1

2   UNITED STATES DISTRICT COURT

3   WESTERN DISTRICT OF NEW YORK

4

5   PAUL D. CEGLIA,   )
)
6   Plaintiff,   )
)
7   vs.   )   No. 1:10-cv-00569
)   (RJA)
8   MARK ELLIOT ZUCKERBERG,   )
     Individually, and   )
9   FACEBOOK, INC.,   )
)
10   Defendants.   )
     ------------------------   )

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15

16   August 10, 2012

17   10:05 a.m.

18

19   Deposition of ALBERT LYTER, held at the

20   offices of Gibson, Dunn & Crutcher LLP, 200

21   Park Avenue, New York, New York, before

22   Laurie A. Collins, a Registered Professional

23   Reporter and Notary Public of the State of New

24   York.

25

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

3

4   BOLAND LEGAL, LLC

5   Attorneys for Plaintiff

6   1475 Warren Road

7   Unit 770724

8   Lakewood, Ohio 44107

9   BY: DEAN BOLAND, ESQ.

10   (via telephone)

11

12   GIBSON, DUNN & CRUTCHER LLP

13   Attorneys for Defendants

14   200 Park Avenue

15   New York, New York 10166-0193

16   BY: ALEXANDER H. SOUTHWELL, ESQ.

17   SRIPRIYA NARASIMHAN, ESQ.

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2 A L B E R T   L Y T E R ,

3   called as a witness, having been duly sworn

4   by the notary public, was examined and

5   testified as follows:

6 EXAMINATION BY

7 MR. BOLAND:

8   Q.   Dr. Lyter, good morning. My name is

9 Dean Boland. I represent the plaintiff, Paul

10 Ceglia, in this matter.

11   You and I haven't met before, have we?

12   A.   No, we have not.

13   Q.   Okay. Have you had any conversations

14 with the defense attorneys before your deposition

15 today?

16   A.   Yes.

17   Q.   When was the most recent conversation

18 you had with them preparing for your deposition?

19   A.   Yesterday afternoon.

20   Q.   And did you discuss your deposition

21 with them before yesterday afternoon?

22   A.   Yes.

23   Q.   And when was that conversation?

24   MR. SOUTHWELL: Dean, I assume you're

25   referring to substantive conversations rather

1   Lyter

2   than, you know, saying, you know, logistical.

3   I guess I'll object to the form. Maybe if you

4   can clarify that, that will be helpful.

5   MR. BOLAND: Yeah, I'm just asking a

6   specific conversation other than before

7   yesterday afternoon in preparation for this

8   deposition, that conversation.

9   A.   Yes, I had a similar conversation in

10   preparation for the deposition last week when the

11   deposition was supposed to occur.

12   Q.   Okay. And you provided at least a

13   declaration in this case, probably more than a

14   year ago. Do you recall that?

15   A.   I don't recall the date.

16   Q.   But you recall a declaration -- it's

17   around -- I have the date in front of me. It's

18   August of 2011. Does that sound familiar to you?

19   Does that ring a bell?

20   A.   Is that the one dated August 15th,

21   2011?

22   Q.   Yes, that would be right. Yes.

23   MR. BOLAND: And Alex, by chance did

24   you get my e-mail with those two documents

25   attached, or three documents attached?

1   Lyter

2   MR. SOUTHWELL: Yes. And I sent you a

3   response saying I provided those three to

4   Dr. Lyter. So he has them in front of him.

5   MR. BOLAND: I didn't hear what you

6   said, Alex.

7   MR. SOUTHWELL: Yes, I sent you an

8   e-mail. I have printed them, and he has them

9   in front of him.

10   Q.   Dr. Lyter, if you could just --

11   MR. BOLAND: Or the court reporter

12   could just mark that declaration dated August

13   15th, 2011, as Exhibit 1, please -- or Lyter,

14   Lyter 1, so we can keep track of it.

15   (Lyter Exhibit 1, declaration of Lyter

16   dated 8/15/11 without exhibits, marked for

17   identification.)

18   Q.   Dr. Lyter, do you recognize this

19   document that's now marked as Lyter 1?

20   A.   Yes, I do.

21   Q.   What do you recognize it to be?

22   A.   It's labeled as my declaration. It

23   bears my signature and is dated August 15th, 2011,

24   and that it was prepared in Raleigh, North

25   Carolina.

1   Lyter

2   Q.   And does that appear to be the

3   declaration you filed -- or that was filed in this

4   case back in August of 2011 and authored by you?

5   A.   Well, it appears to be something that I

6   authored. I don't know when it was filed.

7   Well --

8   Q.   I'll represent to you the date across

9   the top -- the information printed across the top

10 of the declaration indicates when it was filed.

11 So that's August 15th, 2011.

12   A.   Okay.

13   Q.   Does that sound about right?

14   A.   Yes.

15   MR. SOUTHWELL: Mr. Boland, I would

16   just note for the record that what you sent us

17   does not actually have the exhibits to this

18   declaration. So, I mean, that's fine. I just

19   want to make it clear that this is the five

20   pages of the declaration without the exhibits.

21   MR. BOLAND: Yes.

22   Q.   Dr. Lyter, to be clear, there were

23 exhibits attached to this declaration, but I've

24 only provided to you as Lyter 1 just your

25 declaration. Mr. Southwell is correct.

1   Lyter
2   A.   That's right.
3   Q.   Okay. Now, how long have you been
4   analyzing writing inks, Dr. Lyter?
5   A.   Since January of 1975.
6   Q.   So my math, that's more than 30 years;
7   correct?
8   A.   Yes.
9   Q.   And you have a Ph.D. in what field
10 precisely?
11   A.   Analytical chemistry.
12   Q.   Do you know how long Gerald LaPorte has
13 been analyzing writing inks?
14   A.   No, I do not.
15   Q.   And can you tell us if there is an ASTM
16 standard for ink age determination?
17   A.   There are two ASTM standards that
18 relate to the analysis of writing inks. One of
19 them deals with the comparison of writing ink
20 samples, and the other one deals with the
21 identification of writing ink formulations. The
22 only one that deals in way with aging is the one
23 that allows for the identification of ink and
24 therefore determination of commercial
25 availability.

1   Lyter

2   Q.   Does that ASTM standard cover the type

3   of ink age determination that you perform?

4   A.   I certainly do the analysis that's

5   covered in the ASTM standard that relates to

6   identification of ink formulations and therefore

7   dating by commercial availability.

8   Q.   And that test that you perform is not a

9   dynamic test, is it?

10   A.   That particular standard does not

11 relate to any dynamic test.

12   Q.   Right. My point is the testing that

13 you perform -- well, can you describe for me --

14 very briefly summarize the name of the type of

15 testing you do for ink age determination?

16   A.   There are a variety of tests that I

17 perform that relate to the aging of ink samples.

18 One of them would be the one defined in that

19 standard that relates to the identification of a

20 particular, in essence, make and model of ink

21 which would allow for determination of commercial

22 availability.

23   It also includes detection of dating

24 tags, which are unique components that have been

25 added to the ink to identify a particular year of

1   Lyter

2   manufacture.

3   And then there are several dynamic

4   methods that look at either the extractability of

5   the ink or the quantitative measurement of various

6   volatile or semivolatile components.

7   Q.   Okay. And is there a standard, an ASTM

8   standard, for dynamic testing of ink age?

9   A.   I don't believe so.

10   Q.   Do you know why that is or do you have

11 an opinion as to why that is?

12   A.   Well, the mechanism by which ASTM

13 generated standards was by receiving information

14 from various working groups. I think one of them

15 was called SWGDOC, S-W-G-D-O-C, which was the

16 scientific group for document examination.

17   And at the present time that group is

18 no longer providing information to ASTM, so that

19 they would not be in a position to generate any

20 standard methods or standard guides that would

21 deal with the dynamic analysis of writing inks.

22   Q.   Are any of the defendants' experts in

23 that group?

24   A.   I don't know.

25   Q.   Are you in that group?

1   Lyter

2   A.   No, I'm not.

3   Q.   Now, are you aware of the type of ink

4 age testing that Gerald LaPorte performed in this

5 case?

6   A.   If you're talking about the measurement

7 of phenoxyethanol, yes. I don't recall

8 specifically what Mr. LaPorte did in this matter.

9   Q.   Well, no, I'm focusing on -- and for

10 the court reporter's benefit, we'll just call it

11 the PE test. Is that fair enough, that we'll both

12 understand each other what we're talking about

13 when we refer to LaPorte's test?

14   MR. SOUTHWELL: Objection. Are you

15   referring to it generically or are you

16   referring to it as LaPorte's test? I think

17   it's not clear.

18   MR. BOLAND: No, I meant I'm just going

19   to refer to it as the PE test.

20   Q.   Is that an accurate way to sort of

21 summarize the type of test that LaPorte did in

22 this case?

23   A.   Well, the literature describes a

24 variety of methods by which 2-phenoxyethanol,

25 which we've called PE, is measured and how that

1   Lyter

2 can be related to the age of writing inks. But I

3 don't know specifically the methodology that was

4 used by Mr. LaPorte in this case or in any other

5 case, for that matter, regarding the measurement

6 of PE.

7   Q.   Are you aware of that testing method,

8 before your work in this case, where some experts

9 are out there measuring PE as a method of

10 determining the age of ink?

