complaint in this case, the judicial document
11 that starts the litigation?

12 A. I'm not positive, but most probably I
13 have not seen it.

14 Q. You mentioned you thought that prior --
15 was it prior to January 13th that you had seen the
16 PDF of the "work for hire" document or was it on
17 that day?

18 A. I think that because it was e-mailed to
19 me, so it would be logical to e-mail it to me
20 before we met on January 13th. So my -- most
21 probably -- again, I don't remember.

22 Q. That's fine.

23 A. I could verify it to look at my
24 computer. But I think that I received -- I had
25 received it before January 13.

1 Aginsky

2 Q. Do you recall who sent it to you?

3 A. No, I don't.

4 Q. I'm going to put another blank in the
5 transcript here. I'm going to ask if you could
6 determine when it is you received the PDF and who
7 sent it to you and ask that you provide that
8 information so we could fill that transcript blank
9 in; okay?

10 TO BE FURNISHED: _____

11 _____.

12 A. Yes, yes, I will do it.

13 Q. Do you recall was it a single PDF of
14 the two pages that was sent to you?

15 A. As I recall, it was a PDF of two
16 page -- of two-page contract, and I believe the
17 other document, which is Street-something fax. I
18 don't remember the name. I am just guessing. But
19 another -- PDF of another document.

20 Q. Can you describe that document in any
21 other detail?

22 A. This is what I said like a six-page
23 document, but I am not sure that it was a six-page
24 document. It's just -- I don't know why I said
25 it. I apologize if I am -- if I was guessing.

1 Aginsky

2 Q. That's okay. There was another --

3 A. There were two documents that were sent
4 to me as PDF.

5 Q. Okay.

6 A. And because I have never examined the
7 other document, I just didn't pay much attention
8 to that -- the other document.

9 Q. Do you recall if the PDF or either PDF
10 that was sent to you was a color or black-and-
11 white PDF?

12 A. It's a black-and-white.

13 Q. Do you recall how the "work for hire"
14 document was brought to you? And by that I mean
15 was it in an envelope, in a plastic sleeve, or
16 what the method by which it was brought to your
17 office and then given to you.

18 A. Again, I am not positive, but it was in
19 something like an envelope. It could be a folder.

20 Q. And describe to me, if you would, how
21 it was presented to you, the "work for hire"
22 document.

23 A. How?

24 Q. So let's back up. I guess you were not
25 yet sure whether you were going to be retained.

1 Aginsky

2 Was there a discussion at the beginning of the
3 January 13th meeting during which it was confirmed
4 that you were retained and then it was provided to
5 you for examination? I'm trying to get at what
6 occurred.

7 A. What occurred -- I think, as far as I
8 remember, Mr. Argentieri -- we were sitting in my
9 office, and he gave me I think a check, retainer
10 check and a retainer agreement, which was modified
11 from mine. Mine was one page, and that one was
12 like three pages.

13 Then after that he gave me the
14 document. He opened a folder or envelope and gave
15 me this two-page document and said this is the
16 document that he would like me to examine.

17 Q. Were you sitting at your desk or was it
18 in a lab? Maybe you could explain a little more
19 what the setup was.

20 A. It was in my office. So I have two
21 rooms, and one is my office. We were sitting in
22 my office. So the document and everything, the
23 retainer check, were placed on my desk. We were
24 sitting opposite each other. And the laboratory
25 is the other room, the other room.

1 Aginsky

2 Q. Mr. Argentieri took the "work for hire"
3 document out of an envelope or folder and then
4 handed it to you; is that right?

5 A. Yes.

6 Q. Was he wearing gloves; do you recall?

7 A. No, none of us.

8 Q. Did he ask you to wear gloves?

9 A. No. I usually -- sometimes when there
10 is a requirement that the gloves should be worn,
11 yes, I would. But what I usually do, I handled
12 the document -- like I would use another paper,
13 another page, and I would fold it like this and
14 then will use it -- say if I need, I would move it
15 from a table and take it like this (indicating),
16 so to leave as little fingerprints as possible on
17 page.

18 Q. After your examination, did you give
19 the "work for hire" document back to
20 Mr. Argentieri?

21 A. Yes.

22 Q. And do you recall where he put it?

23 A. I finished the examination, like it
24 look approximately overall six hours. Then I
25 returned the document. And I think Mr. Argentieri

1 Aginsky

2 put it in the same envelope or folder.

3 Q. Was Mr. Argentieri and Mr. Ceglia there
4 the whole time during which you were doing your
5 examination?

6 A. No, Mr. Ceglia was not in my lab. He
7 was watching TV. But he wasn't present in my lab.

8 Q. Where is the TV in your office?

9 A. It's not in my office; it's -- it's
10 like a family room. He was there.

11 Q. Your office and your lab are attached
12 to your home?

13 A. Yes.

14 Q. So he was in the family -- Mr. Ceglia
15 was in the family room watching TV while you were
16 doing your examination in the lab?

17 A. Yes.

18 Q. Where was Mr. Argentieri during this
19 time?

20 A. He was with me in the lab.

21 Q. So the document was not left with you
22 overnight or anything like that; correct?

23 A. No. It was six-hour examination.

24 Q. You mentioned how you hold the
25 document. Was there any discussion of testing the

1 Aginsky

2 document for fingerprints at all?

3 A. We didn't discuss a possibility for
4 testing, as far as I remember. But as I said,
5 it's my general procedure, if I'm not wearing
6 gloves, which I try not to because it's not
7 convenient, then I will handle a document very
8 carefully.

9 Like instead of taking a page like this
10 (indicating), I will either take it from here on
11 the angle or, as I mentioned, I would use another
12 page and move it like this (indicating) and then
13 hold it using another paper. That way I will not
14 leave a fingerprint on the page.

15 Q. When you first examined the "work for
16 hire" document on January 13th, 2011, did you
17 understand anything about the storage conditions
18 of the document?

19 A. As far as I remember, we didn't discuss
20 anything regarding the storage conditions.

21 Q. Did you have any knowledge about the
22 storage conditions of the document?

23 A. At that time I didn't ask this question
24 because I wasn't asked to do any ink-aging
25 analysis. And the storage conditions would only

1 Aginsky

2 be relevant to know if I was asked to do an
3 ink-aging analysis.

4 Q. And I understand you didn't ask, but
5 did you have any knowledge about the storage
6 conditions at that time?

7 A. No, I didn't ask about this, and I
8 wasn't provided any information about this.

9 Q. At any point during your engagement up
10 until today, have you -- do you have any
11 understanding about the storage conditions of the
12 "work for hire" document?

13 A. After my examination in January of last
14 year, I have not been involved very much in this
15 case. And other than general questions regarding
16 the ink-aging methodology and how it may be
17 affected by storage conditions, I don't remember
18 discussing anything.

19 Q. You do recall some discussions about
20 how the ink-aging methodology might be affected by
21 storage conditions, but you don't remember having
22 any knowledge -- or you don't have any knowledge
23 about the purported storage conditions for this
24 particular document, the "work for hire" document;
25 right?

1 Aginsky

2 MR. ARGENTIERI: Objection to the form.

3 A. What I -- what I remember is that the
4 questions that I received at a later point
5 regarding the storage conditions, they were
6 after -- after I had received I believe five
7 images that Gerald LaPorte took showing some
8 changes of the appearance of the document.

9 And at that point I received e-mails
10 with those -- Gerald LaPorte's images. And I was
11 asked what in my opinion could cause such
12 discoloration or such a change or fading. And I
13 answered that fading mainly is caused by excessive
14 light. And significant fading is usually --
15 that's something like direct sunlight.

16 Q. And is that what you observed in those
17 images, excessive fading?

18 A. It was very -- the images were not --
19 at least what I received, PDF images, were not of
20 great quality. So I couldn't -- I can't even
21 remember whether they were colored, so it was -- I
22 was just asked general questions, if the ink
23 faded -- or if an ink has faded and if a page
24 become yellow then what -- what could be the cause
25 of that. And I said based on my experience it is

1 Aginsky

2 light, excessive light.

3 Q. And did you have an understanding about
4 anything concerning the "work for hire" document's
5 purported execution, such as where it was it
6 executed, what date it was executed on? Did you
7 have any understanding about those -- that kind of
8 information?

9 A. I don't remember that we discussed on
10 January 13th or any other time the circumstances
11 or location or anything like that where this
12 document was executed.

13 Q. So you have no knowledge about that,
14 the circumstances of execution; is that correct?

15 A. No, I have no knowledge. The only
16 thing I remember is when I compared the two pages
17 I noticed it was obvious, especially under the
18 microscope, that the font is different on pages 1
19 and 2. And I mentioned it and said so the font is
20 different; is it -- how can this be explained.

21 But I don't remember that there was any
22 explanation to me, so that's -- that's the only
23 discussion that related to -- somehow related to
24 the place or the manner how the documents were
25 executed -- the document was prepared.

1 Aginsky

2 Q. Do you have any understanding about why
3 there might be two different fonts on the
4 document?

5 MR. ARGENTIERI: Objection as to form.

6 A. Different font? It means that it's
7 either a different printer or, I don't know, there
8 may be more than one different scenarios. Of
9 course it shows that it is not printed from the
10 same computer on the same printer at the same
11 time.

12 Q. Now, the document that was presented to
13 you for inspection, was it stapled when you got
14 it?

15 A. No, it was not.

16 Q. Was there a staple accompanying the
17 document in any way?

18 A. No, otherwise I would take a picture.

19 Q. Do you have any knowledge about what
20 happened to the staple? Well, let me back up.

21 You documented that there were staple
22 holes; correct?

23 A. Yes.

24 Q. Do you have any knowledge about what
25 happened to the staple that may have caused those

1 Aginsky

2 holes?

3 A. No, I have no knowledge about that.

4 Q. And when you received the document, the
5 paper was white; correct?

6 A. Yes.

7 Q. The handwriting ink appeared to you to
8 be black ballpoint ink; correct?

9 A. Yes, it was black.

10 Q. And you did not notice any fading of
11 the ink or brownish or tannish ink; correct?

12 MR. ARGENTIERI: Objection to form.

13 A. No.

14 Q. Am I correct?

15 A. You're correct, no fading.

16 Q. No fading of the ink?

17 A. No fading of the ink, no.

18 Q. Did you notice any damage to the
19 document visible to the naked eye?

20 MR. ARGENTIERI: Objection as to form.

21 A. There was nothing that would suggest
22 that the document has any, if I use your word,
23 damage, anything that would change the appearance
24 of the document.

25 Q. And as I understand it, you did not

1 Aginsky

2 take samples from the document during this
3 examination; right?

4 A. No, I did not.

5 Q. And did you have an understanding as to
6 why that was?

7 A. At that -- on that date -- on that day
8 I was only asked to do the nondestructive physical
9 optical examinations.

10 Q. And for that examination you used
11 equipment like your microscopes, handheld lamps,
12 the VSC unit, the microscopes you've talked about;
13 is that right?

14 MR. ARGENTIERI: Objection to form.

15 A. Yes, all those -- what we discussed,
16 and also I used -- it is not -- there are no
17 images, but I have it on my work note I used a
18 lamp which is called black light. It's a very
19 primitive type of examination, but sometimes it is
20 effective.

21 Let's say two black inks, they might
22 appear very similar in the visible range of
23 electromagnetic spectrum. But when we illuminate
24 these two inks using the black light, one might --
25 typically might turn red and the other might stay

1 Aginsky

2 as it was, without turning red.

3 So in this case both -- all the -- all
4 the handwritten entries, the initials and
5 signatures, that I observed using this black
6 light, they all turned red.

7 But as I said, it's a not very
8 discriminating type of analysis, but sometimes it
9 is very effective; and if it is, then simply by
10 taking a picture, it would have a very nice
11 demonstrative for in court to show.

12 Q. What equipment did you use to measure
13 the thickness of the paper?

14 A. For the thickness I only used -- I
15 looked at the edges of the paper using a
16 magnifying glass. And also probably for that
17 particular -- I said I typically try not to leave
18 my fingerprints, but it is very effective when you
19 use your fingers just to take two pages between
20 your fingers. And if the pages have different
21 thickness, you might feel it. This is how many
22 people -- money fraud are detected by cashiers.

23 Again, it's a -- I wouldn't say that
24 that's a very sophisticated type of test, but on
25 that date I looked at many parameters of the paper

1 Aginsky

2 other than the thickness. And the UV responses of
3 the paper in the short -- both short and long UV
4 light were the same, or indistinguishable, I
5 should say. The opacity was what we saw on one of
6 my pictures was also very similar.

7 So I couldn't say that there is any
8 evidence that these two pages are different based
9 on that particular parameter.

10 Of course the color, I didn't see any
11 difference between white and white.

12 To me that was enough combination to
13 say that at the level of the analysis that I
14 performed, I don't see any difference between page
15 1 and page 2.

16 Q. For the opacity, you used the
17 transmitted light examination like you saw in
18 those images?

19 MR. ARGENTIERI: Objection as to form.

20 A. Yes, the transmitted light in the
21 visible range, and also I used transmitted light
22 using VSC. I'm not sure if I took those pictures,
23 but I gave you the images. Probably there I
24 used -- VSC allows to take -- to observe the
25 optical characteristics in UV visible range and

1 Aginsky

2 the infrared.

3 Q. And for the thickness measurements, did
4 you take actual measurements, like actual
5 numerical measurements?

6 A. No. The only way to do it would be to
7 use a micrometer, and I don't have a micrometer in
8 my lab.

9 Q. So your equipment was your fingers, if
10 you will?

11 A. No, as I said -- yeah, the fingers
12 plus --

13 MR. ARGENTIERI: Skill.

14 A. -- when I looked at the two pages using
15 some magnifying glasses, because I examined the
16 edges of the pages.

17 What happens when the -- when a typical
18 examination to determine whether there is evidence
19 of page substitution, if a page was substituted at
20 a later time, let's say significantly later, years
21 later, than the previous pages of -- the older
22 pages of the document, they might have some
23 visible or detectible wear and tear
24 characteristics. And the newer page would not
25 have those characteristics.

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

Aginsky

So I looked at those to see if I see any wear-and-tear characteristics which would be different between page 1 and page 2.

Q. I see.

A. That also included the comparison of the thickness.

Q. Okay. And then since that January 13th examination, you have not seen the actual physical document again; is that correct?

A. That's correct.

MR. SOUTHWELL: Why don't we break for lunch at this point. And before we do that, I guess let's on the record still -- I'm going to hand you back your key (handing).

THE WITNESS: Thank you.

MR. SOUTHWELL: I ask for those work notes, and we'll make a copy of them over the lunch break and give them back to you afterwards. We'll mark them to complete the record.

MR. ARGENTIERI: Make sure you wear gloves.

MR. SOUTHWELL: You too, Mr. Argentieri.

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

Aginsky

And why don't we come back in about --

MR. ARGENTIERI: What time you want?

It's 1:30.

MR. SOUTHWELL: Yeah, like maybe 30-45 minutes -- let's say 45 minutes, and that allow us to organize.

(Discussion off the record.)

THE VIDEOGRAPHER: Going off the record 1:28 p.m. This is the end of Disk 2 of the deposition of Valery Aginsky.

(Time noted: 1:28 p.m.)

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

A F T E R N O O N S E S S I O N

(Time noted: 2:26 p.m.)

THE VIDEOGRAPHER: Going back on the record at 2:26 p.m. This is the beginning of Disk 3 in the deposition of Valery Aginsky.

V A L E R Y N . A G I N S K Y ,

resumed as a witness, having been previously sworn by the notary public, was examined and testified further as follows:

EXAMINATION CONTINUED BY

MR. SOUTHWELL:

Q. Great. Dr. Aginsky, did you speak with Mr. Argentieri over the lunch break at all --

A. No.

Q. -- about the substance of the deposition?

A. No, we didn't speak at all.

Q. Now, I want to turn to your June 2011 declaration, which you have in front of you as Defendants' Exhibit 43. I believe you testified earlier that you had worked with Jerry Trippitelli from DLA Piper on this; is that -- is that right?

A. If I remember correctly, the name of the attorney, if it's him, yes, I worked with him

1 Aginsky

2 when I was preparing that declaration.

3 Q. Were there any other attorneys? Let me
4 ask it to you this way: Was there just one
5 attorney that you worked with in connection with
6 this attorney --

7 A. Just one.

8 Q. -- or was it more than one?

9 A. Just one.

10 Q. And your recollection is that it's
11 Mr. Trippitelli; is that right?

12 A. Yes. As I said, I'm not positive,
13 but...

14 Q. Did you meet with the attorney you
15 prepared it with in person at all?

16 A. No. That was e-mail.

17 Q. How did the declaration get put
18 together? In other words, did you dictate it and
19 they took it down or something else?

20 A. I for sure did not -- didn't dictate.
21 I think he sent me an e-mail with the format of
22 this and with some preprinted paragraphs taken
23 from my CV and from his understanding of what my
24 results are. And then I made necessary changes
25 and amendments.

1 Aginsky

2 Q. I see. So did you have a conversation
3 with him prior to that about your examination and
4 results?

5 A. I don't remember. It must have if I --
6 if I did have a conversation, it must be in my
7 time log, which I have on my computer. So I can
8 double-check.

9 Q. Okay. So let's put a blank in the
10 transcript for that as well, when you spoke with
11 him, and if you could provide that information,
12 that would be great.

13 TO BE FURNISHED: _____
14 _____.

15 A. Yes, I will, yes.

16 Q. Let me just make sure I understand.
17 Your recollection is you did speak with him, and
18 that is how he was able to put the information
19 into the draft; right? There wouldn't have been
20 any other way that he would have come up with your
21 conclusions without having spoken to you unless
22 there was somebody else you spoke to about it?

23 A. Yeah, it's logical to assume that we
24 probably had a conversation with me. But as I
25 said, I'm not positive. I need to double-check my

1 Aginsky

2 time log.

3 Q. Okay. Do you recall how long it took
4 you to prepare the declaration or to review it and
5 then finalize it?

6 A. Again, it's on my time log. Everything
7 that -- every work that I did, each work is -- and
8 the time I spent is in my time log.

9 Q. Was there any material in the draft
10 that was sent to you that you were not comfortable
11 including that you then took out?

12 A. Yes, I for sure I changed some
13 positions because he didn't explain correctly
14 technical things. I didn't see anything that I
15 would consider as -- as something that I would
16 feel uncomfortable, meaning that I would include
17 something which will be not based on my result.

18 But some sentences were technically
19 awkward and didn't reflect what I actually
20 obtained in the examination. Therefore I just
21 changed everything that should have been changed.

22 Q. Were there any findings that you had
23 that you were asked not to include in this
24 declaration?

25 A. No, no.

1 Aginsky

2 MR. ARGENTIERI: Objection as to form.

3 A. Is it a document related to this case
4 or is it general?

5 Q. A document related to this case from
6 the court that governs how the examination of the
7 hard-copy documents was to proceed.

8 A. No.

9 Q. Is that a document you're familiar
10 with?

11 A. No, I have not reviewed this document.

12 Q. Were you consulted in any way with
13 respect to the drafting of any protocols or
14 procedures for how the inspection of the hard-copy
15 document would proceed?

16 A. I'm not sure if I was consulted
17 specifically when this document was prepared. It
18 could well be that when we met on January 13th and
19 there was some discussion of how the analysis is
20 done, I would typically mention to any client that
21 what tools are used to take samples, how many
22 samples typically should be taken for both, for
23 ink comparison analysis or ink availability test
24 or for ink-aging test.

25 Q. Did there come a time that you -- well,

1 Aginsky

2 let me back up.

3 You mentioned that you might have
4 provided information about how many samples should
5 be taken. Do you have a general approach to how
6 many samples you need for analysis that you do?

7 A. Yes, usually for ink-aging analysis I
8 need approximately 15 samples. Each sample is 0.5
9 millimeter in diameter.

10 Q. And did there come a time that you were
11 scheduled to attend and take samples from the
12 document in this case?

13 MR. ARGENTIERI: Objection, asked and
14 answered.

15 But you can answer.

16 A. I remember discussion over the phone if
17 I was available to come to Buffalo sometime in
18 June, I believe in June, summertime, and the
19 dates -- on those particular dates I was not
20 available. After that there was no discussion
21 about the dates or my availability.

22 Q. I just want to understand. So the date
23 of inspection started on July 14th, and I had
24 understood that you were planning to attend but
25 you were unavailable until July 22nd.

1 Aginsky

2 Does that sound familiar to you at all,
3 those dates?

4 MR. ARGENTIERI: Objection as to form.

5 A. Yeah, it sounds similar. I'm -- now
6 you said those dates, July 14th, that's when I was
7 not available, and that week that I was available,
8 then the week of -- maybe next week, which
9 includes July 22nd.

10 Q. You were not available for a business
11 engagement or vacation or something? What was the
12 reason for your unavailability?

13 A. I was -- I needed -- I had previous
14 commitments. I needed to be in Chicago. That
15 weekend I was in Chicago.

16 Q. Did there come a time that you arranged
17 to come the week of the 22nd or -- I'm trying to
18 understand, because I think you testified that you
19 sort of never heard again. I'm trying to
20 understand that part of it.

21 So let me ask it to you this way: Was
22 there -- did there come a time when you were
23 scheduled to come the week of the 22nd that you
24 think you were available?

25 A. And this is again I could verify by

1 Aginsky

2 looking at my e-mails. I think that I even booked
3 my flight to Buffalo. But then I was asked to
4 cancel, and I did.

5 Q. Do you recall how soon before your
6 flight you were asked to cancel?

7 A. I need to double-check. I think I have
8 this exchange e-mails on my computer.

9 Q. Do you recall who you were discussing
10 this issue with?

11 A. Mr. Argentieri.

12 Q. Do you have any understanding about why
13 you did not attend to take samples?

14 MR. ARGENTIERI: Objection.

15 MR. SOUTHWELL: Your basis?

16 MR. ARGENTIERI: First of all, he
17 hasn't even testified that -- he has to look
18 at his book about any date -- why he -- I'll
19 just put the objection on the record. That's
20 fine. Go ahead.

21 MR. SOUTHWELL: Okay. Fine.

22 MR. ARGENTIERI: You can answer it,
23 Doctor. I've put the objection on the record.

24 A. I don't know what was the reason for
25 Mr. Argentieri to advise that I should cancel.

1 Aginsky

2 Q. Are you aware that samples of ink were
3 taken by plaintiff's experts on July 25th of 2011?

4 MR. ARGENTIERI: Objection as to form.

5 A. As of today, I don't remember the exact
6 date, but it sounds like the date that I've
7 probably seen in my -- in Dr. Lyter's declaration,
8 which is available on the Internet.

9 Q. Just so it's clear, is your only basis
10 for knowing, roughly speaking, when plaintiff's
11 experts took ink samples is Dr. Lyter's report?
12 Do you have any other basis other than that?

13 A. No, the only source of information is
14 the Internet.

15 Q. And by "the Internet," you're referring
16 to Dr. Lyter's report, which is available there?

17 A. Yes, I believe that was from his
18 declaration or affidavit.

19 Q. And were you in fact available to take
20 samples on the 25th of July, if you recall?

21 A. It's --

22 MR. ARGENTIERI: He has to check.

23 A. It's some time I think one year ago. I
24 don't remember. I assume it was. That's why I
25 said I was not available the previous week but

1 Aginsky

2 will be available next week.

3 Q. Are you aware that on July 25th the
4 only plaintiff's expert to take ink samples was
5 Mr. Speckin?

6 MR. ARGENTIERI: Objection as to form.

7 A. No, I don't know who was the first to
8 take samples. As I mentioned before, Larry
9 Stewart called me at some point in time, and he
10 said that he was going to fly there. And he
11 thought that either we together will be there or
12 he will be there. That's why he asked me what
13 would the strategy to take samples and how many
14 samples I would need for the analysis. Other than
15 that, I don't remember.

16 Q. Now, let's turn back to your
17 declaration that's in front of you. I think it's
18 still there, yes. Defendants' Exhibit 43. Can I
19 direct your attention to Exhibit B, which starts
20 at page 14 of 15 in the top right corner. Do you
21 see that?

22 A. Okay.

23 Q. Do you recall whether you yourself
24 attached Exhibit B to your declaration?

25 A. I need to check to see if I -- I think

1 Aginsky

2 that I sent the declaration, signed declaration,
3 as an attachment, a scanned document, and I need
4 to check if it was just the text with my signature
5 or whether the attachment with.

6 Based on the title of Exhibit B, I
7 don't think that I prepared it myself. That's not
8 my style.

9 Q. Right. I was going to ask if that's --

10 So looking at page 13 of 15 -- and just
11 so that it's clear -- not suggesting that there's
12 anything wrong with an attorney attaching. I'm
13 trying to understand the genesis of this document.

14 So if I understand you correctly, your
15 belief, at least as you sit here now, is that this
16 "work for hire" contract was -- these images at
17 pages 14 and 15 was attached to your declaration
18 by the attorneys who submitted it?

19 MR. ARGENTIERI: Objection as to form.

20 A. Yes, it looks like there's a horizontal
21 bar in the upper-hand corner which looks like a
22 staple on the document. And I have never seen a
23 document with this staple. Therefore I could not
24 scan the document with a staple. So it's not --
25 it's not my scan.

1 Aginsky

2 Q. That was going to be my next question.
3 This is not your scan, as you just said. I guess
4 are you aware -- was this simple a copy of the
5 "work for hire" contract that was provided to you
6 by the attorneys?

