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               UNITED STATES DISTRICT COURT
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               WESTERN DISTRICT OF NEW YORK
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     PAUL D. CEGLIA,
                                  )
                                  )
                   Plaintiff,
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                                  )
 7
                                      No. 1:10-cv-00569
               vs.
                                         (RJA)
                                  )
 8
     MARK ELLIOT ZUCKERBERG,
     Individually, and
                                  )
 9
     FACEBOOK, INC.,
                                  )
10
                  Defendants.
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                           August 3, 2012
17
                           10:56 a.m.
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19
               Deposition of PETER V. TYTELL, held at
20
         the offices of Gibson, Dunn & Crutcher LLP,
21
         200 Park Avenue, New York, New York, before
22
         Laurie A. Collins, a Registered Professional
23
         Reporter and Notary Public of the State of New
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         York.
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L 9	AMANDA AYCOCK, ESQ.
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(Mr. Tytell not yet present.)

MR. SOUTHWELL: It's Alex Southwell.

Laurie Collins is here from Veritext. I'm

going to ask that she go on the record and

then let's just go through a few things, and

then we can proceed.

MR. BOLAND: That sounds good.

MR. SOUTHWELL: So I guess just a few things so that it's clear, you know.

Dr. McMenamin is here and available. You sent an e-mail last night at about 8 p.m. that seemed to cancel that deposition, although, frankly, it was never really explicit. I find that often your e-mails don't specifically respond to the issues. And so, you know, you didn't ever explicitly say you did not want to proceed with Dr. McMenamin. He's here, in any event, and Mr. Tytell is also here.

I presume you do not want to proceed with Dr. McMenamin; is that right?

MR. BOLAND: Yes, my understanding was we were going to try and do Mr. Tytell's deposition today because he is traveling after the 13th; right?

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Proceedings

MR. SOUTHWELL: Yeah, but you had asked for half days for both, so theoretically you could have done both. I take it you don't want to proceed with Dr. McMenamin, and that's your right. We will still be billing you for his appearance fee and travel costs.

Now, we did rearrange schedules, and we have Mr. Tytell here. You know, obviously you had -- he had been noticed for Thursday, and you canceled that one midnight the night before, due to the travel difficulties you had. And so we have rearranged things so that he is here.

We made the copies that you have just asked for, but we need to discuss his fee, which we talked about. His fee is \$3400. There is a cancellation fee from his having canceled yesterday. So are you prepared to --how do you want to arrange for the payment of this?

MR. BOLAND: Well, as I said in the e-mail -- by the way, Mr. LaPorte should have received his payment by now. Have you gotten confirmation from him that he received his

Proceedings

check?

4 Thank you

Thank you.

MR. BOLAND: Okay. Good. The day you had sent me an e-mail saying please send it overnight mail, give me a confirmation number, that e-mail didn't get to me before the check went out in regular mail. But he got it, which is the point.

MR. SOUTHWELL: Yes, we did get that.

I propose that the fee that Mr. Tytell indicated was his fee for his deposition, as soon as the deposition is over, I will go and do that one overnight mail, FedEx, and send you the confirmation number so that you'll have it and he'll have it. And then he'll get it by -- well, actually if it's -- he'll get it by Monday, because there's not going to be on Saturday, typically.

The cancellation fee, I don't -- this is the first I'm hearing of a cancellation fee, so I don't know what to tell you about that. I will have to confer with my client and co-counsel.

MR. SOUTHWELL: I mean it's fairly

Proceedings

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typical, if you reserve an expert witness to be available for deposition and they're not deposed, that they charge either the full fee of half fee. His fee is the half fee. would ask that you pay that as well.

Maybe you can confer during the course of the deposition and then you can make -- as I understand it, you're making -- you're representing on the record that you will pay at a minimum his \$3400 fee and that you will put that in a check -- immediately on a check and in a FedEx overnight to Mr. Tytell's direction at the address on his report immediately following this deposition; correct?

MR. BOLAND: Yes, I will do that, and I will even send an e-mail to you so you have the confirmation number that you need as well for the FedEx. That's not a problem.

MR. SOUTHWELL: The cancellation fee is an additional \$1700. I would ask that you consult about that. We would ask that you pay that as well. We won't charge you for the cost of this phone call for the deposition,

issues you can't hear my complete question, please

1	Tytell
2	let me know and we'll figure out that problem and
3	make sure you can hear everything I'm saying.
4	Can you hear me at this point?
5	A. Yes, I can. Thank you.
6	Q. If I need to speak up or I'm speaking
7	too loudly, let me know, since I can't hear what
8	you're hearing on that side, obviously.
9	A. Okay. I'm sure that the technology
10	will be good to us.
11	Q. Let's hope.
12	I wanted to talk about if the court
13	reporter can hand the witness your report,
14	Mr. Tytell, document Number 330, I believe it is.
15	MR. SOUTHWELL: Just a minute. We're
16	getting it out.
17	MR. BOLAND: What was that, Alex?
18	MR. SOUTHWELL: I said just a minute,
19	we're getting it out to hand to the court
20	reporter.
21	(Tytell Exhibit 1, expert report of
22	Tytell, marked for identification.)
23	MR. SOUTHWELL: Mr. Boland, just for
24	the record, this is document 330 in the court
25	file, which is the report of Mr. Tytell.

	Page 9
1	Tytell
2	MR. BOLAND: It's Mr. Tytell's report,
3	Alex?
4	MR. SOUTHWELL: Yes, document 330.
5	MR. BOLAND: Very good. Very good.
6	Q. And if he could just identify that for
7	the record when he has it.
8	A. Yes, I have this document. There's a
9	front page that says Exhibit F.
10	Q. Is that the report that you submitted
11	in support of the defendants' motion to dismiss?
12	A. I'm looking through. I'll be with you
13	just one sec.
14	Q. Very well.
15	(Pause.)
16	A. Okay, Mr. Boland.
17	Q. Yes.
18	A. Just because of the distance here, I
19	can't tell if, you know I want to catch your
2 0	attention there.
21	With respect to the document that I
22	have before me marked Tytell 1, on page 10
23	somewhere below the middle of the page, there's a
2 4	blank space, and the word "redacted" appears
25	there. That was not that's not how it was on

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Tytell

page 10 of the report that I submitted.

Q. To make this easier, Mr. Tytell, I think both defense counsel and I would agree that for some of the expert reports that they provided and some that we had provided, because of court orders, we have gone ahead and redacted portions of those reports.

And I would acknowledge that the report actually filed by you, as my recollection, had portions of it redacted that were not redacted by you. So that's not -- that's not an issue.

Other than those redactions, is there anything else that looks incomplete about the report you have in front of you?

- A. Well, I was going to add that at the top of the various pages of the report and of the attached exhibits, there is a line that says Case 1:10-cv, et cetera, et cetera -- I'm sure you know what that line is -- and the date --
 - O. Yes.
- A. -- and then some pagination. So that was not present on the document that I submitted. I'm sure you're aware of that.
 - Q. Yes.

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Tytell

A. Okay. And then also what I'm looking at is obviously a printout of some document that was, I guess -- this line at the top -- I don't know if that was put on by the attorneys or the courthouse or some other system for the documents.

But the document I'm looking at obviously has had some changes made to it since I submitted my report. And then after those changes were made, this document has also been printed out. So this is not really exactly the thing that I submitted.

- Q. Did you submit your report to the defendants in electronic form? Is that what you're saying?
 - A. Yes.
- Q. And other than those comments you made about the redaction and the printed material across the top of the page, are there any other -- and that the document is printed versus electronic, any other differences between the content of that Tytell Exhibit 1 and your report other than those things?
- A. Without actually doing a side-by-side comparison, I believe that all the words that are

1	Tytell
2	here are words that were in my report, except for
3	the redacted ones, of course, and the heading that
4	we've discussed.
5	Q. Very well.
6	Mr. Tytell, are you a qualified
7	forensic document examiner?
8	A. Yes.
9	MR. SOUTHWELL: Objection to the form.
10	THE WITNESS: I'm sorry.
11	MR. SOUTHWELL: Just wait for my
12	objection.
13	Q. And are you a trained or qualified
14	handwriting examiner?
15	A. I have been so accepted by courts.
16	Q. And about how many times have you
17	let's break it up.
18	How many times have you actually done
19	handwriting analysis, whether or not you actually
20	had to submit it to a court?
21	A. By "handwriting analysis," what do you
22	mean by that term, please?
23	Q. Well, since I'm a layperson, I'll look
24	at it this way: How many times have you been

hired by a client to compare a signature on a

	Page 13
1	Tytell
2	document with known signatures of that person to
3	see if they are consistent with each other?
4	A. Okay. I couldn't count them for you,
5	but certainly many hundreds if not thousands of
6	signatures over the years.
7	Q. And have you been asked to do
8	comparisons of other types of handwriting other
9	than signatures?
10	A. In the past.
11	Q. Yes.
12	A. We're talking about sort of generally
13	my history here, I think?
14	Q. Yes, sir.
15	A. Okay. And the answer would be yes.
16	Q. And about how many years have you been
17	doing those types of analyses, comparing
18	signatures or comparing a handwriting sample with
19	a known handwriting sample, that kind of thing?
20	A. Well, going to court for those purposes
21	is 42 years next month for my first court
22	appearance, and obviously training and some
23	casework prior to that. So a long time.
24	Q. Had you had any professional

relationship with any of the defendants' experts

1	Tytell
2	before they became part of this case on the
3	defendants' side?
4	A. Okay, could you tell me which could
5	you give me a list of defendants' experts so I can
6	check that off?
7	Q. Sure. Let me ask you, have you read
8	other expert reports involved in this case on
9	either side?
L 0	A. Yes, I have.
L1	Q. Which of the defendants' experts
L 2	reports have you read?
L 3	A. Professor Romano and Mr. Lesnevich.
L 4	Q. Have you had conversations with the
L 5	other experts whose reports you have not read?
L 6	A. Which experts would they be, please?
L 7	Q. Gerald LaPorte?
L 8	A. Well, I've had conversations with
L 9	Mr. LaPorte, many of them, not necessarily about
20	this case.
21	Q. Albert Lyter?
22	A. Well, what kind of conversations are
23	you asking about? Hi, how are you, how was the
24	flight?

No, I'm asking if you had conversations

Q.

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1	Tytell
2	with Albert Lyter about his report, since you've
3	indicated that is not one of the ones you've read.
4	A. Oh. No.
5	Q. Have you had conversations with Albert
6	Lyter about your report and the conclusions and
7	results that are in it?
8	A. No.
9	Q. Have you had conversations with any of
10	the other experts from the case about the contents
11	of your report?
12	A. Again, could you be a little more
13	specific, please?
14	Q. Did you discuss with Gerald LaPorte the
15	contents of your report?
16	A. No.
17	Q. Did you discuss it with Frank Romano?
18	A. This would be after I had written the
19	report, I assume, because how could I discuss the
20	contents until the report was finished. Would
21	that be correct?
22	Q. Yes.
23	A. So the answer well, my report was
24	March 25th. I don't think I've had the pleasure

of Professor Romano's company since then. So I

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Tytell

couldn't have discussed it with him.

- Q. And when were you first contacted by anyone on behalf of the defendants to participate as an expert in this case?
- A. That would have been almost two years ago now.
- Q. And when you were contacted -- after you were contacted, how long did it take before you were retained by the defendants?
- A. Well, the formal retention would have come about two-thirds of a year later.
- Q. And what was your understanding at that time as to why you were being retained in this case?
- A. My initial understanding was that I was being retained to look at the typography, if you will, the printed portions of a two-page document headed "work for hire" -- "work for hire," in quotation marks, contract.
- Q. And had you done that kind of analysis of the typography, as you put it, in prior cases?
 - A. Yes.
- Q. Did there come a time, before you did your analysis of the typography in this case, that

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Tytell

- you had a conversation with defendants' counsel?

 I'm not asking about the contents of it. I'm

 asking did you speak with them before you actually

 did your analysis of the contract in this case.
- A. There was an initial phone call to ask if I would be willing to undertake some work on behalf of that client.
- Q. Do you remember, again, not what was said but who the person was you spoke to from the defendants' attorneys during that conversation?
- A. This would be the first conversation that I had or subsequent?
 - Q. The first one.
 - A. A Mr. Orin Snyder, I believe.
- Q. And have you had conversations with any of the other lawyers from Gibson, Dunn, again, without telling me what was said? I just want to know who else you spoke to.
- A. Well, looking at the people in the room, I would say the four people sitting here.
 - Q. Would that include Alex Southwell?
 - A. That would include Alex Southwell.
 - Q. Matthew Benjamin?
 - A. Matthew Benjamin would also be

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1	Tytell
2	included.
3	Q. Amanda Aycock?
4	A. Yes, she would also be included.
5	Q. You said there were four people. Who
6	else was in the room? I can't see, obviously.
7	A. Sripriya Nara
8	MR. SOUTHWELL: Narasimhan.
9	A. Narasimhan. It's easier in Hungarian.
10	Q. At different times since you've been
11	retained in this case, you've had conversations
12	with those individuals from Gibson, Dunn?
13	A. Yes, I have.
14	Q. Do you have a written agreement with
15	the defendants for your work in this case?
16	A. I have submitted to the defendants my
17	standard terms and conditions, as I do with
18	everyone who inquires about retaining me. And
19	generally if I am retained and I assume those
20	standard terms and conditions apply. And I
21	believe there was also a letter from Gibson, Dunn
22	which would I guess be their standard document.
23	Q. Mr. Tytell, do you know
24	A. Excuse me, you're breaking up now. The
25	technology is not being as kind as we had hoped.

part, but I know that he certainly is a qualified

document examiner. I would, you know, say yes.

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Tytell

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- Do you know if he has any Q. qualifications to analyze handwriting similar to the questions I asked you about yourself earlier?
- I know that he has been trained in that field and has been accepted as an expert in courts on numerous occasions.
- Q. Have you ever been on the opposite side in a case with Mr. Lesnevich specifically dealing with an analysis of handwriting?
 - Α. Probably.
- 0. Do you recall what case or cases that might have been?
- Α. I think there was a case maybe 30 years ago that involved a signature.
- Is that all you can remember about 0. that?
- I remember that we looked at different Α. known samples of the person's handwriting.
- 0. I'm assuming a 30-year old case you don't remember a lot of the details about it?
 - Α. That would be correct.
- You're breaking up again, Mr. Boland. I don't mean to interrupt you, but you obviously can't hear what's going on at this end.

1	Tytell
2	have to interject when
3	MR. SOUTHWELL: Mr. Boland, it sounds
4	like it sort of cuts in and out as if you're
5	on a cell phone or a hand some sort of
6	other device. Is that right or
7	MR. BOLAND: Well, I have a headset
8	connected to my phone so I can sort of type
9	and talk at the same time, and that might be
10	causing a problem.
11	MR. SOUTHWELL: Yeah, I don't know if
12	you're moving around at that point and maybe
13	that's causing it to break up. But it sort of
14	comes in and out. So we'll just have to let
15	you know when it occurs.
16	THE WITNESS: It sorts of sounds as if
17	you're gargling while speaking.
18	Q. Well, Mr. Tytell, I don't take it as
19	rude at all if you interrupt me because you can't
20	hear. I want to make sure you hear the question.
21	So that's not a problem at all.
22	A. Okay. Good.
23	Q. Now, can you hear me clearly at this
24	point?

No, it's that jagged kind of

Α.

1	Tytell
2	interruption again. But maybe
3	MR. BOLAND: Alex, can you give me the
4	number to the conference room there? I will
5	switch devices and call right back.
6	(Pause.)
7	Q. Mr. Tytell, did either your assignment
8	or your tasks that you were given in this case
9	change at any point from the time you were
10	retained to when you eventually produced your
11	report?
12	A. I would say so, yes.
13	Q. And can you describe how that change
14	occurred?
15	A. That change occurred about shortly
16	after 9 a.m. on July 14th, because I was there to
17	examine the document, mainly with an eye towards
18	the printing on the document. And when the
19	document showed up, it presented an entire new set
20	of issues that had not been anticipated.
21	Q. And what were those issues? What would
22	you summarize those to be?
23	A. That the well, prior to seeing this
24	document, I had the opportunity to review copies

of a two-page document headed "work for hire"

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Tytell

contract, and these were copies that had been filed with the original papers filed in this matter in I guess mid 2010.

I had also seen copies that were attached to the declarations of Mr. Osborn, Mr. John Paul Osborn, and Dr. Valery Aginsky. And based on the copies I had seen, I had formed an impression of what the document should look like or would look like when I actually saw the original.

And when I saw the original on the morning of July 14th, it did not look like the document that I had anticipated. I had anticipated a document with handwriting and signatures and initials and dates in black ballpoint pen.

That black ballpoint pen part was based not just on reviewing the documents but also on reading the declaration of Dr. Aginsky from I guess it was sometime in mid 2011 that that declaration was dated, but prior to July 14th.

So based on Dr. Aginsky's description of the writing as being black ballpoint ink and based on the images I had seen, I had expected to

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Tytell

see black ballpoint ink. And when the document was presented, it was immediately obvious that the ink was not black.

So that raised a whole new set of issues about whether or not this was actually the same document that had been viewed and scanned by Mr. Osborn and Dr. Aginsky, did this agree with the document -- with the images that had been filed, with the initial paperwork -- "paperwork" I guess is a wrong phrase for filing, but I hope you'll understand what I'm talking about, the moving papers, the first papers in the case from mid 2010.

And that whole issue then opened up as soon as I saw the ink as to what had happened to the document in that -- prior to its showing up in Buffalo on the morning I guess about 9 -- a little bit after 9 a.m. on the morning of July 14th. So that's when things changed for me very much so.

- Q. And what tasks did you then decide you had to perform that were different than before?
- A. Could you repeat that again? I think I lost the second word there after "what."
 - Q. Yeah, what tasks did you then decide

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Tytell

- you needed to perform that you before that didn't think you were going to have to do?
 - A. Okay. I have tasks, T-A-S-K-S, what tasks?
 - Q. Yes.
 - A. Okay. I don't mean to repeat it; I'm just trying to make sure we got -- we understand what's going on here.
 - Okay. What tasks did I then add? I then inquired about getting earlier images of the document for comparison with the actual document that was present. I tried to figure out why the ink looked like this, could it have looked like this previously when the document was scanned for the images that were filed with the moving papers in mid 2010.