11   A.   I'm certainly familiar with what is in

12 the literature regarding the measurement of PE as

13 a way of determining the age or relative age of

14 writing inks.

15   Q.   And in this case it's true that you did

16 not attempt to do that type of a test measuring

17 PE -- correct? -- in this case?

18   A.   That's correct, I did not.

19   Q.   Have you attempted that test in prior

20 cases?

21   A.   I do use a methodology for the

22 measurement of the amount of phenoxyethanol in

23 writing ink samples as a way of determining the

24 age of that writing.

25   Q.   Have you done that as part of your work

1   Lyter

2   as an expert witness in prior cases?

3   A.   Yes.

4   Q.   Do you use the same method as Gerald

5   LaPorte when you're doing that type of PE testing?

6   MR. SOUTHWELL: Objection to the form,

7   calls for speculation.

8   A.   I don't know. I don't know what

9   Mr. LaPorte uses.

10   Q.   Can you describe briefly what you do --

11   what kind of measurements you take of PE when you

12   performed that test in prior cases? How do you do

13   your test?

14   A.   I basically use multiple samples, at

15   least two different samples, from an area of

16   writing and an additional two samples that would

17   be artificially aged by placing them in an oven

18   for a period of time.

19   And then I extract the ink with a

20   particular solvent that contains an internal

21   standard. And then I measure the amount of

22   phenoxyethanol as well as the internal standard

23   using a gas chromatograph/mass spectrometer, or

24   abbreviated GC/MS.

25   And by running standards of the

1   Lyter

2   phenoxyethanol at various concentrations, I can

3   quantify the amount of phenoxyethanol present in

4   the samples and then measure the difference in the

5   amount of PE based on the fact that one set of

6   samples has not been altered or affected by the

7   heating process and the other set has.

8   That provides me with a delta P in a

9   percentage that is related to how much of the

10   phenoxyethanol has been driven off by the heating

11   process, and it relates to the amount that was

12   there. And the percentage that's been driven off

13   is related to the age of the writing.

14   Q.   And is this a method -- when did you

15   first start using this method in your career that

16   you just described?

17   A.   It's been a number of years. I don't

18   recall specifically when I started.

19   Q.   And do you know Valery Aginsky,

20   Dr. Valery Aginsky?

21   A.   Yes, I do.

22   Q.   And are you aware whether he uses this

23   method as well, the one you just described, or

24   something similar to it?

25   A.   I know that he has published articles

1   Lyter

2 that describe methods that are very similar to

3 this.

4   Q.   And in this case you did not use the

5 method that you just described to test the age of

6 the ink; is that correct?

7   A.   That is correct.

8   Q.   Why didn't you use it?

9   A.   I didn't have enough sample.

10   Q.   When did you do your testing and

11 when -- of the ink?

12   A.   The examination of the documents took

13 place in July of 2011 and I believe again in

14 August of 2011, so that the testing would have

15 been done shortly after that time period; I don't

16 recall specifically.

17   Q.   And was it July of 2011 when you

18 determined you did not have enough samples to do

19 the PE testing that you just described?

20   A.   Well, after the initial examination of

21 the document where it was clear that the ink line

22 had been deteriorated and that the amount of

23 sample available would be somewhat less than what

24 might have normally been available, in particular

25 from some of the smaller amounts of writing like

1   Lyter

2   the initials on the "work for hire" document, the

3   first page, or even the interlineation on that

4   first page.

5   I was at that point questioning whether

6   there would be sufficient sample to be able to do

7   tests for phenoxyethanol using the methodology and

8   based on the equipment configuration that I have.

9   Q.   Now, at some point after July 2011 --

10   in fact it's within the exhibit you have in front

11   of you, Lyter 1 -- you submitted a declaration in

12   part asking the court or justifying to the court

13   why more samples needed to be taken from the

14   document; correct?

15   MR. SOUTHWELL: Object to the form.

16   A.   I'm reviewing Lyter 1. Just one

17   second.

18   Q.   I'm looking at the bottom of page 3,

19   paragraph 8, it looks like, where you start saying

20   what samples you need.

21   A.   Yes, and I forget your initial

22   question.

23   Q.   I'm just pointing out that after July

24   2011 there was a time when you -- you drafted this

25   declaration, and in part of this declaration it's

1   Lyter

2   indicating additional samples that the experts

3   would require, as it says on page 3 there;

4   correct?

5   A.   Yes.

6   Q.   And were those additional samples being

7   sought so you could perform the PE testing that

8   you had previously described in an earlier

9   question?

10   A.   No. There was not sufficient sample

11   available for me to perform the PE testing.

12   Q.   Can you clarify for me was it -- I

13   thought you said -- and maybe I'm wrong -- in July

14   of 2011 the samples taken then, there were not

15   enough -- there were not sufficient samples for

16   the PE testing. Is that accurate or did I

17   misunderstand you?

18   A.   Well, it's true, but it's also true

19   that at no point were there sufficient number of

20   samples for me to conduct PE testing based on the

21   methodology that I use and the instrument

22   configuration that I have.

23   Q.   How many samples do you require to do

24   the testing methodology you use regarding PE?

25   A.   Each of the samples that I need would

1   Lyter

2   contain eight of the little microplugs. And since

3   I need two samples that would be unheated and two

4   samples that would be heated, that will be 32

5   microplugs from any one area of writing.

6   Q.   Why do you need so many?

7   A.   The instrument that I have is set up

8   with an automatic sampler, and the automatic

9   sampler requires the amount of volume of liquid in

10   each of the samples to be of a certain quantity.

11   And in order to be able to measure the

12   amount of PE in that quantity of liquid, the

13   number of hole punches needs to be increased. And

14   I found that the minimum number that will provide

15   the ability to quantify the amount of PE in all

16   instances is eight.

17   Q.   What machine are you talking about that

18   you need that many samples to properly run the

19   test?

20   A.   Well, the machine I use is a GC/MS, but

21   it has an automatic sampler on it instead of

22   simply a manual injection.

23   Q.   If you were using manual injection,

24   would you be able to perform the PE test that you

25   described with less samples than the 32 you've

1   Lyter

2   just described?

3   A.   Yes.

4   Q.   Now, in paragraph 9 of Lyter 1 -- it's

5   on page 34. You see that paragraph?

6   A.   I do.

7   Q.   What are you referring to in the phrase

8   written there where it says "extremely sensitive

9   and precise chemical testing"? What test are you

10   referring to?

11   A.   Well, all of the tests that I do are

12   precise and extremely sensitive. Thin-layer

13   chromatography is one of them. I can do TLC

14   densitometry. That's another. It is possible

15   that GC/MS could be used, but there are

16   limitations to that.

17   Q.   You're aware that a second round of

18   samples was approved by the court?

19   A.   Well, I know that I took samples,

20   additional samples, in August of 2011.

21   Q.   What testing did you perform on those

22   additional samples?

23   A.   I did some additional thin-layer

24   chromatography.

25   Q.   Is that all? Anything else?

1   Lyter

2   A.   No. I didn't do any additional testing

3   on those samples because of the results of that

4   additional thin-layer chromatography test.

5   Q.   And what were those results that caused

6   you to not do any further testing?

7   A.   They're the results that are described.

8   In my report I believe it's on page 7 where we're

9   talking about the TLC results.

10   Q.   And just can you summarize for me what

11 those results were?

12   A.   The samples of ink that were taken from

13 the written notations on the "work for hire"

14 document, both the interlineation, the initials,

15 the signatures, and the dates, the sample -- the

16 samples were so deteriorated that the results of

17 the TLC analysis were not able to be used either

18 for comparison purposes or for any other analyses,

19 such as determining the ink formulations that

20 might have been used or looking at the relative

21 age of the ink through measuring of extraction

22 characteristics.

23   Q.   And did you get similar results from

24 the testing that you did in July?

25   MR. SOUTHWELL: Objection to form.

1   Lyter

2   A.   I don't recall if I did testing in

3 July, waiting because of the possibility of

4 getting additional samples. I just don't recall.

5   Q.   Do you have your notes with you that

6 might refresh your memory on that?

7   A.   No, I do not.

8   Q.   Did you bring them with you to New

9 York?

10   A.   Yes.

11   Q.   Where are they located now?

12   A.   They're in another conference room.

13   MR. BOLAND: Okay. Can we just take a

14   brief break so that Dr. Lyter can go grab his

15   notes, please?

16   MR. SOUTHWELL: What is your intention

17   with respect to the notes? As you know, this

18   is the subject of an ongoing dispute that you

19   have now raised with the court.

20   MR. BOLAND: I'm going to ask him to

21   read his notes and refresh his recollection

22   about what testing he did back in July.

23   That's all.

24   MR. SOUTHWELL: Okay. I mean, you want

25   to keep going and at the next break he can get

1   Lyter

2   them or...

3   MR. BOLAND: Is it a long walk back and

4   forth to where his notes are? If it's going

5   to take him 20 minutes, we can do it at a

6   break.

7   MR. SOUTHWELL: No, it's not a long

8   walk. We'll take a break now then.

9   MR. BOLAND: Very well.

10   (Recess taken from 10:32 to 10:35.)

11   Q.   Dr. Lyter, can you hear my question

12   still? I'm just checking the technology to make

13   sure we're still connected.