7 A. I need to double-check. What I said,
8 that I received a PDF copy before the examination
9 on the 13th of January. And if it matches the
10 image of this, then it could be. So I don't
11 remember what for sure I signed the signature page
12 and mailed it. I'm not sure if the whole document
13 was prepared by myself and mailed to the attorney.

14 Q. I understand. So let me put another
15 blank in the transcript and just ask if you can
16 confirm I guess that the PDF that was provided to
17 you in advance of the January 13, 2011,
18 examination, whether that's the same document --
19 same image as is attached here as Exhibit B to
20 your declaration.

21 TO BE FURNISHED: _____
22 _____.

23 A. I will confirm, yes.

24 Q. While we're at it, if you can just
25 confirm what the other document was that was

1 Aginsky
2 provided to you along with that PDF --

3 A. Yes, okay.

4 Q. -- whether it was that six-page
5 document or something else; okay?

6 A. How should I confirm it? In what way?

7 Q. Why don't you check, and then you
8 can -- I guess depending -- we can talk about this
9 afterwards. I assume there's a quick and easy
10 one --

11 MR. ARGENTIERI: You should probably
12 contact us. We have to comply with the
13 request, unless -- you have to go back and
14 check to see if you even have it; correct?

15 THE WITNESS: Yes, I believe I have it
16 as an attachment. So the e-mail, I should
17 have it in the memory of --

18 MR. ARGENTIERI: I think it should go
19 to Dean and then to you, shouldn't it?

20 MR. SOUTHWELL: Yeah, I think if you
21 provide it --

22 MR. ARGENTIERI: To Dean, not to me,
23 because he can electronically transfer it
24 correctly and then --

25 THE WITNESS: So should I take that

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

Aginsky

attachment and e-mail it?

MR. ARGENTIERI: Dean, can you hear us?

MR. BOLAND: I can hear Dr. Aginsky. I can't quite hear you, Paul.

MR. ARGENTIERI: Alex -- or Dr. Aginsky is asking the process of transferring the information Alex wants on this line of questioning and these other questions, and Dr. --

MR. SOUTHWELL: I think it's fine. You should send it to Mr. Boland and Mr. Argentieri, if he wants. To the extent -- we don't want anything that might be privileged communication in there.

MR. ARGENTIERI: Right.

MR. SOUTHWELL: To the extent there is, he will take that out. If not, he'll pass it on.

MR. BOLAND: Alex, the witness and I and Paul Argentieri will discuss it with him, and we'll make sure that we respond appropriately.

MR. SOUTHWELL: Okay.

Q. Now let's turn to paragraph 6 of your

1 Aginsky

2 declaration, Defendants' Exhibit 43. In that
3 paragraph you note in part: Based on my visual
4 examination of the agreement -- strike that.

5 Based upon my visual examination of the
6 agreement, each page of the document was produced
7 with an office machine system utilizing black
8 toner.

9 Did I read that correctly?

10 MR. ARGENTIERI: Page 2, paragraph 6,
11 Doctor.

12 A. Yes, that's correct.

13 Q. And then you go on to note that there
14 are a variety of such office machine systems, such
15 as laser printers, photocopiers, and some
16 facsimile machines; right?

17 A. Yes.

18 Q. And just to be clear, you do not
19 identify any specific type of machine that
20 produced the "work for hire" document; correct?

21 A. I did not.

22 Q. And this conclusion is a generic
23 finding that simply means that we're not talking
24 about ink jet or color toner or something like
25 that; right?

1 Aginsky

2 MR. ARGENTIERI: Objection as to form.

3 A. Yes, that's just a type of technology
4 which is used widely and printers copies and
5 facsimile machines used as technology.

6 Q. I have a question about TLC analysis
7 and toner. Is it possible to determine the make
8 and model of a printer by doing TLC analysis on
9 black toner?

10 MR. ARGENTIERI: Objection as to form.

11 A. I would say that it's very unlikely.

12 Q. Why is that?

13 A. Most toners, it's a black toner. It
14 consists mainly of carbon black, which is a
15 pigment, which all company use. It contains also
16 polymer resin. Polymer -- different companies use
17 different -- typically use different resins. But
18 TLC analysis is not capable in most cases to
19 determine which resin was used.

20 Sometimes some toners contain organic
21 dyes which are added to carbon black. I don't
22 know -- in this case I didn't do a chemical
23 analysis, so I don't know whether this toner
24 contained an organic dye.

25 But some of Hewlett-Packard's toners,

1 Aginsky

2 they do contain organic dyes, one of which is of
3 violet color. I know it from my experience
4 because I have analyzed toners of different
5 companies by TLC, GC/MS, FT-IR, microspectroscopy.

6 So the best method to analyze resins,
7 polymer resins, would be FT-IR method, not TLC.
8 As I said, TLC would be a good method if a toner
9 contains a dye added in addition to carbon black.
10 If it's only carbon black, then TLC is almost
11 useless.

12 Q. And are most normal -- well, strike
13 that.

14 Are most typical laser printer toners
15 your standard carbon black, and it would be the
16 more, for lack of a better word, esoteric toners
17 that would be able to be discerned using TLC?

18 MR. ARGENTIERI: Objection as to form.

19 A. As I said, TLC is only effective for
20 toner comparison if toner contains an organic dye
21 in addition to inorganic carbon black pigment.
22 Carbon clack cannot be analyzed by TLC or by any
23 other chromatographic method because it's not
24 soluble in any solvent.

25 But as I said, if there is a soluble

1 Aginsky

2 dye added to carbon black, then TLC would be a
3 method of choice.

4 Q. Now let's go on to the rest of
5 paragraph 6. You note on page 1 of the agreement
6 there's an interlineation handwritten with black
7 ballpoint ink, and on page 2 of the agreement
8 there are two signatures and the entries of the
9 date all written with black ballpoint ink.

10 Did I read that correctly?

11 A. Yes.

12 Q. And you were able to make that
13 determination based on a simple visual inspection;
14 correct?

15 MR. ARGENTIERI: Objection as to form.

16 A. Yes, the most important type of
17 analysis is a visual inspection using naked eye
18 and the handheld magnifiers. Of course the reason
19 why it's important is because ball ballpoint use
20 have very specific appearance which is different
21 from water-based inks used in fountain pen ink or
22 in felt tip pens or even in gel roller ball inks,
23 like this one that I have on the table
24 (indicating).

25 So based on the visual examination and

1 Aginsky

2 the microscopic examination of the ink on both
3 pages, I came to the conclusion that this is --
4 that this is black ballpoint ink.

5 Q. You also have a conclusion on paragraph
6 7 that the print and handwritten entries have a
7 logical sequence, and you mentioned that before.
8 This means that the type was printed first and the
9 handwritten entries were made afterwards and on
10 top of the toner; correct?

11 A. That's correct.

12 Q. And other than the sequencing, this
13 finding does not say anything about when the
14 document was printed, does it?

15 A. That's correct.

16 Q. And it does not say anything about when
17 the handwriting was written other than as to
18 sequencing; correct?

19 A. That's correct.

20 Q. In paragraph 8 you discuss your binding
21 with respect to paper. Specifically you state, My
22 visual UV, IR absorption, and IRL examinations
23 reveal that pages 1 and 2 of the agreement were
24 printed on the same type of 8.5 by 11 inch wide
25 paper.

1 Aginsky

2 The paper of both pages has matching
3 characteristics, such as color, thickness, short
4 and long-wave UV fluorescence, IR luminescence,
5 opacity, and surface texture?

6 Did I read that correctly?

7 A. Yes.

8 Q. Now, when you say the same type and
9 matching characteristics, that means that the
10 paper could not be differentiated at the level of
11 analysis that you conducted; correct?

12 MR. ARGENTIERI: Objection as to form.

13 A. That's correct.

14 Q. It's possible that chemical analysis
15 could reveal differences; correct?

16 MR. ARGENTIERI: Objection.

17 A. Yes, chemical analysis is more powerful
18 than the physical, in most cases.

19 Q. So it's possible, for example, that TLC
20 analysis could reveal the existence of different
21 organic optical brighteners on each page?

22 MR. ARGENTIERI: Objection as to form.

23 A. Yes.

24 Q. It's also possible GC/MS analysis could
25 reveal chemical differences in the chemical

1 Aginsky

2 composition of the paper; correct?

3 MR. ARGENTIERI: Objection as to form.

4 A. That's correct.

5 Q. So this finding does not mean that the
6 two pieces of paper, page 1 and page 2, of the
7 "work for hire" document are identical, does it?

8 MR. ARGENTIERI: Objection as to form.

9 A. Of course not.

10 Q. So to characterize your finding that
11 the two pieces of paper of the "work for hire"
12 document are identical would be to mischaracterize
13 your findings. Am I correct?

14 MR. ARGENTIERI: Objection as to form.

15 A. Yes.

16 MR. SOUTHWELL: I'm going to ask this
17 be marked --

18 MR. ARGENTIERI: Let me ask, how much
19 time are you going to go?

20 How much time have we got in the
21 deposition so far?

22 THE VIDEOGRAPHER: Two hours, three
23 hours -- a little under three hours, plus 30
24 minutes now. So 3 hours, 20 minutes, 25
25 minutes.

1 Aginsky

2 MR. SOUTHWELL: We're going to keep
3 going till we're done. We'll go faster if you
4 stop your --

5 MR. ARGENTIERI: Go faster.

6 MR. SOUTHWELL: -- your objections to
7 form after every question that are improper
8 and seemingly meant to disrupt the
9 proceedings.

10 If I could have this marked Defendants'
11 Exhibit 46, please.

12 MR. ARGENTIERI: That's assuming
13 intent, actually not.

14 MR. SOUTHWELL: Are you admitting to
15 it?

16 MR. ARGENTIERI: No. I might learn
17 something.

18 (Defendants' Exhibit 46, document 189,
19 marked for identification.)

20 Q. I'm showing you Defendants' Exhibit 46,
21 which is a document filed in this case, document
22 189. I would direct your attention to page 2.

23 There is a section here that relates to paper
24 testing, which in the second -- I'll just read it.

25 Paper tests can be performed to confirm

1 Aginsky

2 the consistency of two pieces of paper. Valerie
3 Aginsky confirmed that the two pieces of paper,
4 page 1 and page 2, of the Facebook contract are
5 identical.

6 Did I read this Defendants' Exhibit 46
7 correctly?

8 A. Yes, other than my name, everything
9 else is correct. My name is Valery, not Valerie.

10 Q. Valery. Excuse me. Thank you.

11 So this section of this brief stating
12 that you, Dr. Aginsky, confirmed the two pieces of
13 paper, page 1 and page 2, of this Facebook
14 contract are identical, that is not accurate. Am
15 I right?

16 MR. ARGENTIERI: Objection as to form.

17 A. It's not accurate, no.

18 Q. Now let's turn back to your
19 declaration. In paragraph 9 you describe your
20 finding with respect to ink. Specifically you
21 state, Based on my visual and microscopic UV, IR
22 absorption, and IRL examinations of the agreement,
23 I found no discernible difference in ink used to
24 write the interlineation on page 1 of the
25 agreement and to sign and date the agreement on

1 Aginsky

2 page 2.

3 Did I read that correctly?

4 A. Yes.

5 Q. Now, to be clear again, when you say
6 you found no discernible difference, you mean, as
7 you testified, that the inks could not be
8 differentiated at the particular level of analysis
9 that you conducted, which was a visual
10 examination; correct?

11 MR. ARGENTIERI: Objection as to form.

12 A. That's correct.

13 Q. It's possible that chemical analysis
14 could reveal differences; right?

15 MR. ARGENTIERI: Objection.

16 A. Of course.

17 Q. It's possible, for example, TLC
18 analysis could reveal the existence of different
19 colorant components among the inks; correct?

20 MR. ARGENTIERI: Objection.

21 A. Yes.

22 Q. It's also possible GC/MS could reveal
23 other differences in the other components of the
24 inks; correct?

25 A. Correct.

1 Aginsky

2 Q. In fact, later in your declaration you
3 state TLC and GC/MS should be used to learn more
4 about the inks; right?

5 A. Yes.

6 Q. So the findings of no discernible
7 difference does not mean the ink used in the
8 interlineation and signatures is the same ink;
9 correct?

10 MR. ARGENTIERI: Objection to form.

11 A. Of course. The level of analysis
12 doesn't allow us to say that the ink is the same.

13 Q. So to characterize your findings with
14 respect to the ink as confirming that all of the
15 ink on the "work for hire" document is the same
16 ink would be a mischaracterization of your
17 finding; correct?

18 MR. ARGENTIERI: Objection as to form.

19 A. That's correct.

20 Q. Now let's turn back here to Defendants'
21 Exhibit 46, directing your attention to the middle
22 paragraph just right after where I read before.

23 MR. ARGENTIERI: Page 2?

24 Q. Yeah, in the middle after doc 56 after
25 paragraph 8. It starts, He, meaning Valery

1 Aginsky

2 Aginsky, confirmed that the ink used to compose
3 interlineations on page 1 of the agreement was the
4 same ink used to date the Facebook contract on
5 page 2.

6 Did I read that section of the brief
7 correctly?

8 A. Yes.

9 Q. And that section of this brief is not
10 an accurate representation of your findings;
11 correct?

12 MR. ARGENTIERI: Objection as to form.

13 A. That's correct.

14 Q. This is in fact a mischaracterization
15 of your findings; right?

16 MR. ARGENTIERI: Objection as to form.

17 A. Yes.

18 Q. Let's turn back in your declaration to
19 paragraph 9. You describe your finding regarding
20 toner, and specifically you state -- sorry, 10,
21 you state, Based on my visual, microscopic, UV, IR
22 absorption, and IRL examinations of the agreement,
23 I found no discernible difference in the toner on
24 page 1 and 2 of the agreement.

25 And again, finding no discernible

1 Aginsky

2 difference simply means you could not
3 differentiate it at this particular level of
4 analysis, meaning a visual inspection; correct?

5 MR. ARGENTIERI: Objection to the form.

6 A. Yes, visual and microscopic, correct.

7 Q. Thank you.

8 And again, it's possible that chemical
9 analysis such as TLC or GC/MS could reveal
10 differences in various aspects of the toner;
11 correct?

12 MR. ARGENTIERI: Objection as to form.

13 A. That's correct, that is what I do
14 typically. I always reveal differences in toner
15 which are not distinguishable at the level of
16 optical analysis by using GC/MS, TLC, and FT-IR
17 microscopy.

18 Q. Now, prior to submitting the
19 declaration, had you ever reviewed Larry Stewart's
20 analysis of the toner in this case?

21 A. I had never reviewed anything that was
22 done by Larry Stewart in this case.

23 Q. So either before, after, or at any time
24 you've never reviewed anything that Mr. Stewart
25 submitted with respect to analysis of toner;

1 Aginsky

2 correct?

3 A. That's correct.

4 Q. So I guess it goes without saying that
5 in making your findings you are not confirming any
6 of Mr. Stewart's findings; correct?

7 MR. ARGENTIERI: Objection. Objection.

8 A. Yes, of course I cannot confirm
9 something that I had never reviewed. And I
10 understand that my analysis was before his
11 analysis, so I couldn't confirm any analysis that
12 was not done at that time.

13 Q. So to say that the findings contained
14 in paragraph 10 of your report confirm
15 Mr. Stewart's TLC analysis would not be an
16 accurate statement of your findings; right?

17 MR. ARGENTIERI: Objection as to form.

18 A. I agree.

19 Q. I want to understand a little bit more
20 about what it's in and what is not included in
21 your declaration. So to be clear, you do not
22 conclude in your declaration that the "work for
23 hire" document is a genuine document; right?

24 A. That's correct.

25 Q. You wouldn't say that your findings

1 Aginsky

2 conclusively establish the authenticity of the
3 "work for hire" document; right?

4 MR. ARGENTIERI: Objection.

5 A. That's correct.

6 Q. You do not conclude that it was
7 actually signed on April 28th, 2003; right?

8 MR. ARGENTIERI: Objection as to form.

9 A. That's correct.

10 Q. Other than the date written on the
11 signature lines, you did not find forensic
12 evidence that it was actually signed on April
13 28th, 2003; correct?

14 MR. ARGENTIERI: Objection.

15 A. Correct.

16 Q. You did not conduct any ink-dating
17 tests of the document?

18 MR. ARGENTIERI: Objection.

19 A. I did not.

20 (Discussion off the record.)

21 MR. SOUTHWELL: Do you have a basis for
22 these objections or are you just doing it for
23 some other reason?

24 MR. ARGENTIERI: Yeah, I have a basis.

25 It's an objection.

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

Aginsky

MR. SOUTHWELL: What's your basis?

MR. ARGENTIERI: What, the last question?

MR. SOUTHWELL: Yeah.

MR. ARGENTIERI: You mean this is the part where you really want to ask my opinion rather than ignoring it before? I mean --

MR. SOUTHWELL: I'd like to know if you actually have a legitimate basis or you're simply saying "objection" after every question to be an obstructionist.

MR. ARGENTIERI: The basis is you're asking him a question about analysis about genuineness of things and you haven't developed -- whatever. Let's move on.

MR. SOUTHWELL: All right. I'll take that as a no basis.

MR. ARGENTIERI: No.

Q. Dr. Aginsky, you did not conclude that the document was actually signed by Mark Zuckerberg or Paul Ceglia; correct?

A. That's correct, and I am not a handwriting expert. I am not qualified to come to any conclusions regarding who signed the document.

1 Aginsky

2 Q. Right. You did not examine the ink
3 handwriting in any way; right?

4 A. I did not.

5 MR. ARGENTIERI: Objection. The basis
6 is he looked at the ink -- when you ask a
7 question in that manner, the basis is you're
8 assuming things that he said -- go ahead.
9 Just so --

10 MR. SOUTHWELL: He answered the
11 question.

12 MR. ARGENTIERI: I can state my basis,
13 but I object to the way you ask these
14 questions.

15 MR. SOUTHWELL: That's fine.

16 MR. ARGENTIERI: They are generalized
17 questions. He's giving you generalized
18 answers.

19 MR. SOUTHWELL: Are you done,
20 Mr. Argentieri?

21 MR. ARGENTIERI: Yeah, I'm done.

22 Q. Now, Dr. Aginsky, we discussed a little
23 earlier how the "work for hire" document was
24 faded, the ink was faded, and the document was
25 discolored when it was presented to defendants.

1 Aginsky

2 And you understand that it is defendants' position
3 that Mr. Ceglia or someone working with him
4 damaged the document prior to its production to
5 the experts.

6 Do you remember we talked about that?

7 A. I remember talking about that.

8 Q. And I understand as part of your
9 examination you illuminated the "work for hire"
10 document with UV lamps of varying wavelengths;
11 right?

12 A. Yes.

13 Q. During your UV examination, did you
14 observe the back of the document fluoresce any
15 differently than the front?

16 A. No.

17 Q. Did you observe the front fluoresce
18 dully or was it fluorescing --

19 MR. ARGENTIERI: Objection.

20 Q. Strike that.

21 Did you observe normal fluorescence
22 that one might expect from a white piece of paper
23 with optical brighteners on both the front and
24 back?

25 MR. ARGENTIERI: Objection.

1 Aginsky

2 A. Yes. And actually I have -- on my work
3 notes I have the actual color of the fluorescence
4 of the page.

5 MR. SOUTHWELL: Let's mark this,
6 please, as the next exhibit.

7 Q. And I will hand you back your
8 originals, and then we will have marked this as
9 the next exhibit and discuss it with you.

10 (Defendants' Exhibit 47, handwritten
11 work notes of Aginsky, marked for
12 identification.)

13 Q. So that is now marked as Defendants'
14 Exhibit 47. These are your two pages of what
15 you've referred to as your work notes that we made
16 a copy of over the lunch break; is that correct?

17 A. Yes.

18 Q. And what was your observation about
19 fluorescence with respect to the two-page "work
20 for hire" document?

21 A. On the first page you can see the word
22 "paper" then two arrows, P1 and P2, which relates
23 to page 1 and page 2. And then there is the word
24 "blue" on the page 1 and page 2, and that relates
25 to UV 254. 254 nanometers is a short-wave UV

1 Aginsky

2 light which is used to -- was used to illuminate
3 the page, both pages.

4 So the pages on the face and on the
5 back, they are being illuminated with this UV
6 light with the 245 nanometers that's wavelengths.
7 They showed blue fluorescence or luminescence, so
8 both face and back.

9 When I switched from short-wave to
10 long-wave fluorescence -- and that's the UV 366
11 nanometers -- the fluorescence of the paper
12 changed to blueish white. And it was bluish white
13 for both pages on the face and on the back.

14 Q. Did you observe any uneven fluorescence
15 or anomalies in the fluorescence in any part of
16 the pages?

17 MR. ARGENTIERI: Objection to the form.

18 A. No, I didn't observe any changes in the
19 fluorescence pattern along the page. If I did, I
20 would take a picture and I would take a note.

21 Q. Now, in your interrogatories,
22 Defendants' Exhibit 44 that you have in front of
23 you, you described on page 6 -- sorry -- yes, on
24 page 6, which in the top right corner is page 9 of
25 38.

1 Aginsky

2 You described here the various UV
3 analyses that you did on the "work for hire"
4 document; is that right? Why don't you take a
5 minute to read through the two paragraphs under
6 answer on the top of page 6.

7 A. Is that my declaration?

8 Q. No, the interrogatory answers.

9 MR. ARGENTIERI: The interrogatory
10 answers.

11 A. I'm sorry.

12 Q. Defendants' Exhibit 44. That's it.

13 So page 6 as it reads on the bottom,
14 the top half of the page has this answer. Do you
15 see that? If you could just read that, please, to
16 yourself.

17 A. The first paragraph?

18 Q. Both the first and the second.

19 (Pause.)

20 A. Yes.

21 Q. Do these two paragraphs on page 6 of
22 Defendants' Exhibit 44 accurately represent -- or
23 accurately portray all of the UV examination of
24 the "work for hire" document, including the
25 different wavelengths you used and the amount of

1 Aginsky

2 time that you exposed the document to UV?

3 MR. ARGENTIERI: Objection.

4 A. Yes.

5 Q. Now, in addition to this UV
6 illumination and the other nondestructive visual
7 examination you did, did you conduct an ESDA
8 examination?

9 A. No, I did not.

10 Q. Did you do an examination with side
11 lighting at all?

12 A. I typically do, and I didn't mention it
13 as a separate type. But when I -- when I said
14 that I examined paper, when you asked me about the
15 thickness of the paper, and I used the magnifying
16 glasses, I also used a source of light.

17 And of course it was done under the
18 sharp angle. So that can be considered as a side
19 lighting. And I typically do it -- that's the
20 most effective way to determine the surface
21 texture of the paper or anything -- any material
22 on the paper.

23 So yes, I did. I did use side lighting
24 examination.

25 Q. Did you view the document under a

1 Aginsky

2 stereomicroscope at all?

3 A. No, I did not.

4 Q. Now, after these examinations that you
5 did on July -- sorry, strike that -- January 13th,
6 2011, did you notice any change in the paper or
7 ink of the "work for hire" document?

8 MR. ARGENTIERI: Objection to the form.

9 A. No, nothing was -- nothing changed
10 during my examination on that date.

11 Q. And as a result of the examinations you
12 performed, including this UV illumination for the
13 times that you detailed here in your answers to
14 interrogatories, Defendants' Exhibit 44, would you
15 expect there to be a change or damage to the paper
16 or ink?

17 MR. ARGENTIERI: Objection.

18 A. No, I wouldn't expect any damage to the
19 ink, any fading or any damage to the paper based
20 on the amount of exposure that I used because this
21 is what I typically do and what -- I shouldn't --
22 I cannot say that everybody but that's an accepted
23 routine in the field of forensic document
24 examination.

25 During that type -- during that --

1 Aginsky

2 using those types of analysis, it is not possible
3 to damage the document. If it was damageable to
4 the document, that would be reflected in ASTM
5 standard or other publications recommending not to
6 use a particular technique because it's too
7 damageable for a document.

8 Q. So based on the amount of time that you
9 used the equipment that you've detailed, you were
10 not worried about damaging the document; correct?

11 MR. ARGENTIERI: Objection.

12 A. That's correct.

13 Q. I want to talk about the kinds of
14 chemical analysis that can be used to date
15 ballpoint inks, and we've talked about that a
16 minute.

17 Actually, let's take a moment to take a
18 break, a short bathroom break. We're getting
19 close to the end.

20 THE VIDEOGRAPHER: Off the record
21 p.m.

22 (Recess taken from 3:16 to 3:37.)

23 THE VIDEOGRAPHER: Going back on the
24 record at 3:37 p.m.

25 Q. Dr. Aginsky, let's turn to talk about

1 Aginsky

2 the kinds of chemical analysis that can be used to
3 date ballpoint ink. Are you familiar with the
4 term "static method" and "dynamic method"?

5 A. Yes.

6 Q. Can you tell us the distinction between
7 the two?

8 A. The static approach includes methods
9 that analyze the composition of inks, of an ink,
10 to determine -- first of all to identify formula
11 of an ink and to determine when this particular
12 formula or formulation was first manufactured,
13 first came into existence.

14 Therefore, for example, if a document
15 dated, say, ten years ago bears ink that was first
16 manufactured five years ago, that would mean that
17 the document could not be repaired or signed ten
18 years ago because the ink was not -- didn't exist
19 at that time.

20 And the same relates to other
21 materials, paper. When paper first came into
22 existence or any other material, including toner,
23 ink jetting, or stamp padding.

24 Q. And for a dynamic method, it's not
25 necessary to identify an ink prior to doing the

1 Aginsky

2 chemical testing; right?