And then the additional tasks at that stage -- we're now -- we haven't gotten even till 9:30 in the morning of July 14th in terms of additional tasks -- would be of course the documentation of this very unusual appearance of the ink, to document it.

The scanning of the document that morning was not really an additional task; that

Tytell

was a routine task. But subsequently I understood that documentation of the ink in particular would be useful.

- Q. And what was your opinion of the condition of the document other than the ink?
- A. Well, that would bring us to about -well, almost two hours later, around 11 in the
 morning, when I first examined the document with
 ultraviolet illumination and saw that the paper
 had a very strange reaction under ultraviolet
 illumination; that the front of the page was dark,
 nonfluorescing, absorbing under ultraviolet,
 pretty much uniformly on both pages; and that the
 reverse, the nontext side of the page, was by
 contrast brightly fluorescent, which is a normal
 reaction for most of the paper that you use in
 copy machines and laser printers and so on; but
 that this very unusual front dark reverse brightly
 fluorescing reaction, that sort of added another
 task.

Plus within that overall unusual reaction, on the front of both pages there were little rectangles at the top of each page, two rectangles at the top of each page, which were not

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dark like the rest of the face of the page but were brightly fluorescing as the back of the page; and that also on the reverse of page 1 in the corner -- the corner with -- well, on the front it would be the top left corner. When you turn the 6 7 page over, of course, that becomes the top right That that corner, which was folded over corner. 9 and had a crease that created a triangle there in 10 that corner, that on the reverse of the page that 11 corner was dark, like the front of the page, and 12 not fluorescent.

So those issues all just popped up at that point.

Associated with these light and dark front/back tabs triangle on the back was also an overall I guess ivory- or cream-colored cast to the paper on the front, except for the tabs, as opposed to white on the back, just a contrast in the shade of the page. But that was all coterminous with this very unusual reaction under ultraviolet.

So that observation, those facts, presented another set of issues that had to be documented, further examined, during the course of

1	Tytell
2	the time in Buffalo.
3	Q. And you were present when Mr. Lesnevich
4	arrived on July 15th?
5	A. Present where?
6	Q. At the Buffalo analysis in the offices
7	of Harris Beach.
8	A. Yes, I was there that morning when
9	Mr. Lesnevich was present.
10	Q. Did you observe him scanning the "work
11	for hire" document or otherwise making images of
12	it?
13	A. I know that the document was scanned by
14	Mr. Lesnevich and his associate. I'm not sure
15	which one of them actually was driving the
16	machine, if you will, was operating the scanner.
17	Q. Have you ever seen Mr. Lesnevich's scan
18	of the "work for hire" document that he took on
19	July 15th, 2011?
20	MR. SOUTHWELL: Objection to the form.
21	Do you mean the actual like electronic scan?
22	MR. BOLAND: Yes, I'm asking Mr. Tytell
23	if he's ever seen what we would call the
24	native format electronic image, whatever you
25	want to call it, of the scan that

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Tytell

Mr. Lesnevich took of the "work for hire" document on July 15th.

 A. I don't recall seeing that, no. I may have. I don't know.

Q. Have you reviewed any papers that the plaintiff has filed in this case which included exhibits of your scan on July 14th compared to Lesnevich's scan on July 15th?

A. I can actually hear you very clear; I just don't understand you.

Q. Okay.

Have you reviewed a pleading in this case that the plaintiffs filed which included an exhibit showing your scan of the "work for hire" document on July 14th side by side with Mr. Lesnevich's scan of the same document on July 15th? Have you seen that pleading and that exhibit?

A. Well, when -- I'm sorry, when you say "pleading," I'm looking at my -- what's been marked as Tytell 1 for today, which says -- has a whole cover page that says Exhibit F. I assume that there was an Exhibit A, B, C, D, and E. And other than those five exhibits, there may have

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Tytell

been another string of exhibits beginning with G going to the end of the alphabet and beyond.

So I really don't know -- and then there was I guess it would be called a pleading that was the thing to which all of these exhibits were attached.

So if you mean have I read the lawyers' arguments in the form of the pleading to which my report was attached, then the answer would be no, I haven't read that pleading.

Q. No, my question is have you read a document the plaintiffs have filed which included an exhibit comparing what your scan of the "work for hire" document looked like on July 14th to Lesnevich's scan of the same document a day later.

Have you seen that exhibit where we compare them?

- A. This was filed by whom? The plaintiff or --
- Q. Filed by the plaintiff. Have you seen that exhibit?
- A. Oh, the plaintiff. I'm sorry, back up for a minute. I had defendants and plaintiffs confused. I know that seems weird, but you have

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Tytell

to remember document examiners are not like advocates, such as yourself and the wonderful attorneys sitting here in this room, and that we tend to be advocates for the documents rather than the parties.

So maybe if I could look at the document to which you refer that would make it easier for me to give you a good answer, a correct answer.

- Q. Well, just let me ask it this way: As you sit here right now, do you recall seeing a comparison, a visual comparison, of your scan of the "work for hire" document on July 14th with Mr. Lesnevich's on July 15th?
- A. I -- I don't have anything in front of me. If maybe you could give me or supply Mr. Southwell with a document number, I'm sure that the people at Gibson, Dunn have kept copies of everything you filed. I'm sure that's the kind of thing that lawyers do for each other's paperwork.
- Q. Yeah, that's fine. I'll take your invitation there.
- MR. BOLAND: Alex, if you could have

1	Tytell			
2	someone just print a one-page document. It's			
3	document number 263-2 that was filed in the			
4	case. And I can go on with other questions			
5	while that's happening.			
6	MR. SOUTHWELL: All right. We'll do			
7	that.			
8	MR. BOLAND: Thank you.			
9	Q. Mr. Tytell, did you originally think			
10	when you were hired on this case that you might be			
11	asked to provide handwriting analysis?			
12	A. I didn't know.			
13	Q. When you say "know," do you mean			
14	.4 K-N-O-W?			
15	A. Correct, "know" with a K.			
16	Q. Did you ever mention or discuss with			
17	the defendants' counsel the possibility of			
18	analyzing the handwriting on the "work for hire"			
19	document?			
20	A. We're now still discussing my original			
21	retention in this matter?			
22	Q. No, at any point in this case, have you			
23	discussed with the defendants' lawyers the			
24	possibility of analyzing the handwriting on the			

"work for hire" document?

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- I've made some comments about Α. handwriting.
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that's work product that I shouldn't be asking

about. So let me rephrase the question.

let me back up, because that might be something

- 7
- MR. SOUTHWELL: Thank you. I was about to object. Thank you.

I'm not asking for the content, but

How would you describe what it is you

What were those comments -- well, no,

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MR. BOLAND: Yeah, that's fine.

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just to confirm the last question I asked, is it a

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"yes, sir," that you have had conversations about

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possibly analyzing the handwriting on the "work for hire" document?

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Well, I'm not sure -- what do you mean

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- by "the possibility of analyzing"?
- 18
- 19 do in not this case but in previous cases when you
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- have examined handwriting both signatures or just nonsignature handwriting and compared it to samples from a person and tried to make some sort of conclusion about whether -- who wrote some handwriting on a document? What do you call that?

Is that called handwriting analysis or how would

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you describe it? What's your term?

- A. Well, generally handwriting examination. But no, I understand what you mean by "handwriting analysis." I don't quite get the context of what you're asking about.
- Q. Well, the way I'm looking at it is this: You have years and years, as you indicated, of handwriting examination experience. Did that topic ever come up in -- did you ever suggest to the defendants' attorneys that you might analyze the handwriting on this document, that might be something helpful for them?
- A. Okay, well, so, I want to repeat it to make sure I'm getting this right. So did I ever suggest that, hey, I could also submit or work on the handwriting side of the matter? Is that what you're asking about?
 - Q. Yes.
- A. No, then, I'm not looking for an extra task or an extra area in which to perform.
- Q. Do you know if the defendants' lawyers were aware that you had qualifications to analyze or examine handwriting?
 - A. Well, I did submit my résumé to them.

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- I cannot tell you whether or not they read it; but if they had, I would have hoped they would have garnered that kind of information about my background.
- Q. And when you saw the document on July 14th, you obviously noticed that along with the typography, which you were going to analyze, that the document had handwriting. You saw that?
 - A. Yes, indeed.
- Q. Did you discuss with any of the other experts, the defendants' experts, during that examination over those several days the handwriting on the document?
- A. Other than the ink of the handwriting, the actual letter formations, line quality, et cetera, I don't recall making -- having any conversations on that topic.
- Q. Who did you discuss the letter quality or the line quality and all that that you just mentioned, who did you discuss that with? Which experts?
- A. I think I just said I did not discuss that with defendants' counsel in -- on that -- in July of 2011, July 14 and 15. I'm sorry, see,

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- this is where technology is not serving us well.

 The answer is no, I did not discuss these issues with them at that time.
 - Q. Okay. And did you -- what I'm asking is did you discuss with the other defendants' experts during the time of the examination anything about the handwriting.
 - A. I think the only things that we -basically what we discussed was who gets the piece
 of paper. That was most of the conversations.

 And the issues that were discussed I do not
 believe involved the kinds of topics and
 characteristics that one focuses on in doing the
 kind of handwriting examination that I believe
 you're referring to, topics such as line quality,
 formation, et cetera.
 - So I don't think those topics were included in the conversations that I might have had during that time frame.
 - Q. And did you discuss with any of the defendants' experts whether it would be a good idea or whether it could be helpful to your -- to the analysis of the document to have someone analyze or examine the handwriting?

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- A. Did I discuss that -- again, I want to repeat because of what I heard. Did I discuss that with the other defendants' experts at that time? That's the question I heard; right?
 - Q. Yes.
 - A. Okay. No.
- Q. Did you discuss that with the defendants' experts at any time?
- A. Well -- whether or not it would be a good idea to have somebody look at the handwriting?
 - Q. Yes.
- A. Okay. No, that's I think something that was, as they say, overtaken by events because there was some examination of the handwriting, I believe.
- Q. And who do you believe examined -- did some of the examination of the handwriting?
 - A. Mr. Lesnevich.
- Q. Did that examination include trying to determine if the signature on page 2, which appears to be Mark Zuckerberg, is in fact Mark Zuckerberg? Is that part of the examination you're referring to?

1	Tytell
2	A. That appears on page 2 of which
3	document?
4	Q. The "work for hire" document.
5	A. Which "work for hire" document?
6	Q. The one you examined on July 14th and
7	the days thereafter, the few days in Buffalo.
8	A. I believe that Mr. Lesnevich's
9	examination addresses exactly that issue.
10	Q. Did you examine more than one document
11	that you would call the "work for hire" document?
12	A. Yes.
13	Q. When did you okay. So one of them
14	you examined starting on July 14th; correct?
15	A. Correct.
16	Q. When did you examine a second "work for
17	hire" document?
18	A. Well, this is kind of like the line
19	from scripture: The first shall be last, and the
20	last shall be first. The second document was the
21	first document.
22	Q. Can you explain that? I'm confused by
23	your answer. What do you mean, "the second
24	document was the first"?

I'm sorry, there are two documents

Α.

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Tytell

I've -- two documents that have "work for hire" in quotes and "contract" on the top of the page. One of these I have seen only in electronic form, which is the document or the exhibit, I guess it would have been, that was attached to the moving papers from -- filed by plaintiff -- I guess plaintiff always files the original moving papers -- filed by plaintiff in mid 2010.

And I understand that there's also an electronic scan, two pages, I believe two TIFF, T-I-F, files that are color files that I have been informed were e-mailed by a Mr. Paul Ceglia. I think that's C-E-G-L-I-A -- to Mr. Paul Argentieri, A-R-G-E-N-T-I-E-R-I. I hope that's the correct spelling of his name.

So the document or the images that were e-mailed by Mr. Ceglia to Mr. Argentieri and the copy that was -- or exhibit that was appended to the moving papers, that was the first -- well, the copy appended to the moving papers from mid 2010 was the first copy of the "work for hire" document, the first images, that I examined. And that seems to tie into the color scan from Mr. Ceglia to Mr. Argentieri. So I would consider

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2 that one "work for hire" document.

Then I also examined the document in Buffalo in July of 2011, and I would consider that to be another "work for hire" document.

- Q. All right. So for the ease of us understanding what we're talking about, I'm going to refer to the document that you examined starting July 14th as the paper contract, because that was two pieces of actual physical paper that you analyzed starting July 14th; correct?
 - A. Right.
- Q. And the other two documents you referred to, the attachment to an e-mail regarding Mr. Argentieri and the document that was attached to the complaint --
- A. "Complaint" is the word I was looking for. Thank you.
- Q. Yes, well, let me back up with that question.

The document attached to the complaint, you're not -- I don't think you have any dispute that's a photocopy. No one's arguing that's an original document itself that a party signed. You agree with me on that?

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A. Let's back up again. It's a

photocopy -- well, I don't know if it's a

photocopy. I've only seen it as one electronic

form or another. I don't know if it's actually

been through a photocopy machine.

Sadly or interestingly, the term "photocopy" as become to seem quaint. It's moving up there with "carbon copy." So I know that --

- Q. (Inaudible.)
- A. I'm sorry, please.
- Q. I guess I'll try it again. An actual physical paper document purporting to be an original document, there's only one of those that you examined, and that was on July 14th?
- A. Right, the Buffalo -- the Buffalo "work for hire" contract, the two physical pieces of paper with the faded ink that Mr. Argentieri brought out of a U.S. Postal Service express mail envelope just after 9 in the morning on July 14th. We actually have two physical objects to discuss there. That's great.
- Q. The TIFF images are digital images; correct?
- A. Correct.

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- Q. Have you ever been qualified as an expert in the analysis of digital images?
- Α. I've -- let's see. I have provided expertise based upon examination of digital images.
- Have you ever been qualified to answer Ο. the question about a digital image whether it has been -- the digital image itself has been altered or not in a program like Photoshop or something similar to that?
 - Α. No.
- Q. Do you feel that you are qualified to visually examine a digital image and tell whether it has been altered in a program like Photoshop or something similar?
- Α. Within the limitations that would apply to any field of expertise that I might claim to have, I would go as far as I felt comfortable That would be true of my expertise in going. handwriting that you've referred to in the past or typography. I do not pretend to be omniscient in any field that I am actually knowledgeable in.
- Q. As to the TIFF images that you referred to earlier, in your examination of those, were you

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able to determine if those were original images or copies of otherwise original digital images?

A. Well, I did receive -- actually I think it was probably one of the very first images of any document that I received in relation to this matter. And I asked about the document, and I was informed that I had received the PDF file that had been filed with the complaint -- thank you for that word -- that had been filed with the complaint as it was received by Gibson, Dunn. So I have seen that -- what has been represented to me as being that particular document -- that particular electronic file.

As to the -- now, that PDF file -- A, it's a PDF file; B, it's black and white -- I then saw -- it's black and white what would be called 2 bit, the kind of -- the depth of it. It's just black and just white, not gray, not color.

I then have also received these TIFF files, which I have been informed were provided on discovery by Mr. Argentieri. So I have received what I understand to be -- I have received the files.

And when electronic files are moved

Tytell

from one computer to another, it is considered that you are -- no matter how many times that is copied by moving it from one file to another, that's still the original file, barring some glitch in the electronics, such as happened with your voice earlier today.

So I have these two TIFF files, which I have been informed are duplicate original files of the files provided by Mr. Argentieri to defendants' counsel. Now, what happened prior to Mr. Argentieri turning that file over, I have no way of knowing, and I can only accept the representation that the file provided by Argentieri is the file forwarded to me by Gibson, Dunn.

So to that extent I am looking at what I have been told is an original file, it is in color, 24-bit color, but I don't know if that reputation is accurate. I don't know if what was provided by Mr. Argentieri is indeed what he received.

Q. All right. Let me just ask you a hypothetical about TIFFs as digital images. Do you feel qualified to GIF an opinion if you were

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2 qiven -- I hired you as an expert in a case and I 3 said, Look, Mr. Tytell, here are two TIFF images which purport to be the pages of a document that 4 5 were scanned in and I want you to look at the TIFF images and tell me if these TIFF images are 6 7 original -- the original digital image scans of 8 this document or have they somehow been altered 9 before they were created into the TIFF format that 10 I just gave you; not the document itself but was 11 the digital image of the scan somehow altered in 12 Photoshop to make it look different. 13 Would you be qualified to determine

what that alteration was to the digital image?

I -- based upon my knowledge of how these things work, I would attempt to aid you, to the extent that I could. I might try to look at the readily available properties of the file, creation dates, so on and so forth. I'm not sure that I could actually crack into the metadata -- I know those who can -- on a TIFF file.

I have done exactly what you described on PDF files that were archived for documents scanned and transmitted some years prior to the dispute arising. But you're asking about TIFF

Tytell

files, not PDF files.

 So I have some experience with getting into the metadata of the PDF files. And just a very simple explanation of the readily available data can sometimes provide information that could resolve the kind of issue that you have raised in your hypothetical.

So hypothetically if somebody such as yourself were to approach me on that, I would say I can look at it, but there are certainly plenty of people around who are much more specialized and much more highly qualified than I to perform that kind of an analysis.

- Q. What if I gave you two TIFF images that appear to be, you know, images of some landscape, the Rocky Mountains, for example, and I asked you to tell me if visually you could examine those images and tell me if anything has been altered in that apparent landscape -- rocks moved around, trees added or removed -- do you have any qualifications to do that kind of analysis?
- A. Well, you're using the word "TIFF," which brings us into the twenty-first century and the world of electronics, et cetera, which gives

Tytell

2 you some added clues.

But the kind of problem, the kind of photo manipulation, that you're describing hardly -- is a problem that is hardly new and is hardly something exclusive to TIFFs. This is a class or category of examination that has been performed for many, many years regarding photographs that have been altered and manipulated and photo montage.