14   A.   Yes, I can hear you fine.

15   Q.   Do you have your notes in front of you

16   from the testing that you did in July of 2011?

17   A.   Yes, I reviewed that particular

18   testing.

19   Q.   And can you tell us now what tests you

20   performed in July of 2011?

21   A.   I did in fact do thin-layer

22   chromatography of the interlineation from page 1

23   of the "work for hire" document and the signatures

24   and dates appearing on page 2 of the "work for

25   hire" documents.

1   Lyter

2   And the results were as listed in my

3   report in that those analyses were not conclusive.

4   It was clear that the ink lines had deteriorated,

5   and so it was not possible to determine whether

6   those particular entries were similar or different

7   from each other because of the degree of

8   deterioration.

9   Q.   When you say "similar or different from

10   each other," do you mean the ink formulations

11   being similar or different from each other?

12   A.   Yes, the actual results were such that

13   they were uncharacteristic of what we expect to

14   see when we examine ballpoint ink with thin-layer

15   chromatography.

16   Q.   Do you have an image of the two-page

17   contract you analyzed within your notes?

18   A.   I'll have to check.

19   Q.   Very well.

20   (Pause.)

21   A.   I have what appears to be an image of

22   the two pages of the "work for hire" contract, but

23   I'm not -- I don't know where these images came

24   from, so I don't know what they're associated

25   with.

1   Lyter

2   MR. BOLAND: If the court reporter

3   could hand to Dr. Lyter a copy of his report.

4   It should be the document in front of him that

5   was filed in this case. I'm looking for the

6   document number. Document 328 should be

7   stamped across the top of it.

8   THE WITNESS: Yes, I have that.

9   MR. BOLAND: If that could be marked

10   Lyter 2, just for convenience.

11   (Lyter Exhibit 2, redacted report of

12   Lyter, marked for identification.)

13   Q.   Dr. Lyter, could you just describe what

14 that appears to be for the record?

15   A.   Lyter 2 is labeled as Exhibit D. It

16 says that there are 13 pages. It appears to be my

17 report, and attached to it is a copy of my CV.

18 And it's dated March 24th, 2011.

19   Q.   Does this appear to be the report that

20 you submitted to the defendants for them to then

21 eventually file in this case?

22   MR. SOUTHWELL: Mr. Boland, just so the

23   record is clear, this is the redacted version

24   that was publicly filed, just so that that's

25   clear.

1   Lyter

2   MR. BOLAND: Alex, I'm having a hard

3   time hearing you.

4   MR. SOUTHWELL: I just wanted the

5   record to be clear that this is the redacted

6   version which was filed, just so that that's

7   clear.

8   MR. BOLAND: Yes, fair enough.

9   Q.   Dr. Lyter, we've had this incident --

10 not incident -- this situation with several other

11 witnesses. And to be clear, so there's no

12 misunderstanding, the report you submitted to the

13 defendants based on some court rulings, they

14 redacted portions of it out that weren't allowed

15 to be publicly filed.

16   So I understand that this report will

17 have the word "redacted" all over it in different

18 places and that those are not things that you put

19 into the report?

20   But other than the redacted sections

21 that were redacted by the lawyers, does the rest

22 of it appear to be the report you filed in this

23 case in March of 2011?

24   A.   Yes, it does.

25   Q.   Could you go to page 10 of the report,

1   Lyter

2 please. And when I'm using the page numbers,

3 Dr. Lyter, I'm using the page number in the upper

4 right-hand corner of the page, the thing that's

5 been stamped by the court.

6   A.   Okay. Is that the page that bears my

7 signature?

8   Q.   Yes.

9   A.   Okay, I have it.

10   Q.   Do you see paragraph 2 there that you

11 talked about the deterioration of the "work for

12 hire" document?

13   A.   Yes, paragraph 2 says, The intentional

14 deterioration of the "work for hire" document

15 thwarted my ability to assess the authenticity of

16 the questioned documents using TLC analysis and

17 ink identification and relative aging

18 methodologies.

19   Q.   And when did you make that

20 determination? Was that in July of 2011 or

21 sometime later?

22   A.   My initial suspicion was in July. I

23 believe that I actually comment. I'm looking for

24 the -- I guess on page number 3 where it says my

25 initial observations I comment on the

1   Lyter

2   deterioration aspect and that I was concerned

3   about what might be the results of that analysis.

4   Q.   Dr. Lyter, could you look at page 9 of

5   that exhibit. There's -- the first full paragraph

6   on page 9 which starts with the words "the results

7   of the TLC analysis." Do you see that?

8   A.   Yes.

9   Q.   When you say in this paragraph the very

10   next sentence that you were unable to obtain

11   satisfactory TLC results and you talk about the

12   document was deteriorated in a way that changed

13   the chemical composition of the dye components in

14   the ink, can you list what are the dye components

15   in ink?

16   A.   You mean in this particular ink?

17   Q.   I guess what I'm asking is PE is not

18   considered a dye component; it's considered a

19   solvent; right?

20   A.   Yes, it's characterized as a solvent or

21   semivolatile component.

22   Q.   And is it your position that the

23   deterioration of the document had no effect on the

24   PE that might have been in the ink?

25   A.   I don't know. That's not something

1   Lyter

2   that I tested.

3   Q.   Is there a test to do to determine

4   if -- well, how would you know if the PE in the

5   ink was somehow damaged by the deterioration of

6   the document? What test would you run to

7   determine that?

8   A.   You've asked me two questions. The

9   first -- the answer to the first question is that

10   if you did a test that normally is able to detect

11   and quantify PE and you don't find any of it there

12   and you know it's supposed to be there, then

13   there's been deterioration of it.

14   On the other hand, the test that is

15   most listed in the literature as the appropriate

16   method for both detecting and quantifying PE is

17   GC/MS.

18   Q.   Okay. My question is if you use GC/MS

19   and you detected some quantity of PE in this

20   document in this case, how would you then

21   determine if the quantity you detected was

22   accurate given that the document was, as you put

23   it, deteriorated.

24   A.   If the PE had been deteriorated by the

25   condition of the document, then you wouldn't be

                              Lyter

 1
 2   able to detect it.
 3   Q.   Okay. Let's talk about the word
 4   "deteriorated," then, because I'm not
 5   understanding it. Are you saying it's either an
 6   all-or-nothing proposition, that if a document is
 7   slightly deteriorated, it will eliminate all the
 8   PE, you won't be able to detect any?
 9   MR. SOUTHWELL: Object to the form.
10   A.   When you use the word "deteriorated,"
11   I'm referring to it and using it in the manner
12   that describes initially what the appearance is,
13   meaning that the written line was deteriorated
14   because it no longer contained a complete coverage
15   of ink from within the confines of the lines that
16   the ballpoint pen would lay down.
17   And number two, the appearance of the
18   line, in addition to there not being complete
19   coverage, what was there had changed. It had
20   either become discolored and that it was now
21   yellow to brown-colored as opposed to black
22   colored.
23   And number two, because of the testing
24   I performed that would measure what dye components
25   were present and how those dye components reacted

1   Lyter

2   to thin-layer chromatography, it gave me results

3   that indicated that the dye components had in fact

4   been impacted by whatever method was used to cause

5   the deterioration on the document.

6   And it -- I don't -- it would be my

7   opinion that if we're dealing with a semivolatile

8   component such as PE that if you can measure it,

9   then you know that there's some of it there. If

10   you measure a difference that is present after

11   you've artificially aged or heated a sample, then

12   you know that there was a quantity of PE that was

13   present that was higher than what would be present

14   in writing that would be greater than two years

15   old.

16   So the deterioration that I was talking

17   about was evident with the dye components. I

18   didn't do any testing for PE, so I don't know what

19   that testing would have shown.

20   Q.   What I'm saying is when you use the

21   phrase in that paragraph "deteriorated in a way

22   that changed the chemical composition of the dye

23   components" is it your position that that

24   deterioration that was sufficient to change the

25   chemical composition after the dye components,

                        Lyter

 1
 2   would it or would it not also change the amount of
 3   PE in the sample, if you know.
 4   A.   Well, I know that dyes are susceptible
 5   to photodegradation based on the structure that
 6   exists. I'm not aware that PE is susceptible to
 7   photodegradation.
 8   So from that standpoint it would not be
 9   surprising to find dyes that would be altered
10   chemically or altered so that when you examined
11   for them chemically they would give you skewed
12   results versus the fact that you might be able to
13   look at PE and get a perfectly reliable
14   measurement of how much is there.
15   Q.   Is there any way to know whether PE --
16   have you seen anything in the literature whether
17   PE levels are affected by UV light exposure of a
18   document that has ink on it with PE in it?
19   A.   I don't know of any literature that
20   addresses that issue.
21   Q.   Do you know of any way -- outside of
22   the literature, do you know of any way to figure
23   that out, whether PE has been deteriorated as a
24   result of photodegradation?
25   A.   Well, clearly there are

                              Lyter

 1

 2   experimentations that can be performed.

 3   Q.   Do you know if any experts in your

 4   field have ever done such experiments and

 5   published their results?

 6   A.   I'm not aware, as I silt here today, of

 7   any such results. It's not to say that they're

 8   not published; I just don't know of them.