3 MR. ARGENTIERI: Objection as to form.

4 A. If we consider the population of
5 ballpoint inks, then you know that to determine or
6 to evaluate the approximate age of ink on a
7 document based on the particular ink-aging
8 parameters that are measured, it is not necessary
9 to identify the formulation of this ink to
10 determine when this ink or approximately was
11 placed on the document.

12 In other words, if the ink is aging and
13 the document is dated several years ago and it is
14 known that no ink would continue aging if it's
15 older than two years, then if the methodology was
16 applied correctly then that would mean that the
17 ink is younger than it purports to be.

18 Q. Now, through your deposition you've
19 discussed both thin-layer chromatography, TLC, or
20 gas chromatography/mass spectrometry. Those
21 methods are widely accepted for use on inks;
22 correct?

23 MR. ARGENTIERI: Objection.

24 A. Yes, they are used all over the world.
25 Again, if used properly, the methods are very

1 Aginsky

2 reliable for ink analysis and comparison. And
3 this is why they are part of at least two ASTM
4 standards that relate to ink comparison and ink
5 identification.

6 Q. So it's not a problem to use GC/MS
7 testing on ink; right?

8 MR. ARGENTIERI: Objection as to form.

9 A. No, GC/MS is an analytical method which
10 is very reliable and, as I said, used all over the
11 world, not only in forensic labs but in many areas
12 of human activity, like food analysis,
13 pharmaceutical analysis, and many other types of
14 analysis.

15 And the method is most useable
16 analytical method, probably the most useable in
17 the world, as an analytical technique. We're not
18 talking about a specific procedure, but as a
19 method it's very reliable.

20 Q. So someone who said it was a problem to
21 use GC/MS testing on ink, that it should only be
22 used for research and not, for example, casework,
23 you would not agree with that; right?

24 MR. ARGENTIERI: Objection as to form.

25 A. It depends on what someone that you

1 Aginsky

2 mentioned meant by this. GC/MS as an analytical
3 method, as I said, is very reliable, and there are
4 a lot of publications, books, devoted to this
5 method.

6 But this method, analytical method, can
7 be used as a basis for many procedures, specific
8 procedures, like the analysis of pesticides in
9 milk using GC/MS or the analysis of comparison of
10 ink by GC/MS or determine the age of ink using
11 GC/MS.

12 Depending on what that someone that you
13 mentioned meant, that would -- I mean, in other
14 words, the criticism or should be more specific
15 for me to answer this question.

16 Q. Fair enough. But GC/MS testing on ink
17 is commonly accepted and used for casework
18 regularly; is that right?

19 MR. ARGENTIERI: Objection as to form.

20 A. Yes, the GC/MS analysis of ink and
21 comparison of ink is a part of ASTM standard. If
22 probably -- if you're asking me about the use of
23 GC/MS for ink aging, if this is the question, then
24 I would answer.

25 Q. I'm getting to that.

1 Aginsky

2 So GC/MS is commonly used to analyze
3 noncolorant components of ink, such as solvents or
4 resins; right?

5 MR. ARGENTIERI: Objection.

6 A. Yes, that's correct.

7 Q. And one solvent that can be measured
8 with GC/MS is 2-phenoxyethanol, or PE; correct?

9 A. Yes.

10 Q. And a fundamental aspect of GC/MS
11 analysis is that it's important to get good
12 chromatography; right?

13 MR. ARGENTIERI: Objection as to form.

14 A. Yes, the analysis should be conducted
15 at a sufficient proficient -- level of
16 proficiency. In other words, the analyst should
17 be experienced enough to use GC/MS, and he or she
18 should know very well the capabilities and
19 limitations of the GC/MS analysis as well as he or
20 she should know very well the ink chemistry and
21 specifically the composition of inks and how to
22 take samples properly for the analysis, samples of
23 ink for the analysis.

24 Q. The phrase that I used of "good
25 chromatography," that generally means getting good

1 Aginsky

2 peak shape and good resolution when doing GC/MS
3 analysis; right?

4 MR. ARGENTIERI: Objection as to form.

5 A. Yes, this is one of the aspects of the
6 analysis if we have -- let's say, as an example,
7 if we analyze cheese or perfume which contains two
8 or three hundred components, constructible and
9 analyzable by GC/MS, the analysis should be
10 conducted at a level that would allow to separate
11 all of those components.

12 For this reason the peak shape should
13 be -- should not be a tailing; it should be a
14 symmetrical, sharp, triangle. So each peak should
15 be represented by a symmetrical, sharp, triangle.

16 Q. If one obtains good chromatography in
17 whatever the analysis is, that's important for
18 sound results; is that right?

19 A. Yes, without good chromatographic
20 separation, it is generally impossible to get a
21 reliable result.

22 Q. Now, different labs could test the same
23 component and use slightly different parameters,
24 such as pressure or timing or temperature, and
25 still get good chromatography; right?

1 Aginsky

2 MR. ARGENTIERI: Objection as to form.

3 A. Yes, that's correct. In other words,
4 the same procedure can be used by many labs in
5 different countries, and they might use different
6 brand names. But the results are supposed to be
7 very similar. The level of their proficiency is
8 similar.

9 Q. So labs might not use the exact same
10 step-by-step methods but still obtain good
11 chromatography and therefore sound results in
12 their analysis; right?

13 MR. ARGENTIERI: Objection.

14 A. Yes, that's correct. In other words,
15 in order to get from Town A to Town B, we could
16 use Ford or we could use Maserati. It doesn't
17 matter what we use. If we are good drivers, we
18 will be there. It will be simply different time
19 it will take.

20 Q. As long as you're doing good chemistry,
21 the settings of the machine or the process or the
22 steps could be slightly different. You'll still
23 get to the same sound result if you do good
24 chemistry. Is that another way of saying it?

25 MR. ARGENTIERI: Objection to form.

1 Aginsky

2 A. Yes.

3 Q. Now, you stated in your June 2011
4 declaration and you've mentioned earlier here
5 about the fact that ballpoint ink's age on paper
6 within two years and they age at a rate that can
7 be measured; right?

8 A. Yes, up to two years.

9 Q. Up to two years.

10 A. It could be much less than that, but
11 never longer than two years.

12 Q. And it's correct that some inks,
13 ballpoint inks, might age more quickly, and some
14 might be slower, but that rate can be measured and
15 it's not longer than two years; right?

16 A. Yes.

17 Q. Yes. Okay.

18 A. This parameter that is measured for --
19 for the first method I mentioned, SCT, sequential
20 construction technique, this parameter can be
21 measured for up to two years if the ink continues
22 aging during up to two years.

23 Q. Right.

24 A. Or the solvent loss ratio method, this
25 parameter can be measured up to approximately one

1 Aginsky

2 year and a half.

3 Q. In running a PE-based ink-aging
4 analysis, first one has to determine whether the
5 particular ink formulation contains PE; right?

6 A. Yes.

7 Q. And it's not necessary to match a
8 particular formulation of ink with a known ink in
9 order to determine if it contains PE; correct?

10 MR. ARGENTIERI: Objection as to form.

11 A. That's correct.

12 Q. If the ink formulation is found to
13 contain PE through a full-scan GC/MS run, then
14 it's possible to conduct the ink-aging analysis of
15 PE assuming there's a sufficient amount of PE;
16 right?

17 MR. ARGENTIERI: Objection.

18 A. Yes.

19 Q. And as you testified, inks generally --
20 or ballpoint inks generally age for up to two
21 years if -- sorry, strike that.

22 If you were given a hypothetical of a
23 particular percentage finding about the amount of
24 evaporation of PE from ink, there are a number of
25 other things you would want to know about the ink

1 Aginsky

2 on the document and the methodology before making
3 a conclusion about what that meant about how old
4 the ink is; is that right?

5 MR. ARGENTIERI: Objection as to form.

6 A. In order to determine how old the ink
7 is, the ink -- it should be a ballpoint ink. It
8 should contain PE, sufficient amount for the
9 analysis. And the ink-aging parameter that is
10 measured should change.

11 If it's changing, it shows that the ink
12 is aging. Then depending on the extent at which
13 the parameter is changing, it is possible to
14 determine the time frame within which the ink has
15 been place on the document, assuming the
16 conditions of storage were normal.

17 So, for example, for the solvent loss
18 ratio method, it is possible to determine that the
19 ink is younger than six months if the parameter --
20 it is called R, R percentage -- if that
21 parameter -- if the results obtained for the
22 questioned ink exceeds 50 percent.

23 Q. And if you were asked just generically
24 about a percentage that is above 50 percent, would
25 that be sufficient for you to conclude that the

1 Aginsky

2 ink is less than six months old or are there other
3 pieces of information that you would need?

4 A. I mentioned just solvent loss ratio
5 method. As I said, I typically use both,
6 sequential construction technique and solvent loss
7 ratio method. So if both methods would show the
8 result that the ink is aging at a rate showing the
9 ink is younger than six months, then my conclusion
10 will be that the ink is younger than six months.

11 It should be a conditional conclusion
12 because it depends on the storage conditions.
13 What I mentioned sometime at the beginning of this
14 deposition, if someone would put a document in the
15 freezer, then the document which is actually one
16 year old might show the result as if it is younger
17 than six months, simply because it was -- it
18 didn't -- it didn't age at a normal rate; it was
19 aging at a slower rate in the freezer.

20 And vice versa: If the document was
21 somewhere in middle of the desert in the trunk of
22 a car, then it might look as if it is
23 completely -- the ink has completely aged, aged
24 out. But in fact the actual age of the ink could
25 be six months.

1 Aginsky

2 But it may look as if it's completely
3 aged, and the conclusion would be that -- actually
4 it is more difficult to opine in a situation when
5 the ink is not aging. We cannot say for sure that
6 the document is older than six months or older
7 than two years.

8 It's a conditional conclusion, provided
9 that the document had been stored at normal
10 conditions, the ink is at least six months old
11 if -- if the ink is not aging. Or it could be
12 older than two years if it's a slow-aging ink.

13 Q. Right. And you mentioned if it was --
14 in your hypothetical example the document had been
15 kept in the freezer for a year, it would actually
16 be in freezer for an entire period of a year, that
17 might slow the evaporation process and affect the
18 results?

19 A. Yes, for sure it will slow -- it's not
20 even the evaporation what is important. What's
21 important is the -- how the resin -- one of the
22 three major components of ballpoint ink, how this
23 resin is changing over time.

24 Resin is a matrix. With time, after we
25 have placed ink on paper, the resin -- the ink --

1 Aginsky

2 the PE or other solvents, they became evaporating,
3 and the resin becomes -- there are some physical
4 and chemical processes, one of which is
5 polymerization.

6 Just for simplicity, if we consider
7 only polymerization process. So the resin starts
8 polymerizing, and this process can stop as quickly
9 as after six months or it can stop as long as two
10 years.

11 This is what important, not how much of
12 PE is in the ink but how old the resin is.

13 Q. Right. And as I think you mentioned,
14 what's also relevant here is whether the ink is
15 slow aging or -- slow drying or fast drying;
16 right? That's also a factor that would enter into
17 that kind of conclusion; right?

18 A. Yes, the rate at which resin is
19 polymerizing is -- it could be as slow-aging ink
20 or fast-aging ink.

21 Q. When you're talking about the lost
22 solvent method, when you're measuring a PE loss
23 ratio, what you're measuring is the amount of PE
24 that was present at the ink at the time of testing
25 and comparing it to the amount of ink present in a

1 Aginsky

2 sample after heating; is that right?

3 A. Yes.

4 Q. So it's not necessary for the test to
5 know how much PE was in the ink when the pen was
6 actually put to paper; right?

7 MR. ARGENTIERI: Objection.

8 A. That's correct, it doesn't matter how
9 much PE was there. Assuming that the PE wasn't
10 one of the major solvents, that's what important.
11 Sometimes PE is just a subsidiary, is almost like
12 an impurity to a major solvent, which could be
13 benzoyl alcohol or something like that.

14 But in most ballpoint ink formulations,
15 PE is a major solvent, and it doesn't matter what
16 was the absolute amount of PE used by the ink
17 manufacturer. It doesn't matter.

18 Q. And the PE loss ratio does not tell one
19 anything about how much PE was in the ink
20 formulation when the pen was put to paper;
21 correct?

22 MR. ARGENTIERI: Objection as to form.

23 A. No, the solvent loss ratio method
24 measures a specific ink-aging parameter that
25 doesn't relate at all to the initial concentration

1 Aginsky

2 of PE in the fresh ink.

3 Q. And you mentioned sort of in the course
4 of this discussion the storage conditions, and you
5 have no knowledge about what the storage
6 conditions were of the "work for hire" document;
7 correct?

8 A. That's correct.

9 Q. And you have no knowledge about what
10 the circumstances of execution of this purported
11 document are; correct?

12 MR. ARGENTIERI: Asked and answered.

13 A. That's correct.

14 Q. When I think you testified you spoke
15 with Mr. Ceglia about three weeks ago, did the
16 topic of the storage conditions and what the
17 storage conditions were come up in that
18 conversation?

19 A. Three weeks ago? No.

20 Q. Did that topic come up when you first
21 met with him in January of 2011?

22 A. No.

23 Q. Can you pull out your interrogatory
24 answers again. Give me just a moment to put my
25 hands on it.

1 Aginsky

2 (Pause.)

3 Q. Can you turn to your response to
4 Interrogatory 10, which is on the last page, page
5 9. And you testified about this earlier, but I
6 want to ask you some questions about this.

7 You say that you had -- on July 25th
8 you were e-mailed five images, PDF of the evidence
9 copies of portions of the document that had been
10 taken by Mr. Jerry LaPorte using a Foster &
11 Freeman video spectral comparator.

12 That's your answer in this
13 interrogatory; right?

14 A. Yes.

15 Q. And what is your -- well, who e-mailed
16 those to you? Did Mr. LaPorte e-mail them to you
17 or someone else?

18 A. No.

19 Q. Do you recall who e-mailed them to you?

20 A. This is what I said I need to double-
21 check. I have this e-mail, and I will find out.

22 Q. Okay. Let's put another blank in the
23 transcript and you can try to find that one out as
24 well, please.

25 TO BE FURNISHED: _____

1 Aginsky

2
3 Q. What is your basis for saying that
4 Mr. LaPorte took those images?

5 A. I think there are two bases for this.
6 One is I believe his name was mentioned to me when
7 we discussed the images over the phone. And
8 second, I saw some notations that were printed by
9 the machine, and I believe this is consistent with
10 the VSC that he is using.

11 Q. And who are your --

12 A. I might be wrong, but just to --

13 Q. I understand that.

14 Who were your discussions with where
15 Mr. LaPorte's name was mentioned?

16 A. It was the same person who sent me the
17 e-mail. I will double-check. I don't remember
18 right as of today.

19 Q. You understand that pictures -- that
20 the images were taken on July 25th of 2011; is
21 that right?

22 MR. ARGENTIERI: Objection as to form.

23 It says he was e-mailed that but...

24 A. Yes, I was given -- I received the
25 images. They were e-mailed to me on that -- on

1 Aginsky

2 that date, July 25th.

3 Q. Right. So you got the e-mail on July
4 25th. Are you aware of the fact that there was an
5 inspection of the "work for hire" document on July
6 25th, 2011?

7 A. I was aware that there was an
8 inspection in July, sometime in July. As of
9 today, I don't remember if I knew that exactly on
10 that date there was an inspection of the document.

11 Q. Are you aware that the inspection of
12 the documents was videotaped?

13 A. Again, I don't remember for sure. I
14 assume that in a case like this everything should
15 be videotaped.

16 Q. Are you absolutely sure that these were
17 images taken by Mr. LaPorte?

18 MR. ARGENTIERI: Objection. You
19 mean -- objection as to -- we've already gone
20 through the stipulation. He's just going to
21 give us the PDF. I don't know how you want
22 him to answer a question he already said he's
23 got to look at the PDF. I mean...

24 MR. SOUTHWELL: It's just that
25 Mr. LaPorte was actually not there on the 25th

1 Aginsky

2 and --

3 Q. Let me ask you this: Are you aware
4 that a review of the video would show it was
5 Mr. Speckin who was taking images of the document
6 on July 25th using VSC and not Mr. LaPorte?

7 MR. ARGENTIERI: Objection to the form
8 but if he knows.

9 A. Yes, it could be. I think the basis
10 for me to put Mr. LaPorte's name here was, number
11 one, that I most probably was told that it was
12 him; and number two, as I said, the images were
13 consistent -- the titles or what was printed under
14 the images, it was consistent with what I
15 typically see when I review his images.

16 But of course anybody else could use
17 similar equipment, and that would be the same type
18 of printing under the images.

19 Q. And to be clear, the printing under the
20 images is reflective of the model number of the
21 VSC, not -- there's not some indicator that it's
22 like Jerry LaPorte's VSC; right?

23 A. Yes, that's correct, that's the model
24 number of VSC.

25 Q. If someone else was using the same

1 Aginsky

2 model VSC, you would perhaps see the same legends?

3 A. Yes, that's correct.

4 Q. We have up here, which I'm going to
5 show you, a few VSC printouts that were obtained
6 in discovery from Mr. Speckin. We're going to put
7 up on the screen VSC printout 005, and the camera
8 can capture that. I want to ask if you can
9 recognize these as the images that you saw that
10 you're referring to here in your answer to
11 Interrogatory Number 10.

12 A. It looks very familiar to what I -- to
13 what -- to one of the five images that I was --
14 that I received via e-mail.

15 Q. Okay. Let's look at VSC printout 004,
16 and I'll ask you, after looking at that, whether
17 that also looks familiar to the ones that you
18 received in e-mail on July 25th, 2011.

19 A. From my memory, it looks familiar, yes.

20 Q. Okay. VSC printout 003.

21 A. It looks familiar.

22 Q. Just while we're on this image of VSC
23 003, do you see those sort of whitish rectangular
24 pieces there? When you observed the "work for
25 hire" document, you didn't see anything that

1 Aginsky

2 looked like that; correct?

3 MR. ARGENTIERI: Objection to form.

4 A. That's correct.

5 Q. Let's look at VSC printout 002. Does
6 that look familiar?

7 A. It looks familiar.

8 Q. You're now looking at VSC printout 001.

9 A. Yes, this is -- looks familiar, yes.

10 Q. All of these look familiar in relation
11 to what you got by e-mail on July 25th, 2011; is
12 that right?

13 A. Yes.

14 MR. SOUTHWELL: Let's take a quick
15 break. I think we're almost done.

16 MR. ARGENTIERI: Another break?

17 MR. SOUTHWELL: Yep.

18 THE VIDEOGRAPHER: Off the record
19 p.m.

20 (Recess taken from 4:07 to 4:16.)

21 THE VIDEOGRAPHER: Back on the record
22 4:16 p.m.

23 Q. So, Dr. Aginsky, you were asked some
24 questions before the break about your answer to
25 Interrogatory Number 10, which has been submitted

1 Aginsky

2 to the court, and the reference here to PDF copies
3 of portions of the document that have been
4 captured, as you stated, by Mr. Jerry LaPorte
5 using a Foster & Freeman VSC; right?

6 A. Yes.

7 Q. And if you determined that those were
8 not images taken by Mr. LaPorte, do you agree that
9 it's appropriate to clarify this interrogatory so
10 that the court is not under the incorrect
11 impression?

12 A. Yes, of course. As I said, I -- I
13 didn't know for a fact that it was Gerald LaPorte,
14 so I just assumed, based on the information that I
15 received, and based on what I said I think it was
16 consistent with the equipment that he typically
17 uses.

18 Q. I understand. And you're going to go
19 back and check. And if it turns out that it
20 wasn't, you'll correct this interrogatory;
21 correct? Yes?

22 A. Yes. I don't know how and what should
23 I prepare another document?

24 MR. ARGENTIERI: Yeah, we can help you
25 with that, amend it, just amend the

1 Aginsky

2 interrogatory.

3 Q. Yeah, I think you can simply amend this
4 answer and sign it, and that will probably do.

5 MR. ARGENTIERI: And his explanation
6 won't need anything further just to change the
7 answer. We'll find out. He has to go back
8 and look at the images.

9 Q. Is there anything else that you've
10 testified to today that upon reflection you would
11 like to clarify or modify?

12 MR. ARGENTIERI: Do you want the
13 testimony read back, Doctor, the whole day?

14 A. No, I think -- I don't remember
15 anything that I would like to clarify or amend.

16 MR. SOUTHWELL: Okay. Nothing further
17 at this time.

18 MR. ARGENTIERI: And I have no
19 questions, and I believe -- Dean, you don't
20 have any questions, do you?

21 MR. BOLAND: No, no, we have no
22 questions.

23 MR. ARGENTIERI: No questions.

24 MR. SOUTHWELL: Thank you, Dr. Aginsky,
25 then. We're done.

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

Aginsky

THE WITNESS: Thank you.

THE VIDEOGRAPHER: Going off the record
4:18 p.m. This is the end of Disk 3 and
concludes today's deposition of Valery
Aginsky.

(Time noted: 4:18 p.m.)

VALERY N. AGINSKY

Subscribed and sworn to before me
this ___ day of _____ 2012.

NOTARY PUBLIC

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

C E R T I F I C A T E

STATE OF NEW YORK)

: ss.

COUNTY OF NEW YORK)

I, LAURIE A. COLLINS, a Registered Professional Reporter and Notary Public within and for the State of New York, do hereby certify:

That VALERY N. AGINSKY, the witness whose deposition is hereinbefore set forth, was duly sworn by me and that such deposition is a true record of the testimony given by the witness.

I further certify that I am not related to any of the parties to this action by blood or marriage, and that I am in no way interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set my hand this 13th day of August 2012.

LAURIE A. COLLINS, RPR

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

- - - - - I N D E X - - - - -

WITNESS:	EXAMINATION BY:	PAGE
Valery N. Aginsky	Mr. Southwell	4

----- TRANSCRIPT MARKINGS -----

DIRECTIONS:

MOTIONS:

REQUESTS:

RULINGS:

TO BE FURNISHED: 34:3, 114:10, 133:13, 143:21,

----- EXHIBITS -----

DEFENDANTS' NO.	DESCRIPTION	PAGE
	Exhibit 42, motion to strike declaration of LaPorte	59
	Exhibit 43, declaration of Aginsky	78
	Exhibit 44, interrogatory responses of Aginsky	89
	Exhibit 45, copy of CD from Aginsky	93
	Exhibit 46, document 189	153

1

2

Exhibit 47, handwritten work notes of 164

3

Aginsky

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

&	113:25 142:10	2000 43:3	28th 160:7,13
& 1:20 2:16 18:10 27:16 28:3 80:25 85:10,10,12 185:10 191:5	143:17 133:13 195:13 13th 21:18 37:6 110:2,12 112:6 113:15,20 116:3 119:16 122:10 129:8 136:18 143:9 168:5 194:22	2001 40:2 2002 43:3 2003 51:3 160:7,13 2005 43:19 64:16 2006 43:20 2010 17:22 20:9 21:14 50:18 88:2	2:26 131:3,5 2mp 101:3,5 2nd 89:15
0		2011 8:8 9:3,9 10:2 10:5,8 11:25 12:8 15:17,21 16:10 19:22 20:24 21:14 24:6,20 28:10,23 29:5,11,19 30:6,19 30:25 31:18 33:8 37:6 52:7 54:2 55:8 78:20 92:21 109:8 109:13 110:23 111:8 112:6,9 119:16 131:19 140:3 143:17 168:6 177:3 184:21 186:20 187:6 189:18 190:11	3
0.5 137:8 001 190:8 001.bmp 103:14 002 190:5 002.bmp 103:18 003 189:20,23 004 189:15 005 189:7 00569 1:7 3:22 0531.jpg 100:4 0531.jpg. 97:25	14 141:20 142:17 143:21 195:13 1475 2:5 14843 2:13 14th 70:8 75:3,14,23 76:16 112:9 137:23 138:6 15 78:22 79:3 137:8 141:20 142:10,17 153 195:25 164 196:2 17th 78:20 188 2:12 189 153:18,22 195:25 1997 60:18,24 1:10 1:7 3:22 1:28 130:10,12 1:30 130:4	2011-1-13 95:6 2012 1:16 3:13 32:2 33:9,22 56:15 57:2 59:9 193:12 194:22 197:5,22 212 197:4 22nd 137:25 138:9 138:17,23 24 100:25 102:13 104:10 105:4,16 245 165:6 24th 17:22 59:9 25 152:24 254 164:25,25 25th 140:3,20 141:3 185:7 186:20 187:2 187:4,6,25 188:6 189:18 190:11 279-9424 197:4 28 51:3 90:18	3 59:12,14,15 60:14 60:15,16 87:7 131:6 152:24 193:4 30 152:23 30-45 130:5 300 69:11 94:16 332 89:25 34 87:23 34:3 195:13 366 165:10 38 165:25 386 59:7 3:16 169:22 3:37 169:22,24
1			4
1 22:2 51:8 55:6 86:22 104:24 105:6 105:6 122:18 127:15 129:4 149:5 150:23 152:6 154:4 154:13,24 157:3,24 164:23,24 10 157:20 159:14 185:4 189:11 190:25 10001 197:3 10166-0193 2:19 10:20 1:17 3:14 11 35:24 107:21 108:24 150:24 114:10 195:13 11:00 36:17 11:07 36:17,19 11th 78:10 1250 197:3 12:17 86:22,24 12:25 86:24 87:2 13 9:14 19:22 20:16 20:18,24 24:18 71:19 109:7 111:8	2 22:2 51:9 54:19 55:5 87:3 101:10 104:24 105:9 122:19 127:15 129:4 130:10 146:10 149:7 150:23 152:6 153:22 154:4,13 155:2 156:23 157:5 157:24 164:23,24 174:8 20 87:11 152:24 200 1:21 2:18 3:16 94:4,16		4 195:5 40 105:7 400 22:18,18 40x 105:7 42 58:25 59:2,6 195:19 43 78:11,13,15 131:21 141:18 146:2 195:21 44 89:18,19,23 93:4 94:2 100:24 165:22 166:12,22 168:14 195:22 44107 2:7 45 93:6,10 100:5 130:6 195:24 46 153:11,18,20 154:6 156:21 195:25 47 164:10,14 196:2 4:07 190:20 4:16 190:20,22 4:18 193:4,7