Now you're talking about a landscape, a snapshot, and that actually might come into play in some kinds of cases where somebody is presenting -- you know, I couldn't have done the measured in New Jersey. Here, look at me, this is the day I was at, I don't know, someplace in the Rocky Mountains. My Rocky Mountain geography is very limited but -- just -- Vail, is Vail in the Rocky Mountains somewhere? I was skiing in Vail. Here you can see I was on the ski slopes. It just happens somebody is holding up a newspaper next to me giving the date. So I couldn't possibly have been in New Jersey doing the evil deed.

That's the kind of manipulation that was done in the dark room with photographs or with

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2 a scissors and a photocopier. And there are a 3 number of things that you look at to try and find 4 those manipulations. And I have had a certain 5 amount of training in that kind of examination. And nowadays it just involves pixels, and there 6 7 are things with the pixels you can look at in 8 programs like Photoshop that might help you do 9 that.

This is all very interesting as a hypothetical discussion, both in the twenty-first century and probably going back to the nineteenth century, but in this particular case it's not really that relevant to what I did or what use those TIFF files were put to.

- Q. All right. At any point did you request of the defendants' attorneys to get samples of Defendant Zuckerberg's handwriting to do some kind of a comparison to the handwriting on the paper contract you evaluated on July 14th?
 - A. No.
 - Q. And why not?
 - A. Well, several reasons.
- Q. Are you still there, Mr. Tytell?
 - A. Yes, I'm sorry, I'm still here.

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Q. What are those reasons why you did not seek the handwriting samples of Mr. Zuckerberg?

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Α. Well, reason one would be that I was

not tasked -- excuse me one moment. It's a foggy,

I was not tasked with an examination of

Fine, the paper document. And I looked

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humid day in New York, and it's getting to my

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throat.

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handwriting or signatures specifically. Number

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- 10 two, although I was not tasked with this
- 11 examination, after reading the reports of
- 12 Messrs. Blanco and Stewart, I did become
- 13 interested in several aspects of what they had
- 14 discussed and did start taking a look at the
- 15 writing on page 1 and on page 2 of the I guess
- 16 we'll call it the Buffalo document or the paper
- 17 document.
- 18
- 0. Yes.
- 19
- 20 at both the images of the paper document that I
- 21

myself had captured and also at the images of the

paper document that Mr. Osborn and Dr. Aginsky had

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- And in looking at page 2 of the paper document, my curiosity was aroused by the complete

captured.

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lack of mention of the fact that there was a signature on that second page of somebody named Paul Ceglia.

And I had actually seen one other Paul Ceglia signature in Buffalo on July 14th, and that Paul Ceglia signature was on a document -- I believe it's a six-page document with a handwritten notation on page 4 that's initialed and also a signature of Mr. Ceglia or that's supposed to be Mr. Ceglia's signature and a signature of apparently Mr. Zuckerberg also, as well as some dates, that appear on page 6 of that six-page document that is called -- I think we've been calling it the specification document.

Do you understand what I'm talking about, a six-page specification document?

Q. Yes.

A. Okay. I mean, I don't remember what the wording is at the very top of the page. Well, I know it -- actually, that's in my report that's Tytell 1, so let me just get that. A six-page document headed "StreetFax back-end technical specification" dated April 28, 2003. Okay.

So that six-page document bears the

Tytell

exact same date, April 28, 2003, as the "work for hire" document, and both documents have Paul Ceglia signatures.

So I was interested in why nobody -why neither Mr. Stewart nor Mr. Blanco seemed to
notice that there was a Paul Ceglia signature on
page 2. Now, I know Mr. Blanco did collect
samples of the handwriting of Mr. Ceglia. That
was one of his exhibits something like Exhibit 21
or 22, someplace in there. So Mr. Blanco had
collected samples of Mr. Ceglia's writing. But -excuse me -- yeah, Mr. Ceglia's writing.

And unlike the way that samples are often collected by document examiners, Mr. Ceglia, or whoever wrote those samples, did not sign or initial any of the -- I think there were 43 separate pages there. That's just a recollection. Don't hold me to it.

But usually when you collect exemplars from somebody, someplace on those exemplars you're going to get: ask them to please sign it, please initial it. I know that's the standard practice on the forms that many government agencies use, such as the ATF, Alcohol, Tobacco, Firearms agency

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where Mr. Blanco used to work. I know they have that on their forms.

Anyway, although Mr. Blanco did try to determine whether or not Mr. Ceglia had written the interlineation, we've been calling it, the words on page 1, and collected samples for that specific purpose, he didn't collect any samples of Mr. Ceglia's initials to compare to the PC initials on page 1, nor did he apparently collect any signatures of Mr. Ceglia to compare to the signature on page 2, nor any numerals and writing of dates to compare to the 4/28/03 date that appears on page 2 of the "work for hire" document.

So the absence of any pursuit of that issue was kind of interesting. If you accept that Mr. Ceglia just signed the document and of course he signed it, okay, well, then you could also accept that Mr. Ceglia just wrote the interlineation, if he has made that statement.

But if you're going to bother to look at one page to see if Mr. Ceglia actually wrote something, I would suggest it might be consistent, if nothing else, to look at the second page.

So I was just interested. And I looked

1	Tytell
2	at the second page of the "work for hire" paper
3	document from Buffalo as it had been imaged by
4	Dr. Aginsky and Mr. Osborn. And I looked at the
5	images that I had made of the papers that showed
6	up in July.
7	And I compared those just to the other
8	signature of Mr. Ceglia that bore the exact same
9	date. So it would be very contemporaneous. It's
10	the same day. The two documents seem to be linked
11	in terms of the fact that they both show up
12	related to this case and to some work that one
13	person
14	MR. SOUTHWELL: Let's go off the
15	record, please.
16	(Pause - telephone connection lost.)
17	MR. BOLAND: Mr. Tytell was in the
18	midst of describing his analysis of
19	Mr. Ceglia's signature on the "work for hire"
20	paper document with the software specification
21	agreement, is I believe what he was describing
22	when it disconnected.
23	MR. SOUTHWELL: Right. Okay. So
24	please proceed.

Yeah, the technology is not being easy

A.

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2 with us.

So I was very curious about this, and I compared the images from Mr. Osborn, who had also seen the specification document and had also captured images of the writing and initials on page 4 and the signatures on page 6 of the specification document, as well as the writing and signatures on the two pages of the "work for hire" document and also the images of the "work for hire" document captured by Dr. Aginsky as well as the images that I had captured of the "work for hire" document pages 1 and 2 and the specification document, specifically page 6, the signature of Mr. Ceglia.

The signature of Mr. Ceglia on page 6 of the specification document is -- I guess I would compliment Mr. Ceglia on the speed and line quality of his signature: very nice line quality, rapidly, smoothly written, nice pressure variation, long tailing terminal strokes that -- as they leave the page.

Now, I don't want to burden the record unnecessarily, but I hope that you're familiar with the term "line quality," Mr. Boland.

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Q. Yeah.

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A. So you know that line quality is kind of the nonplus ultra of signatures, that this is the thing that you look for, and this is the giveaway, the place where a careful drawn free-hand simulation of a signature will fall down is in the line quality.

This is the problem that trips up people who are doing a very, very careful and precise and accurate tracing of a signature is that they may get all of the forms right but what they're going to have extreme difficulty with is the line quality.

So looking at Mr. Ceglia's signature on page 6 of the specification document, it is clear that Mr. Ceglia has very good line quality, the kind of line quality that is just going to play hob with an attempt at simulation or tracing.

Then looking at the line quality of the Paul Ceglia signature on page 2 of the paper "work for hire" document as imaged by Dr. Aginsky, Mr. Osborn, myself, that line quality is at virtually the opposite end of the scale from the signature of Mr. Ceglia on the sixth page of the

Tytell

specification document.

That line quality is very poor, shaky. And when you get over to the date next to it and, for instance, those very long, straight diagonals or what are supposed to be straight diagonals that separate the month, day, and year of the date, those have very poor line quality compared to the same formations, the separators between the month, day, and year in the date next to Mr. Ceglia's signature on page 6 of the "work for hire" document.

So this is just a contrast night and day, a contrast actually almost as great as the contrast between the fluorescent properties of the front and reverse pages of the "work for hire" document.

You just look at that kind of line quality that is seen on page 2 of the "work for hire" document and you say, unless there's a really good explanation for somebody who shows this fine, smooth, rapid writing with good line quality as another document dated the same day, the specification document, unless there's some explanation for that person suddenly not being

Tytell

able to write properly and yet very writing very precisely, albeit very slowly, I wouldn't even say a snail's pace -- a snail would lap you if you were writing that slowly -- that you have a clear flag, to a document examiner who looks at that, that something is severely wrong here, that the first thing that pops into the mind of somebody who's been examining signatures for a long time is this is a careful simulation or this is a careful tracing.

Now, the way you can usually be able to tell the difference between a simulation and a tracing, where you have such terrible line quality, is if by some happenstance you run across the model or another tracing made from the same model.

As I'm sure you're aware, having been involved in this case for a while and I'm sure you've studied up on the textbooks supplied to you, that people just don't sign their name exactly the same way twice.

We are not printing presses; we are not copy machines; we have variation. And I believe variation was something discussed by either

Tytell

Mr. Blanco or Mr. Stewart. So that is true, we have variation.

And when you find something that -- two signatures that have a similarity that exceeds the normal similarity of somebody signing their name twice that lacks the level of variation that would be expected comparing two naturally and freely written signatures, that you are looking at something that either is the model for that tracing or another tracing made from the same model.

And in comparing the Ceglia signature on page 2 of the paper copy with the Ceglia signature on page 6 -- excuse me, let me start.

When comparing page 2 -- the page 2 signature of Paul Ceglia on the paper copy as imaged by Dr. Aginsky, for instance, with the page 2 Paul Ceglia signature from the scan provided by Mr. Argentieri, the TIFF file, scanned apparently by -- or I've been informed by Mr. Ceglia himself and then sent to Mr. Argentieri as an e-mail attachment, when you compare that Paul Ceglia signature with the Paul Ceglia signature from page 2 of the paper copy of the "work for hire"

Tytell

document, they are almost identical. There is almost no variation.

However, there is variation. There are differences. And the quality, the quantity, the direction in terms of left and right, up and down on the page as well as skew, if you will, the angle relative to 90 degrees or baseline.

So the quality, quantity, size, direction, rotation of the differences are not the kind of differences that one would associate with differences caused by scanning. They are, rather, the kinds of differences in quality and quantity that are typically found when comparing a tracing to its model or to another tracing made from the same model.

Having seen -- well, "clear and convincing" is a legal term, but basically essentially overwhelming evidence that the signature on page 2 of the paper copy -- the Paul Ceglia signature on page 2 of the paper copy is a tracing, it then -- and also the date next to the Paul Ceglia signature, I then also looked at the date next to the Mark Zuckerberg signature on page 2 of the paper copy in its various scanned images

Tytell

and so on and compared that to the date next to Mark Zuckerberg's signature on page 2 of the -- I guess I'll call the mid 2010 images, both the PDF from the complaint and the Ceglia to Argentieri e-mail TIFF files, and found there a number of differences; and similarly with the Zuckerberg signature on page 2, a number of differences qualitatively and quantitatively similar.

Now, Mark Zuckerberg's signature as seen on page 6 of the specification document is --well, it's no offense to Mr. Zuckerberg, but it's not nearly as pretty as Mr. Ceglia's signature.

Mr. Ceglia has a more developed signature style than Mr. Zuckerberg, more skillfully executed, let's say, more quickly executed, apparently.

However, Mr. Zuckerberg's signature on page 6 of the "work for hire" document has better line quality in terms of, let's say, the last stroke at the end of the second name, than does the signature on page 2 of the paper copy of the "work for hire" document.

And since Mr. Ceglia's signature is -- has gross characteristics of a tracing, the idea that Mr. Zuckerberg's signature is a tracing seems

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2 extremely plausible.

I also compared, just because I was in it at that point, the initials and the interlineation printing on page 1 of the paper copy with the interlineation and initials on page 1 of the electronic images from mid 2010 and again found just many, many differences in detail that were not compatible with being caused by a difference in scanning.

So that was actually a handwriting examination, I guess, a handwriting and signature and numeral comparison that I did although I was not actually tasked with doing it.

- Q. How did you come to do that analysis? Was that on your own you decided to embark on that?
- A. Well, it grew out of my reading of Mr. Stewart's declaration and Mr. Blanco's declaration. They had a number of comments concerning some kind of an analysis that Mr. Lesnevich had done.

And I was just sort of interested because they were making -- I mean, this is really thirdhand. This is I'm looking at what Mr. Blanco

Tytell

says about what Mr. Lesnevich says about some handwriting.

Everything in this discussion was all about page 1, and I'm saying, Well, this is all very interesting. There's a critique -- a criticism of Mr. Lesnevich that his illustrations appear to be made from a printout.

And there was discussion of the yellow security dots that appear on the output of color copiers and color printers, and therefore we know that this was done using a printout rather than the original electronic file.

And I said, Well, okay, that's all very nice as a discussion. I'm not going to bother with any color printouts. I have access to the original electronic files. I will use them. And those are what I used.

Also, as I said, everybody was talking about page 1, and I'm wondering what happened to page 2. The only discussions of page 2 are -- or the handwriting on page 2 are Mr. Blanco talking about the Mark Zuckerberg signature, not talking at all about the date next to the Mark Zuckerberg signature, and not even mentioning that Paul

1	Tytell
2	Ceglia was in any way involved with anything on
3	the second page.
4	So my curiosity was piqued, and I
5	looked. And what I found was quite interesting, I
6	felt.
7	Q. Have you provided a report to the
8	defendants regarding those findings?
9	A. No.
10	Q. Have you communicated those findings to
11	them verbally?
12	A. Yes.
13	Q. When was that conversation?
14	A. Well, it would be more than one
15	conversation.
16	Q. When did you first communicate this to
17	them?
18	A. After seeing the well, obviously
19	after reading the early June reports of
20	Messrs. Blanco and Stewart. So I'm trying to
21	remember, I think those came in around the first
22	week of June is that correct, sir? the date
23	on Mr. Blanco's declaration? Is that like
24	around

There were declarations filed June 4th

Q.

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by Mr. Blanco and Mr. Stewart. They had filed previous declarations, but the June 4th one I think is the one where Mr. Blanco -- well, he talked about the handwriting in two different declarations, one of which was June 4th, the most recent.

- A. Okay, so --
- Q. That's the one that --
- A. Yes, sorry?
- Q. Is that the one you read, June 4th, that prompted you to do this analysis?
- A. Yes, Mr. Blanco and Mr. Stewart's declarations, both. I reviewed them -- let's say they're dated June 4th. I don't know when I actually received them, a couple of days later at the most. And then I started reading them.

I'm pretty -- I will acknowledge people have told me that I tend to be a bit wordy, but I was impressed with their declarations and the detail that they went into. I think one was 90 pages and the other was 99.

And so it took me a while to go through them and to consider each of the various issues that they addressed, but, you know, given a number

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- of days, a week or two or something thereafter, when I finally got into this.
- So I can't give you an exact date, but it would be sometime in the weeks between, say, the second week of June and today that I've had these discussions. I don't really recall when the first one was.
- Q. Have you been asked to provide a report on these results?
- A. No, I have not been asked to provide a report.
- Q. And let's talk about what was a pretty detailed answer to my question, which I appreciate, and is it your conclusion, then, from that analysis that the signature on page 2 of the paper contract, the "work for hire" contract that you analyzed, is actually not an original -- I'm talking about Paul Ceglia's signature -- is not an original signature but a tracing of his signature? Is that your position?
- A. Well, when you say "original signature," I'm going to ask you to sort of be a little more specific about that term, because that's kind of a -- you're getting into my

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2 term-of-art department.

- Q. Well, tell me how you would describe a signature that is authentic, that you determined after you looked at it the person actually wrote their signature, good line quality, et cetera, it wasn't a tracing. What would you call it? What is your term?
- A. Okay, thank you. I would describe that as a freely, naturally written signature by the writer of the knowns, in that case the knowns being the Paul Ceglias of the knowns. We're discussing his signature.
- Q. Did you have access to any of Paul Ceglia's knowns other than that signature on the specification agreement?
- A. That was the only original ink signature that I had access to.
- Q. Did you have access to any photocopies of his signature?
 - A. I had --
 - Q. Or copies --
- A. I'm sorry, please.
- Q. I didn't mean to use the word "photocopy" necessarily as a restrictive.

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Did you have access to any other examples of his signature?

A. I guess in the twenty-first century we should just say images, whether they're produced on a copy machine, a scanner, or whatever.

Yes, I did have access to some images of Mr. Ceglia's signatures that appeared on documents that had been filed in this case that were part of the -- I don't know if it's the record, the filings, the documents that have numbers at the top, like Tytell 1 has a document number 330 at the top.

- Q. Is it your opinion, then, to use your terminology, that the signature on -- Paul Ceglia's signature on page 2 of the paper contract that you analyzed July 14th, starting July 14th, is not a freely written, natural signature; it's a tracing? Is that your conclusion?
- A. Well, it's -- that's two different things that you're asking about. Number one, it is not a freely and naturally written signature. That is, I think, self-evident. We've just passed the 4th of July and Declaration of Independence.

I think that is self-evident from the

Tytell

signature itself of -- even from the images that
were scanned or the photographic images taken by
either Mr. Osborn or Dr. Aginsky, or those that
were used, for instance, by Mr. Blanco in his
report.

The line quality is terrible. It's not a freely and naturally written signature of the kind typically -- or of the kind seen in the Paul Ceglia signature on the specification document written the same day. You use that as an example of what Paul Ceglia signs like.

Sorry, that's a badly constructed sentence.

But you know how he signs by looking at his signatures, for instance, the original signature dated the exact same day on page 6 of the specification document, and you see a nice, freely written signature, and the signature on page 2 of the "work for hire" paper document does not conform to that. It is not that kind of a freely written, natural signature.

It is -- now, to the second part of the question, it is a signature on page 2 of the "work for hire" document, that line quality, that slow-

Tytell

drawn appearance, is a hallmark of simulated writing. It is a hallmark of a slow-drawn line quality, typically of carefully copied signatures, be they simulations looking at something next to where you are or tracings.

The reason that it moves to being a tracing is the conformity of that signature, the level of conformity, although it is not total precise conformity, such as one would see in a photocopy transfer or a scanned cut-and-paste transfer.