 9   Q.   Have you heard of the term "the ink

10   matrix" before?

11   A.   Yes.

12   Q.   And how would the deterioration of the

13   document that you observed and you reported in

14   your report, how would that have changed the ink

15   matrix?

16   A.   Well, what I mean when I say "ink

17   matrix" is basically the resin component of the

18   ink. And my knowledge of resins would not

19   indicate that they are going to be very

20   susceptible, if at all, to photodegradation.

21   Q.   Can you describe the sort of layers of

22   the ink matrix or is it just one thing, the

23   resins, as you described?

24   A.   Well, when I talk about the resins, I'm

25   talking about the -- basically the component of

1   Lyter

2   the ink into which all of the other components are

3   incorporated, which lays on top of the paper when

4   you're talking about ball pen inks.

5   Q.   Is PE part of that ink matrix?

6   A.   Well, all of the components are

7   incorporated into the matrix. In other words, the

8   resins basically keep everything together.

9   Q.   If that matrix gets damaged somehow,

10   let's say through UV degradation or some other

11   deterioration, can PE be released out of that

12   matrix which ordinarily would be trapped in that

13   matrix?

14   A.   I don't know.

15   Q.   Is that possible?

16   MR. SOUTHWELL: Objection.

17   A.   Anything is possible. Without actually

18   seeing some research data or performing some

19   experimentation, I wouldn't know. It would be

20   speculation to say that it was or wasn't.

21   Q.   Could you look at the letter P that's

22   on the first page of the Facebook contract that

23   you have there connected to your notes in the

24   initials PC on the first page.

25   A.   Okay.

1   Lyter

2   Q.   And would you agree that the ink in

3   that P is darker than the ink on the

4   interlineation itself or no?

5   MR. SOUTHWELL: I'm going to object to

6   this line of inquiry if you're not -- I mean,

7   it's not clear --

8   MR. BOLAND: I can't make out what

9   you're saying, Alex. You're far from the

10   microphone, I guess.

11   MR. SOUTHWELL: I don't know. I'm

12   right in front of it.

13   I'm going to object to this -- the way

14   that you're conducting this inquiry, because

15   it's not -- I'm not sure what you're asking

16   him about on a document that's -- I mean, if

17   you want to use one of the scans that's in the

18   record, we could get a copy of that, we can

19   put it up on the screen.

20   Asking him to look at something and

21   comment on the differentiation of the inks

22   without his knowledge -- as he said, he's not

23   sure what the image is that he has. I just

24   think that it's improper.

25   Q.   Well, Dr. Lyter, can you comment on the

1   Lyter

2   apparent darkness of the ink in the letter P in

3   the initials PC compared to the rest of the

4   interlineation? What's your opinion of that?

5   A.   I can't tell much from the copy that I

6   have because I believe that it's smaller than the

7   normal -- in other words, it's not a one-to-one

8   copy, number one. And number two, it's -- I'm not

9   sure when it was taken. It almost appears like

10 there might be -- that it was taken after there

11 were hole punches taken, sampling of it.

12   I know that there were varying degrees

13 of ink coverage on various parts of the writing

14 that appeared on the "work for hire" document.

15 Specifically I don't have a recollection about the

16 initials PC.

17   Q.   This conclusion we were just talking

18 about on page 10 of your report, did you know this

19 or did you reach this conclusion about the

20 deterioration and the change in the chemical

21 composition of the dye components after the July

22 testing?

23   MR. SOUTHWELL: Objection, asked and

24   answered.

25   A.   I certainly had performed some

1   Lyter

2   thin-layer chromatography on some samples from the

3   "work for hire" document after the July sampling

4   in 2011, and at that point in time what I saw

5   indicated deterioration.

6   After getting additional samples in

7   August and doing additional testing, those results

8   were confirmed and expanded to include all of the

9   writing on the "work for hire" document.

10   Q.   Can you please describe why you could

11   not perform relative aging analysis as a result of

12   that deterioration?

13   A.   Relative aging is actually a technique

14   by which the amount of color that is extracted in

15   the solution is measured. And when you can see

16   that the amount of color is being unreliably

17   displayed on a thin-layer chromatograph, then it's

18   not appropriate to be able to or to try to measure

19   quantitatively that amount of color.

20   There's just too much going on, too

21   much that's been affected by whatever method that

22   was used to deteriorate the ink to be able to try

23   to measure something quantitatively and use,

24   therefore, as a measure of the age.

25   Q.   Do you know who Erich Speckin is?

1   Lyter

2   A.   Yes.

3   Q.   Are you aware whether he uses the ink-

4   aging method that you use regarding

5   extractability? Does he use that method too?

6   A.   You're talking about relative aging?

7   Q.   Yes.

8   A.   I believe he does, yes.

9   Q.   Going back a second, when you talk

10   about the GC/MS machine, there was manual

11   injection and I think automatic injection. Do you

12   remember that topic we were talking about?

13   A.   Yes, I do.

14   Q.   Why don't you use manual injection?

15   A.   The instrumentation that I use is at

16   Duke University. I rent time on it. I do not own

17   it. And it is set up to use automatic sampling,

18   and that's the way the instrument is set up.

19   Q.   What's your opinion of the use of

20   manual injection as compared to the automatic

21   sampling that you just talked about?

22   A.   There's nothing wrong with manual

23   injection. A lot of individuals and/or

24   organizations don't decide to spend the additional

25   funds necessary to buy an automatic sampler and/or

1   Lyter

2   may not do sufficient number of samples so that

3   the automatic sampler is not required.

4   But both methods of injection will give

5   reliable results.

6   Q.   Have you opposed Gerald LaPorte in

7   previous cases regarding ink aging?

8   A.   We have been retained on opposite sides

9   of matters. I don't know that those issues have

10 revolved around ink aging. I can only recall one

11 matter, and I don't believe there was any ink

12 aging performed in that case.

13   Q.   Would you agree with the statement

14 that -- well, is it appropriate to describe the

15 relative ink aging that you do most commonly as

16 accelerated aging with rate of extraction?

17   A.   No.

18   Q.   What is that method or is that even a

19 method that you've heard of?

20   A.   Well, I know what accelerated aging is,

21 and I know what the rate of extraction is. It

22 might be best to define those. Rate of extraction

23 and extent of extraction are different measurement

24 methodologies. In other words, they're different

25 parameters that are being measured. They both

1   Lyter

2   relate to how easily an ink sample is dissolved in

3   a solution.

4   Relative aging will use either one or

5   both of those measurement methodologies and

6   compare various writings, some of them being

7   questioned in nature as far as when they were

8   prepared and others being known as to when they

9   were prepared.

10   Accelerated aging as a technique will

11   use either the rate of extraction or the extent of

12   extraction and compare two different samples from

13   the same writing, and that writing is questioned

14   as far as its age.

15   One of the samples is not treated in

16   any way, and the other sample is heated. And the

17   conclusions are derived by looking at how those

18   two samples differ. And if they provide differing

19   results, in other words, different rates of

20   extraction or different extents of extraction,

21   then they are -- the writing on the document is

22   considered to be less than a certain number of

23   months or years old.

24   It's not relative aging because it has

25   no controls. There's nothing other than the

1   Lyter

2   questioned writing that's being examined. And

3   that is not a procedure that I use.

4   Q.   Do you use a procedure that measures

5   the extractability of some components of ink to

6   try and determine their age?

7   A.   Yes, I do relative aging. In other

8   words, in order for me to measure the age of

9   writing by measuring an extraction

10   characteristic -- and the two extraction

11   characteristics are rate of extraction and extent

12   of extraction -- I have to have some known dated

13   writing, in other words, writing that I know was

14   done on a particular date, by which I can compare

15   that with the questioned writing. And that's

16   known as relative aging.

17   Q.   And would you agree with the statement

18   that other than you Mr. Speckin is the only other

19   person in the world who performs that kind of

20   measurement of extractability?

21   MR. SOUTHWELL: Object to the form.

22   A.   I don't know if that's a correct

23   statement or not.

24   Q.   Would you agree with the statement that

25   that method you just described that you use is not

                          Lyter

1

2   scientifically reliable?

3   A.   No.

4   Q.   And if Mr. LaPorte has said that in a

5   prior deposition, you would disagree with his

6   statement on that point?

7   MR. SOUTHWELL: Objection,

8   mischaracterizes.

9   A.   I would have to know exactly what he's

10 saying and why, because I know that what's in the

11 literature and I know that some of the stuff

12 that's in the literature is not correct.

13   Q.   Give me an example of something that's

14 not correct in the literature. What do you mean

15 by that?

16   A.   There's an article that describes some

17 experimentation that was done involving relative

18 aging, which is the extraction methodology. And

19 some of the conclusions that were reached were

20 based on data that clearly provided the opposite

21 results to the conclusions that were reached. The

22 conclusions said the technique did not work; the

23 data clearly illustrated that it did.

24   Q.   Do you recall who the authors of that

25 published article were?