4th 56:15	absence 35:6	76:24 171:6 173:10	79:19 80:1,16 81:1
5	absolute 183:16	177:5,6,13 178:20	82:1 83:1 84:1 85:1
5 23:13 24:12 25:8 25:11,16,19 40:6 90:13 93:4,25 96:21	absolutely 57:4 187:16	180:18,24	85:11 86:1,23 87:1
5,000 24:23,24	absorption 150:22 154:22 157:22	aged 71:13,14	87:3,5 88:1 89:1,20
50 179:22,24	academy 81:8	180:23,23 181:3	90:1 91:1 92:1 93:1
500 69:8	accelerate 72:13,21	agencies 86:5	93:11 94:1 95:1
56 156:24	accelerated 72:3	agency 60:23 64:3 82:3 88:11	96:1 97:1,7 98:1,8
59 195:19	accepted 168:22 171:21 173:17	ages 63:19	99:1 100:1,8 101:1
5th 110:23	accidentally 12:23 50:3 53:5	aging 7:17 41:9 45:8 45:16 48:22 50:10	102:1 103:1 104:1
6	accompanying 123:16	50:11 58:17 63:8,18	105:1 106:1 107:1
6 87:7 145:25 146:10 149:5 165:23,24 166:6,13 166:21	accounts 72:24 73:12	64:20 65:2,20 66:22	108:1 109:1 110:1
600 69:9	accurate 92:5 96:16 100:20 105:18	66:25 68:9 69:10,17	111:1 112:1 113:1
66 78:19	108:25 154:14,17 157:10 159:16	69:22 72:2 83:22	114:1 115:1 116:1
7	accurately 166:22 166:23	84:17 119:24 120:3	117:1 118:1 119:1
7 79:3 96:21 150:6	action 194:18	120:16,20 136:24	120:1 121:1 122:1
770724 2:6	activity 172:12	137:7 171:7,12,14	123:1 124:1 125:1
78 195:21	actual 22:3 128:4,4 129:9 164:3 180:24	173:23 177:22	126:1 127:1 128:1
8	adam 28:16	178:3,14 179:9,12	129:1 130:1,11
8 150:20 156:25	added 78:18 147:21 148:9 149:2	180:8,19 181:5,11	131:6,13 132:1
8.5 150:24	addition 148:9,21 167:5	181:12 182:15,19	133:1 134:1 135:1
84 50:19,24	additional 15:9,12 79:12 85:6,13	182:20 183:24	136:1 137:1 138:1
89 195:22	admitted 60:20	aginsky 1:19 3:23 4:1,23 5:1 6:1 7:1	139:1 140:1 141:1
9	admitting 153:14	8:1 9:1 10:1 11:1,4	142:1 143:1 144:1
9 1:16 154:19 157:19 165:24 185:5 197:5	adopt 65:4	11:14,23 12:1 13:1	145:1,4,6 146:1
93 195:24	advance 143:17	14:1 15:1 16:1 17:1	147:1 148:1 149:1
9th 3:13	advise 139:25	18:1 19:1 20:1 21:1	150:1 151:1 152:1
a	affect 181:17	22:1 23:1 24:1 25:1	153:1 154:1,3,12
a.m. 1:17 3:14 35:25 36:19	affidavit 41:23 140:18	26:1 27:1 28:1 29:1	155:1 156:1 157:1,2
aaron 28:19	affirmative 56:21	30:1 31:1 32:1 33:1	158:1 159:1 160:1
able 71:14 86:11 133:18 148:17 149:12	age 48:22 66:6 70:15 70:22 72:14,22 73:8	34:1 35:1 36:1,3,20	161:1,20 162:1,22
abroad 69:19		37:1 38:1 39:1 40:1	163:1 164:1,11
		41:1 42:1 43:1 44:1	165:1 166:1 167:1
		45:1 46:1 47:1 48:1	168:1 169:1,25
		49:1 50:1 51:1 52:1	170:1 171:1 172:1
		53:1 54:1 55:1 56:1	173:1 174:1 175:1
		57:1,20 58:1 59:1,5	176:1 177:1 178:1
		60:1,18 61:1,3 62:1	179:1 180:1 181:1
		63:1 64:1 65:1 66:1	182:1 183:1 184:1
		67:1 68:1 69:1 70:1	185:1 186:1 187:1
		70:4 71:1 72:1 73:1	188:1 189:1 190:1
		74:1,11 75:1 76:1	190:23 191:1 192:1
		77:1 78:1,8,14 79:1	192:24 193:1,6,9
			194:11 195:6,21,23
			195:24 196:3 197:6
			197:21

<p>aginsky's 60:19,21 60:24 61:2 65:5</p> <p>ago 6:23 7:11,19,21 37:7 45:6 54:14 55:14 61:5 140:23 170:15,16,18 171:13 184:15,19</p> <p>agree 3:10 23:8 67:14 159:18 172:23 191:8</p> <p>agreement 6:4 21:7 22:5,5,8,9,12,14 116:10 146:4,6 149:5,7 150:23 154:22,25,25 157:3 157:22,24</p> <p>ahead 23:5 35:14 48:3 63:4 74:21 89:17 139:20 162:8</p> <p>aim 98:8</p> <p>aiming 96:11 98:9</p> <p>al 3:20 39:14</p> <p>alcohol 183:13</p> <p>alex 4:8 10:25 11:5 11:8 145:6,8,20</p> <p>alexander 2:20</p> <p>allcock 30:3</p> <p>allow 62:24 101:24 103:7 104:4 130:7 156:12 175:10</p> <p>allowed 43:7,8 69:25 99:19 107:2</p> <p>allowing 52:15</p> <p>allows 101:9 127:24</p> <p>amanda 2:22 4:9</p> <p>amend 191:25,25 192:3,15</p> <p>amendments 19:4 132:25</p> <p>america 42:13</p> <p>american 64:16 87:24 90:20</p> <p>amount 24:23 25:19 69:21 166:25 168:20 169:8</p>	<p>178:15,23 179:8 182:23,25 183:16</p> <p>analyses 166:3</p> <p>analysis 8:16,17 9:4 17:5 19:16,19 20:5 38:22 41:9,11 44:23 45:12 48:21,21 54:9 55:3 63:10 65:20 67:2 68:10,10,15 69:10,17,22 80:22 81:4,20,21,22,23 83:5 84:17 87:12,19 88:7 99:19 111:3,12 119:25 120:3 126:8 127:13 136:19,23 137:6,7 141:14 147:6,8,18,23 149:17 151:11,14 151:17,20,24 155:8 155:13,18 156:11 158:4,9,16,20,25 159:10,11,11,15 161:14 169:2,14 170:2 172:2,12,13 172:14 173:8,9,20 174:11,14,19,22,23 175:3,6,9,17 176:12 178:4,14 179:9</p> <p>analyst 174:16</p> <p>analytical 81:7,12 172:9,16,17 173:2,6</p> <p>analyzable 175:9</p> <p>analyze 18:25 54:19 63:17,18 98:17 148:6 170:9 174:2 175:7</p> <p>analyzed 49:9,19 148:4,22</p> <p>andrasko 65:25</p> <p>angle 106:8,10 119:11 167:18</p> <p>anomalies 165:15</p> <p>answer 5:21 10:17 11:21 50:25 52:11 52:22 53:13,23</p>	<p>54:12,22 55:10 62:25 67:19 71:25 88:16,23 93:3 137:15 139:22 166:6,14 173:15,24 185:12 187:22 189:10 190:24 192:4,7</p> <p>answered 56:18,20 64:25 88:22,23,25 98:12 121:13 137:14 162:10 184:12</p> <p>answers 9:13 56:23 74:23 96:21 162:18 166:8,10 168:13 184:24</p> <p>antonio 82:10</p> <p>anybody 6:17 23:16 26:5,8,12 32:7 35:8 48:19 188:16</p> <p>apologize 33:17 114:25</p> <p>apparently 26:19 34:18 53:6</p> <p>appear 125:22</p> <p>appearance 5:25 70:11 74:3,5 91:20 96:14 97:19 102:21 121:8 124:23 149:20</p> <p>appearances 3:25</p> <p>appeared 74:2 124:7</p> <p>appears 103:18</p> <p>applicable 100:17</p> <p>applied 45:8 64:6 82:23 171:16</p> <p>applying 72:22 83:2</p> <p>approach 83:9 137:5 170:8</p> <p>approached 8:3</p> <p>appropriate 191:9</p> <p>appropriately 145:23</p>	<p>approximate 34:2 66:6 171:6</p> <p>approximately 3:14 6:23 16:18 32:25 33:5 40:6 43:19 48:3 99:12 117:24 137:8 171:10 177:25</p> <p>april 51:3 56:15 57:2 160:7,12</p> <p>area 38:3,16 50:6 51:22 67:13</p> <p>areas 172:11</p> <p>argentieri 2:11,14 4:2,2 6:13 10:14,18 10:22,24 11:13,20 14:20 16:21 23:5 26:12 27:11,12 31:2 35:12 36:7,12 42:4 42:9 46:14,23 47:6 47:7,13,15 52:10,21 53:12,22 54:11,21 55:9,19 56:4,9,16 57:5,12,25 58:8 59:17,21,24 60:8 61:14,19 62:9,18,23 63:2 67:24 68:7 70:9 71:24 73:2,14 74:8,17 75:5,15 76:4,10,17 77:2,13 77:22 83:6 88:8,16 88:19,25 91:7,11,24 92:12 93:18,23 94:9 95:23 97:21 98:2,11 99:21 100:7,15 108:13 109:16,21 110:4 111:15 112:2 112:7,11 116:8 117:2,20,25 118:3 118:18 121:2 123:5 124:12,20 125:14 127:19 128:13 129:22,25 130:3 131:14 135:6 136:2 137:13 138:4</p>
--	--	---	---

<p>139:11,14,16,22,25 140:4,22 141:6 142:19 144:11,18 144:22 145:3,6,13 145:16,21 146:10 147:2,10 148:18 149:15 151:12,16 151:22 152:3,8,14 152:18 153:5,12,16 154:16 155:11,15 155:20 156:10,18 156:23 157:12,16 158:5,12 159:7,17 160:4,8,14,18,24 161:3,6,13,19 162:5 162:12,16,20,21 163:19,25 165:17 166:9 167:3 168:8 168:17 169:11 171:3,23 172:8,24 173:19 174:5,13 175:4 176:2,13,25 178:10,17 179:5 183:7,22 184:12 186:22 187:18 188:7 190:3,16 191:24 192:5,12,18 192:23 argument 57:16 arranged 98:25 138:16 arrangement 22:17 22:21 arrows 164:22 articles 57:18 87:11 87:16 artifacts 80:6 artificially 70:15,22 71:13,15 73:8 76:24 ascertain 59:10 60:12 aside 20:17 43:11 92:23 asked 7:15 11:10 12:16 14:7,9,14,18</p>	<p>15:2 16:5 19:15 20:4 21:21 34:13 37:25 45:6,13 56:19 60:11 74:3,11 88:19 98:11 110:8 119:24 120:2 121:11,22 125:8 134:23 137:13 139:3,6 141:12 167:14 179:23 184:12 190:23 asking 11:3,7,13,18 47:4 62:13 71:4 73:4 74:19 98:6 145:7 161:14 173:22 aspect 174:10 aspects 80:11 105:19 158:10 175:5 assembled 90:7 assert 5:16 assessment 15:14 assist 68:5 assistant 23:18 associated 80:2 associates 85:10,13 assume 22:16 45:16 46:10 54:23 133:23 140:24 144:9 187:14 assumed 13:7 49:16 191:14 assumes 56:19 61:20 assuming 45:3 63:23 111:11 153:12 162:8 178:15 179:15 183:9 assumption 77:16 astm 90:21 169:4 172:3 173:21 astrology 57:11</p>	<p>attached 43:12 78:9 112:17 118:11 141:24 142:17 143:19 attaches 101:11 attaching 142:12 attachment 142:3,5 144:16 145:2 attack 56:12 attacked 55:17 56:2 attacking 56:7 attempt 76:22,25 attend 30:18 137:11 137:24 139:13 attention 59:12 79:2 87:7 90:12 115:7 141:19 153:22 156:21 attorney 46:18 56:12 62:10,12,16 131:25 132:5,6,14 142:12 143:13 attorneys 2:4,17 3:24 132:3 142:18 143:6 audience 64:20 audio 3:9 august 1:16 3:13 53:25 55:8 194:22 197:5 authenticity 160:2 author 63:13 86:16 availability 136:23 137:21 available 20:4 31:9 73:13,15,16 137:17 137:20 138:7,7,10 138:24 140:8,16,19 140:25 141:2 avenue 1:21 2:18 3:16 aware 26:17 28:23 30:5 31:17 37:16,19 37:21 39:6,7,12,16 46:11 51:2,11,19,24</p>	<p>52:14,24 53:8,14,17 53:25 54:7,17,23 55:3,16,25 56:6,10 56:11,24,25 57:8,15 58:4,11 70:4,8 73:10 74:24 75:20 76:5,6,14,18,20 77:3,4,8,14,17,19 79:13 109:12,19 110:20 112:16 140:2 141:3 143:4 187:4,7,11 188:3 awkward 134:19 aycock 2:22 4:9</p>
b			
<p>b 90:19 141:19,24 142:6 143:19 176:15 back 6:6 7:23 17:19 22:3 33:10 36:18 45:18 49:11 52:6 70:14 75:17 81:6 86:25 93:19 96:20 96:24 97:5 100:23 109:7,14 115:24 117:19 123:20 129:15,19 130:2 131:4 137:2 141:16 144:13 154:18 156:20 157:18 163:14,24 164:7 165:5,8,13 169:23 190:21 191:19 192:7,13 backdated 40:9,9 72:20 background 46:8 59:18,19 balabanian 31:23 balance 25:9 ball 107:4 149:19,22 ballpoint 66:5 98:19 124:8 149:7,9,19 150:4 169:15 170:3</p>			

171:5 177:5,13 178:20 179:7 181:22 183:14 baltimore 64:15 bar 142:21 based 12:15 15:4,6,9 20:8 34:14,17 48:21 50:20 55:3,13 56:8 61:11 63:10 68:10 79:16 90:25 121:25 127:8 134:17 142:6 146:3,5 149:13,21 149:25 154:21 157:21 168:19 169:8 171:7 178:3 191:14,15 bases 186:5 basis 22:24,25 25:25 139:15 140:9,12 160:21,24 161:2,10 161:13,18 162:5,7 162:12 173:7 186:3 188:9 bathroom 169:18 bears 170:15 began 6:13 beginning 87:2 116:2 131:5 180:13 begins 60:15 112:25 behave 103:4 belief 142:15 believe 6:25 7:5 9:12 13:6 16:15 21:7 24:23 29:10 31:4 34:20 41:3 42:13 52:23 77:9 80:13 94:11 112:14 114:16 121:6 131:21 137:18 140:17 144:15 186:6,9 192:19 believed 34:22 bell 28:17 benjamin 2:21 4:10	benson 28:12,14 benzoyl 183:13 best 92:3 135:15 148:6 better 7:16 13:19 64:12 106:11 148:16 beyond 51:22 big 18:2,8 bigger 101:8 billion 40:7 bills 32:18 binding 150:20 bit 9:24 22:4 56:17 79:14 159:19 black 94:22,25,25 115:10,12 124:8,9 125:18,21,24 126:5 146:7 147:9,13,14 147:21 148:9,10,15 148:21 149:2,6,9 150:4 blanco 39:9 44:7 blank 33:24 107:9 114:4,8 133:9 143:15 185:22 blind 84:3,12 blood 194:18 blower 70:25 blue 164:24 165:7 blueish 165:12 bluish 165:12 bmp 102:13 boland 2:3,8 4:7,7 6:25 11:2,8,17 56:12 57:2,19 62:17 145:4,12,20 192:21 boland's 57:9 book 139:18 booked 139:2 books 87:13,16 173:4 border 64:2 88:11 bottom 59:13 60:16 82:5 87:7 90:13	166:13 brand 176:6 brazeau 88:10 break 47:20 86:19 86:20 105:12 129:12,19 131:14 164:16 169:18,18 190:15,16,24 breaks 5:15 brendan 37:12 brief 154:11 157:6,9 briefly 6:13 110:18 brighteners 151:21 163:23 bring 41:19 bringing 51:15 broadway 197:3 broke 87:5 brother 28:3,6 37:12 brought 36:4 115:14 115:16 brown 74:14 75:4 brownish 76:2 124:11 brownlie 30:3 buchner 65:23 buffalo 31:10 48:5 137:17 139:3 business 138:10 busy 50:2 bügler 65:23	99:10,17 104:17 125:18 135:23 141:9 179:20 calling 62:15 calls 20:20 camera 96:23 97:3 97:13 100:12,14,20 100:25 189:7 canada 64:2,6 69:19 88:10 canary 86:8 cancel 139:4,6,25 canceled 43:13 canon 94:3 95:6,18 96:2,12,23 97:2,3 97:10,13,14 100:12 100:20,24 canoscan 94:4 97:10 cantu 82:10,22 83:4 83:9,13 capabilities 7:16 45:13 109:3 174:18 capable 147:18 capacity 17:2 caption 3:18 capture 96:11 98:10 101:9 102:17,20 106:17 189:8 captured 105:6 107:25 108:5 191:4 captures 104:11 car 71:7 180:22 carbon 147:14,21 148:9,10,15,21,22 149:2 career 68:16 70:21 84:8 carefully 13:18 119:8 carmine 37:10 carrie 30:2 case 3:19,20,22 5:3 7:25 10:3 12:17,24 13:11,15 14:6,7,9 15:19,20 16:9,14,17
		c	
		c 2:2 66:16 194:2,2 cabinet 81:2 california 44:3 call 28:9 51:6 71:3,4 89:2 94:20 99:11 callahan 16:20,21 32:11,23 called 4:16 18:6 28:6,11 31:18 32:3 45:17 48:5 63:14,15 65:19 84:3 97:20	

<p>17:21 18:8,16,18,20 18:21,22 19:6 22:21 23:4 26:18,23 30:8 31:8,17 33:8 34:14 34:17,21,23 37:22 38:24 39:5 40:3,5 40:18,25 41:5,13,21 41:22,24 42:5,20,21 43:3,17,21,22 44:3 44:11,17 45:9 47:25 49:8,24,25 50:5,9 50:11,12,13,16 51:20,25 52:2 56:14 57:23 58:18 62:7,14 63:8,25 66:20 68:8 69:20 71:17 78:20 89:13 90:2 91:10,14 98:19 103:6 107:4,5 107:13 108:15 109:14,20 110:21 111:11 112:17,21 112:23 113:10 120:15 126:3 135:23 136:3,5 137:12 147:22 153:21 158:20,22 187:14 197:5</p> <p>cases 39:23 40:2,20 41:14,16,19,21 42:7 42:14,25 43:16,24 50:3 64:6,6,21,21 64:22 65:2,2 66:19 68:14 69:21 70:21 71:11,11,13 83:23 96:8 147:18 151:18</p> <p>casework 60:22 172:22 173:17</p> <p>cashiers 126:22</p> <p>cause 21:13 77:15 77:25 78:2 121:11 121:24</p> <p>caused 77:10 121:13 123:25</p> <p>causes 77:25</p>	<p>cbsa 88:11</p> <p>cd 9:16 92:22 93:8 93:10 95:16 195:24</p> <p>cease 62:24</p> <p>ceglia 1:5 3:19 6:25 7:3 24:15 26:13 27:13 36:24 37:10 37:15 50:17,24 76:23 118:3,6,14 161:22 163:3 184:15 197:5</p> <p>ceglia's 37:9 51:12 53:2 57:17</p> <p>cell 3:7</p> <p>center 81:17,24 84:14</p> <p>central 42:13</p> <p>certain 18:25 25:19 72:10</p> <p>certainly 37:18</p> <p>certify 194:10,16</p> <p>challenge 42:23 43:6 58:19</p> <p>challenged 56:13 67:15,15 69:25</p> <p>challenging 58:6,13</p> <p>change 63:19 78:6 86:19 94:20 106:8 121:12 124:23 168:6,15 179:10 192:6 197:7</p> <p>changed 28:24 79:14 94:17 100:16 134:12,21,21 165:12 168:9</p> <p>changes 19:4 121:8 132:24 135:3 165:18</p> <p>changing 179:11,13 181:23</p> <p>chapters 87:12</p> <p>characteristics 91:15 92:6 106:7 127:25 128:24,25 129:3 151:3,9</p>	<p>characterize 88:6 152:10 156:13</p> <p>charges 23:23</p> <p>check 21:10 116:9 116:10,23 133:8,25 139:7 140:22 141:25 142:4 143:7 144:7,14 185:21 186:17 191:19</p> <p>cheese 175:7</p> <p>chemical 8:23 19:18 44:22 53:20 72:2,4 80:5,11 81:4,9,21 147:22 151:14,17 151:25,25 155:13 158:8 169:14 170:2 171:2 182:4</p> <p>chemically 49:19</p> <p>chemicals 48:16</p> <p>chemist 44:21 45:21 45:25 46:3,8 68:3 79:17 81:6 89:9 111:14</p> <p>chemistry 38:12 46:9 79:23,25 81:8 81:13,19,19 174:20 176:20,24</p> <p>chemists 38:12 44:20 65:22 88:10 88:13</p> <p>chicago 43:3 138:14 138:15</p> <p>china 66:3</p> <p>choice 149:3</p> <p>chromatographic 148:23 175:19</p> <p>chromatography 80:21,23 171:19,20 174:12,25 175:16 175:25 176:11</p> <p>circumstances 21:4 40:24 90:15 122:10 122:14 184:10</p> <p>citigroup 41:4</p>	<p>city 3:12,17</p> <p>clack 148:22</p> <p>claiming 50:19</p> <p>claims 50:21</p> <p>clarification 5:6</p> <p>clarify 97:4 191:9 192:11,15</p> <p>clark 32:9</p> <p>clear 47:11 80:14 97:24 105:12 111:9 140:9 142:11 146:18 155:5 159:21 188:19</p> <p>click 102:10</p> <p>client 10:13 11:24 41:4,13 42:12 43:14 43:22 46:18 62:11 62:16 71:3 136:20</p> <p>close 38:2 57:24 65:4 91:19 100:18 169:19</p> <p>cloudness 99:11,12</p> <p>colleagues 101:17</p> <p>collins 1:22 4:13 194:7,25</p> <p>color 78:6 101:23 104:25 115:10 127:10 146:24 148:3 151:3 164:3</p> <p>colorant 155:19</p> <p>colored 121:21</p> <p>combination 83:21 127:12</p> <p>come 7:23 22:3 31:10 34:22 44:4 45:18 49:11 71:16 84:16 111:13 130:2 133:20 136:25 137:10,17 138:16 138:17,22,23 161:24 184:17,20</p> <p>comfortable 134:10 135:4,7,8,15</p> <p>comment 45:6,9,12 61:24 89:13 98:4</p>
---	---	---	---