But the level of conformity with the signature on the images from mid 2010 is such that it would be considered a tracing. As to who traced it, that is something that you usually are unable to tell. I can't tell if it was traced by the man in the moon, John Doe, Paul Ceglia himself, anybody else.

Q. Did you do a similar comparison to Mark Zuckerberg's signature on page 2 of the "work for hire" agreement with Mark Zuckerberg's signature on whatever page it was on the software specification agreement, those two paper documents?

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- A. That would have been page 6. Right next to the Paul Ceglia signature is where the Mark Zuckerberg signature appears. And yes, I did.
 - Q. And what was the result of that analysis?
 - A. I think I had mentioned that earlier is that the Mark Zuckerberg signature on page 6 does not have the same high level of line quality seen in the Paul Ceglia signature on page 6.

I don't want to use "page 6" because there's a newspaper in town here, the New York Post, that has a Page Six with -- I don't know if you've ever seen it, but it's a very specific term of art to that.

So on the sixth page, the last page, the signature page of the specification document, the Mark Zuckerberg signature on that page,
Mr. Zuckerberg just doesn't have the same kind of writing speed and style that you see in the signature on that page of Mr. Ceglia. But the line quality there is noticeably better than the line quality on page 2 of the paper "work for hire" document.

Tytell

And the comparison of the Mark

Zuckerberg signature on page 2 of the paper

document with the Mark Zuckerberg signature on the

page 2 of the images from mid 2010 shows the same

kind of qualitative and quantitative deviations

that are seen in the Paul Ceglia signature

comparison of the paper document to the mid 2010

document and similarly with the date next to the

Mark Zuckerberg signature, the 4.28.03.

Apparently Mr. Zuckerberg uses dots or periods rather than diagonal lines as his date separators. But the comparison of the numerals in that date next to the Zuckerberg signature gives the same result.

All -- each of the four elements that appear on page 2 of the paper "work for hire" document, the Zuckerberg signature, the dates next to the Zuckerberg signature, the Ceglia signature, the date next to the Ceglia signature, each of those four elements compared individually letter by letter, line by line, character by character, as a whole and as a collective whole of those four elements, when doing a comparison of the writing on page 2 of the "work for hire" paper document

1	Tytell
2	with the writing on page 2 of the "work for hire"
3	mid 2010 electronic document, the results are all
4	very consistent, and the results are all
5	indicative of a tracing.
6	Q. So is it the same conclusion regarding
7	Mark Zuckerberg's signature, that his signature on
8	page 2 of the paper document, the "work for hire"
9	contract, is also a tracing, in your opinion?
10	A. Yes. And again, I don't know who
11	traced it. Mr. Zuckerberg could have traced it
12	himself, Mr. Ceglia could have traced it, John Doe
13	could have traced it. Obviously you'd have to
14	have access to that sheet of paper to be able to
15	do it, but that would be pretty much the only
16	limitation.
17	Q. Do you intend on producing a report
18	with these results to provide to the defendant?
19	A. Not at the moment.
20	Q. Did you take notes while you were doing
21	this analysis?

A. I -- not so much notes as working images.

I'm sure you're familiar with the technique employed by Mr. Blanco in one of his

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2 3 exhibits where he took one image and then superimposed it on the other. So he did it.

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sure that I didn't do it exactly the same way he

I'm not sure that -- actually, I am

did in terms of the -- well, not to get lost in

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the weeds of Photoshop technicalities.

But I did a similar kind of exercise of

taking one image and superimposing it on another image of these various elements that I've spoken

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about on both page 2 and page 1. So I have lots of those images, which essentially constitutes notes, as well as some other images that I prepared that are to compare and contrast the actual formations of, let's say, the Ceglia signature on the paper document with the mid 2010 electronic documents -- electronic images, also some comparisons of different line

Mr. Ceglia to compare and contrast the line quality of the Ceglia signature from page -- from

segments and portions of the signatures of

the last page, the signature page, of the

specification with the Ceglia signature on page 2

of the paper "work for hire" document.

Mr. Boland, we have MR. SOUTHWELL:

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1	Tytell
2	this document 262-2 that you asked for. I
3	don't mean to interrupt, but I just wanted to
4	let you know we have that, if you wanted it.
5	MR. BOLAND: Very well. Thank you.
6	We'll get that in a second.
7	Q. Mr. Tytell, in your business do you
8	carry liability insurance for the work that you do
9	like the work you have done in this case?
10	MR. SOUTHWELL: Objection.
11	You can answer.
12	A. Oh, I'm sorry, you objected. I didn't
13	know if I could answer.
14	MR. SOUTHWELL: Generally you can
15	answer unless I direct you not to.
16	THE WITNESS: Okay.
17	No.
18	Q. And are you aware if any of the
19	experts, while the analysis of the two-page
20	document on July 14th was occurring, if any of
21	them touched that document with their bare hands?
22	A. Yes.
23	Q. Do you know who touched it with their
24	bare hands during the examination?
25	A. I did.

	Page 75
1	Tytell
2	Q. Did you also touch it at times with
3	gloves on your hands?
4	A. Yes.
5	Q. And what dictates for you when you
6	would touch a document that you're examining with
7	gloves on versus times that it would be
8	appropriate to touch it with no gloves on?
9	A. Well, really nothing in particular.
10	Most documents that I've examined I haven't worn
11	gloves.
12	Q. Were you aware of the types of analysis
13	that the other experts were going to do on that
14	document after July 4th I'm sorry, July 14th
15	when you first had it? Did you know what was
16	going to happen afterwards as far as the
17	defendants' experts' analysis?
18	A. To which experts are you referring?
19	Q. Any of the other experts after you.
20	Did you talk did you know not talk.
21	Did you know about what their analysis
22	would be for any of the defendants' experts after
23	you?
24	A. Well, after me I knew that an ESDA

analysis was going to be performed, and I

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understood that ink samples would be taken for chemical analysis.

- Q. And what chemicals did you understand they were going to analyze in those ink samples?
- A. I didn't. Well, the chemical constituents of the ink, which would include the dye stuffs, the dyes that were present, and I didn't know if they were going to also examine any of the resins or solvents or other constituents of the inks.
- Q. Do you know what those components or constituents of the inks were? Did you know what those were on July 14th when you started -- at the time when you were handling the document sometimes without gloves?
 - A. I did not --

MR. SOUTHWELL: Objection to the form -- or objection, mischaracterizes, rather.

You can answer.

Q. I can ask to have a clear answer. On July 14th when you first were given the document, did you know what chemical -- all the chemical components of the ink were that the other experts

	Page 77
1	Tytell
2	were going to analyze?
3	A. No.
4	Q. Have you read Mr. LaPorte's report?
5	A. The LaPorte report? No.
6	Q. Yes.
7	A. Yes, no, I have not read the LaPorte
8	report.
9	Q. Okay. And I'm talking specifically
10	about the declaration/report that he filed
11	attached to the motion to dismiss filed by the
12	defendants, that report. Have you read that?
13	A. You're going to have to give me a date
14	because I mean, I totally understand that for
15	you a document a document examiner's report is
16	something that you stick on the back of legal
17	arguments as an exhibit. But for me the brilliant
18	legal arguments by either side are the
19	miscellaneous pieces of paper that are on top of
20	the document examiner's report.
21	So if you could give me a date for the
22	document you're referring to or maybe a number so
23	that somebody could show it to me, then I would be

able to answer. But I just can't understand

the -- I can't register what document you're

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talking about based upon it being attached to some kind of a legal paper.

- Q. Do you know whether the report that I've had you identify as Tytell 1, do you know whether that document was ever attached to anything that was filed in this case?
 - A. Yes.
- Q. What do you understand that it was attached to?
- A. Some kind of a filing. I don't know if it was a motion, a response, a counter response, a reply to a response to a motion to a counter motion. I don't know. These things are like the Russian grandma dolls. They just go in layers like an onion.

So I couldn't tell you what the document was to which this is an Exhibit F. I'm sure that if I got the whole stack of paper and I read the little lines to the right of the heading I would be able to tell you what it was. Whether or not I actually understood what those words meant is something I couldn't promise you at this time.

Q. Have you read any declarations filed by

	Page 79
1	Tytell
2	Gerald LaPorte in this case?
3	A. I don't believe so.
4	Q. Have you been involved in the past with
5	drafting ASTM standards?
6	A. I have.
7	Q. Do you know if there are any ASTM
8	standards which talk about handling documents
9	during examination and whether gloves should be
L 0	worn by the examiner or gloves are optional?
L1	A. Could you refer me to a particular
L 2	standard?
L 3	Q. No, sir, I'm just asking if you know of
L 4	a standard; if you don't, that's fine. I'm just
L 5	asking if you know of a standard that talks about
L 6	the wearing of gloves when you're examining a
L 7	document.
L 8	A. I think that there are some standards
L 9	which say in discussing the handling of a
20	document, is that what you're referring to?
21	Q. I'm asking if you know if there's an
22	ASTM standard regarding whether you should wear
23	gloves or not when you're examining a document.

A. I don't think that -- I cannot recall

That's all, if you know that.

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standards that specifically say, Thou shalt wear gloves. I believe to my recollection now -- and again, I would like to look at the standards before giving you a definite answer.

I think that there's a generalized caution to handle the documents with care and that there may be an e.g., a for instance, a gratuitous example of for instance with gloves.

And I do recall that there was an issue of -- at one time the wording was with cotton gloves or cloth gloves, and then it was changed to not use cloth gloves.

So gloves are not always a good things. Gloves can sometimes did deleterious.

- Q. What kind of negative effects can the wearing of gloves have when handling a document during an examination?
- A. Well, the wearing of cloth gloves, some experimentation has shown, can -- I don't want to use a term like "mess up" but can have a deleterious effect on the document, disturbing the paper surface such that you don't -- that you would not be able to subsequently visualize latent impressions through the use of technology such as

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the ESDA machine -- and the ESDA, capital E, capital S, capital D, capital A, electrostatic static detection apparatus.

That kind of machine is used, as you may be aware, to determine latent visual impression on documents, indented writing. And there had been some research done, paper presented, that suggested that cloth gloves can be harmful and can interfere with subsequent ESDA examinations. So the ASTM recommendation regarding cloth gloves was withdrawn.

- Q. What kind of damage can come to a document handling it during an examination with latex gloves like were used in this case?
- A. I would -- I don't know. Are you asking me to speculate on this topic, because --
- Q. No, only if you know. Are there any -is there any literature or any knowledge or
 experience you have as to the kind of damage that
 can be done to a document using latex gloves like
 were used in this case?
- A. Well, I'm not sure that the same kind of latex gloves were used universally in this case, first of all. So can you be a little more

1	Tytell
2	specific, please?
3	Q. Do any type of latex gloves, wearing
4	them on your hands and handling a document, have
5	you had experience with that has caused damage to
6	a document?
7	A. I have not had experience, but I have
8	heard that some people have said that the kind of
9	powder that is used on certain kinds of latex
10	gloves might be problematic. I have not had
11	personal experience in that area.
12	Q. But during portions of the examination
13	of the document in this case, you did wear latex
14	gloves; correct?
15	A. Correct.
16	Q. Do you feel that you damaged the
17	document while wearing those latex gloves and
18	handling it?
19	A. Could you define "damage," please?
20	Q. Did you contaminate it with some
21	substance that wasn't originally on the document

A. Like latex, for instance?

by handling it with latex gloves?

Q. Any substance at all. You're the expert. I don't know. Is there any substance you

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1	Tytell
2	could have contaminated a document with by
3	handling it with latex gloves?
4	A. I have no idea. You're asking me to
5	speculate here. I would be happy to speculate if
6	that's what you want.
7	Q. No, I'm just saying do you know for a
8	fact whether you did contaminate the document by
9	handling it with latex gloves. Do you know?
10	A. I do not know.
11	Q. What is the purpose why did you
12	choose at portions during this examination to wear
13	latex gloves while handling the document?
14	A. It seemed like a good idea at the time.
15	Q. Why did it seem like a good idea?
16	A. An excess of caution, I think.
17	Q. What were you cautioning against by
18	wearing latex gloves?
19	A. Leaving my fingerprints on the
20	document. That's pretty much the reason people
21	wear latex gloves in examinations.
22	Q. Were you concerned about transferring
23	any contaminants from your fingers, other than a

No, I generally approach not just the

fingerprint, to the document?

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Tytell

court but the documents with clean hands. I -the problem with fingerprints in document
examination is that the ESDA machine develops
fingerprints.

In fact, the original research in the 1970s in England that led Messrs. Foster and Freeman to the discovery, if you will, for ESDA for the development of imprinted writing, the original purpose for that research was to develop fingerprints on paper.

This is in the midst of what is euphemistically referred to as the troubles in northern Ireland which also spilled over considerably into England. And they were -- the home office in England had a research project funded to develop fingerprints on paper, and there were many, many different techniques that were developed during this time period.

Among them was they were trying to develop it with the ESDA machine. And the people who were working on it said, Well, you know, we're actually getting some results on fingerprints, but we keep getting this indented writing that is sort of interfering with the fingerprints.

Tytell

 And when they told that to the right person, who realized -- it wasn't quite like Fleming discovering penicillin, but they realized they had stumbled onto something extremely interesting.

Then they redirected their efforts to the development of latent writing as being potentially more useful than the quality of fingerprints they were getting from that side of the research.

So it has been known virtually from the very beginning that the ESDA technology, the ESDA machine, will develop fingerprints, and you don't want those fingerprints to interfere with your subsequent ESDA examinations.

And that's why document examiners -- I mean, other people in the forensic world have other reasons for doing everything. But that's the reason that we're essentially watching out for fingerprints is the problem of fingerprints on ESDA.

Q. Do you know of any common household products that have chemicals in them that could be transferred to a document? For example, if you

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had lotion on your hands and you touched a document, do you know if that can transfer contaminants to the document?

- A. What kind of lotion are you referring to as the household product?
- Q. Any kind of hand lotion. As a matter of your years and years of experience handling documents, have you ever come across a scenario where someone has something on their hand -- lotion or shampoo remnants or whatever -- and they handle a document like that and transfer some of that material to the document? Can that happen?
- A. Well, I do recall a case that was shown to me as a "hey, look at this, this is so cool kind" of case at the Scotland Yard lab back I guess it would be in the 1980s, in the early days of laser work with fingerprints, that they had found that a particular kind of hand cleaner used by car mechanics left a residue on the fingers that could be transferred to other things like steering wheels, guns, paper as well, and that this particular mechanic's hand cleaner did have a strong fluorescence when illuminated with a particular wavelength from a -- I'm trying to

	Page 87
1	Tytell
2	remember if it was a copper vapor laser or a
3	frequency double Nd: YAG laser, anyway, the kind
4	of lasers they were using back then. It worked
5	out that this worked very well. So that would be
6	one kind of an instance.
7	(Time noted: 1:00 p.m.)
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AFTERNOON SESSION

(Time noted: 1:32 p.m.)

MR. SOUTHWELL: I wanted just to make clear you've gone about two hours, and you had asked for and were given the rate for a half day, which is three and a half hours. So just to keep that in mind.

MR. BOLAND: Yes, I will.

PETER V. TYTELL,

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

- EXAMINATION CONTINUED BY
- 15 MR. BOLAND:
 - Q. Mr. Tytell, can you hear me okay?
 - A. Yes, at the moment the technology is being good to us.
 - Q. Okay. Good.
 - I wanted to go back just a bit about your comment about you come to the court the same way you handle documents, with clean hands. Do you remember that?
- A. Yes. Excuse me, wait one moment,

 please. I'm not sure that is what I said exactly.

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- Q. Well, let me qualify it, then. It's true that while you were handling the document in this case starting July 14th and for the several days that you were examining it you washed your hands regularly to try and be cautious about contaminating the document?
- A. I wash my hands regularly whether or not I'm examining documents.
- Q. But I'm focused on July 14th and the days while you handled the document. You washed your hands during that time regularly?
- A. I washed my hands when they were -- if they were dirty or if I had been to the lavatory.
 - Q. And what kind of soap did you use?
 - A. The soap that was provided there.
- Q. And did you wash your hands at the hotel in the morning before you came over to handle the document, I assume?
 - A. Right.
 - Q. What kind of soap did you use there?
 - A. Bar soap.
- Q. Do you know what the ingredients were, like specifically the chemical ingredients of the soap at the hotel?

1	Tytell
2	A. No.
3	Q. Do you know what the ingredients were
4	of the soap that was provided in the lavatory at
5	the law firm where you were examining the
6	document?
7	A. No.
8	Q. Are you aware of whether either one of
9	those soaps contained a chemical called
L O	phenoxyethanol?
L1	MR. SOUTHWELL: Objection. He just
L 2	said he doesn't know the ingredients.
L 3	Q. Do you know what phenoxyethanol is,
L 4	sir?
L 5	A. I've heard the term before.
L 6	Q. What do you understand it to be?
L 7	A. A solvent.
L 8	Q. Do you know if that solvent is found in
L 9	soaps?
20	A. No, I don't.
21	Q. Do you know any other do you know
22	where that solvent is found in products that are
23	available to consumers?
2 4	A. It is my understanding that it is found
25	in certain ballpoint pen inks.

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- Q. Other than inks do you know of any other products that contain that component?
 - A. I do not know of any others, but from your questioning I understand that you might think there are.
 - Q. Well, it's not about what I think. I'm just wondering what you knew.
 - A. No, I'm only familiar with that chemical based upon my understanding that it is used in certain inks.
 - Q. When we talked earlier, you mentioned one of your concerns that causes you to be cautious when handling documents is to try and avoid putting a fingerprint on a document. Do you recall that?
 - A. Yes, because of the effect that fingerprints can have on ESDA work.
 - Q. And it's true, sir, that by putting a fingerprint on a document that happens by causing oils from the skin, in this case it would be your skin if you had accidentally done it -- I'm not saying you did or didn't -- but oils from the skin to be transferred to the document and that makes the imprint of the fingerprint; right?