1   Lyter
2   A.   I don't remember. It seems to me they
3   were from Germany, but I don't recall.
4   MR. BOLAND: Alex, at this point, I
5   would like to take about a ten-minute break,
6   if we could, and the court reporter and
7   everyone can run to the restroom or whatever
8   they need to do.
9   MR. SOUTHWELL: All right.
10   (Recess taken from 11:09 to 11:23.)
11   Q.   Dr. Lyter, I asked you some questions
12 before about the GC/MS machine, and you responded
13 that you use one at Duke University; right?
14   A.   That's correct.
15   Q.   And it's not a machine you own; you
16 sort of just rent time on it, I guess, is the way
17 to say it; right?
18   A.   That's correct.
19   Q.   And that machine is set up to do auto
20 sampling as opposed to manual injection for
21 purposes of PE testing; right?
22   MR. SOUTHWELL: Objection to form.
23   A.   Well, it's set up with an automatic
24 sampler for all kinds of analyses, and as opposed
25 to having manual injection.

1   Lyter

2   Q.   An auto sampler is an add-on for that

3   GC/MS machine; correct?

4   A.   Yes, it is. It's made to be used on

5   it, but it's not something that has to be

6   purchased when the machine is purchased.

7   Q.   And it's true, sir, you could have

8   chosen at any time, using that machine, to have

9   performed a manual injection, if you wanted to?

10   A.   No, I could not. It was under the

11   control of Duke University, and the configuration

12   of the equipment was to be used as it is.

13   Q.   I guess my point is if you got the

14   permission from Duke University, the machine --

15   the machine itself in the abstract was capable of

16   being switched over to manual injection; true?

17   A.   Yes, that's right, the automatic

18   sampler can be taken off.

19   Q.   And you never asked Duke to do that as

20   part of your testing or thoughts of testing in

21   this case?

22   A.   I had asked them in previous matters to

23   do it, and they said no.

24   Q.   Do you need more samples when you're

25   using an auto sampler as opposed to if you did

1   Lyter

2 manual injection or used manual injection?

3   A.   The automatic sampler requires a

4 certain volume of liquid in order to reliably

5 inject a certain amount. And when you increase

6 the amount of volume in your sample, you have to

7 increase the amount of analyte, which in this case

8 were the ink samples.

9   And so yes, it requires a larger number

10 of microplugs from any one area of writing that's

11 going to be analyzed.

12   Q.   Does the use of more samples provide

13 you with more accurate results?

14   A.   No, I don't believe it has anything to

15 do with accuracy. It's just you're -- you're

16 increasing the concentration of the analyte within

17 the volume to the point where it is most

18 measurable and reliably measured.

19   Q.   Are you aware that Mr. LaPorte in his

20 testing only used two samples from the document to

21 perform his PE test?

22   A.   I'm not familiar with the specifics of

23 his analysis, so I don't know.

24   Q.   And when I said "samples," I should

25 have used the technical term. I meant two plugs

1   Lyter

2   from the document.

3   Were you aware of that or not?

4   A.   No, I wasn't aware of that.

5   Q.   Have you read his report in this case

6   and the results that he has in his report?

7   A.   I have read his report.

8   Q.   Do you agree with his results about the

9   ink is two years old or newer?

10   A.   I neither agree nor disagree. I

11   haven't reviewed his data, so I don't have an

12   opinion.

13   Q.   Isn't all the data you need to assess

14   his conclusions within his report?

15   A.   Well, I would have to review his report

16   to see if it contains any data.

17   Q.   You don't recall, when you read his

18   report, if it contained data necessary to support

19   his conclusion?

20   A.   No, I frankly don't.

21   Q.   What kind of data would be necessary to

22   be in that report to -- for you to review to

23   verify his conclusions? I'm not understanding

24   what kind of data you mean.

25   MR. SOUTHWELL: Mr. Boland, can you

1   Lyter

2   just be more specific? Are you referring

3   specifically to PE conclusions or all of his

4   conclusions?

5   MR. BOLAND: I'm just asking the

6   witness if he agrees with the conclusions in

7   LaPorte's report, and he said he couldn't

8   agree or disagree. And I asked -- and he said

9   he would need to review the data.

10   And now I'm asking him what data would

11   he need to review in order to determine if he

12   agrees or disagrees with any of the

13   conclusions in LaPorte's report.

14   A.   Well, I would have to see any images

15   that he may have taken. I would have to see any

16   examination results that he had, whether they were

17   results of a visual examination, whether they were

18   results from examination by VSC, whether they were

19   thin-layer chromatography results, or whether they

20   were GC/MS results.

21   Q.   About how many cases in the past have

22   you done PE testing and produced a report for a

23   client?

24   A.   I don't know. I don't remember.

25   Q.   Well, can you ballpark it for me?

1   Lyter

2 Would it be more than a hundred times?

3   A.   No, probably less than that, but it's a

4 guess.

5   Q.   Wouldn't you agree with me that if

6 someone's doing testing of ink and they're using

7 75 percent less number of plugs as part of their

8 testing that that test would be -- that there's a

9 higher potential for human error in that test when

10 they're using so few plugs?

11   MR. SOUTHWELL: Objection to form.

12   A.   No, I wouldn't agree. You'd have to

13 know more specifically about what the specific

14 methodology was and where the particular points of

15 error may occur. And then also there's the

16 question of the competency of the individual doing

17 the test.

18   Q.   Do you have an opinion as to whether

19 Gerald LaPorte is a competent ink analyst using PE

20 testing?

21   A.   I have no reason to believe that he's

22 not.

23   Q.   And what causes you to decide whether

24 you're going to use PE testing on ink or not in a

25 given case?

1   Lyter

2   A.   Well, in this case the first

3   consideration is the amount of ink that's

4   available; secondly, the circumstances surrounding

5   the document regarding the purported date of

6   preparation and the supposed date of preparation

7   relative to when the examination was done; and

8   then of course the particular kind of ink that's

9   used, because a lot of inks -- or at least a fair

10 number of them do not contain PE.

11   Q.   Did you consider using PE in this case

12 when you were first retained? PE testing, I mean.

13   A.   It is certainly one of the types of

14 testing that is in my repertoire. As to whether

15 it was going to be used or not depended on what

16 the condition of the documents were and what kind

17 of inks were being used.

18   Q.   So did you assess those two factors you

19 just mentioned in this case before deciding what

20 ink age testing to do?

21   A.   As I mentioned in my report, because of

22 the condition of the document, it was clear to me

23 that there would be insufficient sample for me to

24 do PE testing, given the methodology that I use

25 and the instrument configuration that I have.

1   Lyter

2   Q.   And what methodology do you use? How

3   do you distinguish your methodology from

4   Mr. LaPorte's?

5   A.   I don't know what Mr. LaPorte's

6   methodology is. I don't think that I've ever seen

7   it in writing or seen him describe specifically

8   step by step what his methodology is.

9   Q.   Do you recall a paper that Mr. LaPorte

10 wrote in 2004 describing the PE methodology he

11 uses?

12   A.   No.

13   Q.   Have you ever seen his methodology

14 published by anyone in any of the scientific

15 literature?

16   A.   I don't know. I certainly am aware of

17 some of the articles that he's written, and I know

18 he's addressed measuring PE by GC/MS from

19 ballpoint ink samples. But I don't know how that

20 particular article relates to the methodology he

21 uses in casework.

22   Q.   Would you agree that his method has or

23 has not been peer-reviewed?

24   MR. SOUTHWELL: Objection as to form.

25   A.   I don't know one way or the other. I

1   Lyter

2 would have to see what particular article he

3 references as containing his methodology.

4   Q.   But as you sit here today, you have

5 never seen such an article?

6   MR. SOUTHWELL: Objection to the form.

7   A.   I've never had somebody point out to me

8 an article that says this is the method that Jerry

9 LaPorte uses. Therefore I don't know whether the

10 methodology that he uses has been peer-reviewed or

11 not.

12   Q.   Okay. Well, let's focus on your

13 methodology, the two points you made, the

14 methodology and the condition of the document,

15 which were decision points on why you didn't do PE

16 testing.

17   What about your methodology as applied

18 to the document in this case caused you to not do

19 PE testing?

20   A.   There was nothing about the methodology

21 that caused me not to do PE testing. Once I could

22 not get past the sample size restriction, it

23 didn't make any difference what methodology I

24 used. I wasn't going to be able to do the

25 testing.

1   Lyter

2   Q.   And what sample size restriction are

3   you referring to?

4   A.   The one that I had previously described

5   where I need at least 32 hole punches of ink in

6   order to be able to analyze any one area of

7   writing.

8   Q.   And when did you know you needed 32

9   plugs to perform PE testing using your sort of

10   methodology?

11   A.   Well, that's -- that's the methodology

12   that I use, so even before I went into the

13   examination, I knew that I would need that much.

14   Q.   Did you tell the defendants' attorneys

15   that you needed that many samples -- or plugs, I

16   should say, plugs?

17   A.   I don't recall whether I did or not. I

18   just don't remember.

19   Q.   Did you discuss doing PE testing with

20   the defendants' attorneys?

21   A.   When? I don't recall discussing it

22   once the documents were examined. We may have

23   talked about it briefly in the very early

24   discussions regarding my involvement in this case,

25   but I don't remember.

1   Lyter

2   Q.   Sir, what were you hired to do? What

3   was your understanding you were hired to do by the

4   defendants' attorneys in this case?

5   A.   As I listed on my report, I was engaged

6   for the analysis of ink and paper. I was going to

7   inspect two different documents, the "work for

8   hire" document, a specifications document. And I

9   was asked to determine whether there were any

10 inconsistencies in the document and to determine

11 if I could the date or time period of preparation

12 of the document.