<p>commenting 99:24 commission 197:25 commitments 138:14 commonly 173:17 174:2 communicate 7:12 communication 25:4 26:9 145:15 companies 147:16 148:5 company 42:13 147:15 197:2 comparator 9:15 80:25 185:11 compare 38:24,25 98:14 99:9 102:20 compared 97:16 122:16 compares 98:21 comparing 182:25 comparison 67:2 103:11 129:6 136:23 148:20 172:2,4 173:9,21 compensation 22:6 complaint 112:17 112:23,25 113:4,10 complete 92:15 129:20 completely 61:9 69:3 84:12 85:23 86:9,12 180:23,23 181:2 complex 65:9 complies 93:20 comply 144:12 component 175:23 components 48:16 48:22 82:23,24 83:3 155:19,23 174:3 175:8,11 181:22 compose 157:2 composition 152:2 170:9 174:21</p>	<p>computer 9:12 33:19 93:13 101:7 101:12 113:24 123:10 133:7 139:8 computers 101:8,8 concentration 183:25 concerning 14:18 16:11 122:4 concert 76:23 conclude 159:22 160:6 161:20 179:25 concluded 14:5 concludes 193:5 conclusion 35:7 40:12 55:13,16 77:20 146:22 150:3 150:5 179:3 180:9 180:11 181:3,8 182:17 conclusions 12:6 13:10,14,22 68:6 133:21 161:25 conclusively 160:2 condition 70:5 76:21 92:10 conditional 180:11 181:8 conditions 119:17 119:20,22,25 120:6 120:11,17,21,23 121:5 179:16 180:12 181:10 184:4,6,16,17 conduct 8:23 53:19 79:22,25 94:13 160:16 167:7 178:14 conducted 8:9 20:25 54:8 151:11 155:9 174:14 175:10 conducting 19:9 90:18</p>	<p>conference 6:22,24 28:9 45:5 55:14 64:15 86:8 conferences 87:17 confidentiality 22:13 confirm 143:16,23 143:25 144:6 153:25 159:8,11,14 confirmation 35:9 confirmed 116:3 154:3,12 157:2 confirming 156:14 159:5 connection 132:5 connors 18:10 21:8 21:9 27:4,6,16,18 28:3 29:8 consider 45:25 134:15 171:4 182:6 considered 84:10 167:18 consistency 154:2 consistent 186:9 188:13,14 191:16 consists 147:14 constructible 175:8 construction 66:16 82:16,21 83:9,20 177:20 180:6 consulted 136:12,16 contact 18:4 19:22 35:6 144:12 contacted 17:20,23 18:19 contain 101:24 105:2 147:20 148:2 178:13 179:8 contained 97:17 147:24 159:13 contains 99:10 101:21 102:8 147:15 148:9,20 175:7 178:5,9</p>	<p>contents 11:10 context 25:22 contingency 22:24 22:25 25:25 continue 3:9 171:14 continued 131:11 continues 177:21 contract 20:11 21:20,21 50:20 51:3 51:12 52:16 53:2 57:21 114:16 142:16 143:5 154:4 154:14 157:4 contrast 94:18 controversy 70:5,10 convenient 119:7 conversation 5:14 7:14,19,20 11:4 19:8,24 20:9,15 26:11,25 34:18 48:14 61:12 133:2,6 133:24 184:18 conversations 3:6 11:10 20:14,20 37:14 62:11 copied 26:8 copier 104:25 105:2 copies 112:14 147:4 185:9 191:2 copy 36:6 90:6,9 93:7,8,10 105:13 129:18 135:23,25 136:7,14 143:4,8 164:16 195:24 cord 101:13 corner 79:4 98:23 141:20 142:21 165:24 corners 97:17 corporation 23:25 23:25 correct 6:2,9 8:15 8:20,21 10:6,7,10 10:11 14:23 15:24 16:25 22:10 25:10</p>
---	---	--	---

<p>37:7 39:21,25 67:23 74:15 79:8 81:9,13 84:25 85:4,19 86:13 87:20 88:3 90:10 91:6,16 92:11,25 94:25 95:2,22 97:7 97:11,14 107:22 108:9 109:10,11 118:22 122:14 123:22 124:5,8,11 124:14,15 129:10 129:11 135:5 144:14 146:12,20 149:14 150:10,11 150:15,18,19 151:11,13,15 152:2 152:4,13 154:9 155:10,12,19,24,25 156:9,17,19 157:11 157:13 158:4,6,11 158:13 159:2,3,6,24 160:5,9,13,15 161:22,23 164:16 169:10,12 171:22 174:6,8 176:3,14 177:12 178:9,11 183:8,21 184:7,8,11 184:13 188:23 189:3 190:2,4 191:20,21 correctly 23:13 30:14 67:4,6 82:11 86:15,17 90:23 97:16 100:9 131:24 134:13 142:14 144:24 146:9 149:10 151:6 154:7 155:3 157:7 171:16 costs 6:2,5 counsel 3:18 4:5 5:9 5:9,13 61:12 95:9 countries 66:9 176:5 country 66:12 county 194:5</p>	<p>course 5:8 29:4,18 60:6 67:5 92:4 123:9 127:10 149:18 152:9 155:16 156:11 159:8 167:17 184:3 188:16 191:12 court 1:2 3:21 4:12 10:10 51:21 52:15 52:24 53:17,18 56:13,25 57:9 60:20 60:25 69:4,7,9,11 69:15 70:7 78:18 126:11 136:6 191:2 191:10 courts 67:21 cover 6:7 covers 22:9 created 51:14 55:7 criminal 64:6 criticism 173:14 criticized 63:21 67:11 cross 29:22 40:14 52:8 crossed 108:8 crow 17:25 crutcher 1:20 2:16 current 39:4 cut 84:4 cv 1:7 3:22 78:9 79:5,7,11,17 87:6 87:22 132:23</p>	<p>damaged 163:4 damaging 169:10 data 86:10 date 3:13 6:21 15:13 16:2,5 19:13 31:10 31:11 34:2 51:2 55:8 56:3 57:9 76:25 84:5,5 102:2 110:6,7,18 122:6 125:7 126:25 137:22 139:18 140:6,6 149:9 154:25 157:4 160:10 168:10 169:14 170:3 187:2 187:10 197:5,25 dated 89:15 170:15 171:13 dates 51:9 137:19,19 137:21 138:3,6 dating 17:5 41:11 64:20 67:22 68:6,15 79:18,19 80:16 81:22 82:7,13 83:8 87:12,18 160:16 dave 28:3 david 17:25 20:22 28:5 day 7:6,9 19:13,15 20:25 21:5 24:17 27:7,10 113:17 125:7 192:13 193:12 194:22 197:22 days 40:15 dealt 29:12 dean 2:8 4:4,7 6:25 10:18,18 56:12 144:19,22 145:3 192:19 december 9:10 24:5 43:2 89:15 decision 43:10,13 declaration 9:2 10:9 11:16,25 12:9,11,12</p>	<p>14:22 15:3 28:22 29:5,18 30:6 49:6 52:7,20 53:10,15 54:6 59:3,8 78:10 78:13,25 131:20 132:2,17 134:4,24 135:5,10 140:7,18 141:17,24 142:2,2 142:17 143:20 146:2 154:19 156:2 157:18 158:19 159:21,22 166:7 177:4 195:20,21 declined 26:2 defect 102:25 defects 103:6 defendant's 74:24 defendants 1:10 2:17 3:18 4:11 9:7 39:18 44:20 51:11 51:18,24 52:14,25 52:25 54:8 58:25 59:2,6 70:6 75:2,8,9 75:11,20 76:20,25 77:4,7,8,17 78:11 78:13,15 89:17,19 89:22 92:22 93:4,6 93:10 94:2 100:5,23 131:21 141:18 146:2 153:10,18,20 154:6 156:20 162:25 163:2 164:10,13 165:22 166:12,22 168:14 195:17 defense 81:9 definitely 110:14,16 definition 5:6 definitive 35:9 definitively 35:15 degradation 77:11 77:15 delay 21:13 deliver 84:16</p>
	<p>d</p>		
	<p>d 1:5 3:19 107:20 195:2 dalbert 58:19 60:20 67:14 dallmayer 65:24 damage 77:9 124:18 124:23 168:15,18 168:19 169:3 damageable 169:3,7</p>		

demonstrative 103:2 126:11	103:2,7 106:19 107:3,9,14 108:16 114:6 128:18 147:7 147:19 167:20 170:10,11 171:5,10 173:10 178:4,9 179:6,14,18	differently 163:15 difficult 69:9 84:10 181:4 difficulties 12:2 47:22 digital 96:23 97:3 97:13 100:12,20,24 101:3,5,6,11 105:17 105:22,23 106:5 dinilitr 95:7 dinolite 105:23 106:3,16,24 108:14 108:24 direct 59:11 70:24 72:12 78:2 90:12 121:15 141:19 153:22 directing 156:21 direction 46:18 directions 195:9 director 46:6 disagreed 23:7 disappeared 103:25 discerned 148:17 discernible 154:23 155:6 156:6 157:23 157:25 disclose 86:9 discoloration 121:12 discolored 74:2 75:12,18,19 76:21 162:25 disconnection 36:2 74:10 discovered 54:18 discovery 52:9,13 52:19 189:6 discrepancies 21:25 discriminating 126:8 discuss 19:9 26:15 30:22 48:18 110:14 119:3,19 145:21 150:20 164:9	discussed 30:21 31:3,11 40:17 62:6 62:7 63:7 93:2 110:5,7 122:9 125:15 162:22 171:19 186:7 discussing 71:5 120:18 139:9 discussion 19:11,12 20:3,6 28:20 63:6 93:9 110:17 113:7 116:2 118:25 122:23 130:8 136:19 137:16,20 160:20 184:4 discussions 16:14 31:5 110:10,15 120:19 186:14 disk 87:3 95:5 130:10 131:6 193:4 dismiss 51:20,25 52:2 displayed 93:15 disqualified 67:25 disrupt 153:8 distinction 170:6 distinguishable 158:15 district 1:2,3 3:21 3:21 dla 28:25 29:9 30:6 131:23 doc 78:19 156:24 docket 78:19 doctor 42:5 61:22 62:9 65:25 139:23 146:11 192:13 document 12:7 14:18 15:2,25 19:2 19:5 20:8,12 21:22 30:18 37:17 38:2,6 38:13,21 39:9 40:9 46:13 47:18 49:2 50:21 51:6,7,13 53:11,20 54:4,10
--------------------------------------	---	--	---

<p>55:7 58:10,15,20 59:6 60:3,13 61:4 61:10 64:17 66:7 70:6,16 71:7 72:8,9 72:19 73:8,25 74:4 74:14,18 75:2,3,12 75:23,25 76:9,15,22 77:9,11,20 78:16,18 78:22 79:17,19 80:11,15,16 84:4,4 87:25 89:8,12,24,25 90:6,7,14 91:5,14 91:15,19,20,22 92:10,15,18 94:3,14 96:7,13,15,22 97:13 98:14,15,15,18 101:2,19,21 106:21 108:17 109:8,9,13 109:18,20,22,23 110:9 111:22,25 112:12,13,25 113:6 113:10,16 114:17 114:19,20,23,24 115:7,8,14,22 116:14,15,16,22 117:3,12,19,25 118:21,25 119:2,7 119:16,18,22 120:12,24,24 121:8 122:12,25 123:4,12 123:17 124:4,19,22 124:24 125:2 128:22 129:10 135:21,23,24 136:3 136:5,9,11,15,17 137:12 142:3,13,22 142:23,24 143:12 143:18,25 144:5 146:6,20 150:14 152:7,12 153:18,21 153:21 156:15 159:23,23 160:3,17 161:21,25 162:23 162:24 163:4,10,14 164:20 166:4,24</p>	<p>167:2,25 168:7,23 169:3,4,7,10 170:14 170:17 171:7,11,13 179:2,15 180:14,15 180:20 181:6,9,14 184:6,11 185:9 187:5,10 188:5 189:25 191:3,23 195:25 document's 122:4 documented 123:21 documents 5:7 7:7 7:13 8:8,19 10:3 14:14 38:25 55:23 70:23 71:12,12,14 76:12 80:3,7 90:17 96:18 101:23 110:21,22 112:6 115:3 122:24 135:25 136:7 187:12 doing 19:18 65:2 70:14 81:18 86:16 118:4,16 147:8 160:22 170:25 175:2 176:20 dots 101:24 104:24 105:3 double 133:8,25 139:7 143:7 185:20 186:17 doubt 110:17 download 9:17 dpi 94:16,16 dr 4:23 11:4,14,23 36:20 49:6 50:7 54:5 57:20 59:5 66:21 70:4 74:11 78:8 82:10,22 83:4 83:9,13 87:5 97:7 98:8 100:8 131:13 140:7,11,16 145:4,6 145:10 154:12 161:20 162:22 169:25 190:23</p>	<p>192:24 draft 133:19 134:9 drafting 136:13 draiman 43:4,4,4 drive 9:17 drivers 176:17 driving 34:11 drying 182:15,15 due 36:2 74:10 76:22 dully 163:18 duly 4:16 194:13 dumain 16:22,23 32:5,10,23 dumain's 32:17 dunn 1:20 2:16 3:16 4:9,10 dye 82:23 147:24 148:9,20 149:2 dyes 147:21 148:2 dynamic 170:4,24</p> <p style="text-align: center;">e</p> <p>e 2:2,2 4:15 25:5,6 25:22 26:6 27:17 29:2 30:15 113:18 113:19 121:9 131:2 131:2,7 132:16,21 139:2,8 144:16 145:2 185:8,15,16 185:19,21 186:17 186:23,25 187:3 189:14,18 190:11 194:2,2 195:2 e1422-05 90:22 earlier 33:15 42:25 44:14 49:10 80:13 81:15 88:12 131:22 162:23 177:4 185:5 early 32:2 easier 41:20 42:17 107:6 easily 73:15,21 easy 144:9</p>	<p>edelson 31:18,22 edges 126:15 128:16 effective 78:2 125:20 126:9,18 148:19 167:20 eight 40:15 either 11:22 12:22 44:4 115:9 119:10 123:7 141:11 158:23 electromagnetic 125:23 electronically 144:23 element 101:19,20 elevated 72:3,11 elliott 1:8 3:19 emanuel 18:12,13 18:16 26:25 employer 85:9 encyclopedias 87:13 enforcement 82:2 86:4 engage 5:14 engaged 21:16 engagement 120:9 138:11 english 47:21 135:13 enhance 101:18 enter 182:16 entered 33:7 entire 181:16 entries 126:4 149:8 150:6,9 envelope 115:15,19 116:14 117:3 118:2 equipment 65:11 80:19 84:21 106:23 125:11 126:12 128:9 169:9 188:17 191:16 erich 39:8 errata 197:2</p>
---	---	--	---

<p>escaped 33:4 esda 167:7 esoteric 148:16 especially 35:2 122:17 esq 2:8,11,14,20,21 2:22 establish 100:4 160:2 et 3:20 europe 86:8 evaluate 171:6 evaluated 12:11 evaporating 182:2 evaporation 178:24 181:17,20 eventually 24:22 40:18 everybody 66:11 168:22 evidence 61:20 69:15 98:16 106:14 127:8 128:18 160:12 185:8 exact 6:21 93:7 140:5 176:9 exactly 36:20 187:9 examination 4:21 8:10,13 9:25 10:2,6 12:14 19:10,14 20:25 22:4 24:18 31:6 34:14 35:4 38:13,22,23 40:14 47:25 53:18 54:16 71:19 76:16 89:13 90:17 91:6 92:11,16 94:13 101:15 109:8 110:2,12,13 111:6 111:13,20 116:5 117:18,23 118:5,16 118:23 120:13 125:3,10,19 127:17 128:18 129:9 131:11 133:3 134:20 135:20,25</p>	<p>136:6 143:8,18 146:4,5 149:25 150:2 155:10 163:9 163:13 166:23 167:7,8,10,24 168:10,24 195:4 examinations 8:14 8:15 30:18 38:24 46:13 47:18 125:9 150:22 154:22 157:22 168:4,11 examine 14:14,18 15:2 21:21 52:16 53:2 84:21 110:8 116:16 162:2 examined 4:17 7:6 20:12 53:7 70:21 71:12 74:15 85:3 98:17 102:4 109:8 109:24 110:21 111:24 112:4 115:6 119:15 128:15 131:9 167:14 examiner 38:2,7 89:9 examiners 37:17 39:9 64:17 80:15 87:25 example 38:4 73:11 91:23 101:19 105:5 151:19 155:17 170:14 172:22 175:6 179:17 181:14 examples 54:3 exams 8:12 exceeds 179:22 excessive 121:13,17 122:2 exchange 139:8 excuse 26:13 154:10 executed 122:6,6,12 122:25 execution 122:5,14 184:10</p>	<p>exhibit 59:2 78:11 78:13 79:3 89:18,19 89:23 93:4,6,10 94:2 100:5,23 131:21 141:18,19 141:24 142:6 143:19 146:2 153:11,18,20 154:6 156:21 164:6,9,10 164:14 165:22 166:12,22 168:14 195:19,21,22,24,25 196:2 exhibits 195:16 exist 170:18 existence 151:20 155:18 170:13,22 expand 56:17 expect 11:12 163:22 168:15,18 expedited 52:9,12 52:19 experience 77:23 121:25 148:3 experienced 174:17 expert 16:25 17:7,10 17:12,14,15 35:16 42:23 46:3,4 50:7 54:8 57:20 62:3 67:21 110:11 141:4 161:24 expertise 51:23 experts 11:11 12:17 12:20,22 13:11,14 14:5 39:13 44:17 45:4 46:13 47:19 48:11 49:14 54:2 57:18 61:2 75:21 76:15 77:9,18 140:3 140:11 163:5 expires 197:25 explain 17:4 99:18 101:4 103:20 106:2 116:18 134:13</p>	<p>explained 17:21 80:13 122:20 explanation 5:6 122:22 192:5 explanatory 108:5 explosives 81:22 exposed 167:2 exposure 77:10,12 168:20 extension 96:3 extent 145:13,17 179:12 eye 124:19 149:17</p> <p style="text-align: center;">f</p> <p>f 131:2 194:2 fabricated 51:14 face 165:4,8,13 facebook 1:9 50:20 51:19 154:4,13 157:4 facsimile 146:16 147:5 fact 13:24 20:16,25 27:3 44:17 47:5 56:6 67:21 72:17 73:9 76:14 93:8 110:20 140:19 156:2 157:14 177:5 180:24 187:4 191:13 factor 182:16 facts 61:20 fade 78:6 faded 74:2,14 75:3 76:2,21 77:21 121:23,23 162:24 162:24 fading 77:25,25 78:3,4,5 121:12,13 121:14,17 124:10 124:15,16,17 168:19 fair 15:14 17:18 35:10 173:16</p>
---	--	--	---

fall 9:9 familiar 44:7 72:23 135:22 136:9 138:2 170:3 189:12,17,19 189:21 190:6,7,9,10 family 118:10,14,15 far 67:6 116:7 119:4 119:19 152:21 fast 182:15,20 faster 153:3,5 favor 43:14 fax 114:17 fbi 64:4,19 82:3 88:12 features 101:21 106:10 federal 81:24 fee 22:17 feel 126:21 134:16 fees 24:10 felt 149:22 field 17:5 61:2 83:5 83:7 88:6 89:4 101:18 168:23 file 95:4 103:13,17 108:4,4 filed 3:20 50:18 59:9 62:2 78:18,20 89:25 89:25 153:21 files 96:3,9 102:13 fill 114:8 film 99:25 finalize 134:5 find 73:22 103:6 106:12,14 160:11 185:21,23 192:7 finding 146:23 150:13 152:5,10 154:20 156:17 157:19,25 178:23 findings 10:10,13 11:24 12:3 13:14 14:13,17 134:22 152:13 156:6,13 157:10,15 159:5,6	159:13,16,25 fine 18:3 25:23 33:21 67:20 88:24 89:6 112:8 113:22 135:16 139:20,21 145:11 162:15 fingerprint 119:14 fingerprints 117:16 119:2 126:18 fingers 126:19,20 128:9,11 finish 5:20,21 finished 117:23 firm 18:2,8,10 27:4 27:7,16 28:11 29:13 30:7 31:18,20 32:3 32:5,8,17,18 33:7 79:18 85:16 firms 26:18,22 28:23,25 first 5:5 7:20 17:20 18:19 19:13,13 20:8 22:4 45:15 56:20 57:7 70:14 75:13,23 76:9 82:5,21 84:13 84:23 85:7 95:18 96:18 103:22,22 107:3 108:6,17 111:2 119:15 139:16 141:7 150:8 164:21 166:17,18 170:10,12,13,15,21 177:19 178:4 184:20 firsthand 92:7 five 121:6 170:16 185:8 189:13 flew 34:7 flight 139:3,6 florida 42:11,12 fluoresce 163:14,17 fluorescence 151:4 163:21 164:3,19 165:7,10,11,14,15 165:19	fluorescing 163:18 fly 141:10 fold 117:13 folded 98:23,25 folder 96:24 97:2,6 97:14 102:8 107:19 107:21 115:19 116:14 117:3 118:2 folders 95:4,15 folds 98:22 follow 87:15 91:9 follows 4:18 131:10 font 122:18,19 123:6 fonts 123:3 food 72:7 172:12 ford 176:16 forensic 38:21 46:12 47:18 79:17,19,23 79:25 80:16 81:17 81:24 84:14 89:8,12 91:5 160:11 168:23 172:11 forgery 51:14 forget 110:16 form 15:9,11 25:3 35:13 46:16 52:10 52:21 53:12,22 54:11,21 55:9,19 56:4,9,16 57:25 67:24 68:7 70:9 71:24 73:2,14 74:8 74:17 75:5 76:10,17 77:2,13,22 91:11 92:12 94:9 100:15 108:13 109:16 110:4 111:15 112:2 121:2 123:5 124:12 124:20 125:14 127:19 135:6 136:2 138:4 140:4 141:6 142:19 147:2,10 148:18 149:15 151:12,22 152:3,8 152:14 153:7	154:16 155:11 156:10,18 157:12 157:16 158:5,12 159:17 160:8 165:17 168:8 171:3 172:8,24 173:19 174:13 175:4 176:2 176:25 178:10 179:5 183:22 186:22 188:7 190:3 format 132:21 former 69:2 81:10 81:18 formula 170:10,12 formulated 51:17 formulation 170:12 171:9 178:5,8,12 183:20 formulations 183:14 forth 194:12 foster 80:25 185:10 191:5 found 80:6 106:18 154:23 155:6 157:23 178:12 fountain 149:21 four 84:7 95:4 frame 94:5 179:14 francisco 43:18 50:6 50:12 frankly 25:13 fraud 40:9 51:21 59:8 126:22 freeman 80:25 185:11 191:5 freezer 71:9 180:15 180:19 181:15,16 fresh 184:2 front 75:12,17 104:17 131:20 141:17 163:15,17 163:23 165:22 frye 43:6,7,9 ft 148:5,7 158:16
--	---	---	--

<p>full 60:3 178:13 fundamental 174:10 furnished 34:3 114:10 133:13 143:21 185:25 195:13 further 34:13 75:10 82:25 131:10 192:6 192:16 194:16</p>	<p>getting 16:8 169:18 173:25 174:25 gibson 1:20 2:16 3:16 4:9,10 give 78:7 84:20 117:18 129:19 184:24 187:21 given 21:6,20 36:13 79:3 85:8 115:17 178:22 186:24 194:15</p>	<p>174:11,24,25 175:2 175:16,19,25 176:10,17,20,23 government 60:22 64:3 68:25 73:17 governs 135:24 136:6 grable 17:25 20:22 26:25 28:2,4 granted 52:24 53:6 great 9:23 105:11 121:20 131:13 133:12 guess 7:23 13:19,21 13:23 16:8 19:20,23 20:16 23:9 35:12 37:20 46:15 49:3,17 58:13 59:16 61:25 70:13 72:16 73:6 115:24 129:14 143:3,16 144:8 159:4</p>	<p>handwriting 38:22 46:4 51:7 124:7 150:17 161:24 162:3 handwritten 91:19 101:20 102:22 126:4 149:6 150:6,9 164:10 196:2 hang 10:22 62:9 happened 31:11 71:6 123:20,25 happens 128:17 happy 100:5 hard 135:23,25 136:7,14 he'll 145:18 head 100:2 headquarters 84:16 hear 10:19,24 57:7 145:3,4 heard 11:2 29:3 55:13 57:6,14 58:2 70:14 138:19 hearing 43:7,9 56:14 57:2,10 111:23</p>
<p style="text-align: center;">g</p>			
<p>g 4:15 131:7 gas 80:21 171:20 gaudreau 88:3,5,9,9 89:7 gc 54:9 80:21 148:5 151:24 155:22 156:3 158:9,16 172:6,9,21 173:2,9 173:10,11,16,20,23 174:2,8,10,17,19 175:2,9 178:13 gel 149:22 general 17:6 20:5 45:11 62:13 113:7 119:5 120:15 121:22 136:4 137:5 generalized 59:25 162:16,17 generally 8:2 45:9 49:25 50:23 53:21 63:5,7 70:17 80:10 80:20 174:25 175:20 178:19,20 generic 146:22 generically 179:23 genesis 142:13 genuine 159:23 genuineness 161:15 gerald 13:5 41:24,25 45:7,14 54:15 59:8 63:12,23 64:10,24 121:7,10 191:13 germany 65:22</p>	<p>giving 35:9 36:10 62:18 69:15 162:17 glass 126:16 glasses 128:15 167:16 gloves 117:6,8,10 119:6 129:23 go 3:10 7:25 17:19 23:5 35:14,22 48:3 63:4 74:21 89:16 95:18 96:20,24 97:5 109:7 139:20 144:13,18 146:13 149:4 152:19 153:3 153:5 162:8 191:18 192:7 goes 72:7 159:4 going 27:18,19 35:7 48:5,19 53:21 56:17 61:19 62:10 74:18 78:10 85:16 86:6,9 86:21,25 93:5,12 98:3,4 100:3 114:4 114:5 115:25 129:14 130:9 131:4 141:10 142:9 143:2 152:16,19 153:2,3 169:23 187:20 189:4,6 191:18 193:3 good 3:2 4:23,24 11:9 38:10 40:12 46:8 48:11 67:5 85:25 103:2 148:8</p>	<p>114:18,25 guide 90:21 gus 39:14</p>	<p>heard 11:2 29:3 55:13 57:6,14 58:2 70:14 138:19 hearing 43:7,9 56:14 57:2,10 111:23 heating 183:2 held 1:19 3:15 56:14 help 191:24 hereinbefore 194:12 hereunto 194:21 hewlett 147:25 high 54:18 83:12 94:15 higher 106:18 highly 55:4 83:14 111:19 hire 21:21 50:21 51:6,13 53:11 54:4 54:9 55:7 73:25 75:2,23,25 77:11 109:9 112:5,13 113:16 115:13,21 117:2,19 119:16 120:12,24 122:4</p>
		<p style="text-align: center;">h</p>	
		<p>h 2:20 29:2 31:15 hair 70:25 half 69:10 166:14 178:2 halfway 59:19 60:16 hall 30:2 hand 129:15 142:21 164:7 194:22 handed 112:11 117:4 handheld 125:11 149:18 handing 129:15 handle 119:7 handled 117:11 hands 184:25</p>	