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- Α. I am aware that that is one way that fingerprints can occur.
 - What are other ways they can occur? 0.
- Well, I guess you're limiting it to Α. documents; right?
- 0. Yes, what are other ways fingerprints can appear on documents besides transferring the oil from someone's fingertips to the document?
- I was thinking about what they're called where a fingerprint is left in a soft substance such as soft wax or clay. They're called plastic fingerprints sometimes. I didn't realize you were limiting it to only documents.
- You earlier talked about a tracing as a 0. means by which the signatures for both Paul Ceglia and Mark Zuckerberg now appear on the second page of the "work for hire" document. Do you recall that testimony?
- I recall discussing tracings and the reasons to understand that this document has all the indicia of having been a tracing, yes.
- Is it your conclusion from your 0. analysis that those two signatures on page 2 of the paper document, the "work for hire" document,

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were created by tracing?

- A. Everything I've seen to date points in that direction. I haven't seen anything contrary to that, but I would be interested in some further inquiry to determine whether or not that would be a final definite determination.
- Q. And how is a tracing done, in your experience?
- A. Well, there are a number of different ways that have been discussed in the literature for doing tracings. Would you like a catalog of those?
- Q. Well, first, how many different ways are there to make a tracing of a signature?
- A. I would suggest that's probably almost infinite.
- Q. Well, would one of those be someone putting the signature of the writing they want to trace next to a blank piece of paper and then just trying to sort of mimic what they're seeing on the other piece of paper on this new blank piece of paper? Is that considered a tracing?
- A. No. That would be considered a drawn simulation or a copied simulation. It's a subset

Tytell

or subcategory of free-hand simulations where -another one would be if I just remembered I've
seen a signature, I'll remember what it looks
like, I'm going to try and imitate it from memory.

I've seen a signature, it's sitting

I've seen a signature, it's sitting right here next to me, I'm going to copy it looking back and forth from the model signature that I'm copying to the page where I'm writing what I see on the signature.

There may be elements of practice involved in this kind of simulation, you know, sit and practice it for three weeks, see how good you get at it.

These are all different kinds of simulations, but that would be distinct methodologically from a tracing or what is called a tracing.

Q. Well, I'm a layperson, so tell me if this definition of tracing is what you're talking about, and that is someone having the signature they want to trace on a piece of paper and then laying the other piece of paper blank on top of that and trying to look through the top piece of paper to the one underneath and actually trace out

1	Tytell
2	what they're seeing on the underneath page.
3	Is that what you mean by "tracing"
4	generally?
5	A. Generally, yes, that is one form of
6	tracing, one of many.
7	Q. Are there any forms of tracing that do
8	not involve one piece of paper on top of the
9	other, sort of like what I described?
10	A. Yes.
11	Q. What form of tracing took place in this
12	case? What's your opinion there?
13	A. I don't know which of the many
14	possibilities you described just using the
15	particular methodology that you mentioned
16	previously, the model signature is it okay to
17	use this term of art, the "the model signature,"
18	the page that has the signature that you want to
19	copy? Okay? Can you I use that so you'll
20	understand what I mean?
21	Q. Yes.
22	A. You said you have a piece of paper with
23	a signature on it. Let's just call that the model
24	signature. That, of course, could be a real

signature, an ink signature, or it could be a

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photocopy or anything else. But it's on a physical piece of paper.

So you say there's only one piece of paper on top of the model signature piece of paper. You can have two pieces of paper on top of the model signature piece of paper. You're saying you're looking through the top piece of paper, the one you're actually writing on in creating the tracing. It's not all that easy.

It's much easier if you have a light source behind your model signature so that it can -- it can help you see through that. And that light source could be a light box or that light source could be the window.

Actually you can see that in a movie called the Apprenticeship of Duddy Kravitz. If you ever happen to see that movie, there's a scene there where he traces a signature holding the model up to the window and putting the -- I think it's a check endorsement over it.

So that's another way to do it, to have a light source from behind.

Nowadays you could probably have an image of a signature on a computer screen and

Tytell

2 trace from that. And that's still, you know, one 3 page on top of another.

- Q. What is your conclusion about how the tracing occurred in this case?
 - A. Carefully.
 - Q. I mean, which one of those methods?
- A. I have not made a determination about that. I am just of the opinion it's a careful tracing. There are also -- there's another method where you can project the signature from above onto a piece of paper, and then it doesn't matter what's underneath the page where you're tracing the signature because the signature is projected from above. And there were a number of different devices that can be used for that.
- Q. Can you identify for me the model signature in this case that you believe was used to complete the tracings of Paul Ceglia's signature specifically? Let's just go on that one.
- A. Well, as I said before the break, the quality and quantity of the agreements and the quality and the quantity of the differences point to the signature of Paul Ceglia on page 2 of the

Tytell

mid 2010 images of the "work for hire" document, such as the copy attached to the complaint as being either the model for the signature on page 2 of the paper "work for hire" document or another tracing made from the same model.

And that document does exhibit, even from the copy we see, some better line quality features than are apparent in the Paul Ceglia signature on page 2 of the paper document.

- Q. The document from which -- the model signature from which the tracing was made of Paul Ceglia's signature that now appears on the "work for hire" agreement, according to you, is the page 2 of the document that was attached to the complaint in this case, or the amended complaint?
- A. Page 2 -- well, the image, the copy that was there, could have been used, a printout of the TIFF file sent by Ceglia to Argentieri, whatever document it was that was scanned to create that TIFF file or whatever document was copied or printed out to create the attachment to the complaint.

You know, there's a plethora of possibilities all subsumed in this idea of a mid

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- 2 2010 document. And as I said, more than once, I'm

 afraid -- I am getting a bit repetitious here -
 as I said previously, that signature on the mid

 2010 document or copies thereof would be a model

 signature or another tracing or copy made from the

 same model.
 - Q. Well, where's the model -- if that is a tracing made from another model, where is that model for that tracing of the 2010 -- mid 2010 one that you're talking about?
 - A. I don't know. It could be on the document that I've seen which people call the StreetFax contract. There's another --
 - Q. I'm sorry, go ahead.
 - A. No, I didn't mean to interrupt you.
 - Q. Did you compare the second page of the so-called StreetFax contract with any other second pages of the "work for hire" contract either in paper or a digital image of it?
 - A. Yes.
 - Q. And what was the result of that comparison?
- A. It agrees with the second page of the mid 2010 TIFF files, et cetera, et cetera. I

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mean, we have to get some kind of I guess a shortcut phrase for all of that stuff from the attachment to the complaint and the TIFF file sent by Mr. Ceglia to Mr. Argentieri. So if you understand when I say the mid 2010 images, that's what I'm talking about, if that's okay with you.

- Q. Yes.
- A. Okay. Good. All right. Page 2 -- yes, I'm sorry?
- Q. Let me ask some specifics. Does page 2 of the StreetFax contract, based on your analysis, make match -- not match. Is it the same as page 2 of Mr. Osborn's scan that you reviewed?

MR. SOUTHWELL: Objection. Are you asking about the signature still or are you asking a broader question? I'm not sure I understand the question.

- Q. I'm just asking the signature on page 2 of the so-called StreetFax contract of Paul Ceglia, how does that compare to Paul Ceglia's signature as it appears on page 2 of Mr. Osborn's scan of the "work for hire" document.
- A. It differs -- okay, page 2 of the tracks differs from page 2 of the Osborn scan of

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- the paper document qualitatively and quantitatively the same way, to the extent it's possible to see, as the page 2 Paul Ceglia signature from the mid 2010 images differs from the Ceglia signature on the page 2 of the Osborn scans.
- Q. I'm asking the same question about Mr. Zuckerberg's signature on the "work for hire" paper contract that you started analyzing July 14th, what -- is it the same set of documents that you believe are the potential model signatures from which that tracing of Mr. Zuckerberg's signature was created?
 - A. I'm sorry, you lost me here.
- Q. Mr. Zuckerberg's signature on page 2 of the "work for hire" agreement that you analyzed on July 14th, starting on July 14th, you testified that you believe that's also a tracing, not his original signature, or his free-hand natural signature; right?
- A. That's what all of the indicia point to, yes.
- Q. And what was the model signature used to create the tracing of Mr. Zuckerberg's

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- signature on that two-page paper document you analyzed starting July 14th?
- A. Again, all of the features that I've been able to see so far point towards the Mark Zuckerberg signature on page 2 of the mid 2010 images as being the model for that signature or another tracing from a common model.
- Q. In your opinion was the StreetFax document legible enough to make a scientific conclusion about the handwriting?
- A. To the extent that it was possible to see what could be seen, it did agree very closely with the features that I have outlined here.
- Q. Do you know if there is any other expert for the defendants that have analyzed any handwriting on the "work for hire" agreement in this case?
 - A. Yes.
 - Q. And who else do you know has done that?
- A. I don't know about the "else" part, since I'm not sure that I've actually done it to a completion point and I don't believe I've done it because I was asked to do it. But the -- I believe that Mr. Lesnevich has looked at the

	Page 103
1	Tytell
2	handwriting issues regarding the "work for hire"
3	contract.
4	Q. Do you know if he's analyzed the
5	signature of Paul Ceglia on that contract?
6	A. I don't know what he's done regarding
7	page 2 of the document. I'm aware of what he has
8	done regarding page 1.
9	Q. Other than Mr. Lesnevich, do you know
10	of any other defendants' expert who has analyzed
11	the handwriting on either page 1 or page 2 of the
12	"work for hire" agreement?
13	A. Could you be a little more specific
14	about who we're including as defendants' experts.
15	Q. Gerald LaPorte?
16	A. Okay. And we're talking
17	Q. Has he done any analysis of the
18	handwriting on either of the pages of the
19	document, as you know?
20	A. Not that I'm aware of.
21	Q. Has Albert Lyter done that, if you
22	know?
23	A. Not that I'm aware of.

Q. Has Frank Romano done that, if you

know?

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- Not that I'm aware of. Α.
- Do you know all of the experts that the 0. defendants have hired to analyze the document in this case?
 - I don't know if I know. Α.
- Q. Can you name all the ones that you're aware of the defendants have hired to analyze any part of document in this case?
- Α. Well, you mentioned several: Professor Romano, Mr. LaPorte, Mr. Lesnevich, Dr. Lyter. I became aware, because I ran into him today, of Dr. McMenamin. Let's see. LaPorte and Lyter and Lesnevich. That's the Ls. McMenamin, Romano.

And I'm sure that there are a host of other experts on other subjects related in some way, shape, or form to this document, but I don't know of them -- I don't know, you know, the names of the people specifically who would be involved.

- After you were retained, did you Q. suggest to the defendants to hire any of the experts that are currently working for them that you just listed?
- Let's see. Let me just run down the Α. inventory here. Lesnevich, Lyter, LaPorte. I may

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- have given them a list of all of the people I know who do ink work in the U.S. and Canada. I'm not sure if that's a recommendation. It's a fairly small number. So I would have mentioned to them. Aginsky, Lyter, LaPorte, et cetera.
- So, I mean, that's not really a recommendation; that's a listing of everybody.
- I may have also put them in contact or given them the contact information for Dr. McMenamin, but I don't know whether or not I did.
- Q. When the July 14th analysis began, was there any one of you experts who was, for lack of a better word, sort of in charge of how the examination would proceed?
- A. No, I don't think there was a chain of command situation there.
- Q. I asked you before about handling the document without gloves. Other than yourself, did you notice any other experts handling the document without gloves on? And if you could list them, please.
- A. Mr. Lesnevich and not -- that's the only one who I actually saw handling the document.

	Page 106
1	Tytell
2	Q. Do you know if he transferred any
3	contaminants from his hands to the document when
4	he touched it?
5	A. No.
6	Q. Is it your opinion that the document
7	you analyzed starting July 14th in Buffalo is the
8	same document that Mr. Aginsky scanned and that
9	you saw a scan of that document?
10	A. I believe that's so. That's my opinion
11	as of the material that I've looked at to date,
12	that it was the same document, however, in a
13	radically different condition.
14	Q. If you could take a look at the exhibit
15	that the Gibson, Dunn's folks were so nice to
16	print out for me, document 240-1. If we could
17	mark that Tytell 2.
18	MR. SOUTHWELL: You want just 240-1?
19	MR. BOLAND: 240-1 should be a two-page
20	document, is it not?
21	MR. SOUTHWELL: Okay, yes.
22	MR. BOLAND: I'm sorry, a three-page
23	MR. SOUTHWELL: Yeah, it's three pages

have a copy of all of 240 that we have

to Exhibit A and then two images of scans. I

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printed, but if you want me to separate it out, I can do that.

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MR. BOLAND: Yes, I just wanted 240-1.

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That was it.

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(Tytell Exhibit 2, document labeled "Exhibit A", marked for identification.)

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Q. Mr. Tytell, if you could identify that document for the record, please.

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A. I'm looking at a document marked at the top 240-1. The first page says page 1 of 3. It is a three-page document, and the first page has "Exhibit A" printed on it, marked Tytell 2. And then the next page is some kind of an image of the "work for hire" contract marked page 2 of 3 with

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the faded ink on the interlineation, et cetera.

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And then the last page, the third page of this

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240-1, Tytell 2, headed page 3 of 3, is some kind

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of an image, apparently, of page 2 with the faded

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ink of the signatures -- of both signatures and

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Q. And is it correct, sir, that these are printouts of two scans -- two scans that you took of page 1 and page 2 of the "work for hire" paper

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both dates.

contract?

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- A. I believe that's incorrect, but I don't know.
- Q. Let's look at the other exhibit that you -- the other item there, which is -- I believe it's document 238-2.
- A. Let's start again. 2 -- well, I have in front of me two exhibits, Tytell 1 and Tytell 2; right?
 - Q. Yes. If you could --
- A. Tytell 2 is a document 240-1. And you're asking me about another document?
- Q. Yeah, there should be one other exhibit, if they can hand it to you, which is 232-2, which was printed by Gibson, Dunn for me.
 - A. I'm sorry, I hadn't seen that yet so...

 MR. SOUTHWELL: Hold on.

(Tytell Exhibit 3, document labeled "Exhibit B", marked for identification.)

- Q. If you could just describe that document for the record, Mr. Tytell.
- A. Okay. This is marked Exhibit B, and it's marked -- it's apparently five pages. Page 1 of 5 says Exhibit B, and page 2 of 5 is some kind of image of the "work for hire" contract page 1

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with the faded ink of the interlineation. Page 3 of 5 appears to be the reverse of page 1 of the paper "work for hire" document, and there does seem to be -- yeah, you can see in the upper right the darker nature of the corner there.

Page 4 of 5 appears to be an image of the front of page 2 of the paper "work for hire" document with the brownish, off-color, whatever, ink of the signatures of Mr. Ceglia and Zuckerberg and the dates next to them faded out ink. And then page 5 of 5 appears to be the reverse of that page.

So that's what I have here as Tytell 3.

- Q. Do you recognize Tytell 3 as a printout of the scan of the "work for hire" document that you created when you first received it on July 14th --
 - MR. SOUTHWELL: Objection.
 - Q. -- 2011?
 - MR. SOUTHWELL: Objection. Calls for speculation. I'm not sure how you can expect him to identify this.
- Q. Do you recognize those as your scans of that document; "yes" or "no."

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Tytell

- A. Well, first of all, what I'm looking at are not scans.
 - Q. Printouts of your scans of the documents. Do you recognize them as printouts of your scans?
 - A. Well, my scans did not have this heading at the top, Case 1:10, et cetera, et cetera, page 2 of 5, page 3 of 5. So that was not part of my scan.
 - Q. Fair enough.

Anything else on there that wouldn't have been part of your scan?

- A. I have no idea whether there are additions or subtractions relative to what I had scanned, if these are indeed documents that in some way are traced back -- or traceable back to the scans that I made at -- on one of the several occasions when I did scan page 1 and 2 of the "work for hire" document. It was scanned several times during that day.
- Q. Did you provide copies of the electronic files of those scans to the defendants' attorneys?
 - A. I provided the copies of the I guess

	Page III
1	Tytell
2	what you were calling them before the raw files,
3	the native format files, is that what
4	Q. Yes, electronic files of those scans,
5	did you provide those?
6	A. Right, the actual I'm sorry, I don't
7	want to talk over you.
8	MR. SOUTHWELL: I want to clarify what
9	you're referring to as "those scans," and I
10	don't know if that's clear.
11	MR. BOLAND: I'll be clearer.
12	Q. The very when the document was first
13	taken out of the envelope and placed on the table
14	on July 14th, were you the first person to scan
15	that two-page "work for hire" document that
16	morning?
17	A. Yes.
18	Q. My questions now are referring to the
19	electronic file that would have been created by
20	those scans that we just talked about right just
21	now in that previous question.
22	Did you give copies of the electronic
23	file of those scans to the defendants' attorneys?

Do you know if the defendants'

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Q.

Yes.

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- attorneys printed those scans as an exhibit to anything they have filed in this case, if you know?
- 5 A. I don't know, but -- well, I don't know.
 - Q. Looking at Tytell 3 as it's printed out in front of you, can you look at the interlineation that appears ton page 1 of that document.
 - A. Yes.
 - Q. And do you see the word, although faded, "May," as in the month of May, that is handwritten in that interlineation?
 - A. Well, when you said page 1, page 1 of 5 is just the words "Exhibit B." I assume you're referring to page 2 of 5 of Tytell 3, which is some kind of an image of the front of page 1 of the "work for hire" contract?
 - Q. Yes, page 1 of the "work for hire" contract, which is part of this overall exhibit you have.
 - A. Right, which is --
- Q. If you could look at page 1 of the contract itself.

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- A. Which is mark as page 2 of 5 in the header. Okay.
 - Q. Yeah, I understand that. But you're on page 1 of the actual contract; right?
 - A. Well, I'm not on page 1 of the actual contract; I'm on page 2 of the exhibit, which is a picture of something, or an image of something.
 - Q. Yes. And do you see the interlineation that is in that -- on that page of that document?
 - A. Yes, sir.
 - Q. And do you see specifically the handwritten word "May," as in the month of May, that's in that interlineation?
 - A. Yes.
 - Q. Now, can you refer to Tytell 2, which is also, I think you would agree, appears to contain within it pages of a scan of page 1 of the "work for hire" contract?
 - A. Yes.
 - Q. Can you look at the interlineation on that Tytell 2 and the word "May" as in the month of May in that interlineation? Do you see that, sir?
- 25 A. I do.