13   Q.   Did you ever suggest to the defendants

14 that you could do PE testing if you had sufficient

15 samples from the document -- I mean the

16 defendants' lawyers?

17   MR. SOUTHWELL: I'm going to object,

18   Mr. Boland. You're calling for privileged

19   communications at this point. I mean, you can

20   probably ask it in a different way.

21   Q.   Dr. Lyter, did you make it known to

22 anyone how many samples you would need to do PE

23 testing, without telling me who? Did you tell

24 anyone involved many this case how many samples

25 you would need to do testing, the 32 plugs?

1   Lyter

2   A.   I don't remember that I did.

3   Q.   How did you determine that you weren't

4   going to be permitted to get 32 plugs out of a

5   sample and do PE testing, then, if you didn't ask

6   anybody?

7   A.   I could tell by looking at the

8   documents and the condition of the writing that

9   there were clearly areas of writing where that

10 amount of sample would not have been available,

11 given the fact that the ink line had been

12 deteriorated and that there were multiple experts

13 involved, both from defendants and plaintiffs,

14 that would desire to take samples of ink and that

15 there simply wasn't going to be enough ink

16 available.

17   Q.   Can you explain to me how Gerald

18 LaPorte reached a completely different conclusion

19 that he could do PE testing in this case?

20   MR. SOUTHWELL: Objection, calls for

21   speculation.

22   A.   I don't know.

23   Q.   If you know.

24   A.   Yeah, I don't know other than he does

25 not have the same sample size restrictions that I

1   Lyter

2   do.

3   Q.   Does that change the reliability of his

4   test compared to yours?

5   A.   I don't think so.

6   Q.   So you could have done PE testing with

7   less samples if you had used a machine that

8   allowed manual injection; is that accurate?

9   MR. SOUTHWELL: Objection, asked and

10   answered.

11   A.   Yes, that's correct.

12   Q.   Are you more experienced than

13   Mr. LaPorte in doing ink age analysis?

14   A.   I don't know. I certainly have more

15   years doing the testing, but I don't know

16   whether -- how you would measure that parameter.

17   Q.   And using your type of PE testing, what

18   effect does storage conditions have on a document

19   and the type of -- what effect would storage

20   conditions have on PE testing results, in your

21   opinion?

22   A.   You mean in general?

23   Q.   Yes, the storage conditions of a

24   document, can it affect PE testing results?

25   A.   Certainly if a document is stored in

1   Lyter

2 what I'll characterize as harsh conditions, it may

3 make the amount of PE that's present less than

4 what would normally be present.

5   Q.   What kind of storage conditions would

6 cause that?

7   A.   Well, considering the fact that part of

8 the methodology for PE testing is to artificially

9 age or heat samples, I would say exposure to

10 excessive heat conditions.

11   Q.   What's the freezing point of PE,

12 Dr. Lyter?

13   MR. SOUTHWELL: Objection to form.

14   A.   I don't know.

15   Q.   If a document is stored at a

16 temperature that puts it at or below the freezing

17 point of PE, how would that affect the PE testing

18 result?

19   A.   I wouldn't think it would affect it at

20 all.

21   Q.   It's your position that PE would

22 evaporate at the same rate if the document is kept

23 at a temperature where PE is at its freezing

24 point? It would still evaporate at the same rate

25 as room temperature?

1   Lyter

2   A.   I believe that -- first off, I have no

3   knowledge of what PE may or may not do at

4   different temperatures because I don't know what

5   the freezing point is and I don't know what the

6   boiling point is for PE.

7   But I know that because it's a

8   component that was within a matrix that includes

9   resins and other materials that there's going to

10   be synergistic effect within that matrix that's

11   going to be different than what might occur with

12   PE just sitting in a beaker on top of a desk or

13   something.

14   Q.   Well, when you test PE, you test it

15   within an ink matrix; you don't test it sitting

16   placed in a beaker. Am I right?

17   A.   It depends on what test you're doing.

18   If I do a standard, yes, the PE comes directly out

19   of a beaker. But generally speaking we're testing

20   ink samples that presumably have PE in them.

21   Q.   And in this case we don't know the ink

22   formulation; true?

23   A.   That's correct.

24   Q.   And would you agree with Gerald LaPorte

25   that we also don't know whether this ink is a

1   Lyter

2   fast-aging or slow-aging ink when it comes to PE?

3   Would you agree with that?

4   MR. SOUTHWELL: Objection to form.

5   A.   I don't know what Mr. LaPorte said

6   about this ink one way or the other. I have no

7   personal knowledge as to how this ink would be

8   characterized regarding whether it's a fast aging

9   or a slow aging.

10   Q.   You've heard of that terminology,

11 though, before, fast aging and slow aging, as it

12 relates to PE evaporation?

13   A.   Yes, I have.

14   Q.   Do fast-aging and slow-aging inks

15 generate the same test results when you do PE

16 testing with regard to them?

17   A.   What samples are you talking about?

18 Are you talking about samples that are the same

19 age or purported to be the same age? I don't

20 understand your question.

21   Q.   Let me give you a hypothetical.

22 Assuming we have two different inks and we agree

23 that one of them is a fast-aging ink when it comes

24 to PE evaporation and the other one is a slow-

25 aging ink, and we take each one of those pens and

1   Lyter

2 we make a mark on a piece of paper all the way

3 down the side of the piece of paper on the same

4 day for both of those inks, then a year later you

5 went ahead and ran your PE tests on those two

6 inks.

7   Would you -- do you assume that the

8 results you would get would be identical for the

9 amount of PE that's driven off by heating,

10 et cetera, or would it be different between the

11 slow-aging and the fast-aging ink?

12   A.   I would expect that if you did multiple

13 samples of that ink that the actual average delta

14 P value would be different for the two writings,

15 but they would both fall within the -- or above or

16 below the appropriate threshold value that would

17 be used to determine the age of the writing.

18   Q.   So it doesn't matter if you have a

19 fast-aging ink or a slow-aging ink, you're still

20 going to get an accurate estimate of how old it is

21 using PE testing?

22   A.   Within certain criteria, yes.

23   Q.   What criteria would those be?

24   A.   You have to realize that if you have a

25 fast-aging ink you may not be able to distinguish

1   Lyter

2   between a writing that is two years old versus one

3   that's one year old, whereas with a slow-aging ink

4   you probably will be able to distinguish that.

5   Q.   Have you ever heard of a thing called

6   The Merck Index, M-E-R-C-K?

7   A.   Yes.

8   Q.   And are you aware that The Merck Index

9   shows that PE is commonly used in bug spray and

10   hand lotion?

11   A.   I don't know. I certainly haven't read

12   The Merck Index regarding PE, so I don't know what

13   it says.

14   Q.   Do you know what other common household

15   products contain PE?

16   A.   No.

17   Q.   Now, when you were handling this

18   document during the examination, did you handle

19   the document wearing gloves or just with your bare

20   hands?

21   A.   I don't remember. I think that for a

22   portion of the time I had gloves on and another

23   portion I didn't.

24   Q.   The portion where you had gloves on,

25   why did you bother to wear gloves?

1   Lyter

2   A.   Well, I don't remember that I did. I

3   just -- that seems to be in my mind, but I'm not

4   certain.

5   Q.   And do you think it's important to

6   handle a document with gloves that you're

7   examining, if you're intending to do PE testing

8   on?

9   A.   No.

10   Q.   Is it possible ever that handling a

11   document without gloves could cause contamination

12   of that document as it relates to PE?

13   A.   I'm not aware of any circumstances in

14   which that would be problematic. I know

15   personally I don't use lotions and stuff on my

16   hand, so that it wouldn't be a problem in that

17   regard.

18   Q.   What about somebody that does use

19   lotions on their hand or bug spray that contains

20   PE, wouldn't you agree that if they handled a

21   document without gloves they could transfer PE to

22   the document?

23   A.   Well, I guess that's possible. I would

24   propose that or question whether or not the amount

25   that was transferred and the form that it took

1   Lyter

2   would be problematic regarding the testing of the

3   ink. So I would look at that as being something

4   that is speculative and would need to be tested in

5   order to determine the viability of it presenting

6   any problems.

7   Q.   But there's no literature on that, is

8   there?

9   A.   I'm not aware of any.

10   Q.   Is it fair to say that during the time

11   you were testing this document if you went to the

12   restroom or when you woke up in the morning and

13   before you came in to test you washed your hands

14   with soap? Would that be a fair assessment?

15   A.   I generally have pretty good hygiene,

16   so I would guess yes.

17   Q.   And do you know if the soap you washed

18   your hands with had PE in it?

19   A.   I would think not, but I don't know.

20   Q.   So there's another possibility: if a

21   person washes their hands in soap that has PE in

22   it that if they touch a document they could

23   transfer PE to the document. You agree that's

24   possible?

25   A.   I would say you're dealing with the

1   Lyter

2   realm of possibilities and not probabilities, and

3   I tend to deal in probabilities. And as far as

4   that being very probable, I would say that it's

5   not.

6   Q.   What data or studies are you pointing

7   to to base your comment that it's not probable

8   that PE could be transferred from hand soap used

9   by a person handling a document?