<p>135:21 142:16 143:5 146:20 152:7 152:11 156:15 159:23 160:3 162:23 163:9 164:20 166:3,24 168:7 184:6 187:5 189:25 hired 57:23,23 61:5 hold 118:24 119:13 holes 97:18 123:22 124:2 holmberg 35:18 home 118:12 hong 40:3 43:9,12 69:20 hopefully 86:17 horizontal 142:20 hornell 2:13 hot 70:24 71:22 hour 22:18,19 118:23 hourly 23:19 hours 33:5 117:24 152:22,23,23,24 huh 15:23 52:3 88:18 human 172:12 hundred 175:8 hutnyan 18:18 hypothetical 178:22 181:14</p>	<p>identify 146:19 170:10,25 171:9 identifying 77:18 ignoring 161:8 illuminate 125:23 165:2 illuminated 163:9 165:5 illumination 167:6 168:12 image 73:25 76:6,8 96:7 97:25 98:20 99:4,20 100:9 101:18 102:19,20 103:13,17,20,21,22 104:13 105:6,9 108:2 112:16 143:10,19 189:22 imagery 92:9,24 93:13 104:5 images 9:8,14 36:4,5 74:5 89:12 91:13,21 92:3 95:7,7,8,18,20 96:21 97:12,14,15 99:24 102:9,9 103:10 104:10,10 104:14 105:4,16 106:18 107:20 108:20 112:12 121:7,10,17,18,19 125:17 127:18,23 142:16 185:8 186:4 186:7,20,25 187:17 188:5,12,14,15,18 188:20 189:9,13 191:8 192:8 img 100:4 immediately 43:9 important 84:10 106:8 149:16,19 174:11 175:17 181:20,21 182:11 183:10 impossible 99:15 175:20</p>	<p>impression 38:23 191:11 improper 153:7 impurity 183:12 inch 150:24 incident 106:9 include 9:16 22:5 134:16,23 included 129:6 159:20 includes 138:9 170:8 including 14:2 80:24 87:12 134:11 166:24 168:12 170:22 incorrect 191:10 incorrectly 67:5 indentation 111:3 111:12 indentations 104:2 independent 91:2 indicate 87:10 indicating 9:22 117:15 119:10,12 149:24 indicator 188:21 indistinguishable 127:4 individually 1:8 information 7:12 12:24 33:20 44:24 47:4 53:4 57:21 73:12,21 104:20 107:10 114:8 120:8 122:8 133:11,18 137:4 140:13 145:8 180:3 191:14 informational 20:2 infrared 8:15 91:22 103:24 104:5,8,12 104:15 105:10 128:2 initial 19:8,11,24 26:24 183:25</p>	<p>initially 43:7 62:6 initials 51:8 103:8 108:7 126:4 ink 7:16 17:5 41:9 41:11 44:17,19,20 45:8,16,21,25 46:3 46:9 48:17,22,23 49:11,14 50:10,11 54:3,9 56:3 57:22 58:17 63:8,18,19 64:20,20 65:2,20 66:7,22,25 67:2,2 67:22 68:3,9,15 69:10,17,22 70:12 70:15 72:7,14,14,22 72:22 74:2,4,14 75:3 76:2,22,25 77:10,21 78:4,5 79:17 80:6,9,9 81:18,21,21,21 82:7 82:13 83:8,22 84:17 87:11,18,19 88:10 89:9 91:19,20,22 94:25 98:19 102:21 102:21 103:25 104:2 107:4,14,15 107:17,17 108:16 119:24 120:3,16,20 121:22,23 124:7,8 124:11,11,16,17 136:23,23,24 137:7 140:2,11 141:4 146:24 149:7,9,21 150:2,4 154:20,23 156:7,8,12,14,15,16 157:2,4 160:16 162:2,6,24 168:7,16 168:19 170:3,9,11 170:15,18,23,25 171:6,7,9,10,12,14 171:17 172:2,4,4,7 172:21 173:10,10 173:16,20,21,23 174:3,20,23 177:21 178:3,5,8,8,12,14,24</p>
<p>i</p>			
<p>idea 48:11 ideas 82:25 identical 152:7,12 154:5,14 identification 59:4 78:14 89:21 93:11 153:19 164:12 172:5 identified 96:25 100:8</p>			

<p>178:25 179:4,6,7,7 179:9,11,14,19,22 180:2,8,9,10,23,24 181:5,10,11,12,22 181:25,25 182:12 182:14,19,20,24,25 183:5,14,16,19,24 184:2</p> <p>ink's 177:5</p> <p>inks 66:5 68:6 125:21,24 149:21 149:22 155:7,19,24 156:4 169:15 170:9 171:5,21 174:21 177:12,13 178:19 178:20</p> <p>inorganic 148:21</p> <p>inspection 12:8 70:7 75:14,22 112:10 123:13 135:24 136:14 137:23 149:13,17 158:4 187:5,8,10,11</p> <p>installation 43:19</p> <p>instance 15:16 91:18</p> <p>instances 107:16</p> <p>instruction 47:10</p> <p>instruments 80:24</p> <p>intense 94:18</p> <p>intent 153:13</p> <p>interact 29:5,6 31:14 32:15</p> <p>interaction 29:22 107:11</p> <p>interactions 29:25 30:12,17 31:21</p> <p>interest 50:5,19 66:9</p> <p>interested 194:19</p> <p>interfere 3:8</p> <p>interior 81:16,25 82:2</p> <p>interlineation 51:8 55:5,6 103:8 149:6 154:24 156:8</p>	<p>interlineations 157:3</p> <p>internal 85:20</p> <p>international 90:21 91:2</p> <p>internet 12:25 13:18 39:10 49:5,24 50:15 52:5 53:5 54:6 55:20,21 58:16 73:20,21 75:7 140:8 140:14,15</p> <p>interrogatories 9:8 9:13 73:24 74:23 76:7 95:19 100:24 165:21 168:14</p> <p>interrogatory 15:17 24:3 74:13 89:14,19 93:3,25 96:20 166:8 166:9 184:23 185:4 185:13 189:11 190:25 191:9,20 192:2 195:22</p> <p>interrupt 99:21</p> <p>interrupting 62:23 62:24 74:20</p> <p>intersection 107:5,6 107:8,17 108:5</p> <p>introduce 30:15</p> <p>invented 83:10</p> <p>invited 84:15 86:7,7</p> <p>invoice 27:23</p> <p>invoices 24:5,7</p> <p>involved 15:20 16:9 16:9,17 22:13 28:11 29:10 31:13,19 32:14 34:17,21,23 34:25 35:8,21 37:22 37:22 39:4 41:25 43:16,25 44:12 49:8 68:9,9 89:3 112:20 120:14</p> <p>involvement 8:2 17:20 19:11 26:23 27:15 31:3 39:4 50:9 62:7 63:7</p>	<p>71:18,18</p> <p>involves 38:22</p> <p>ir 148:5,7 150:22 151:4 154:21 157:21 158:16</p> <p>irl 150:22 154:22 157:22</p> <p>iron 70:24,24 71:22</p> <p>island 86:8</p> <p>israel 84:13,15,16</p> <p>issue 20:8 139:10</p> <p>item 96:21</p> <p style="text-align: center;">j</p> <p>james 2:25 3:11 28:2</p> <p>jan 65:25</p> <p>january 8:7 10:2,5 19:21 20:16,18,24 21:14,18 24:18 37:6 71:19 109:7,12 110:2,12,22 111:8 112:6 113:15,20,25 116:3 119:16 120:13 122:10 129:8 136:18 143:9 143:17 168:5 184:21</p> <p>jason 35:18</p> <p>jay 31:22</p> <p>jeff 30:8,10</p> <p>jennifer 32:8</p> <p>jerry 30:7 39:13 131:22 185:10 188:22 191:4</p> <p>jerusalem 84:22,24</p> <p>jet 80:9 146:24</p> <p>jetting 170:23</p> <p>jim 39:9 44:7</p> <p>john 30:3 37:21 38:4 110:11 111:2,5</p> <p>journals 63:21 67:10 106:22</p> <p>judge 5:3 40:18 41:13 43:7,13 47:11</p>	<p>56:14 66:23,24</p> <p>judge's 47:10</p> <p>judgment 43:23 53:3</p> <p>judicial 17:14 113:4 113:10</p> <p>july 30:19,24,25 31:18 53:25 70:7 75:3,14,22 76:16 112:9 137:23,25 138:6,9 140:3,20 141:3 168:5 185:7 186:20 187:2,3,5,8 187:8 188:6 189:18 190:11</p> <p>jump 9:17,22 42:15</p> <p>june 9:3 10:8 11:25 12:8 16:10 28:23 29:10,19 30:6 31:4 52:6 78:10,20 79:7 131:19 137:18,18 177:3</p> <p>junk 57:3 63:21 67:7,11</p> <p>jürgen 65:23</p> <p style="text-align: center;">k</p> <p>k 4:15 131:7</p> <p>kasowitz 28:11,14</p> <p>keep 62:16 72:8 153:2</p> <p>keeps 80:22</p> <p>kept 49:25 181:15</p> <p>kevin 29:22</p> <p>key 129:15</p> <p>kind 55:22 122:7 182:17</p> <p>kinds 169:13 170:2</p> <p>kip 30:2</p> <p>knew 49:7 52:23 65:6 111:18 187:9</p> <p>know 6:7 17:2,4,13 17:14,16 23:15 25:14 26:20 36:12 36:13 37:25 38:19</p>
---	---	---	--

<p>39:3,21 41:4,12 42:9,20 44:9 45:15 46:7 49:8 50:8,24 51:23 53:4 55:22 63:12 64:7,8,13 68:14 75:16 76:11 77:23 78:22 84:11 85:24 90:4 101:17 105:5 112:3,18,19 114:24 120:2 123:7 139:24 141:7 147:22,23 148:3 161:9 171:5 174:18 174:20 178:25 183:5 187:21 191:13,22 knowing 140:10 knowledge 13:13,21 13:25 14:5 44:12 45:2 47:3,16 49:4 49:21 111:10 119:21 120:5,22,22 122:13,15 123:19 123:24 124:3 184:5 184:9 known 38:9,18 83:14 84:5,6 171:14 178:8 knows 48:19 188:8 kong 40:3 43:10,12 69:20</p>	<p>lack 148:16 lake 30:8,10,13 lakewood 2:7 lamp 125:18 lamps 125:11 163:10 language 47:21 135:13 laporte 13:5 39:13 39:17 41:25,25 45:14 54:8,15,17 55:4,17 58:6,13 59:3,8 63:12,24 64:10,24,24 121:7 185:10,16 186:4 187:17,25 188:6 191:4,8,13 195:20 laporte's 45:7 49:11 55:12,15 60:17 121:10 186:15 188:10,22 large 65:10 96:4,5,6 96:8 102:3 106:25 larger 106:17 larry 13:6 39:8 45:24 46:19 49:18 141:8 158:19,22 laser 146:15 148:14 lasted 34:24 late 9:9 34:25 35:5 35:21 latest 87:22 laurie 1:22 4:13 194:7,25 law 26:18,22 27:4,6 27:16 28:11,23,25 30:7 31:18 32:2,5,8 69:3 82:2 86:4 lawsuit 50:18 51:15 113:2 lawyer 16:20 17:24 18:7 27:9 28:16 29:9,17 30:8 32:13 lawyers 16:16,16 18:15 27:16 28:12</p>	<p>29:6,23 30:2,23 31:22 43:11 layer 80:23 171:19 leading 20:17 learn 153:16 156:3 leave 117:16 119:14 126:17 lecture 84:17 led 21:4 35:7 left 26:22 92:18 97:17 118:21 legal 2:3 legends 189:2 legitimate 161:10 lesnevich 39:15 letters 103:15 level 54:24 66:10,12 99:18 127:13 151:10 155:8 156:11 158:3,15 174:15 175:10 176:7 lide 94:4 lieu 25:9 69:5 life 68:19 light 75:4 77:25 99:5 106:9 121:14 122:2,2 125:18,24 126:6 127:4,17,20 127:21 165:2,6 167:16 lighting 99:5 106:7 167:11,19,23 limitations 92:5 174:19 line 78:16,17 85:17 89:23 98:24 99:2 145:8 197:7 lines 91:19 102:21 160:11 lippes 29:2 list 41:19 42:7,17 lists 42:22 literature 63:22 72:24 73:5</p>	<p>litigation 8:5 59:7 113:11 little 9:23 22:4 56:17 79:14 101:4,8 106:2 116:18 117:16 152:23 159:19 162:22 live 69:5 llc 2:3 llp 1:20 2:16 located 3:16 42:10 location 122:11 log 33:19 133:7 134:2,6,8 logical 77:16,19 113:19 133:23 150:7 long 7:24 40:14,14 89:4 127:3 134:3 151:4 165:10 176:20 182:9 longer 15:20 34:21 34:23,24 67:18 177:11,15 look 60:3 72:9,15,16 72:20 73:9 78:21 90:3 95:3 102:6 113:23 117:24 139:17 180:22 181:2 187:23 189:15 190:5,6,10 192:8 looked 108:20 126:15,25 128:14 129:2 162:6 190:2 looking 33:9,10 60:4 97:22,25 98:5 99:23 107:19 139:2 142:10 189:16 190:8 looks 55:21 99:7 101:7 142:20,21 189:12,17,19,21 190:7,9</p>
I			
<p>I 4:15 29:2 107:20 131:7 lab 8:9 23:21 64:3,4 68:25 88:14 116:18 118:6,7,11,16,20 128:8 labeled 95:5,6 laboratory 46:6 65:10 79:19 80:17 80:20 81:25 116:24 labs 172:11 175:22 176:4,9</p>			

loss 45:17 54:19 63:15,24 65:17,21 66:4,5,13,17 82:14 83:21 87:19,24 88:14 177:24 179:17 180:4,6 182:22 183:18,23 lost 41:13 182:21 lot 55:21 173:4 luc 88:9 luminescence 91:22 151:4 165:7 lunch 129:13,19 131:14 164:16 lyter 39:14 49:6 50:7 54:5 66:21 lyter's 140:7,11,16 <hr/> <p style="text-align:center">m</p> <hr/> m 29:2 31:15 102:20 machine 146:7,14 146:19 176:21 186:9 machines 146:16 147:5 magnification 106:17,18 magnifiers 149:18 magnifying 126:16 128:15 167:15 mail 25:5,6,22 26:6 27:17 30:15 113:19 132:16,21 144:16 145:2 185:16,21 186:17 187:3 189:14,18 190:11 mailed 113:18 143:12,13 185:8,15 185:19 186:23,25 mails 121:9 139:2,8 main 2:12 major 83:3 181:22 183:10,12,15 making 159:5 179:2	malfunctioning 102:25 mangled 31:25 manipulation 94:21 manner 90:15 122:24 162:7 manufactured 170:12,16 manufacturer 183:17 march 28:10 33:8 mark 1:8 3:19 36:7 36:11 51:19 53:9 88:9 129:20 161:21 164:5 marked 58:25 59:3 59:6 78:11,14 89:17 89:20 93:6,11 152:17 153:10,19 164:8,11,13 markings 195:8 marks 28:16,19 marriage 194:18 maserati 176:16 mass 80:21 171:20 master's 81:12 match 178:7 matches 143:9 matching 151:2,9 material 80:8 98:18 134:9 167:21 170:22 materials 90:21 106:13,20 170:21 mathias 29:2 matrix 181:24 mattel 18:18 matter 176:17 183:8 183:15,17 194:20 matthew 2:21 4:10 mcguire 31:19 mean 8:21 12:3,18 15:20 34:21 36:9,12 67:11,15 70:11 73:19 78:6 98:2	110:3 115:14 152:5 155:6 156:7 161:6,8 170:16 171:16 173:13 187:19,23 meaning 9:6 42:23 51:23 67:17 104:24 134:16 156:25 158:4 means 12:4 17:15 52:2 83:25 123:6 146:23 150:8 151:9 158:2 174:25 meant 153:8 173:2 173:13 179:3 measure 63:18 126:12 measured 171:8 174:7 177:7,14,18 177:21,25 179:10 measurements 128:3,4,5 measures 183:24 measuring 182:22 182:23 medium 92:5 meet 32:20 132:14 meeting 16:15 20:17 20:21 33:2,5 34:15 34:16 87:25 116:3 megapixel 101:10 melissa 32:8 memory 33:4 103:12 104:22 144:17 189:19 mention 32:4 136:20 167:12 mentioned 20:11 24:12 28:6,7 35:20 37:18 38:3,17 42:21 45:21 61:8 66:21 73:7,17 80:9 83:16 83:19 88:12 92:23 109:22,25 110:2,8 111:22 113:14 118:24 119:11	122:19 137:3 141:8 150:7 173:2,13 177:4,19 180:4,13 181:13 182:13 184:3 186:6,15 mentioning 55:23 58:16 mentions 49:6 messages 62:17,19 messed 97:4 messrs 32:23 met 6:12,14 16:24 17:2 32:10 33:11,12 35:17 36:23,24 113:20 136:18 184:21 method 45:14,15,16 45:17 54:20 55:2 56:3 57:19 58:19 63:16,23,24,25 64:5 64:7,9,13 65:17,18 65:21 66:4,14,17 67:8 82:15 83:21 85:15 87:20,24 88:15 89:5 115:16 148:6,7,8,23 149:3 170:4,4,24 172:9,15 172:16,19 173:3,5,6 173:6 177:19,24 179:18 180:5,7 182:22 183:23 methodology 40:11 45:8 50:10,11 55:24 58:17,17 62:5 65:5 66:23 67:4 82:9 83:2,19,24 86:14 120:16,20 171:15 179:2 methods 21:23,24 63:20 66:9 68:4 82:7,13,18 170:8 171:21,25 176:10 180:7 mga 18:18
--	--	--	--

michael 28:16 michigan 8:9 32:21 micrometer 128:7,7 microphones 3:4,8 microphotographs 101:2 107:21 108:10,24 microscope 101:3,5 101:6,10,11,16 102:10,18 104:4,6 105:17,22,24 106:6 106:16,24,25 107:13 108:15,18 109:3 122:18 microscopes 80:25 106:12 125:11,12 microscopic 8:14 21:24 150:2 154:21 157:21 158:6 microscopy 158:17 microspectroscopy 148:5 middle 59:12,13 71:8 156:21,24 180:21 milberg 32:3,5,17 33:7 military 81:8 milk 173:9 millimeter 137:9 mind 47:7 100:7 mine 116:11,11 ministry 81:16,25 82:2 minus 43:20,20 minute 35:23 68:12 166:5 169:16 minutes 73:22 130:6 130:6 152:24,24,25 mischaracterization 156:16 157:14 mischaracterize 152:12 miscope 101:3,5	misled 34:18 model 147:8 188:20 188:23 189:2 modified 116:10 modify 192:11 moment 58:22 78:7 78:21 90:3 169:17 184:24 money 25:15 126:22 monitor 66:5 months 33:11,12 179:19 180:2,9,10 180:17,25 181:6,10 182:9 moran 17:25 morning 3:2 4:23,24 75:2,22 moscow 81:10 84:15 85:2,3 107:2 motion 43:12 52:8 52:25 55:23 58:4,5 58:9,13 59:2,7 61:15 62:2,20 195:19 motions 195:10 mouse 101:7 move 36:21 93:18 117:14 119:12 161:16 moved 51:20,25 52:15 68:21,24 69:18 85:5 multimillion 43:21 multipage 38:25 98:15 mute 10:21 mz 103:15 105:7	naked 124:19 149:17 name 3:11,22 16:19 17:24 28:6,8,21 29:13,14,15,21 30:10 31:20,22,25 35:19 41:2 42:5,7 44:9 108:4 109:17 114:18 131:24 154:8,9 186:6,15 188:10 named 28:16 30:8 31:14 32:14 35:18 names 13:5 28:15,17 29:3 30:2 39:10,14 40:23 43:5,18 65:23 107:24 176:6 nanometers 164:25 165:6,11 narcotics 81:23 nathan 31:15 nature 45:4 near 103:24 104:5,7 104:12 necessary 65:11 67:19 94:21 96:8 132:24 170:25 171:8 178:7 183:4 need 5:4,5 9:17 36:11 42:17 94:15 94:22 95:10 103:11 104:21 117:14 133:25 137:6,8 139:7 141:14,25 142:3 143:7 180:3 185:20 192:6 needed 138:13,14 needs 20:12 neither 11:9 never 22:25 25:24 43:23 44:11 53:10 57:23 58:2,19 60:19 60:22,25 61:5,10 63:21 67:10,14,15 67:16,25 115:6	138:19 142:22 158:21,24 159:9 177:11 new 1:3,21,21,23 2:13,19,19 3:12,12 3:16,17,21 16:16 38:3 40:25 194:3,5 194:9 197:3,3 newer 128:24 news 49:25 72:24 73:11 nice 126:10 nine 26:18 noncolorant 174:3 nondestructive 8:13 19:16 21:23 57:22 61:4 90:17 125:8 167:6 normal 148:12 163:21 179:16 180:18 181:9 normally 103:4 notary 1:23 4:17 131:9 193:15 194:8 197:25 notations 186:8 note 3:4 94:3 99:12 125:17 146:3,13 149:5 165:20 noted 24:4 130:12 131:3 193:7 notes 99:11,16 104:17,20 105:13 108:3 129:18 164:3 164:11,15 196:2 notice 104:23 124:10,18 168:6 noticed 122:17 november 9:9 17:22 19:22,24 20:9,15 21:14 92:21 number 3:22 14:2 41:16 59:7 66:18 80:23 87:16,18,23 98:21,22 105:6,9
	n		
	n 1:19 2:2 3:23 4:15 4:15 31:15 86:23 87:3 107:20 131:2,2 131:2,7,7 193:9 194:11 195:2,5 197:6,21		

<p>178:24 188:10,12 188:20,24 189:11 190:25 numbers 79:4 90:13 numerical 128:5</p>	<p>176:2,13,25 178:10 178:17 179:5 183:7 183:22 186:22 187:18,19 188:7 190:3 objections 47:11 153:6 160:22 observation 57:17 164:18 observe 74:13 92:6 127:24 163:14,17 163:21 165:14,18 observed 94:24 96:17 100:21 105:19,21 109:2 121:16 126:5 189:24 obstruction 63:14 obstructionist 161:12 obtain 96:8 176:10 obtained 12:12 13:25 134:20 179:21 189:5 obtains 175:16 obvious 122:17 obviously 60:2 81:2 86:16 99:23 occasion 7:11 occasions 7:4 36:25 36:25 37:2 occurred 11:7 24:18 44:15 116:6,7 october 15:17,21 86:8 offer 11:19 24:13 26:3,12 offered 10:9,12 11:14,18,24 23:10 23:11 25:8 57:21 67:22 office 17:3 34:8 115:17 116:9,20,21 116:22 118:8,9,11 146:7,14</p>	<p>offices 1:20 3:12 32:20 oh 11:20 18:12 47:13 97:2 ohio 2:7 okay 5:22,23 6:24 7:2 8:17 9:21 12:5 14:12 17:18 23:2 47:13,14 73:23 93:15,17 97:2 99:20 105:15 109:5 114:9 115:2,5 129:8 133:9 134:3 135:10,16 139:21 141:22 144:3,5 145:24 177:17 185:22 189:15,20 192:16 old 19:3 20:13 50:13 179:3,6 180:2,16 181:10 182:12 older 72:15,16,20 73:9 128:21 171:15 181:6,6,12 once 7:5 37:3,5,6 48:2 ones 91:14 189:17 opacity 97:19 99:9 127:5,16 151:5 opened 116:14 operating 91:3,10 95:22 108:11,19,22 opine 181:4 opinion 11:18 12:15 15:9 40:19,19 67:22 83:12 89:6 121:11 161:7 opinions 10:10,12 11:15,24 12:3,3 14:25 15:5,7,12 opportunity 60:3 93:22 opposed 39:23 40:21 opposing 5:9</p>	<p>opposite 116:24 optical 19:16 21:23 21:24 80:24 125:9 127:25 151:21 158:16 163:23 option 84:18 oral 57:16 order 52:15 54:25 85:22 92:17 176:15 178:9 179:6 ordered 53:18 70:7 ordering 53:17 organic 147:20,24 148:2,20 151:21 organize 130:7 original 110:9 originally 60:18 originals 164:8 osborn 37:22 38:4 38:19 110:11 111:23 osborn's 39:3 outcome 194:19 outlined 90:20 outside 82:8 83:17 83:25 84:9 85:7,14 85:23 outstanding 24:5,10 24:22,25 25:9 27:23 32:18 oven 72:12 overall 69:8 84:7 117:24 overlap 5:21 overnight 118:22 overseeing 47:18 oversight 46:12 ownership 50:19</p>
o			
<p>o 131:2,2,2 object 10:14 57:12 62:11 84:20 162:13 objection 35:12 46:15 52:10,21 53:12,22 54:11,21 55:9,19 56:4,9,16 56:17 57:5,13,25 58:8 60:2,20 61:14 61:20 67:24 68:7 70:9,10 71:24 73:2 73:14 74:8,17 75:5 75:15 76:4,10,17 77:2,13,22 83:6 88:8 91:7,11,24 92:12 94:9 98:11 100:15 108:13 109:16,21 110:4 111:15 112:2 121:2 123:5 124:12,20 125:14 127:19 135:6 136:2 137:13 138:4 139:14,19,23 140:4 141:6 142:19 147:2,10 148:18 149:15 151:12,16 151:22 152:3,8,14 154:16 155:11,15 155:20 156:10,18 157:12,16 158:5,12 159:7,7,17 160:4,8 160:14,18,25 161:11 162:5 163:19,25 165:17 167:3 168:8,17 169:11 171:3,23 172:8,24 173:19 174:5,13 175:4</p>	<p>ob 131:2,2,2 object 10:14 57:12 62:11 84:20 162:13 objection 35:12 46:15 52:10,21 53:12,22 54:11,21 55:9,19 56:4,9,16 56:17 57:5,13,25 58:8 60:2,20 61:14 61:20 67:24 68:7 70:9,10 71:24 73:2 73:14 74:8,17 75:5 75:15 76:4,10,17 77:2,13,22 83:6 88:8 91:7,11,24 92:12 94:9 98:11 100:15 108:13 109:16,21 110:4 111:15 112:2 121:2 123:5 124:12,20 125:14 127:19 135:6 136:2 137:13 138:4 139:14,19,23 140:4 141:6 142:19 147:2,10 148:18 149:15 151:12,16 151:22 152:3,8,14 154:16 155:11,15 155:20 156:10,18 157:12,16 158:5,12 159:7,7,17 160:4,8 160:14,18,25 161:11 162:5 163:19,25 165:17 167:3 168:8,17 169:11 171:3,23 172:8,24 173:19 174:5,13 175:4</p>	<p>opposite 116:24 optical 19:16 21:23 21:24 80:24 125:9 127:25 151:21 158:16 163:23 option 84:18 oral 57:16 order 52:15 54:25 85:22 92:17 176:15 178:9 179:6 ordered 53:18 70:7 ordering 53:17 organic 147:20,24 148:2,20 151:21 organize 130:7 original 110:9 originally 60:18 originals 164:8 osborn 37:22 38:4 38:19 110:11 111:23 osborn's 39:3 outcome 194:19 outlined 90:20 outside 82:8 83:17 83:25 84:9 85:7,14 85:23 outstanding 24:5,10 24:22,25 25:9 27:23 32:18 oven 72:12 overall 69:8 84:7 117:24 overlap 5:21 overnight 118:22 overseeing 47:18 oversight 46:12 ownership 50:19</p>	
p			
<p>p 2:2,2 29:2,2 p.m. 86:22 87:2 130:10,12 131:3,5 169:21,24 190:19 190:22 193:4,7</p>			