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- Q. How do those words, the month of May,

 compare as far as the fadedness of their

 appearance in the exhibits you have in front of

 you?
 - A. Well, this is comparing apples with pineapples because --
 - Q. How so?
 - A. Well, first of all, the proper comparison would be of -- if you wanted to do such a thing, first of all, I'm looking at what are apparently reduced-size images. These are not enlargements by any means.

These actually seem to have reduced an 8.5 by 11 page to something on the order of 8 by 10 or maybe even a little smaller. I don't have a ruler on me. So that makes it a little tough to compare a letter like the letter M in "May," that I do not know the source of either of these images.

But unless they were taken on the scanner with the same settings, albeit at two different time points, then I don't think it would be a useful exercise to compare them for the level of detail that you seem to be requesting.

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2 There are two different scans of the page 1 of the "work for hire" contract taken on 3 the same scanner with the same computer at the 5 same settings on the morning of July 14th and on the afternoon of July 14th. Those two scans would 6 be comparable from like -- I remember 9:18 is a 7 8 number that's in my report and a second scan 9 around 1 p.m. Those would be comparable.

I don't think this exercise is really a valid one.

- Q. I want to go over that so I clearly understand your answer. Is it your opinion that to compare two scans of what purport to be the same document it's important to know the model of scanner that both scans were created from?
 - A. No.
- Q. It's not? It won't make a difference in the output of that scanning operation if it's a different type of scanner that scans the document?
 - A. Oh, it can. It certainly can.
 - Q. And how --
- A. But, you see, that's not -- I'm sorry,
 Mr. Boland, but that's not what you were asking me
 to do. You were not asking me to compare two

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scans to I believe you're calling them native files. You're not asking me to do that. That would be an entirely different exercise.

You're asking me to compare a printout -- and I don't know if these were printed out on the same printer or not. I don't know what the settings might have been at one printing or another. I'm looking at two printouts.

Working backwards towards the underlying native format files that you had referred to, I don't know if the thing that was printed out is a PDF file that was processed by a court or other computer in Buffalo that was processing another PDF file that was submitted to that court or that court computer by some attorney, some law firm's computer, and that that PDF file in turn had been created from a PDF file that I might have submitted or somebody else might have submitted a PDF file which would have been based somewhere on another file going backwards to at some point the file that you referred to as the native format file.

So just comparing these two printouts, these two pieces of paper, and a very small,

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reduced detail on those printouts, not even same size as life-size, whatever that might have been, it's just not a valid exercise.

But I'm very happy to engage in a completely invalid exercise if that's what you want. Well, I can't say I'm really happy to do it, but I'm willing to.

- Q. So would you say it's an unfair question, then, to ask you to compare a printout to an electronic scan of a document?
 - A. Not necessarily.
- Q. But could it be? Would there be situations where that would not be an appropriate comparison?
- A. We live in such a wonderfully huge and infinite universe that there are situations where virtually anything is appropriate and virtually anything is inappropriate.
- Q. So are you comfortable -- have you ever reached a scientific conclusion in one of your reports by comparing a document that was printed versus the claim that that same document you're looking at in electronic format on a computer screen? Have you ever compared those two to try

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to make a determination about a document?

- A. I think I've gotten lost here. I'm sorry. Could you try that again, please? I apologize.
- Q. Let me break it down, because you went through quite a list, and I want to talk about that.

When comparing -- you called it apples to pineapples or some such thing. When comparing the two exhibits you have in front of you, Tytell 2 and Tytell 3, you pointed out a bunch of considerations that could result in differences of what you're seeing from front of you right now there on the table; correct?

- A. Yes.
- Q. Do those differences make it unfair for me to ask you to compare the word "May" in those two documents and how vibrant the ink appears? Is that still -- can you still come to a scientifically valid conclusion regarding that comparison or not?
- A. Well, I'm not sure about the fairness of it. And certainly I can look at them, although they are reduced in size and anything that small

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is the kind of thing that I would usually want to look at with magnification, just because that's my habit.

You can compare any two objects, and you can compare apples and pineapples. You can compare apples and oranges. And there are many points of similarity and many points of difference. Apples and pineapples both have juice.

But the comparison that you're asking for -- and I can do it for you, if you wish, but I just don't think that it's a meaningful comparison in terms of getting to the basic issue of whether or not the ink on the paper "work for hire" document was faded out to a very light brown or tan at the moment it was produced on the morning of July 14th.

- Q. And when you say "faded," compared to what was that ink faded?
- A. Compared to the image that had been -the images that had been captured in January by
 plaintiff's experts.
- Q. So you compared those electronic scanned images of that "work for hire" document to

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2 the actual document on July 14th and concluded 3 that the ink had faded; is that correct?

- A. I compared some of the images that had been captured in January to the document on July 14th. I compared the images that were attached to the -- I believe they were June 16th or June 17th, 2011, declarations by plaintiff's experts.
- Q. Do you feel that's a scientifically valid comparison?
- A. Yes. For the purpose that was involved there, yes.
- Q. And can you compare Tytell 2 and Tytell 3 that you have in front of you and the letter M in the word "May" and how does -- do they look -- do the ink in those two letters M in those two exhibits you have in front of you seem like one is more faded than the other?
- A. I can do that, but this is not in any way a parallel kind of comparison. I believe I'm sitting in a room that you have sat in previously with a very beautiful view of the skyline of New York, and you're asking for a comparison at the distance of, let's say, the length of Manhattan island from midtown to the southern tip, which is

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maybe 5 miles, of a building -- one building is, let's say, 85 stories and the other building is 86 stories. And you're asking me to compare a very subtle difference in a reduced image far away, when you're asking me to compare these -- let me just finish, if I might -- of Tytell 2 and 3.

However, the kind of difference that was apparent on July 14th would be the difference between the Empire State Building and a one-story taxpayer. The differences are order of magnitude separated. It's the difference between black, dark ink and black as the toner on the images and something that is faded to the point of almost not being there.

And now you would suggest that that kind of a comparison, such as -- which is the comparison that took place on July 14th, is in some way analogous to a comparison of dark-medium to medium-medium brown or tan, as these two -- whatever is on these two pages. And it's just -- the two kinds of comparisons are not comparable.

But again, if you'd like me to do it, I'd be happy to do it.

Q. The two exhibits in front of you, does

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- the word M in "May" appear more faded in one of those exhibits than the other? That's my question. Not about buildings, not about skylines, just the letter M in those two exhibits.
- A. I'm sure there are differences because they are two different images. However, to be able to quantify the difference without magnification, looking at these reduced images, is not something that I feel comfortable doing. But I'll try.
- I just -- I don't -- I don't really see the details. I would look at it with magnification before I would want to venture an opinion on it but...
- Q. I understand, sir, you would prefer to magnify. I'm saying looking at it just as it is, does the M appear more faded in one of the exhibits? Just "yes" or "no," looking at it as you can.
- A. Well, the overall image appears darker on Tytell 2.
- Q. The letter M, sir. The letter M. I'm referring to just the letter M, not the whole image. Does the letter M look more faded in one

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- image than the next? That's it.
- A. Portions of it appear darker on Exhibit 2 than on Exhibit 3.
- Q. Do you have any reason to account for why the M looks darker -- portions of the M looks darker in one exhibit than the other? How do you account for that?
- A. I would suggest any one of a long list of variables, which I think -- and I think I've been over some of them so far, without being overly redundant, that some of those variables might, singly or in combination, account for the M -- portions of the M appearing darker on the scan from Tytell -- on the image which is page 2 of 3 of Tytell 2 when compared to the same portions of the M from the image on page 2 of 5 in what has been marked as Tytell 3.
- Q. And to be clear, sir, your answers previously were about the letter M in the word "May." I'm not asking about the letter M in the initials MZ; correct?
 - A. Correct.
- Q. Okay. Now, you did some work for -you did some analysis of the paper thickness in

1	Tytell
2	this case; true?
3	A. Yes.
4	Q. Did you use a micrometer?
5	A. Yes.
6	Q. Do you know if there is an ASTM
7	standard describing the use of a micrometer when
8	measuring paper thickness?
9	A. I'm not sure that's a whole standard
10	all by itself.
11	Q. Does any ASTM standard deal with, in
12	part, the use of micrometer when measuring paper
13	thickness?
14	A. I think there is, for document
15	examination. I would well, all right, what
16	kind of ASTM standard?
17	Q. Any kind, sir. Is there any ASTM
18	standard which discusses, in part or in whole, the
19	proper way to use a micrometer?
20	A. Well, there are
21	Q. (Inaudible.)
22	A. I'm sorry, could you please ASTM has
23	a set of volumes of of volumes of standards
24	that occupy about half or maybe a third of a
25	floor-to-ceiling bookshelf in the library.

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Of those thousands and thousands of
standards covering many dozens of different
industries, could you be a little specific about
what you're talking about?

- Q. I'm asking if you know of, from memory, obviously -- I'm not assuming you had it memorized -- but are you aware of any ASTM standards, in whole or in part, that deal with the use of a micrometer measuring paper thickness, if you know.
- A. I know that that is discussed in one of the forensic document examination ASTM standards.

 And if you want to limit it to that, then I think I am aware of it.
- Q. Did you follow that standard when you did your micrometer measurements of the two-page "work for hire" document in this case?
- A. As I recall the standard, it suggests measuring away from the very edge of the page, and it suggests taking multiple measurements. And that is what I did.
- Q. Did you record your results of those multiple measurements?
 - A. I did.

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Q. Do you recall how many measurements you made of page 1?

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- A. No.
- Q. Do you recall how many measurements you
 6 made of page 2?
 - A. No.
 - Q. Did you report those findings in your report to the defendants?
- 10 A. No.
 - Q. Why not?
- 12 A. They were not clear-cut.
 - Q. What does that mean, "clear-cut"?
 - A. The unit that I used measures down -it was an electronic readout unit, and it measures
 down to thousandths of an inch. That would be
 three places to the right of the decimal point of
 an inch. And there was some variation where one
 sheet seemed a little bit thinner than the other.
 It was not clear-cut when I was measuring at that
 level.

I took into account the appearance of the paper, the condition of the paper at the time that I was measuring it, and I felt that this difference, while it might be a real significant

Tytell

difference, at the level of measurement I was engaging in and at the -- and given the condition of the paper that it was not enough to definitely say that the two pages were of a different caliper or a different thickness. But it was there, so that I really couldn't say that the pages were of the same thickness.

So having sort of equally balanced yes and no, thicker or thinner or the same, I felt that it was appropriate not to report. And -- I mean, this is pretty much what I said at the bottom of page 3, or numbered page 3, which is page 4 of Tytell Exhibit 1, that any limitations of the documents examined were evaluated and, where appropriate, are reflected in the strength of the reported opinion. And here the strength of the reported opinion is such that there was no reported opinion.

- Q. You said you used an electronic readout unit? What does that mean?
- A. That the micrometers measure things.

 And in order to read the measurement, there are several different technologies that have evolved over the years -- over the centuries, really.

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One is a Vernier caliper style of
micrometer where you turn a knob and then you read
marks that are engraved on the barrel that you're
turning. This is the oldest style or the most
traditional, if you will, style of readout.

Then there is a dial readout where you have usually a circular like a clock face with numbers and markings on it and a needle that will move and point to one of the numbers.

Sometimes you have two needles like the fancy watches that have a little watch within the watch face. So very often you'll have two different pointers within the dial face of a dial readout. Those are -- would be considered analog units.

And then there is the kind of unit I have where you have a little electronic display that gives you numbers, you know, 0.010, 0.003, something like that.

- Q. Do you feel that your device is more accurate or the same inaccuracy as the other devices you mentioned?
- A. It depends on the calibration of the given unit. There are units that read out in

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tenths of an inch, in hundreds on an inch, and in thousandths of an inch. So each of these units is calibrated to a finer level.

This is a standard manufacturer that I feel is accurate at the level of the readout that is provided. It has the advantage of a very long throat so that you can take measurements away from the very edge of the page. But that is just the unit that I've used.

- Q. Have you reviewed Mr. LaPorte's findings on his micrometer measurements of the two pieces of paper of the "work for hire" contract?
- A. I haven't -- I don't think I've read his report. I don't know if I've reviewed them.
- Q. Do you recall seeing any other experts' micrometer measurements of the two pieces of paper of the "work for hire" contract?
- A. I do think at some point I saw

 Mr. LaPorte's measurements or become aware of them
 in some way.
- Q. Do you agree with what his measurements were of the two pieces of paper?
- A. As I recall -- and I could not -- I'm

 not saying that I'm absolutely certain -- I recall

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he was using an instrument that was measuring in smaller increments than my instruments. I think one more decimal place to the right -- one more place to the right of the decimal point.

And he was able to, therefore, take a more subtle measurement than I was. And therefore he was measuring on a slightly different scale than I was. And if his results accurately reflect a difference that I did not find as clear-cut, then that's the nature of the difference in the scale of the two measuring devices.

- Q. Do you know if he used his micrometer properly when obtaining his measurements?
 - A. I don't know.
- Q. Now, as to the ink fade generally, you first noticed, I think your report says, that the ink on the first page -- or on either page of the "work for hire" contract was faded virtually immediately when you first looked at it on July 14th. Is that fair to say?
- A. It's -- I don't know if it's fair, but it's certainly accurate.
- Q. And you made a scan of both pages of the document pretty soon after you first saw the

	Page 131
1	Tytell
2	document with your eyes that morning; correct?
3	A. Yes.
4	Q. And did you retain the metadata related
5	to the electronic file which results from that
6	scan of page 1 and page 2 that morning?
7	A. Whatever data was saved with the file
8	is still with the file. I have not stripped any
9	metadata. I think that's the technical term. I
L O	have not in any way altered the metadata.
L1	Q. Did the metadata of that scan include
L 2	or have embedded in it the settings of your
L 3	scanner used while you were making the scan?
L 4	A. I don't know.
L 5	Q. Do you have any records saved anywhere
L 6	of the settings for your scanner when it was
L 7	making the initial scans of page 1 and page 2 of
L 8	the "work for hire" document that morning?
L 9	A. It would be the default settings.
20	Q. So do you have a record of what those
21	settings were that morning?
22	A. No.
23	Q. What's the model or the manufacturer of

the scanner you used that morning?

 ${\tt Epson}\,,\ {\tt E-P-S-O-N}\,.$

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	Page 132
1	Tytell
2	Q. And do you know what model of Epson
3	scanner it was?
4	A. Perfection 500 Photo.
5	Q. Do you know what version of software
6	was being used at the time you did those scans
7	that morning?
8	A. No. It would have been the then more
9	or less current edition of the Epson software for
10	that scanner and for Windows 7.
11	Q. But you don't know the version number?
12	A. No.
13	Q. Do you know if that software has
14	settings on it?
15	A. No.
16	Q. Do you know the model of any of the
17	scanner that Gerald LaPorte used during his
18	examination of the "work for hire" document when
19	he was there in Buffalo?
20	A. No.
21	Q. Do you know the settings for his
22	scanner?
23	A. No.
2 4	O. Do you know the software that he used?

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don't have a car.

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Q. Same question as to the scans that
might have been made by Mr. Lesnevich of the "work
for hire" document. Do you know any -- do you
know the model or the make of scanner he used?
A. I do not know for a fact. I think that
the scanner looked like a Canon scanner, but
that's, you know, like saying a car looks like a

A. I do not know for a fact. I think that the scanner looked like a Canon scanner, but that's, you know, like saying a car looks like a Chrysler. It just -- you know, it could be another GM car. I don't know -- no, Chrysler is not a GM car. I'm sorry, I'm a New Yorker; I

No, I don't know -- for any of the other people's scanners, I don't know the make, model, software, software edition, or settings.

- Q. As a result of that -- and this is a hypothetical -- if I gave you a scan of the "work for hire" document from one of those other experts' scanners and gave you the actual electronic file and you brought that up on your computer screen alongside the image of your scan from that morning, if those scans appear visually different, what would be your reaction to that?
 - A. Well, hypothetically that would depend.
 - Q. What would it depend on?

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- A. A number of features, such as how different are they. If they are --
 - Q. I'll ask a hypothetical. What if your scan of the document, let's say page 1, appears white or slightly off-white but one of the other expert's scans taken during those four days appears yellowed, that same page appears yellowed, what would be your reaction to comparing those two scans from those different experts and different scanners?
 - A. Well, I would be very surprised if looking at any scan taken at any time that day the ink would appear white unless it was taken under infrared luminescence conditions, at which point on the 15th of July we did capture images in which the ink appeared white. But that wasn't a scan; that was a capture of an image from the VSC 400 where the ink appeared white.

But I'm not aware even of a hypothetical condition where the ink appeared white on any of my scans. I guess there are instances where the ink is so faded it is virtually transparent. So you might consider that as white.

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Q. My question was unclear. I'm talking about the overall paper of the document, not the ink, the paper being off-white in your scan and compare it to another one of the other defendants' experts taken a day or two later and the paper of the document now appears discolored, let's say yellow.

What would be your reaction to that comparison? Would you agree with me that shows -- if that were true, would you agree with me that shows the document became discolored while it was in the expert's possession because of the comparison of the scan?

A. Well, you're now asking me several questions. The answer to the last of those questions is no. The answer to the question about what my reaction would be would be not very much because the color of the paper overall is tertiary.

The principal issue that I would focus on as a forensic document examiner is the deteriorated condition of the ink. The second feature I would focus on, based upon the facts that were brought forth during the examination on

Tytell

the morning of July 14th, would be the reaction of the paper to ultraviolet illumination.

And I would consider the ultraviolet reaction to be much more significant than any subtle difference in color as recorded on two different scanners, because the very clear and gross difference in ultraviolet reaction is coterminous with the areas of yellowing of the paper and is much easier to see and much more dramatic, very clearly seen in the videos, even, as well as the photographs taken using ultraviolet illumination.

So I think that is a much more significant feature to focus on than a subtle difference as seen between two scans from different scanners. So my reaction to any difference, slight difference, in the images recorded on the scanners would be, well, let's take these and equalize them using the appropriate software settings and see if the differences that we're looking at between the scans are apparent differences that are artifacts of differences in the scanners or the scanning settings or if they are real differences that reflect actual

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differences in the color of the paper.