10   A.   Just my personal experience in

11   examining documents and examining paper blanks

12   from documents, in particular from the areas on

13   the documents where people would normally handle

14   them. And I don't recall that in those instances

15   I've ever found a measurable amount of PE.

16   Q.   So you've run testing of this type,

17   washing your hands with soap that had PE in it,

18   handling a document, and then seeing how much PE

19   you might have added to it? You've done that kind

20   of test?

21   A.   No, I have never done a specific test.

22   Number one, I don't know that PE is used in soap.

23   Like I said, it seems to me kind of

24   counterproductive.

25   But I've tested blank samples of paper

1   Lyter

2   that have been handled by a variety of

3   individuals, and I've never detected any PE. So

4   that to me says that the likelihood of finding a

5   contaminant of PE on a document because of the

6   handling process is extremely limited if -- even

7   if -- if it even exists.

8   Q.   Are you aware that there's published

9   articles that have talked about the contamination

10   of documents regarding PE and people touching them

11   with their hands? Are you aware of literature on

12   this point?

13   A.   No, I'm not.

14   Q.   Here's a hypothetical for you. Let's

15   imagine you're back in July 2011 and you're at the

16   offices of that law firm and you're handling this

17   document without gloves and someone told you there

18   was a huge sign above the soap dispenser, which

19   was the only one you could use in the bathroom you

20   could use to wash your hands with, and it says, By

21   the way, this soap contains PE, would that cause

22   you to use gloves when you went back to handle the

23   document; do you know?

24   A.   No, I probably would have only used

25   water to wash my hands.

1   Lyter

2   Q.   Okay. Let's assume you used the soap,

3   though, and you saw the sign and went ahead and

4   used the soap, would you still go handle the

5   document with your bare hands, knowing that you

6   just washed your hands with soap with PE in it?

7   A.   I don't know. I'd have to think about

8   it.

9   MR. BOLAND: Alex, at this point, I

10   would like to take one more break. I think

11   we're close to be done. But how about we take

12   15 minutes.

13   MR. SOUTHWELL: Okay.

14   (Recess taken from 11:54 to 12:14.)

15   Q.   Dr. Lyter, can you hear me still?

16   A.   I can.

17   Q.   Did you provide a list of cases in

18   which you have testified in the past four years as

19   part of providing your report in March of 2011?

20   A.   I don't know if I did. I frankly don't

21   remember.

22   Q.   Do you know if you did that -- I'm

23   sorry, go ahead.

24   A.   I frankly don't remember if I did that

25   or not.

1   Lyter

2   Q.   Do you remember if you did that with

3   any prior declaration that you submitted in the

4   case?

5   A.   No, I don't have any recollection as to

6   whether that was submitted prior to this.

7   Q.   Do you maintain such a list of cases in

8   which you've testified in the past, at your

9   office, for example?

10   A.   Yes, I do.

11   Q.   And if you reviewed that list, would

12   you be able to tell me in how many of those cases

13   you issued a report and Gerald LaPorte was hired

14   by the other side's lawyers in that particular

15   case?

16   A.   Maybe.

17   Q.   Okay, well, I'll just leave a little

18   blank in the deposition and ask that you review

19   that list and provide that information to answer

20   that question within seven days, please.

21   TO BE FURNISHED: _____

22   _____.

23   MR. SOUTHWELL: All right. I'll ask

24   that Dr. Lyter provide that to us, and we'll

25   discuss that with you.

1   Lyter

2   Q.   The GC/MS machine that you use at Duke

3 University, can you tell me the make and model of

4 that machine?

5   A.   The manufacturer is Schmidazu

6 Schmidazu, S-C-H-M-I-D-A-Z-U, and I believe it's

7 2010 is the model number.

8   Q.   And that's the machine, just to be

9 clear, that is set up to do auto sampling, and you

10 were not able to change the settings -- you were

11 not allowed to change the settings to a manual

12 injection; right?

13   A.   That's correct.

14   Q.   Do you have a copy -- do you have that

15 list -- that list I was just asking you about of

16 cases in which you testified previously, do you

17 have that list with you today?

18   A.   No, I do not.

19   Q.   Okay. You didn't bring it to New York?

20   A.   I did not.

21 RQ   Q.   And then I'd also ask that the notes

22 that you brought with you that we've been talking

23 about today, if you can provide a copy of those to

24 us within seven days as well, because we've never

25 seen those.

1   Lyter

2   MR. SOUTHWELL: All right. Well, we

3   can discuss that along with all the notes that

4   you've been withholding from us.

5   MR. BOLAND: I mean, yeah, that's up to

6   you, Alex, if you want to provide it to us. I

7   ask he provide them to you, and if you guys

8   want to withhold them, there's nothing I can

9   say about that.

10   Q.   And just to clarify that, the GC/MS

11 machine in Duke, if Duke permitted you, do you

12 have the ability to alter the settings of that

13 machine so you could use it with a manual

14 injection? Do you know how to change that

15 setting?

16   A.   Well, it involves removing a physical

17 piece of hardware, and then there are some changes

18 to the software as well, just some settings in the

19 software. I'm sure that, given sufficient amount

20 of time, I'd be able to do that.

21   Q.   Have you ever done that before with any

22 GC/MS machine?

23   A.   Well, I certainly have used the GC/MS

24 in the past where I was using an individual --

25 well, it wasn't a GC/MS; it was just the GC part,

1   Lyter
2   where I was making manual injections.
3   Q.   You were present in July 2011 for the
4   inspection of the actual two-page document at
5   issue in this case?
6   MR. SOUTHWELL: Objection to the form.
7   Do you want to specify which day?
8   MR. BOLAND: I couldn't hear that,
9   Alex. Objection what?
10   MR. SOUTHWELL: I'm asking if you want
11   to specify the day. The examination lasted
12   for multiple days.
13   Q.   Dr. Lyter, what day in July of 2011, or
14   days, plural, perhaps, were you present in Buffalo
15   examining the two-page contract?
16   A.   July 19th.
17   Q.   And do you know what day the
18   examination started by the defendants' experts?
19   A.   I don't remember.
20   Q.   How did the document appear to you when
21   you first saw it on July 19th? How would you
22   describe it?
23   A.   Which document are you talking about?
24   Q.   The two-page contract that's the main
25   document in this case.

1   Lyter

2   A.   Is that the one we referred to as the

3   "work for hire" document?

4   Q.   Yes, that's how the defendants'

5   attorneys and everyone referred to it, that's

6   correct.

7   A.   The pages were -- the paper of the two

8   pages was somewhat yellowed on the front, and

9   there were certainly deterioration of the ink

10   samples, ink entries, that appeared on both pages

11   so that the ink line was not consistent from side

12   to side or along the length of the writing. And

13   it was discolored, being more yellow to brown than

14   it was black. And then it was -- contained

15   toner-based printing on it that was dark in color.

16   Q.   Did you capture any images of the

17   document before your examination began?

18   A.   I believe I did, yes.

19   Q.   And how did you capture those? What

20   type of devices?

21   A.   Flatbed scanner.

22   Q.   And did you record what the settings

23   were on that scanner when you used it for those

24   scans?

25   A.   I didn't make any specific recording of

1   Lyter

2   the settings that I believe it's maintained in the

3   software as default settings so that I could

4   identify what they were.

5   Q.   And approximately how many scans did

6   you take before you started examining the

7   document?

8   A.   I believe just one each, each page

9   front side. I don't believe I took a scan of the

10   back side.

11   Q.   And when you observed the yellow --

12   yellowing, I guess you called it, of the front of

13   the two pages, did you discuss that with any of

14   the other experts that were present on July 19th?

15   A.   I don't recall there were any other

16   experts present.

17   Q.   Fair enough. Was there anyone else

18   present? Were you by yourself in the room doing

19   your examination?

20   A.   No, there was both defense counsel and

21   I believe Mr. Argentieri was there, and there was

22   a videographer there. And I don't believe anybody

23   else, or I don't recall anybody else, anyway.

24   Q.   And about how long did your examination

25   take that day?

1   Lyter

2   A.   I don't remember specifically. I think

3   somewhere in the neighborhood of four to five

4   hours.

5   Q.   Did you provide copies of all the

6   images you captured of that two-page contract to

7   the defendants' lawyers?

8   A.   I don't believe so, but I don't recall

9   specifically.

10   Q.   Did you retain copies of those to this

11 day in your office?

12   A.   Yes, I think so.

13   Q.   And what type of an agreement did you

14 have or do you have with the defendants or the

15 defendants' lawyers as far as your work in this

16 case and how much you are to be paid?

17   A.   I'm compensated for my time at the rate

18 of $400 an hour.

19   Q.   Is that from a retainer that you keep

20 on account with you or do you bill them

21 periodically and then receive a payment on that

22 invoice?

23   A.   I did receive a retainer, and I billed

24 against it. And then I send monthly invoices.

25   Q.   And approximately how much have you

1   Lyter

2 been paid for your work thus far in the case from

3 the first time you started working on anything

4 related to this case?

5   A.   I don't know. I would have to check my

6 billing records that are back in the office. I

7 know that my initial retainer is $4,000.

8   Q.   Well, what would you estimate you've

9 billed them thus far, again, like a ballpark? Is

10 it $500,000 or something less than that?