<p>p1 164:22 p2 164:22 package 91:21 packard's 147:25 padding 80:9 170:23 page 19:4 21:20,22 39:2 51:6,8,9 55:5,6 59:12,14,15 60:14 60:15,16 75:19 78:22 79:3 82:5 87:7 90:9,13 93:4 93:25 94:2,14 96:21 98:14,15,16 99:2,3 99:6,14 102:22,23 103:9 105:6 106:15 107:9 108:3 109:9 109:23 111:22 114:16,16,22,23 116:11,15 117:13 117:17 119:9,12,14 121:23 127:14,15 128:19,19,24 129:4 129:4 141:20 142:10 143:11 144:4 146:6,10 149:5,7 151:21 152:6,6 153:22 154:4,4,13,13,24 155:2 156:23 157:3 157:5,24 164:4,19 164:21,23,23,24,24 165:3,19,23,24,24 166:6,13,14,21 185:4,4 195:4,17 197:7 pages 22:2 87:15 97:6,17 98:21,22,23 98:25 104:19,24 114:14 116:12 122:16,18 126:19 126:20 127:8 128:14,16,21,22 142:17 150:3,23 151:2 164:14 165:3</p>	<p>165:4,13,16 paid 14:11 16:2,7 22:9,15 24:9,22,25 32:18 pan 100:6 102:7 paper 54:3 63:19 70:12 75:11 76:2 78:5,5,6 80:6 87:22 87:23 97:16,18,19 98:18 99:7,8,10 104:2 106:21 117:12 119:13 124:5 126:13,15,25 127:3 150:21,25 151:2,10 152:2,6,11 153:23,25 154:2,3 154:13 163:22 164:22 165:11 167:14,15,21,22 168:6,15,19 170:21 170:21 177:5 181:25 183:6,20 paragraph 59:13 60:16 82:6 90:14 100:25 145:25 146:3,10 149:5 150:5,20 154:19 156:22,25 157:19 159:14 166:17 paragraphs 132:22 166:5,21 parameter 127:9 177:18,20,25 179:9 179:13,19,21 183:24 parameters 63:19 96:14 126:25 171:8 175:23 parents 37:10 parikh 30:2 park 1:21 2:18 3:16 part 23:22 36:10,15 53:8,17 56:11 101:15 105:14 108:18 138:20</p>	<p>146:3 161:7 163:8 165:15 172:3 173:21 particular 5:4 16:2 25:15 31:10 77:18 94:4,10 98:20 102:19 105:22 120:24 126:17 127:9 137:19 155:8 158:3 169:6 170:11 171:7 178:5,8,23 particulars 34:8 parties 3:10 53:18 54:2 194:17 pass 145:18 pattern 105:3 165:19 paul 1:5 2:11,14 3:19 4:2 6:25 36:23 37:21 38:4 51:12 76:23 110:11 111:2 111:5 145:5,21 161:22 pause 10:23 36:2 58:23 68:13 74:10 78:24 166:19 185:2 pay 27:19 115:7 payment 5:25 24:4,7 pc 108:7 pdf 112:14 113:16 114:6,13,15,19 115:4,9,9,11 121:19 143:8,16 144:2 185:8 187:21,23 191:2 pe 55:17 56:2,8,13 57:2,10,24 58:6 60:17,19,21,24 61:13 63:10,17 66:5 68:10 83:3,5 87:19 88:6 174:8 178:3,5 178:9,13,15,15,24 179:8 182:2,12,22 182:23 183:5,9,11 183:15,16,18,19</p>	<p>184:2 peak 175:2,12,14 peer 63:20 67:9,9 87:11,16 106:22 peers 67:12 pen 102:24 103:3,7 149:21 183:5,20 penalty 69:6 135:11 135:17 pens 103:4 149:22 people 38:8,9,15 65:11,15,24 66:10 70:22 72:21 86:11 126:22 percent 23:13 24:12 25:8,11,16,19 50:19 50:25 179:22,24 percentage 178:23 179:20,24 perestroika 69:15 perform 61:6 80:10 performed 8:12 61:3 127:14 153:25 168:12 perfume 175:7 period 27:22 181:16 perjury 69:6 135:11 135:17 permitted 53:19 permitting 52:25 person 7:8 23:25 37:3,5 83:15 132:15 186:16 personally 12:12 pesticides 173:8 peter 13:6 32:14 38:5 ph.d. 3:23 65:22 81:7 pharmaceutical 172:13 phenoxyethanol 48:17 54:19,24 83:3 174:8</p>
--	--	--	---

<p>phone 4:6,7 18:4,6 28:8 37:4,6 62:17 137:16 186:7</p> <p>phones 3:7</p> <p>phonetic 17:25</p> <p>photo 77:11</p> <p>photocopiers 146:15</p> <p>photograph 57:20 90:16</p> <p>photographing 92:3</p> <p>photographs 89:11 91:5,13,18 92:23 98:9 100:11,13,19 102:14,17</p> <p>photoshop 95:25 96:3</p> <p>phrase 58:18 174:24</p> <p>phraseology 88:21</p> <p>phrasing 46:19</p> <p>physical 8:18 19:16 52:16 53:2,19 54:2 81:3 125:8 129:9 135:22 151:18 182:3</p> <p>pick 3:5 135:14</p> <p>picture 97:3 99:17 101:9 123:18 126:10 165:20</p> <p>pictures 92:14 100:17 127:6,22 186:19</p> <p>piece 163:22</p> <p>pieces 152:6,11 154:2,3,12 180:3 189:24</p> <p>pigment 147:15 148:21</p> <p>pioneer 83:4,7 88:6 89:2</p> <p>pioneers 88:20</p> <p>piper 28:25 29:10 30:6 131:23</p> <p>place 3:7 82:21 122:24 179:15</p>	<p>placed 106:20 116:23 171:11 181:25</p> <p>placement 91:20</p> <p>plaintiff 1:6 2:4 4:3 8:5 17:8,12 22:21 24:9,14 25:4 26:17 28:10,24 30:23 37:16 39:7 40:8 41:2,8 44:21 50:18 52:18 55:16,25 56:6 58:5 61:5,6 62:2,3 74:25</p> <p>plaintiff's 5:13 16:24 31:19 44:16 45:22 46:13 47:19 49:14 52:8 56:12 61:13 62:5 76:15 110:11 140:3,10 141:4</p> <p>plaintiffs 5:10 9:7 27:9 39:12</p> <p>planning 137:24</p> <p>plant 43:18</p> <p>plastic 115:15</p> <p>please 3:4,6,24 4:13 58:25 59:14 74:20 86:20 103:20 153:11 164:6 166:15 185:24</p> <p>plus 43:20,20 80:9 94:22 128:12 152:23</p> <p>point 8:3,7 14:15,19 24:6,10 46:5 48:10 62:23 63:9 72:10 107:4 120:9 121:4,9 129:13 141:9</p> <p>poland 69:21</p> <p>police 82:3 84:15</p> <p>polymer 147:16,16 148:7</p> <p>polymerization 182:5,7</p>	<p>polymerizing 182:8 182:19</p> <p>popular 72:23 73:11</p> <p>population 171:4</p> <p>portable 101:6</p> <p>portion 41:8 59:15 61:7 74:14</p> <p>portions 84:4 96:22 97:12 101:2 102:22 107:24 185:9 191:3</p> <p>portray 166:23</p> <p>position 17:16 51:12 51:18 62:14 74:25 75:8,9,11,17 76:21 77:5,7 79:16,22 163:2</p> <p>positions 134:13</p> <p>positive 29:20 85:24 110:24 113:12 115:18 132:12 133:25</p> <p>possibilities 102:3</p> <p>possibility 19:9 119:3</p> <p>possible 31:3 62:7 63:7 72:25 92:4 106:17 107:9 117:16 147:7 151:14,19,24 155:13,17,22 158:8 169:2 178:14 179:13,18</p> <p>potential 17:20 71:3</p> <p>potentially 15:11</p> <p>powerful 151:17</p> <p>practice 91:2</p> <p>preferred 66:23</p> <p>preliminary 9:4 19:15</p> <p>preparation 84:5,6</p> <p>prepare 6:14,18 72:19 134:4 191:23</p> <p>prepared 12:10,19 12:22 13:7 19:2 69:4,8 86:4 90:7</p>	<p>122:25 132:15 136:17 142:7 143:13</p> <p>preparing 29:4,18 132:2</p> <p>preprinted 132:22</p> <p>present 2:24 75:22 76:15,19 118:7 182:24,25</p> <p>presentation 64:19</p> <p>presentations 87:17</p> <p>presented 8:19 12:7 70:6 75:13 76:9 87:24 88:2 115:21 123:12 162:25</p> <p>presiding 5:3</p> <p>pressure 175:24</p> <p>presumes 46:17</p> <p>pretty 11:9</p> <p>prevent 42:24</p> <p>preview 103:14</p> <p>previous 108:7 128:21 138:13 140:25</p> <p>previously 17:21 18:9 66:21 81:5,16 131:8</p> <p>primitive 125:19</p> <p>principles 56:7</p> <p>print 150:6</p> <p>printed 101:19,23 107:11 123:9 150:8 150:14,24 186:8 188:13</p> <p>printer 101:23,25 104:25,25 123:7,10 147:8 148:14</p> <p>printers 146:15 147:4</p> <p>printing 188:18,19</p> <p>printout 76:8 189:7 189:15,20 190:5,8</p> <p>printouts 189:5</p> <p>prior 16:5 36:16 110:11,22 113:14</p>
---	---	--	---

<p>113:15 133:3 158:18 163:4 170:25 private 3:6 5:14 65:13 privilege 5:16 privileged 47:3 145:15 probable 55:4 probably 15:9 25:16 29:20 45:16 49:18 86:16 100:16 111:19 113:12,21 126:16 127:23 133:24 140:7 144:11 172:16 173:22 188:11 192:4 probate 40:6 problem 47:23,23 172:6,20 procedure 91:4,10 92:13 95:22 107:2 108:12,19,22 111:2 111:16 119:5 172:18 176:4 procedures 136:14 173:7,8 proceed 4:19 136:7 136:15 proceedings 153:9 process 72:2,2 145:7 176:21 181:17 182:7,8 processes 182:4 produced 74:25 75:24 93:8 105:17 146:6,20 producing 36:10 product 10:15 62:12 production 36:16 163:4 profession 38:10 professional 1:22 79:5 87:8 194:8</p>	<p>professor 39:15 75:21 proficiency 66:10 66:13 82:8 83:17,25 84:8,9,23 85:6,8,14 85:23 174:16 176:7 proficient 65:16 174:15 project 23:17 properly 171:25 174:22 protocol 135:24 protocols 136:13 proven 82:7 provide 33:25 36:5 114:7 133:11 144:21 provided 8:8 9:2,6 9:11 11:16 73:24 74:5 76:7 92:21 93:13 95:16 112:5,9 116:4 120:8 137:4 143:5,16 144:2 181:8 provision 22:6 proximity 100:18 psd 96:3 public 1:23 4:17 131:9 193:15 194:8 197:25 publications 46:9 79:12 87:8 169:5 173:4 publish 86:6 published 43:10 57:18 63:20 67:9 82:10 83:10 86:5 106:21 pull 93:13 184:23 purported 50:20 51:2,3,7,12 52:16 53:2 54:4 55:6 120:23 122:5 184:10</p>	<p>purports 19:3 20:13 72:10,15 171:17 purpose 48:25 72:14 96:6 purposes 51:14 53:20 92:2,9 135:21 pursuant 70:7 put 12:8 33:24 41:12 46:15 47:10 59:24 61:19 71:7,8 71:22 82:20 85:16 89:22 93:12 114:4 117:22 118:2 132:17 133:9,18 139:19,23 143:14 180:14 183:6,20 184:24 185:22 188:10 189:6 putting 20:17 92:23</p> <p style="text-align: center;">q</p> <p>qd 95:7 97:6 qualifications 46:4 qualified 37:25 38:6 38:16 67:21 68:2 89:8 161:24 quality 121:20 quantity 54:18 question 5:20 7:13 10:25 11:23 14:4 23:2 36:22 37:21 46:16 54:13 56:18 56:19,20 60:9,9 61:22 62:25 63:2 64:18,19,25 73:3,10 74:20 88:17 96:10 98:3 119:23 143:2 147:6 153:7 161:4 161:11,14 162:7,11 173:15,23 187:22 questioned 64:16 87:25 109:13,20 179:22 questioning 145:9</p>	<p>questions 5:7 7:15 40:17 45:20 71:5,16 74:3,12 78:9 89:11 93:14 98:7 120:15 121:4,22 145:9 162:14,17 185:6 190:24 192:19,20 192:22,23 quick 86:20 105:13 144:9 190:14 quickly 177:13 182:8 quinn 18:12,13,16 18:17 26:25 quite 65:9 145:5 quote 57:3,3,10,19 57:24 83:16</p> <p style="text-align: center;">r</p> <p>r 2:2 4:15 107:20 131:2,7 179:20,20 194:2 rafey 31:23 ran 12:24 range 103:23,24 104:5,7,12,12 105:8 105:10 125:22 127:21,25 rate 22:18 23:19 177:6,14 180:8,18 180:19 182:18 rates 23:17 ratio 45:17 54:20 63:16,24 65:17,21 66:14,17 82:14 83:21 87:19,24 88:14 177:24 179:18 180:4,7 182:23 183:18,23 reach 28:12 reaction 72:4 read 46:23 54:5 55:11 61:16,18 82:11 83:17 90:23 146:9 149:10 151:6</p>
---	--	---	--

<p>153:24 154:6 155:3 156:22 157:6 166:5 166:15 192:13 reads 166:13 really 161:7 reason 33:3 102:19 138:12 139:24 149:18 160:23 175:12 197:7 rebuttal 14:8 40:10 recall 17:22 25:11 26:5 36:20 40:23 41:14,17 52:7 94:17 95:15 111:21,23,24 112:22 113:9 114:2 114:13,15 115:9,13 117:6,22 120:19 134:3 139:5,9 140:20 141:23 185:19 receive 71:2,3 92:11 received 5:24 24:4,7 96:15,18 113:24,25 114:6 121:4,6,9,19 124:4 143:8 186:24 189:14,18 191:15 receiving 62:16 recess 36:17 86:24 169:22 190:20 recognize 78:23 90:5 189:9 recognized 83:15 recollection 29:12 132:10 133:17 recommend 37:24 recommendation 90:19 recommended 37:23 110:25 recommending 38:8 169:5 record 3:3,10,25 5:22 28:20 35:22,24 36:11,18 47:11 59:25 86:21 87:2</p>	<p>91:15 92:3,10,17 93:9 96:14 97:4,23 97:24 105:11,14 129:14,21 130:8,9 131:5 139:19,23 160:20 169:20,24 190:18,21 193:3 194:14 recording 3:9 96:7 recovery 23:14 25:18 rectangular 189:23 red 125:25 126:2,6 reddish 103:19 refer 64:22 79:2 reference 191:2 referred 18:7 58:4 78:19 97:5 109:14 164:15 referring 59:11 60:13 82:18 83:18 100:9 104:16 140:15 189:10 reflect 134:19 reflected 74:5 169:4 reflection 192:10 reflective 89:24 188:20 refresh 103:12 104:21 refrigerator 72:9 refrigerators 72:6 regard 91:4 regarding 22:6 31:6 45:13 50:10,15 65:16 70:5 119:20 120:15 121:5 157:19 161:25 registered 1:22 194:7 regularly 173:18 rejected 40:18 relate 41:10 172:4 183:25</p>	<p>related 14:13 41:9 66:25 68:4,15 69:10 80:2,5 122:23,23 136:3,5 194:17 relates 12:12 69:21 153:23 164:22,24 170:20 relating 16:14 45:7 46:9 79:23 relation 190:10 relatively 71:11 relevant 120:2 182:14 reliability 57:4 61:3 reliable 57:11 67:8 82:7 86:15 172:2,10 172:19 173:3 175:21 rely 83:22 remain 16:9 remember 6:21 15:24 16:13,19 18:2 20:10,19,21 22:14 23:13 25:22 28:5,7 28:15,18,21 29:7,13 29:15,21 30:10,11 30:14,15,20 31:5,9 31:20 33:3,18 34:7 34:8,9 35:19 41:2 42:4,6 43:17 44:5 52:12 64:14 69:23 71:20 73:23 74:7 97:15 99:15 103:11 109:17 110:5 111:17,17 113:3,21 114:18 116:8 119:4 119:19 120:17,21 121:3,21 122:9,16 122:21 131:24 133:5 137:16 140:5 140:24 141:15 143:11 163:6,7 186:17 187:9,13 192:14</p>	<p>remind 47:5,9 render 12:14 rendering 68:6 repaired 170:17 rephrase 73:6 report 12:19 14:2,8 45:10 46:22,24 47:2 59:8,21 76:12 140:11,16 159:14 reported 73:11 reporter 1:23 4:12 194:8 reporting 197:2 reports 12:21 13:4,5 13:7,8,17 69:4,5,6,9 represent 26:18 78:17 93:7 166:22 representation 92:6 157:10 representations 96:17 100:21 105:18 109:2 represented 28:25 175:15 representing 3:11 reproduced 63:25 republic 81:18 reputation 38:10 85:16 request 144:13 requests 195:11 requirement 117:10 research 82:9 172:22 resin 147:16,19 181:21,23,24,25 182:3,7,12,18 resins 147:17 148:6 148:7 174:4 resolution 94:11,12 94:15 101:10 105:7 175:2 respect 15:19 22:4 39:20 96:10 136:13 150:21 154:20</p>
--	--	---	--

<p>156:14 158:25 164:19 respond 15:18,22,25 16:6 145:22 response 15:17 55:15 57:16 185:3 responses 9:8 24:3 89:14,20 93:25 127:2 195:22 rest 149:4 result 82:8 134:17 168:11 175:21 176:23 180:8,16 results 12:11,13,15 12:17 15:4,10,13 17:4 41:24 45:7 54:14 85:3,4,18,24 86:5,10,11,13 132:24 133:4 175:18 176:6,11 179:21 181:18 resumed 131:8 retained 8:4,4 18:24 19:7,21,25 20:16,23 21:5 27:4 37:17 38:20 39:8,12,17 40:7 41:3 43:22 112:20 115:25 116:4 retainer 21:6,10 22:8 116:9,10,23 returned 117:25 reveal 150:23 151:15,20,25 155:14,18,22 158:9 158:14 review 12:16,18 14:8,9 15:8 59:14 60:12 86:11 134:4 188:4,15 reviewed 12:19 13:8 13:16,18 15:12 45:10 63:20 67:9,9 87:11,16 106:22 135:2 136:11</p>	<p>158:19,21,24 159:9 reviewing 14:2 87:6 93:4 rezende 41:3 right 6:10 8:5,10 9:4 9:10 11:5,6,20 14:12 17:11 18:11 18:13 25:18 26:3,21 37:2 38:14 39:24 40:3 46:25 51:9 70:2,3 72:25 73:18 75:10 77:21 79:4,20 80:7 83:5 87:13 92:19,24 93:16 102:10,14 103:14 103:15 105:24 107:7,25 108:7,8 117:4 120:25 125:3 125:13 131:23 132:11 133:19 135:11 141:20 142:9 145:16 146:16,25 154:15 155:14 156:4,22 157:15 159:16,23 160:3,7 161:17 162:2,3 163:11 165:24 166:4 171:2 172:7,23 173:18 174:4,12 175:3,18 175:25 176:12 177:7,15,23 178:5 178:16 179:4 181:13 182:13,16 182:17 183:2,6 185:13 186:18,21 187:3 188:22 190:12 191:5 rigorous 66:25 riley 85:9,10,10,12 85:13 ring 28:17 risk 85:21 rja 1:7</p>	<p>road 2:5 robert 16:21 30:3 roberts 2:25 3:11 role 7:13 38:7 47:17 roller 149:22 romano 39:15 75:21 room 116:25,25 118:10,15 rooms 116:21 roughly 68:14 69:11 140:10 routine 168:23 routinely 90:18 rpr 194:25 ruled 43:13 rules 5:4 rulings 195:12 run 178:13 running 178:3 russia 68:25 69:2,16 73:17 81:17 86:3,4</p> <p style="text-align: center;">s</p> <p>s 2:2 4:15 29:2,2 31:15 66:16 131:2,2 131:2,7 197:7 s.jpg 108:8 sahara 71:8 sample 137:8 183:2 sampled 48:25 49:2 samples 8:19,22 19:18,19 31:4,8 35:3 44:18 48:4,8 48:12,20 49:5,9,17 49:18 84:3,3,20,21 84:24 85:14 86:4 125:2 135:22 136:21,22 137:4,6,8 137:11 139:13 140:2,11,20 141:4,8 141:13,14 174:22 174:22 sampling 44:15 53:19</p>	<p>san 43:17 50:6,12 sanford 16:22 32:5 satisfied 60:25 saw 13:5 53:5 54:6 58:18 59:11 74:4,6 99:15 127:5,17 186:8 189:9 saying 35:8 46:2 63:6 159:4 161:11 176:24 186:3 says 97:14 186:23 scale 102:3 scan 90:16 94:14 96:2,13 97:9 142:24 142:25 143:3 178:13 scanned 94:3 95:24 142:3 scanner 81:2 94:4 95:20 96:12 97:10 scanning 92:2 scans 89:11 91:4,13 91:19 92:9,14,22 94:7 95:7,21 96:12 96:16 97:5,6 scenarios 123:8 schedule 20:21 scheduled 137:11 138:23 scheme 60:24 61:13 scholarly 57:18 schuster 28:17 science 57:3 63:22 66:24 67:7,11 81:17 81:24 84:14 scientific 56:7 63:22 67:12 73:4 87:17 scientists 80:15 scope 64:9,13 screen 93:16 95:3 99:23,23 100:6 102:6 103:13,14 107:19 108:7 109:6 189:7</p>
--	---	---	--