I would suggest to you that they are much more likely to be the former than the latter.

- Q. Another hypothetical. If one of plaintiff's experts scanned the first page of the document days later after your examination was done and the ink appeared more vibrant than your scan on the morning of July 14th, what would your opinion be of that comparison?
 - A. Pretty much the same.
- Q. Meaning what? What accounts for that would be scanner model, make, software settings, et cetera?
- A. Would you define, please, qualitatively and quantitatively what you mean by "more vibrant"?
- Q. Well, I'll use your word "faded."

 Let's hypothetically say the plaintiffs expert scanned page 1 of the document a week after you did on July 14th and that resulting scan showed the ink less faded than how it appears in your scan that you took July 14th.
 - What would be your reaction to that?
 - A. Well, okay, so on July 21st somebody

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scanned the document. I'm not sure -- that seems to be contrary to fact, even for a hypothetical, but okay.

And in that scan when you say "less faded," do you mean black like normal black ballpoint ink or do you mean a darker shade of yellow or the difference between light tan Chinos and medium tan chinos in terms of tan?

Can you be a little more specific here as to how much darker it is? Are we talking about subtle gradations here or are we talking about black versus almost invisible tan or yellow?

Q. My hypothetical, sir, is simply that when you look at these two documents side by side, your scan on July 14th and let's hypothetically say plaintiff's expert's scan a week later, to your eye the ink in the plaintiff's expert's scan appears less faded than your scan.

So that takes care -- you're saying in your mind when you look at it in your hypothetical that the ink looks less faded in a scan taken a week later, what would your reaction to that be in the hypothetical?

Would you conclude your scanner was not

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- set up correctly or would you conclude that the plaintiff's scanner was not set up correctly?

 What would you conclude about that?
- A. I would -- I would start by looking at the quantitative and qualitative level of difference. Your hypothetical is much too vague to really answer properly.
- Q. Well, you used the word that the ink was faded in your report, did you not?
- A. Yes. And then I proceeded to try to describe the level of fading, and then I included an image of the faded ink.
- Q. And in my hypothetical I'm saying you have a scan of that image in front of you where the level of fading was less than what you described in your report. You looked at it yourself, and you said to yourself, Wow, the level of fading of this scan a week later is much less than what appears in my scan.

What's your reaction to that?

A. Well, first of all, when you say "the level of fading," it's like saying, you know, the level of water in the bathtub. What's the level of water in the bathtub? Is it flowing over the

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top or is it barely enough to get the soles of your feet wet?

What's the level we're talking about here? If it's a level that would cause me to say, Wow, that's a pretty big level, a wow level, and in my mind's eye I'm really having trouble imagining the level of difference that you want me to imagine. You have to give me the absolute level.

Q. Well, we talked about exhibit -comparing the letter M in Exhibits 2 and 3
earlier. Let's go back to those exhibits. And
assume that Exhibit 2, that scan of the document,
was taken after the scan of the first page of the
document in Exhibit 3.

MR. SOUTHWELL: Mr. Boland, let me just interrupt for one second. At the appropriate time, I'd like to take a comfort recess. You are also at about 3 hours and 15 minutes at this point, just so you know.

MR. BOLAND: Let me just finish this little bit, and then we can take a break.

That's fine. Just this little area. It won't take long.

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1	Tytell
2	A. Can you just repeat that, please?
3	Q. Look at exhibits Tytell 2 and 3.
4	A. Right.
5	Q. And for the hypothetical assume that
6	Exhibit 3 is your scan of page 1 of the
7	Facebook the "work for hire" contract. Just
8	assume that.
9	A. Okay.
10	Q. And look at Exhibit 2, page 1 of the
11	scan of the document within Exhibit 2, and assume
12	that that scan was taken later after yours.
13	A. We're on page 2, now, of the "work for
14	hire" document? Oh, no, I'm sorry
15	Q. We're talking about the portion of
16	either one of these two exhibits that depicts page
17	1 of the "work for hire" document.
18	A. Okay. I'm with you.
19	Q. The page 1 printed in each one of them.
20	Tytell Exhibit 3, assume that is your page 1 of
21	the "work for hire" document, and Exhibit 2,
22	assume that that contained a scan of page 1 of the
23	"work for hire" document that was taken after your

Okay. And we'll just assume also that

scan, like a day later or two days later.

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- these are actually printouts and unknown number of steps removed from the scans when we call them the scans.
 - O. Correct.
 - A. Okay.
- Q. Or just assume they're both printed on the same printer, hypothetically. And I showed these to you and said, Mr. Tytell, how do you account for the fact that the letter M in "May" appears to be not as faded in Exhibit 2 as it is in Exhibit 3.
- A. Well, the only comment I could make is that -- you're telling me now that Exhibit 3 I am to assume hypothetically is a result of the scans that I made on the morning of July 14th?
 - Q. Yes. You got it.
 - A. Okay. Got it. Thank you.
- So all I can say about Exhibit 3 is that the scans that I made on the morning of July 14th and also on the afternoon of July 14th are true, accurate, fair representations of the condition of the document, of the condition of the ink on pages 1 and 2 as it appeared to me on July 14th.

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I really cannot account for what might or might not have taken place in the long and checkered history of scans and electronic files which has led to the printout before me as part of Tytell Exhibit 2.

- Q. Well, assuming that Tytell Exhibit 2
 was scanned after yours and the ink on the letter
 M you already said looks a little less faded than
 yours, how do you account for that? How could the
 ink have gotten more vibrant over time? Ink
 doesn't fade the option direction, does it, it
 gets brighter over time, in your experience?
- A. I'm sorry, I don't think I used the word "vibrant" or the words "less faded."

 Perhaps -- perhaps we could look back and see what words I actually used. But I'm fairly sure --

Excuse me, sir. Excuse me, Mr. Boland, please, I can't see you, so it's hard to interrupt you properly.

I'm fairly sure that those words "more vibrant" and "less faded" are not my words, but you're telling me now they are my words. I have no problem with my words usually, and I know there are many of them. But those I don't believe are

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- among them in my description of the portion of the letter M on page 2 of 3 of Tytell Exhibit 2.
 - Q. Does the letter M on those two exhibits visually appear the same to you or different?
 - A. I think we went over this at some length previously, and if you would like to go over it again, let's start from the beginning.
 - Q. I'm just asking about the letter M.

 Does the letter M appear visually to you to be the same between those two? That's all.
 - A. Which letter M?
 - Q. The letter M in the word "May" that is in the interlineation.
 - A. And this is the same question we went over earlier; correct?
 - Q. No. I'm asking you if those appear similar or -- do they appear the same to you or different, the letter M in "May," on those two exhibits?
 - A. Well, the word "same" is kind of a loaded word because no two things are going to appear exactly the same unless they are exactly the same, unless they are -- I'm looking at two different pieces of paper. They're not the same.

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- 2 One is on my left; one is on my right.
- So the word "same" here is not, I
 think, appropriate. Perhaps you could help me out
 some.
 - Q. What word would you use as an expert to compare two documents like that and look at the quality of the ink or the fadedness or not fadedness -- because you used the word "faded" in your report -- what words would you use to compare the letter M in "May" in those two exhibits?
 - A. Well, in both of the exhibits before me, the letter M in "May" does appear faded, in both of them.
 - Q. So would you say that the letter M in "May" appears faded more or less in one of them or the same, it's faded to the same degree, to your eye?
 - A. Well, you'd have to consider it -- as I said, portions of the M in one appear darker than in the other.
 - Q. In which one does it appear darker, portions of the M?
 - A. The portions of the M appear darker in Tytell 2 than they do in Tytell 3. I believe

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that's what I said previously.

- Q. So let's focus on that, and then we can go to the break here.
 - A. Okay.
- Q. If hypothetically the scan of this document which resulted in Tytell 2 was -- that scan was taken after the scan that is printed out in Tytell 3, how is it possible that portions of the M appear darker in the later scan?
- A. Well, if you're telling me that they do appear darker, as part of your hypothetical, then I don't have to deal with whether or not it's possible that they appear darker, because part of your hypothetical setup is that they do appear darker.

So the word "possible" is inappropriate in that kind of a hypothetical. Your -- if I could try to clarify, you seem to be asking me that given hypothetically one appears darker -- something, some thing, whatever it is, part of the M, part of the R -- if there's an R in there -- part of some letter appears darker in one than darker in the other, it's not possible; that's a foundational part of your hypothetical.

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Then what are the possible explanations for that hypothetically factual difference. And as far as possible explanations are concerned, the break isn't going to happen until sometime tomorrow morning if you want me to actually list all of those possibilities.

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Just give me three, the three most Q. likely possibilities that explain why portions of the M appear darker in one exhibit than the other.

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I couldn't evaluate the likelihood of the possibilities. I could give you --

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Q. Give me the first three to pop into your head.

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Α. The first three to pop into my head randomly, possibly?

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0. Sure.

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The printer was out of ink. The yellow 19 reservoir of ink in the cyan, magenta, yellow, and 20 black ink cartridge in the printer, the yellow was 21 exhausted. Or one of the other ink cartridges

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were exhausted.

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reasons by going one ink cartridge after another,

and then we could combine maybe two of them are

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So I could give you four different

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- exhausted and there are two changes to run. Those are well past three different reasons.
- Q. How about give me a difference that might have been -- that accounts for this that's related to the scanning process.
- A. Yes, there are differences that could be related that are related to the scanning process, as you are setting up in your hypothetical, hypothetically, yes.
- Q. So off the top of your head, could you give me two of those, two differences in scanning processes that could account for the ink appearing darker in a later scan of an image -- I mean of a document?
 - A. Scanning settings.
- Q. Okay. What's one other one, and then we'll go to a break?
- A. Features of the scanner other than the settings.
 - Q. Like what, for example? What do you mean by that?
- A. I don't know what could happen.
- 24 Anything. I'm sorry, I'm sort of -- I'm out of my 25 speculating -- the speculating portion of my brain

1	Tytell
2	doesn't seem to be coming up with any speculation
3	that I can provide to you.
4	Q. Okay. Fair enough.
5	A. I'm out of imagination.
6	MR. BOLAND: Alex, let's go ahead and
7	take that break. How much time do you want?
8	MR. SOUTHWELL: We just need about five
9	minutes. You only have a little less than ten
L O	minutes left. We just need to take a quick
L1	comfort recess here.
L 2	MR. BOLAND: Okay. Good.
L 3	(Recess taken from 2:55 to 3:08.)
L 4	Q. Mr. Tytell, I neglected to ask you at
L 5	the beginning, how did you how are you charging
L 6	the defendants for your time working on this case?
L 7	A. By the hour.
L 8	Q. Do they have a retainer on account with
L 9	you or do you just bill them monthly and then they
20	pay the bill?
21	A. I bill them monthly, and I hope they
22	pay the bill.
23	Q. And what's your hourly rate you're
24	charging them?
25	A. \$425 per hour.

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Q. Do you have any other type of an agreement with them other than that hourly rate?

A. My standard terms and conditions, which have the hourly rate. There was an initial retainer for one day, which was worked off, eight hours. And then there are other conditions in there regarding testimony, such as court testimony or depositions where there is a one-day minimum.

And also a standby fee for half a day for standby and a cancellation fee if something happens and I'm not informed three days prior.

I'm not sure if it's days or business days, although at this point there are seven business days per week -- we've come to that -- that without three business days' prior notice there's a half-day fee.

- Q. When you initially got the document on July 14th and noticed some of the differences that we talked about earlier, did you contact anyone from the defendants' attorneys to mention that to them before you continued with your examination?
- A. Contact them? You mean call them from my cell phone to their cell phone when they were on the other side of the room?

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Q. Or just tell them across the other side of the room that you noticed something -- some problem with the document when you compared it to what you saw in the scans? Did you tell them before you continued your examination?

MR. SOUTHWELL: Objection, calls for privileged communication.

- Q. I'm not asking what you said -- well, let me just ask. Did you stop examining the document to have any conversations with anyone when you noticed it was in a different condition than you expected?
- A. I noticed it, and then I scanned the document front and back, both pages, to make sure that the condition of the document which I had just noticed was recorded.

I think in the middle there I did look at the ink of page 1 and page 2 under the stereomicroscope. I did conduct a microscopic -- or an examination under the stereomicroscope.

This is all within the first, I guess, 20 minutes or 25 minutes after the document was presented.

And then after the scanning and the looking at it, I think there was a brief

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conversation initiated by Mr. Argentieri. But I was busy looking at the document; so I hope he didn't consider me rude, but I had to break off that conversation.

And at that point I left the room, and so did Professor Romano leave the room; and we went to another small conference room. I guess it would be called a breakout room or some term like that. And in that room with Dr. Romano and myself were the attorneys from Gibson, Dunn.

And I have a feeling -- I have a feeling I should stop here, but I don't know.

- Q. You used a VSC machine during your examination; correct?
 - A. Yes.
- Q. And an employee of Foster Freeman was in the room having conversation with you while you were using that machine; true?
 - A. On which day are we talking about now?
 - Q. Let's say day one, July 14th.
- A. Okay, July 14th, the answer would be yes.
- Q. That employee of Foster Freeman in fact set up the VSC machine for your use in that room

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1	Tytell
2	that morning, didn't he?
3	A. I believe so.
4	Q. And he sat next to you at times while
5	you were using the computer connected to that
6	machine; right?
7	A. Well, I wasn't actually using the
8	computer connected well, "using the computer
9	connected to that machine," that's like saying
10	when you're driving a car you're using the motor
11	connected to the car. The computer was involved
12	in the use of the machine, yes.
13	Q. And at some point during your
14	examination on one of those days, that machine was
15	removed from that office and replaced with a
16	different machine, VSC machine; right?
17	A. There was another VSC machine in use on
18	the 15th, the second day.
19	Q. And the previous machine was taken out
20	of the room?
21	A. I don't recall whether it was taken out
22	of the room or not.
23	Q. And was there something malfunctioning

with that had to be replaced with the new machine?

with the machine on July 14th that you started

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- A. The machine on July 14th had to be rebooted on one or two occasions, I think, the computer. Something -- something was problematic there. I don't exactly recall.
 - Q. Did you discuss that with the representative of Foster Freeman, the problems you were having with that VSC machine on July 14th?
 - A. Not that I recall the specifics of.
 - Q. Does that machine have the capacity to project UV -- to project UV light onto a document?
 - A. It has that capacity, although that capacity was not utilized on the 14th, or on the 15th -- excuse me, or on the 15th, for that matter.
 - Q. And who are you referring to? It was not utilized by you or nobody utilized that capacity on the 14th and 15th?
 - A. Well, that capacity was not utilized on either the 14th or the 15th while any -- while either page of the "work for hire" document was in a VSC machine on the 14th. And that UV capacity was not utilized on the 15th either, that I recall, but certainly not on the --
 - Q. How do you know that fact? How do you

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2	know that i	fact?
3	А.	Because wh
4	was in the	VSC machin
5	for a brief	f a rela
6	morning of	the 14th,
7	Q.	Do you kno
8	machine?	
9	Α.	Yes.

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when the -- when the document thine on the 14th, which was only

I was operating the machine.

for a brief -- a relatively short period on the

- Q. Do you know how to operate that
- Q. Was the Foster & Freeman employee giving you some advice on how to set that machine for its use?
- A. Yes, but that wasn't my first rodeo.

 I've used that -- the software that controls the various VSC machines of that range, of that system, I've used those machines often.
- Q. And does the software control the intensity of the light that is projected onto a document that's in the machine?
- A. No. The software turns on the lights, but the lights -- the intensity doesn't really change once the lights are on.
- Q. So there's only one setting for the intensity of the light in a VSC machine?
 - A. There are a number of different lights,

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a number of different light sources. Well, wait a second. Is there a dimmer? On the white light bulbs, there is a dimmer, and, as I recall, those bulbs are just regular clear light bulbs that are probably less powerful than the light bulb in my refrigerator. I think they are 12 or 13 watt bulbs; they are not even 20 watt bulbs, although there are several of them. But those are just regular white light bulbs, not ultraviolet.

- Q. Do you own a VSC machine for work in your professional capacity?
- A. I have two of them, plus the other similar machines that I have built myself, which I have several.
 - O. You've built VSC machines?
- A. Well, a VSC machine is a specific form of video -- it's a video camera, essentially a closed circuit video camera. The first ones went to a video monitor. Nowadays you called that an lag kind of video, like television sets used to be year ago.

There was a video camera with a silicon target tube that went to a screen, to a small TV monitor. And you had filters in front of the lens

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or between the lens and the camera. And I built a number of those one way or another.

And I participated in the design -back in the late 1970s, around '78, '79, something
like that, I participated in the design of the
original Foster & Freeman VSC machine. And I have
given them lots of suggestions, some of which they
actually acted on, on improvements in the machines
over the last two or 30 years.

So yeah, I've built a number of these machines.

I've actually -- I don't know if

Mr. Blanco was there. I did a workshop on

building your own video infrared system at a joint

meeting of the American Society of Questioned

Document Examiners, SAQTE, and SAFDE, Southwestern

Association of Forensic Document Examiners.

There was a joint meeting in Colorado back a number of years ago where I gave a workshop -- I'm not sure, I think that Mr. Blanco attended that -- on how to build your own VSC system.

But we did acquire a VSC machine back in I guess the early eighties. I had worked with

1	Tytell
2	one VSC at the crime lab the Israeli crime lab
3	in Jerusalem, one of the very first models. Then
4	we subsequently got our own.
5	Then we upgraded that VSC 1 to a newer
6	VSC 1 sometime in the I guess the early
7	nineties. I think that was the same winter as the
8	first World Trade Center bombing. That's sort of
9	the way I keep track of time, unfortunately.
10	And then we and then since then I
11	have also, just as we had in Buffalo, arranged for
12	Foster & Freeman to either bring a VSC unit,
13	whatever their current state-of-the-art unit was,
14	to a location to where I would be working with
15	documents or, alternatively, to bring the
16	documents to Foster & Freeman's U.S. office where
17	I would work with their big machines, like the VSC
18	6000.