11   A.   I wish. No, I would say maybe $40,000.

12 That's a guess.

13   Q.   And since you submitted your

14 declaration's last report in March of 2011, have

15 you done any other work on this case, analysis-

16 type work, not just conversations with lawyers?

17   A.   Since I submitted the report?

18   Q.   Yes.

19   A.   No, I have not done any additional

20 examinations.

21   Q.   Do you know if any of the other

22 defendants' experts have done additional

23 examination since March of 2011?

24   A.   I haven't spoken with any of the other

25 experts, so I don't know.

1   Lyter

2   Q.   Are there examinations you performed or

3   conclusions that you reached that are not

4   reflected in your report?

5   A.   Yes.

6   Q.   Well, let's break that up, then. What

7   examinations have you done that are not reflected

8   in your report?

9   A.   I list in my report having done --

10   having used a VSC 4C on page 2 regarding the

11   ultraviolet. And I used the VSC through both the

12   visible and near infrared region as well to

13   characterize the inks that were on the "work for

14   hire" document, and those results were not

15   reported in the report.

16   And then I also did some testing, in

17   essence experimentation, to determine the effect

18   that ultraviolet light and heat had on paper

19   samples, in particular how they affected the

20   optical brighteners.

21   And then I also did an experiment with

22   determining how exposure to sunlight affected both

23   optical brighteners in paper as well as black ball

24   pen ink writings.

25   Q.   And why didn't you put those -- the

1   Lyter

2   fact that you did those examinations in your

3   report?

4   A.   Well, the VSC analysis was not

5   really -- was not included because I was going to

6   do chemical testing, and the results of the

7   chemical testing is normally more significant, in

8   particular the ability to identify the ink

9   formulations that were present on the

10 specifications document in this case.

11   And the experimentation was not

12 included in order -- because the results of that

13 testing was actually included in the conclusions

14 that were given regarding what had occurred to the

15 "work for hire" document, what had caused its

16 deterioration, and what we were seeing as regards

17 the ultraviolet examination.

18   And then the fact that the experience

19 that I had had relative to the effect of

20 examination equipment in causing deterioration of

21 documents, I had not had that experience. And the

22 length of time that was required to cause that

23 kind of effect simply validated that experience.

24   Q.   Did you provide those conclusions to

25 the defendants' lawyers?

1   Lyter

2   A.   I told them about it.

3   MR. BOLAND: Very well. Alex, I have

4   no further questions.

5   MR. SOUTHWELL: Okay. I've got no

6   questions either. I guess I just wanted want

7   to put a couple things on the record,

8   Mr. Boland.

9   I should have raised this at the

10   outset, but we had communicated the fee for

11   Dr. Lyter, and I'm just double-checking what

12   the amount is. I would ask that you write the

13   check today and put it in an overnight, you

14   know, delivery service for Monday delivery to

15   Dr. Lyter's address, which is on the first

16   page of his report, Lyter 2.

17   THE WITNESS: Yeah, that's a P.O. box.

18   I can give you a street address, which would

19   be --

20   MR. BOLAND: Yes, go ahead. What's

21   that street address? FedEx won't go to a P.O.

22   box.

23   THE WITNESS: It's 7425 Capstone,

24   C-A-P-S-T-O-N-E, Drive, Raleigh, North

25   Carolina, and the ZIP code is 27615.

1   Lyter

2   MR. BOLAND: Okay. I have the address,

3   Alex.

4   And then we'll talk about getting his

5   notes, copies of his notes, and the other

6   information from his case log as well so we

7   can conclude the deposition that way.

8   MR. SOUTHWELL: All right, yeah, we can

9   certainly talk about that in consultation with

10   Mr. Stewart's items that he has withheld.

11   There's seemingly a large amount of materials

12   that your experts have that have not given us

13   and that you have abrogated the agreement that

14   we had about mutual exchange. So once we can

15   resolve that --

16   MR. BOLAND: Stewart is the only one

17   left. I have responded to everything,

18   including Larry Stewart, what we will and will

19   not give you. Maybe we haven't given you

20   everything. The responses are all in.

21   There's nothing left hanging regarding the

22   responses from any of the experts from us, as

23   far as I know.

24   MR. SOUTHWELL: Well, okay, you may

25   have responded and said that you're not going

1   Lyter

2   to give us the things that were plainly -- no,

3   I take it back. Your response was we gave it

4   to you, and what we have pointed out is that

5   is incorrect.

6   So, frankly, I am waiting for a

7   response on how you square your claim that

8   you've given us everything with the reality of

9   the situation as it's detailed in the

10   deposition transcript.

11   MR. BOLAND: Oh, no, let's be clear.

12   We've given you everything that we think is

13   appropriate to provide, and there's other

14   things you've asked for that we felt, just

15   like you did, that they were more

16   appropriately obtained during deposition.

17   The same answer you gave to me on a

18   bunch of those questions, which I accepted,

19   and I went after a bunch of that stuff in

20   deposition, and so did you.

21   So we've responded to everything. You

22   got everything that we think is appropriate

23   just like you have given us everything that

24   you think is appropriate at this point, I

25   assume.

1   Lyter

2   MR. SOUTHWELL: No, Mr. Boland, that is

3   incorrect. Mr. Stewart testified that he

4   provided us with a PDF which included

5   everything including, for instance, his ink

6   inventory. He did not. You represented on

7   the record that you provided that to us. You

8   did not.

9   We provided you exactly what we got

10   from Mr. Stewart, which was not a PDF but a

11   series of images, and it did not include that

12   inventory, which both he and you claim to have

13   given us, and you have not.

14   So it is not a case of something

15   different where you're saying, you know, these

16   are things that we are saying are not

17   appropriate.

18   So I think there is still an issue here

19   that we need to get resolved, and I anticipate

20   that we will get it resolved so that we can

21   continue to depose Mr. Stewart about it. But

22   in any event, we don't need to take up the

23   record on all of this.

24   And the only other thing I wanted to

25   add is we are requesting a review of the

1   Lyter

2   transcript. I will -- I'll have to just

3   e-mail you confirmation of the amount for

4   Dr. Lyter, but you're representing on the

5   record here that you will provide the check

6   for the amount as we had previously discussed,

7   overnighted to the address Dr. Lyter provided

8   for Monday delivery; correct?

9   MR. BOLAND: Right, and you're going to

10   give me the amount, though.

11   MR. SOUTHWELL: Yeah. We had

12   previously communicated to it. I just can't

13   get my fingers on it right now. So I will

14   send it to you by e-mail shortly.

15   MR. BOLAND: And what about Larry

16   Stewart's payment? It's probably way over 30

17   days now. Can you guys put that in an

18   envelope today for Monday delivery as well?

19   MR. SOUTHWELL: I e-mailed you about

20   that yesterday. I don't think it is over 30

21   days. There's not a specific time frame. But

22   yes, I'm expecting the check today, and I was

23   planning to send it out.

24   MR. BOLAND: Oh, you're sending it out

25   today. Okay.

1   Lyter

2   MR. SOUTHWELL: As I told you

3   yesterday.

4   MR. BOLAND: All right. I just heard

5   yesterday in the e-mail was an accounting

6   issue, and I wasn't certain when you were

7   sending it. That's fine.

8   MR. SOUTHWELL: Well, I'm waiting for

9   the check. I believe I will have the check

10   today. And if I have the check today, then

11   I'll send it out.

12   MR. BOLAND: Very well.

13   MR. SOUTHWELL: So we're concluded for

14   today?

15   MR. BOLAND: Yes.

16   (Time noted: 12:36 p.m.)

17

18   _____

19   ALBERT LYTER

20

21   Subscribed and sworn to before me

22   this _____ day of _____, 2012.

23

24   _____

25   Notary Public

1

2   C E R T I F I C A T E

3   STATE OF NEW YORK   )

4   : ss.

5   COUNTY OF NEW YORK   )

6

7   I, LAURIE A. COLLINS, a Registered

8   Professional Reporter and Notary Public

9   within and for the State of New York, do

10   hereby certify:

11   That ALBERT LYTER, the witness whose

12   deposition is hereinbefore set forth, was

13   duly sworn by me and that such deposition

14   is a true record of the testimony given by

15   the witness.

16   I further certify that I am not

17   related to any of the parties to this

18   action by blood or marriage, and that I am

19   in no way interested in the outcome of this

20   matter.

21   IN WITNESS WHEREOF, I have hereunto

22   set my hand this 13th day of August, 2012.

23

24   _____

25   LAURIE A. COLLINS, RPR

1

2 - - - - - - - - - - - - I N D E X - - - - - - - - - - -

3

4 WITNESS: EXAMINATION BY: PAGE

5   Albert Lyter   Mr. Boland   3

6

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19   Exhibit 2, redacted report of Lyter   23

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ERRATA SHEET

VERITEXT REPORTING COMPANY

1250 Broadway

New York, New York 10001

(212) 279-9424

CASE: Ceglia v. Zuckerberg

DEPOSITION DATE: August 10, 2012

DEPONENT: Albert Lyter

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_____
ALBERT LYTER

SUBSCRIBED AND SWORN TO BEFORE ME
THIS _____ DAY OF _____, 2012.

_____   _____
(NOTARY PUBLIC)   MY COMMISSION EXPIRES:

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