<p>sct 66:16 83:22 177:19</p> <p>searches 50:15</p> <p>second 47:21 59:15 103:9,21,23 107:3 109:20 135:13 153:24 166:18 186:8</p> <p>secret 46:6 64:8,10 64:22 65:7 82:4 83:11</p> <p>section 153:23 154:11 157:6,9</p> <p>sector 65:13</p> <p>security 101:21</p> <p>see 7:8,18,22 9:19 12:16 13:2,9 15:11 16:4,18 19:2 21:25 24:2 27:25 32:13 36:3 38:25 45:11 61:7 94:5 95:4 98:16 99:2,6 103:24 103:25 104:5 106:9 106:9 111:7 127:10 127:14 129:2,2,5 133:2 134:14 141:21,25 144:14 164:21 166:15 188:15 189:2,23,25</p> <p>seemingly 153:8</p> <p>seen 12:21,23 13:3 13:17 39:10,14 43:23 49:5,5,23 52:4 53:3 55:20,21 58:10,12,16,20 61:8 61:10 75:6 110:9 112:12,23,24 113:9 113:13,15 129:9 140:7 142:22</p> <p>self 108:5</p> <p>send 6:6 145:12</p> <p>sense 29:11</p> <p>sensitive 3:5</p> <p>sent 6:2 27:17 30:14 85:3 112:14 114:2,7</p>	<p>114:14 115:3,10 132:21 134:10 142:2 186:16</p> <p>sentence 135:8</p> <p>sentences 60:5 134:18</p> <p>separate 167:13 175:10</p> <p>separation 175:20</p> <p>sequence 106:20 150:7</p> <p>sequencing 150:12 150:18</p> <p>sequential 63:14 66:16 82:15,16,20 83:8,20 177:19 180:6</p> <p>service 46:6 64:8,11 64:22 65:7 82:4 83:11</p> <p>services 22:7 64:3 88:11</p> <p>set 194:12,22</p> <p>setting 94:18 104:3</p> <p>settings 94:8 100:13 100:17 176:21</p> <p>settled 41:22 44:5</p> <p>setup 116:19</p> <p>shaman 31:15,15,15</p> <p>shape 175:2,12</p> <p>sharp 167:18 175:14 175:15</p> <p>sheet 197:2</p> <p>shoot 99:22</p> <p>shooting 98:5 99:25</p> <p>short 60:24 67:3 127:3,3 151:3 164:25 165:9 169:18</p> <p>shot 100:2</p> <p>show 74:18 78:12 93:5 98:21 100:6 126:11 180:7,16 188:4 189:5</p>	<p>showed 98:22 165:7</p> <p>showing 59:5 78:15 121:7 153:20 180:8</p> <p>shows 98:24 123:9 179:11</p> <p>sic 33:22</p> <p>side 12:22 31:19 41:15 42:2,3 44:20 44:21 45:22 48:12 50:7 66:22 75:19 167:10,18,23</p> <p>sides 12:20</p> <p>sign 154:25 192:4</p> <p>signature 90:10 107:12 142:4 143:11 160:11</p> <p>signatures 51:9 126:5 149:8 156:8</p> <p>signed 21:6,7,10 53:10 76:12 107:10 135:15 142:2 143:11 160:7,12 161:21,25 170:17</p> <p>significant 42:16 79:11 121:14</p> <p>significantly 79:15 128:20</p> <p>similar 19:7 64:3 82:3 88:12 125:22 127:6 138:5 176:7,8 188:17</p> <p>simple 143:4 149:13</p> <p>simplicity 182:6</p> <p>simply 13:3 47:4 64:14 78:17 82:25 89:24 96:13 103:22 106:6 126:9 146:23 158:2 161:11 176:18 180:17 192:3</p> <p>single 23:25 114:13</p> <p>sit 142:15</p> <p>site 42:21,22</p> <p>sitting 116:8,17,21 116:24</p>	<p>situation 181:4</p> <p>six 85:4 109:23 111:22 114:22,23 117:24 118:23 144:4 179:19 180:2 180:9,10,17,25 181:6,10 182:9</p> <p>skill 128:13</p> <p>skivington 32:14</p> <p>sleeve 115:15</p> <p>slightly 175:23 176:22</p> <p>slow 72:6 181:12,17 181:19 182:15,15 182:19</p> <p>slower 177:14 180:19</p> <p>small 102:4</p> <p>smaller 81:3</p> <p>snowing 34:10</p> <p>society 64:16 87:25 90:20</p> <p>software 96:2</p> <p>solely 81:19</p> <p>soluble 148:24,25</p> <p>solvent 45:17 54:19 63:15,24 65:17,21 66:4,13,17 82:14,23 83:2,21 87:19,23 88:14 148:24 174:7 177:24 179:17 180:4,6 182:22 183:12,15,23</p> <p>solvents 174:3 182:2 183:10</p> <p>somebody 23:21 27:6 32:4 35:18 133:22</p> <p>soon 139:5</p> <p>sophisticated 106:25 126:24</p> <p>sorry 14:16 23:20 26:7,14 33:9 55:5 59:12 72:18 95:9 157:20 165:23</p>
---	--	--	---

<p>166:11 168:5 178:21 sort 38:12 46:12 47:3 59:19 60:15 72:23 77:10 138:19 184:3 189:23 sought 52:18 sound 11:3 18:11 138:2 175:18 176:11,23 sounds 46:15 90:25 138:5 140:6 source 77:14,18 140:13 167:16 southwell 2:20 4:8,8 4:20,22 10:16,21 11:6,21 35:22 36:3 36:9,15 46:21,25 47:9,14 56:22 58:21 58:24 59:23 60:6,11 61:17 62:15,22 68:11 74:19 78:7 86:18 87:4 88:18,22 89:16 95:12 97:23 98:6 100:3 102:7 109:5 129:12,17,24 130:5 131:12 139:15,21 144:20 145:11,17,24 152:16 153:2,6,14 160:21 161:2,5,9,17 162:10,15,19 164:5 187:24 190:14,17 192:16,24 195:5 soviet 69:2 81:10,18 speak 28:2 32:7 47:24 92:19 131:13 131:18 133:17 speaker 86:7 speaking 47:10 80:20 140:10 specialist 63:8 79:18 specific 37:21 44:24 45:2,19 48:18 49:20 50:4,15,24 53:14</p>	<p>58:18 63:25 65:9 87:18 89:10 96:12 98:20 103:6 106:19 111:10 113:4 146:19 149:20 172:18 173:7,14 183:24 specifically 21:16 23:10 38:2,11 51:16 65:3 68:4 75:16 83:8 97:16 101:15 102:16 110:21 136:17 150:21 154:20 157:20 174:21 specifications 109:15 specifics 20:6 22:14 63:6 112:19 speckin 39:8,20 40:7,21 41:15 42:2 42:15 43:8 48:25 49:4,7,7 141:5 188:5 189:6 speckin's 40:19 41:8 41:13,23 spectral 9:15 80:24 185:11 spectrometer 80:22 spectrometry 171:20 spectrum 125:23 spent 134:8 split 48:12 spoke 7:5 28:4 30:16 32:4 36:24 48:2 110:18 133:10 133:22 184:14 spoken 6:17 7:3,4 32:11 35:17 37:9 133:21 spring 33:9,12,16 ss 194:4 stages 68:18</p>	<p>stake 25:16 40:7 85:17 stamp 80:9 170:23 stand 42:18 43:25 standard 90:21 91:3 91:9 92:13 94:8,19 94:23 95:21 96:14 100:13 108:11,18 108:22 111:2 148:15 169:5 173:21 standards 91:3 172:4 standing 60:9 stands 80:23 staple 97:18 98:22 123:16,20,21,25 142:22,23,24 stapled 123:13 start 71:4 87:8 93:24 started 65:12 69:15 137:23 starting 79:3 starts 59:17 113:11 141:19 156:25 182:7 state 1:23 3:25 90:14 150:21 154:21 156:3 157:20,21 162:12 194:3,9 stated 46:21 74:12 177:3 191:4 statement 159:16 statements 75:24 states 1:2 43:2 60:21 64:4 68:21 69:18 82:6 85:5 static 170:4,8 stating 47:2 53:10 154:11 stay 95:10,12 125:25 step 70:13 176:10,10</p>	<p>stepped 30:8 steps 176:22 stereomicroscope 168:2 steve 31:22 stewart 13:6 39:9 43:15,25 45:24 46:11,19 47:2,17,24 49:18 141:9 158:22 158:24 stewart's 158:19 159:6,15 stipulation 187:20 stood 64:25 stop 52:2 72:6 74:20 153:4 182:8,9 storage 119:17,20 119:22,25 120:5,11 120:17,21,23 121:5 179:16 180:12 184:4,5,16,17 stored 181:9 strategy 141:13 street 2:12 114:17 strength 17:13 strike 37:15 58:5,9 59:3,7 61:15 62:20 79:24 146:4 148:12 163:20 168:5 178:21 195:19 study 12:18 style 142:8 subjected 83:24 submission 53:9 59:21 submitted 30:5 41:22 43:12 52:20 53:9 58:5 75:24 84:2,2 85:18,19 142:18 158:25 190:25 submitting 158:18 subscribed 193:11 197:22</p>
--	---	--	---

<p>subsidiary 183:11 substance 131:16 substances 79:23 80:2 substituted 128:19 substitution 39:2 98:17 106:15 128:19 substitutions 19:4 successful 42:24 sufficient 54:25 174:15 178:15 179:8,25 sufficiently 54:18 suggest 124:21 suggesting 135:18 142:11 suggestion 22:23 23:3 sum 25:15 summer 33:10,11,16 summertime 137:18 sun 71:22 sunlight 70:24 72:12 77:12 78:2 121:15 supplemental 56:19 support 41:23 52:8 52:20 supposed 176:6 sure 13:4 22:15 46:3 47:15 66:3 76:19 96:25 97:3,21 111:4 111:18 112:20 114:23 115:25 127:22 129:22 132:20 133:16 134:12 135:8 136:16 143:11,12 145:22 181:5,19 187:13,16 surface 151:5 167:20 survive 84:11 survived 58:19 67:16</p>	<p>swear 4:14 sweden 65:25 switch 104:7,7 switched 165:9 sworn 4:16 52:7 53:9 75:24 131:9 135:10 193:11 194:13 197:22 symmetrical 175:14 175:15 system 69:3,3 146:7 systems 146:14</p> <hr/> <p style="text-align: center;">t</p> <hr/> <p>t 29:2 66:16 107:20 131:2 194:2,2 table 99:5,5 117:15 149:23 tailing 175:13 take 8:18,22 20:24 31:8 48:8,12,19,20 57:8,15 70:13 73:22 78:21 85:21 86:18 86:19 90:3 92:14 93:21 100:12,17 101:18 109:5 117:15 119:10 123:18 125:2 126:19 127:24 128:4 135:2 136:21 137:11 139:13 140:19 141:4,8,13 144:25 145:18 161:17 165:20,20 166:4 169:17,17 174:22 176:19 190:14 taken 3:17 35:3 36:17 44:19 86:24 94:7 95:21 97:9,13 99:4 101:2 108:10 108:21 132:22 136:22 137:5 140:3 169:22 185:10 186:20 187:17</p>	<p>190:20 191:8 talk 26:15 48:15 57:23 72:24 144:8 169:13,25 talked 20:22 68:5 82:14 125:12 135:20 163:6 169:15 talking 18:22 38:11 49:10 51:5 66:13 146:23 163:7 172:18 182:21 tan 75:4 76:2 tannish 76:2 124:11 tape 86:19,22 task 18:25 19:7 72:19 98:14 106:12 108:15 tasked 46:12 team 23:22 tear 128:23 129:3 technical 40:17 109:14 134:14 technically 134:18 technique 63:15 66:16 82:16,21 83:20 169:6 172:17 177:20 180:6 techniques 7:17 technology 54:25 65:9 147:3,5 telephone 2:9 6:22 28:9 36:2 45:5 55:14 74:10 tell 5:4 170:6 183:18 temperature 72:4,5 72:11 77:24 175:24 ten 64:2 69:22,24 88:15 170:15,17 tend 96:3 tepler 31:23 term 170:4 terms 23:10 test 48:18 60:17,17 60:19,21,24 61:13</p>	<p>63:10 84:9,12,13,23 85:8,15,15,20,22,23 85:24 86:2,12 106:19 126:24 136:23,24 175:22 183:4 tested 44:17 67:10 testified 4:18 40:8 40:11 41:7,10 43:6 44:14 46:24 50:6,13 53:16 58:12 66:18 66:20 68:2,9,15 69:16,19 81:5,15 105:20 131:10,21 138:18 139:17 155:7 178:19 184:14 185:5 192:10 testify 41:6 43:8 44:5 58:3 69:4,12 69:25 99:18 testifying 42:24 testimony 40:14 41:9 66:24 67:22 69:5,11 192:13 194:15 testing 8:24 38:12 48:15 49:11,15 53:20 55:8,18 56:2 56:8,13 57:3,10,22 57:24 58:7 61:4,6 62:5 80:5,11 82:8 83:17,17,25 90:20 118:25 119:4 153:24 171:2 172:7 172:21 173:16 182:24 tests 19:15 54:8 63:11,14 84:8 85:6 153:25 160:17 text 91:21 142:4 texture 151:5 167:21 thank 4:20 26:16 36:6 58:25 82:17</p>
--	---	---	---

87:4 95:14 129:16 154:10 158:7 192:24 193:2 thermal 65:19,20 thickness 126:13,14 126:21 127:2 128:3 129:7 151:3 167:15 thin 80:23 171:19 thing 122:16 things 49:24 70:23 73:7 134:14 161:15 162:8 178:25 think 6:4 7:24 15:25 16:19 17:24 18:24 19:12 23:6 27:17 28:4 31:2 32:3 33:15 42:11 44:18 46:2,18 48:8,11 49:6 52:4 53:16 56:22 58:4,9,15 60:8 62:6 75:6 86:18 88:20 97:23 104:16 105:12 109:22 110:24 113:18,24 116:7,9 117:25 132:21 138:18,24 139:2,7 140:23 141:17,25 142:7 144:18,20 145:11 182:13 184:14 186:5 188:9 190:15 191:15 192:3,14 thinking 34:16,25 35:20 45:23 thorough 12:18 thought 34:19 85:7 113:14 141:11 thousand 95:5 three 6:23 7:11,19 7:21 33:5 37:7 45:6 54:14 55:14 65:22 84:8,24,25 85:2 87:12 116:12 152:22,23 175:8	181:22 184:15,19 thwart 76:24 till 153:3 time 3:14,24 7:3,24 12:10 16:3,16 17:7 19:17,18 24:6,20,21 28:14,24 33:19 34:22 46:5 52:19 57:7 64:9 68:2 71:20 72:10 73:16 76:3 79:6 82:22 85:9,12 89:4 92:11 94:4 95:24 99:15,17 103:12 104:22 109:12 112:18,22 113:9 118:4,19 119:23 120:6 122:10 123:11 128:20 130:3,12 131:3 133:7 134:2,6 134:8,8 136:25 137:10 138:16,22 140:23 141:9 152:19,20 158:23 159:12 167:2 169:8 170:19 176:18 179:14 181:23,24 182:24 192:17 193:7 times 69:16 71:2 105:7 110:19 168:13 timing 175:24 tint 103:19 tip 149:22 title 79:16 142:6 titles 188:13 tlc 80:22 147:6,8,18 148:5,7,8,10,17,19 148:22 149:2 151:19 155:17 156:3 158:9,16 159:15 171:19 today 6:19 9:19 17:12 18:23 34:2	57:7 111:17 120:10 140:5 186:18 187:9 192:10 today's 3:13 193:5 told 19:21 35:15 57:9 188:11 tom 85:9,13 toner 54:3 80:6 94:24 98:19 107:4 107:14,15,17,18 108:16 146:8,24 147:7,9,13,23 148:8 148:20,20 150:10 157:20,23 158:10 158:14,20,25 170:22 toners 147:13,20,25 148:4,14,16 tool 101:16 tools 81:3 136:21 top 78:16 79:4 89:23 94:2 95:6 107:14,15 107:17 141:20 150:10 165:24 166:6,14 topic 30:22 184:16 184:20 touch 28:13 town 176:15,15 trained 65:12 trans 99:7 transcript 33:25 114:5,8 133:10 143:15 185:23 195:8 transfer 144:23 transferring 145:7 transmitted 127:17 127:20,21 transparency 99:7 transparent 86:12 travel 5:25 6:5 trial 41:6 43:8,13 44:4,6	triangle 175:14,15 tried 70:22 95:25 trippitelli 29:8,14 30:7 131:22 132:11 trippitelli's 29:9 true 92:5 96:16 100:20 104:9 105:18 108:25 194:14 trunk 71:7 180:21 try 5:19,20 26:21 41:17 70:15 72:21 119:6 126:17 185:23 trying 13:23 19:20 19:23 23:9 44:25 59:10 60:12 61:25 62:3 102:17 116:5 135:19 138:17,19 142:13 turn 3:6 6:5 9:23 52:6 87:6 100:23 103:17 125:25 131:19 141:16 145:25 154:18 156:20 157:18 169:25 185:3 turned 126:6 turning 126:2 turns 191:19 tv 118:7,8,15 two 16:15,16 21:20 21:22 27:14 28:25 33:5 36:24,25 37:2 38:17 40:13 41:21 44:19 48:11 51:6 55:7 60:4 63:11,13 63:18 68:18 73:22 85:6 87:13 88:10,13 95:5 97:6,17 98:14 98:15,21,22,25 104:19 109:9 110:19,21 114:14 114:15,16 115:3 116:15,20 122:16
--	--	--	---

<p>123:3 125:21,24 126:19 127:8 128:14 149:8 152:6 152:11,22 154:2,3 154:12 164:14,19 164:22 166:5,21 170:7 171:15 172:3 175:7 177:6,8,9,11 177:15,21,22 178:20 181:7,12 182:9 186:5 188:12 type 46:16 55:23 101:25 106:5 125:19 126:8,24 146:19 147:3 149:16 150:8,24 151:8 167:13 168:25 188:17 types 38:13 81:19,20 169:2 172:13 typical 18:24 90:16 94:12 111:16 128:17 148:14 typically 14:7,10 18:25 22:12 38:21 77:24 94:11,15 98:13 111:13 113:8 125:25 126:17 136:20,22 147:17 158:14 167:12,19 168:21 180:5 188:15 191:16 tytell 13:6 38:5 39:13,16 75:21 tytell's 76:8,12</p>	<p>unavailability 138:12 unavailable 137:25 uncomfortable 134:16 underlying 86:10 understand 5:11,17 6:12 7:16 11:17 12:2 13:24 14:12,16 17:11 18:20 21:3 23:8,9,20 26:2,19 26:22,24 27:19 31:12 47:22 49:23 50:17,22 51:17 53:21 61:11,22,25 62:4 68:20,23 69:13 73:3 75:10 95:19 111:11 119:17 120:4 124:25 133:16 135:19 137:22 138:18,20 142:13,14 143:14 159:10,19 163:2,8 186:13,19 191:18 understanding 13:10 17:9 19:14,17 20:7 21:12 22:20 25:14,20 31:7 35:2 38:7 43:21 44:16,22 48:7,24 49:13 54:15 55:12 62:4 63:9 75:18 77:6 92:4 110:25 111:4,5 120:11 122:3,7 123:2 125:5 132:23 139:12 understood 44:15 50:23 135:12 137:24 uneven 165:14 unfortunately 103:4 union 69:2 81:11 unit 2:6 125:12 united 1:2 43:2 60:21 64:4 68:21</p>	<p>69:18 85:5 unsuccessful 42:23 updates 79:10,11 upper 97:17 142:21 ups 91:19 usb 101:13 use 22:12 54:25 64:9 64:13 65:7,19 66:12 66:15,15,17 70:24 71:22 72:5,11,21 83:20 92:14 94:11 94:13,16 96:2 99:17 100:13 101:7,14 106:11 108:14,17 117:12,14 119:11 124:22 126:12,19 128:7 147:15,16,17 149:19 167:23 169:6 171:21 172:6 172:21 173:22 174:17 175:23 176:5,9,16,16,17 180:5 188:16 useable 172:15,16 useful 101:16 104:21 106:19 useless 148:11 uses 82:6 106:23 191:17 usually 36:13 66:17 117:9,11 121:14 137:7 utilizing 146:7 uv 8:14 80:25 127:2 127:3,25 150:22 151:4 154:21 157:21 163:10,13 164:25,25 165:5,10 166:2,23 167:2,5 168:12</p>	<p>vacco 29:21 valerie 154:2,9 valery 1:19 3:23 60:18 65:5 86:23 87:3 130:11 131:6 154:9,10 156:25 193:5,9 194:11 195:5 197:6,21 valid 55:24 validity 55:17 56:2 56:13 58:6 61:2 value 41:12 variation 60:17 variety 73:7 146:14 various 91:15 158:10 166:2 varying 163:10 vera 37:10 verify 113:23 138:25 veritext 3:12 4:13 197:2 versa 180:20 version 60:19,21 65:18,21 versus 3:19 18:18 43:4 45:3 vice 180:20 video 9:15 80:24 95:10 98:5 185:11 188:4 videographer 2:25 3:2 4:5,12,19 35:24 36:18 86:21,25 93:20 95:9,14 99:22 100:6 130:9 131:4 152:22 169:20,23 190:18,21 193:3 videotaped 97:22 187:12,15 view 61:13,14,15 62:5,13 167:25 views 67:12,13 vilardo 18:10 27:16 28:3</p>
<p>u</p>			
<p>u.s. 3:21 46:6 64:8 64:10,22 65:7 68:24 69:19 82:4 83:10 88:12 uh 15:23 52:3 88:18 ultimately 8:4 unable 15:18,22,25</p>			
		<p>v</p>	
		<p>v 4:15 131:7 197:5 vacation 138:11</p>	

<p>violet 148:3 visible 103:23 104:7 104:12,14 105:8 124:19 125:22 127:21,25 128:23 visual 8:13 21:23 146:3,5 149:13,17 149:25 150:22 154:21 155:9 157:21 158:4,6 167:6 volatile 48:16,16 vs 1:7 vsc 8:16,17 9:15 36:4 80:24 91:21 92:24 125:12 127:22,24 186:10 188:6,21,22,24 189:2,5,7,15,20,22 190:5,8 191:5</p>	<p>wavelengths 163:10 165:6 166:25 way 9:14 12:6 13:12 16:10,12 25:21 34:14 42:17 46:19 47:8 119:13 123:17 128:6 132:4 133:20 135:12 136:12 138:21 144:6 162:3 162:13 167:20 176:24 194:19 ways 14:2,3 73:10 we've 82:14 93:3 96:25 99:20 169:15 187:19 wear 117:8 128:23 129:3,22 wearing 117:6 119:5 web 42:21,22 week 110:22 138:7,8 138:8,17,23 140:25 141:2</p>	<p>60:2 61:23 62:25 93:21 95:11,13 129:16 131:8 144:15,25 145:20 193:2 194:11,15,21 195:4 witnesses 11:11 won 41:4 43:22 word 58:14 124:22 135:4,9,15 148:16 164:21,23 words 5:7 15:18 20:10 40:13 46:7 52:12 65:5 66:2,8 72:19 86:14 132:18 135:14 171:12 173:14 174:16 176:3,14 work 9:3 10:15 14:10 21:20 22:15 22:24,25 23:24 25:24 50:20 51:5,13 53:10 54:4,9 55:6 62:12 66:3 73:25 74:25 75:23,25 77:11 99:11,11 104:17,20 108:3 109:9 112:5,12 113:16 115:13,21 117:2,19 119:15 120:12,24 122:4 125:17 129:17 134:7,7 135:21 142:16 143:5 146:20 152:7,11 156:15 159:22 160:3 162:23 163:9 164:2,11,15,19 166:3,24 168:7 184:6 187:5 189:24 196:2 worked 7:25 18:8 18:15,17 29:17 68:25 73:16 81:16 106:25 131:22,25</p>	<p>132:5 working 23:16 65:12 76:23 80:15 84:14 163:3 works 86:15 world 65:15 83:15 171:24 172:11,17 worn 117:10 worried 169:10 wow 40:16 write 154:24 writing 46:3 108:3 written 11:15 149:9 150:17 160:10 wrong 6:22 142:12 186:12 wrote 9:13 33:18 42:21 104:20,23 108:3</p>
<p>w</p>		<p>x</p>	
<p>wait 5:19,20 wang 40:2 want 7:25 13:23 26:21 36:7 45:19 59:11,24 62:21 80:14 84:19,19 85:21 89:10 93:18 96:24 97:22 102:7 109:7 112:19 130:3 131:19 137:22 145:14 159:19 161:7 169:13 178:25 185:6 187:21 189:8 192:12 wanted 27:18 50:8 66:4 78:8 87:6 wants 145:8,13 warren 2:5 watching 118:7,15 water 93:22 149:21 wave 151:4 164:25 165:9,10</p>		<p>x 195:2</p>	
<p>weekend 138:15 weeks 6:23 7:11,19 7:21 37:7 45:6 54:14 55:14 184:15 184:19 welch 85:10,10,12 went 62:19 western 1:3 3:21 wheel 40:3 whereof 194:21 whispering 3:5 white 75:13 115:11 115:12 124:5 127:11,11 163:22 165:12,12 whitish 189:23 wide 150:24 widely 147:4 171:21 winter 33:21 wish 41:19 withdrew 30:7 41:8 witness 3:23 4:14,16 14:8 40:10 42:6,11</p>		<p>y</p> <p>y 4:15,15 131:7,7 yeah 11:2 16:21 23:12 36:15 47:15 52:4 59:16,19,23 61:17 68:17 70:18 88:22 90:6 128:11 130:5 133:23 138:5 144:20 156:24 160:24 161:5 162:21 191:24 192:3 year 33:13 43:20,20 61:5 79:7 86:2,9 90:8 95:25 120:14 140:23 178:2 180:16 181:15,16 years 55:7 64:2 82:9 88:15 90:18 128:20 170:15,16,18 171:13,15 177:6,8,9 177:11,15,21,22 178:21 181:7,12</p>	

182:10 yehuda 43:4 yellow 101:24 104:24 105:3 121:24 yellowed 74:13 yep 190:17 york 1:3,21,21,24 2:13,19,19 3:12,13 3:17,17,22 38:3 40:25 194:3,5,9 197:3,3 young 32:8 younger 72:9 171:17 179:19 180:9,10,16
z
z 102:20 zarbeco 95:8 101:3 101:5 102:8,10,18 104:4,6,10 105:17 105:19 106:4 108:20 zuckerberg 1:8 3:20 50:22 51:20 53:9 161:22 197:5