And actually in I guess 2009, in the fall of 2009, I spent a week with a VSC 400 on a location in Washington, D.C., where I got to use that machine. And various other times.

So I am familiar with the equipment.

MR. SOUTHWELL: Mr. Boland, we're now past three and a half hours.

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1	Tytell
2	MR. BOLAND: Okay. We've got a little
3	bit more to go.
4	MR. SOUTHWELL: All right. Hopefully a
5	very little bit. Go ahead.
6	Q. Mr. Tytell, do you know what bulbs were
7	in that VSC machine, the first one that was
8	delivered to the law firm's offices?
9	A. I only know that the white light bulbs,
10	which is what was used most of the time, were the
11	regular bulbs, the 12 or 13 watt bulbs.
12	Q. How do you know that?
13	A. Well, that's what's in the specs. I
14	didn't actually look under the hood and check that
15	the bulbs that were in there were the bulbs that
16	were in the specs.
17	Q. Are those the only bulbs that can fit
18	in that machine, the ones that are in the specs?
19	A. I don't know. I don't know what kind
20	of sockets they use.
21	Q. How about the replacement machine that
22	came later, whenever that was, when the first one
23	got hauled away, do you know what bulbs were

Well, I don't know that the first one

inside of there?

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Tytell

was hauled away. And the second machine that was used on the 15th, the white light bulbs there I believe are the same specification. But again, I did not --

- Q. Did you look under the hood?
- A. Again, I did not check under the hood to see if they had anything different there. But these are generally -- because of the sensitivity of the camera, these bulbs are really only very low wattage.

I mean, a one AAA battery pocket flashlight, the kind that you have on your key chain, that is more than powerful enough for most of the kinds of examinations that are done with the whited light bulbs.

- Q. Do you agree with some of the other experts in this case that have said that on the day you got this document, July 14th, not only did the ink appear faded, which you have stated, but that the document appeared discolored? Is that your opinion as well, that the document appeared discolored?
 - A. Could you define "discolored," please?
 - Q. The common terms some of the other

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experts are using was "yellowed," the document was yellowed from how it appears in the Aginsky scan.

Do you agree with that?

MR. SOUTHWELL: Objection,

mischaracterizes.

- A. Well, I don't know about other experts' opinions and agreeing with them or not. I do know that when I -- among my observations on July 14th, including the faded nature of the ink and the ultraviolet reactions, was the cream color -- or I guess "yellowish" would be an okay term -- cast of the front of the paper fairly uniformly on both pages, with the exceptions of the tabs at the top, which were white by contrast to the yellow, and then, as I mentioned, the top corner of page 1 within the area delineated by the crease of the fold.
- Q. Is it your opinion that the yellowing of the tabs of the document that you saw and the ink fading are related?
- A. Well, they're concomitant, for sure.

 And the yellowing or the cast, as I mentioned previously, are coterminous with the areas of unusual lack of fluorescence or presence of normal

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1	Tytell
2	fluorescence.
3	Q. My question is do you think that the
4	same process that caused the ink to fade is also
5	the process that resulted in the yellow cast, as
6	you put it.
7	A. Things tend to point that way, yes.
8	Q. Now, the forensic business you run now
9	you took over from your parents; is that true?
10	A. I'm not sure I took over their
11	business. There was a separate you know,
12	Tytell Questioned Document Labs was my mom's name
13	for doing business, and I had a name Forensic
14	Research. But it is certainly their practice that
15	I have stepped into.
16	Q. And would you say your parents were
17	pretty highly regarded in this field when they
18	were running their business?
19	A. Certainly by me.
20	Q. I mean by the professional their
21	peers.
22	A. I would hope so.
23	Q. And did they have government agencies

My mother certainly $\operatorname{\mathsf{--}}$ she was much

who hired them to do work on cases?

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more active over the long haul, and my mom certainly appeared numerous times on behalf of the government, the U.S. attorney's office, in cases like the pizza connection or the case of the government -- the United States versus the Reverend Moon, cases like that.

- Q. Have you retained those sort of same government contacts with your business that you're running now?
- A. Not the same contacts. I think she worked much more in the Southern District than I have. I have appeared a number of times on cases brought by the U.S. attorney's office in the Eastern District but also on some cases brought by the U.S. attorney's office in the Southern District or in the District of New Jersey, and one a while ago in the Northern District of New York and in Vermont.
 - Q. Go ahead.
- A. U.S. attorney's office in Vermont. But that was an attorney who had gone from Eastern District of New York to district of Vermont.
- Q. Have you ever done any work for the CIA?

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1	Tytell
2	A. Well, I just finished a case for the
3	U.S. Department of State, and their legal counsel
4	is in the offices that were formerly occupied by
5	the CIA in the U.S. navel observatory in
6	Washington.
7	But cases for the CIA is I don't
8	think I've ever gotten a paycheck that said CIA on
9	it or U.S. Treasury re CIA work. I think that
10	would be a fair statement.
11	Q. Have you ever done any work for the
12	CIA, no matter who paid you?
13	MR. SOUTHWELL: Objection to relevance.
14	A. I just don't know how to answer.
15	Q. It's "yes" or "no." That will do.
16	A. I think I would have to respectfully
17	decline to answer.
18	Q. Did your parents ever work for the CIA?
19	MR. SOUTHWELL: Objection to the
20	relevance. What's your point here,
21	Mr. Boland? You're over your time, and now
22	you're asking questions about Mr. Tytell's
23	parents' work? I mean, come on.

MR. SOUTHWELL: What's the relevance?

MR. BOLAND: I am.

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1	Tytell
2	MR. BOLAND: Did your parents ever work
3	for the CIA, that's a pretty simple question.
4	MR. SOUTHWELL: What's the relevance of
5	that?
6	MR. BOLAND: I heard your objection.
7	The witness needs to answer the question.
8	MR. SOUTHWELL: You can answer one more
9	of this.
10	A. Okay.
11	MR. SOUTHWELL: To the extent you can.
12	MR. BOLAND: I object to that on the
13	record. He can answer whatever question he
14	needs to answer, according to the rules. So
15	that's it.
16	A. Well, then, let me ask you you
17	mentioned the rules. I don't know what the rules
18	are. But let me ask you for some clarification,
19	if I might. What do you mean by "work for the
20	CIA"?
21	Q. Were they ever employed by that agency?
22	That is one way of looking at it.
23	A. Okay. As employees they were never
24	Q. Yes.
25	A. Well, during World War II there was a

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1	Tytell
2	predecessor agency to the CIA. The CIA didn't
3	exist until sometime a couple years after World
4	War II. So let's stick with the CIA. And I think
5	I can safely say, no, my parents did not work for
6	that agency.
7	Q. Are you aware of any ASTM standards
8	relating to ink age determination?
9	A. No.
10	Q. Do you know why there isn't any of
11	those standards, if you know?
12	A. They haven't been written yet.
13	Q. Do you know if there's agreement
14	amongst experts in the field of ink age
15	determination as to a standard approach to making
16	those to doing that analysis, if you know?
17	A. I don't know.
18	Q. In the occasions where you participated
19	in writing or drafting ASTM standards, do you
20	recall questions about that?
21	A. I don't recall any questions about
22	that.
23	Q. Okay. Have you ever been involved in

Ah, yes, I recall a question along

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drafting ASTM standards?

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those lines. The answer is yes.

- Q. And if someone wants to get a new technique standardized, how do they go about that?

 MR. SOUTHWELL: Objection to the form.
- A. If somebody wants to get a new technique or an old technique or a middle-aged technique put into the format of an ASTM standard, that individual would first have to write a draft standard, hopefully in the appropriate stylistic form as laid out in the ASTM standard -- they have a book.

They call it the blue book. I think "blue book" is a word lawyers also use. There's an ASTM blue book that gives you the styling of number of paragraphs and so on.

And you draft up your standard, and then you put it through the appropriate subcommittee and the appropriate committee. The first step is that somebody or some group of people have to write a first draft.

There are a lot of documents that need to be written for every field. There are a number of drafts for questioned document standards that have been written that are -- that never made it

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into the ASTM process just because of the logjam, you know, the throughput, how many standards can the ASTM appropriate committee handle in a given time period.

But that is the process one would follow for any kind of a method or procedure, whether it's new, old, or in between.

- Q. So before we come to an ASTM, the relative folks in the field would have to agree upon a method or methods; true?
- A. Before those folks would have a chance to agree, somebody would actually have to write up a draft. The first step is to sit down and write a draft of the procedure that you would like everybody else to look at and decide whether or not they agree with. You need to start with a draft of the standard.
- Q. And then once that draft goes around to the relevant experts, if they can't agree on what the standard ought to be, it's true you can't reach -- then an ASTM standard will never be established?
- A. Well, you were asking about age of ink, and age of ink has never gotten to the point of

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- the draft. So I have no clue what might happen if that were to be circulated among the appropriate people. You have to have a little fact somewhere in the hypothetical. This one lacks it.
- Q. I'm just talking about ASTM standard approach in general, not ink age determination. In general if you can't get relative people in the --
 - (Unintelligible discussion interrupted by the reporter.)
- Q. If you can't get people in the relevant field to agree on a method, then you can't create an ASTM standard; is that true or not?
 - A. That is incorrect.
- Q. Can a single person draft a proposed

 ASTM standard and somehow get it incorporated into
 the ASTM manual by themselves without agreement of
 other people?
- A. A single person can draft a standard.

 There's no problem. And many standards have been drafted by one person who just feels like drafting it. That standard then has to achieve a certain level of agreement. It does not need to achieve unanimity.

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A consensus standard requires a

consensus of the people who get to vote on the

standard. This voting population may not

represent the entire population of people of -
who are interested, although it ought to. And it

does not require unanimity.

If somebody has an objection that they put forth and it's a valid objection, then usually the standard gets -- or the draft document gets modified. Somebody comes up and says, Gee, this is wrong and here's why; and everybody goes, Oh, my, we hadn't really thought of that, thank you very much, we'll fix it. Things get changed. And that happens quite often.

If, however, somebody just digs in their heels and have a particular position and say, I don't like this, I think this is wrong, full stop, and two-thirds of the people who are voting on it say, We appreciate your interest, but we think that you're not correct in your objection, then the standard moves forward.

So if one person writes a standard and one person can explain why that standard is correct and modify, where appropriate, and defend

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where objections are wrong, then yes, that one person can shepherd a draft document through the entire ASTM process and see it eventually included in the volumes of ASTM standards.

- Q. I guess what I'm saying is you have to have, somewhere along the line after a draft is made, at least a majority of people in the relevant field have to agree on a standard before it becomes a standard. Fair enough?
- A. Well, the majority of people who are involved in the subcommittee and the committee dealing with the standard have to agree, not just a majority but usually two-thirds. Sometimes it is a simple majority, yes.

But the first thing that's required is somebody has to commit the idea to I would like to say paper but I would say has to commit the idea to electronics, has to draft a document that could be circulated. And if you don't draft the document, then everything after that is completely moot.

- Q. Do you own Photoshop, the photo editing software?
 - A. I do.

1	Tytell
2	Q. Do you use it in your work?
3	A. I have been using it recently.
4	Q. When did you start using it in your
5	work?
6	A. Sometime I guess in the last six
7	months.
8	Q. Have you used any photo or digital
9	image editing software before Photoshop?
10	A. Yes.
11	Q. What was the name of it?
12	A. Oh, there were several. There's a very
13	useful program that Nikon has I think I'm not
14	sure if it's Picture Capture. It is a software
15	that you can get with the newer Nikon digital
16	cameras. I have been using it with the D70, the
17	old D70, and now the D90.
18	Prior to that software, there was a
19	software it seems antique now called Picture
20	Publisher. I believe that came from a company
21	called Micrografx, M-I-C-R-O-G-R-A-F-I-X, I
22	believe. And they used to be down in Texas. They
23	have gone, but that was a great software program
24	for the kind of work we do: overlays and so on.

I would still be using it except that it won't run

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2 on a 64-bit machine.

Then there's another program called

ImageJ -- Image and then a capital J at the end -which I think was developed by the -- either the

National Institutes of Health or the National

Academies of Science. And I think that's what
people call freeware. And I have used that some
in the past over the last, say, I don't know, four
or five years, maybe.

- Q. Have you reviewed any of the images you captured in this case using any of that kind of image-editing software?
 - A. Yes.
- Q. Did you keep records of any changes you might have made to the images in that software?
- A. Well, I -- as with any enhancement of images to bring out details that might not be readily available on the surface. You never change the original image. You are always working with copy images.

So when you ask if I've kept any record of changes I have made to the images, there have been no changes made to the original I guess you would talk about native files.

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Where I have been using the Photoshop software, I believe there is a feature there called history which is always turned on so I can go back and look at step by step what adjustments have been made. And that is sort of the record that would be kept. And also I would save the images as I go so I could look at the images.

But I haven't done anything that's really that compound/complex that it couldn't be redone in real time in a matter of a couple of minutes. Actually that's not true. Some of the overlays -- some of the overlays require some adjustments. But the kind of adjustments to levels or brightness and contrast, those are really very basic.

A lot of these adjustments are pretty much the kind of adjustments that we used to do to television pictures when they had knobs on the front of televisions. I don't know if you're old enough to remember that, sir.

- Q. I am.
- A. Okay. Well, you remember brightness and contrast knobs on the front of the black-and-white TVs, if you're that old.

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Then when we got to color TVs, you had

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the images.

Q.

Α.

Yes.

adjustments for tints and things like that. are pretty much the same adjustments that at least in this case bring out the significant details of

For instance, using those kinds of adjustments, just brightness and contrast, you can take a look at the scans taken at 9:18 a.m. and see the two tabs at the top of page 1. You can use those simple adjustments, the kind that used to be on the old television sets, and see the darkened triangle on the reverse of page 1.

So, you know, it's nice to have these wonderful software tools, most of which use algorithms originally developed by NASA 30 or 40 years ago. But it's nice to use all of these things, but the adjustments themselves are really very basic.

- Did you produce your report to the defendants in a PDF format?
- Α. Did I produce my -- well, produce. sent it to them as a PDF, yes.
 - And do you know what they did, if Q.

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anything, to that report before submitting it as part of an exhibit to their motion to dismiss?

Did they change it in any way, if you know?

- A. I do not know.
- Q. Do you know how the quality of the image that -- the images included in your report as it was filed with the court compare to the quality of those images as you have them on your copy of the report in your office?
 - A. No.
- Q. Have you provided to the defendants the electronic files of all the images that are included in the PDF document that you eventually sent to them?
- A. Well, since I've given them all the images that I took, that would include the start-up set of images which were included in the report.
- Q. And do you have copies of all those images still in your office?
- A. What do you mean by "copies of the images"? Oh, I --
- Q. Do you have scans in electronic file format in your office?

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- A. Well, in my office, yes. I have also on backup external hard drives the scans and the photographs or the images that were acquired with the scanner, the images that were acquired with the digital Nikon -- the Nikon digital camera, and the images that were acquired using the VSC 400. All of those files I have the originals of the native format files of everything, and so does counsel for defendants.
- Q. And did you save the adjusted versions of those images? You know how you were talking about contrast and all that. Did you save those versions of the images as well?
- A. Yes, in different file folders in completely different folders from the original images, of course.
- Q. Did you give the defendants' lawyers those adjusted images, copies of those adjusted images?
- A. I think I have sent PDF files of some of those to the attorneys for the defendants.
- Q. And as part of producing your report in this case, did you review some images, if you know, that were obtained from the plaintiff's

1	Tytell
2	expert?
3	A. Yes, I did. Yes, I did. Excuse me,
4	let me back up. Excuse me, Mr. Boland. Can you
5	please define "plaintiff's experts" for me?
6	Q. Larry Stewart, did you review some
7	images that you understood came from him and his
8	scanning or imaging work of the document?
9	A. Yes.
10	Q. Jim Blanco, did you review some of his
11	images?
12	A. Yes.
13	Q. John Osborn?
14	A. Yes.
15	Q. And Mr. Aginsky?
16	A. I believe it's Dr. Aginsky, and yes.
17	Q. And Mr. Speckin, does that ring a bell?
18	A. Erich Speckin rings a bell, and I
19	believe that there are images that were acquired
20	by Mr. Speckin on his VSC equipment in I believe
21	Chicago on July 25th.
22	And as I it's just my recollection
23	from the video. I think that Mr. Stewart was
24	standing at his elbow, if you will, when they were
25	acquired. And those images are attached as

1	Tytell
2	Exhibit C to my report, and that would be pages
3	21, 22, 23, and 24 of document 330, which is
4	Tytell Exhibit 1.
5	That's why I know what they were. I've
6	got them sitting here. Those, I believe, are the
7	Speckin images, or among the Speckin images.
8	Q. Let me clarify something. The adjusted
9	images that you made of the scans, did you or did
10	you not provide those to defendants?
11	A. Some.
12	Q. Counsel?
13	A. Some, some of them.
14	Q. You did? Okay. Oh, some. You said
15	you provided some of them. Do you know which ones
16	you provided to them?
17	A. Let's see. Yes, I do.
18	Q. Can you describe which adjusted images
19	you provided to the defendants?
20	A. I provided defendant with images
21	showing split channels in CYMK mode and split
22	channels in RGB mode. And some of those kinds of
23	images with brightness and perhaps contrast

That is what I recall at the moment.

adjustments.

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- Q. And which images -- I understand the types of adjustments that were made to those images. I'm saying which images, adjusted versions of images of page 1 of the "work for hire," page 2 of the "work for hire," the specification agreement, what images did you adjust and then send to them?
- A. Pages 1 and 2 of the "work for hire" document, images taken from the specification document that had portions cropped to illustrate line quality of the signature of Mr. Ceglia. I think I may have used those images, but they were not necessarily adjusted.
- Q. Did you use any of those adjusted images in your report that you filed along with the motion -- not that you filed but that the defendants filed along with the motion to dismiss?
 - A. I don't believe so.
 - MR. SOUTHWELL: Mr. Boland, we're now at four hours. Are you almost done here?

 MR. BOLAND: Yeah.
- Q. What's your basis for that belief, Mr. Tytell?
 - A. Exhibit Tytell 1.

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- Q. You're saying you reviewed that exhibit or you reviewed your report since it was filed and that's your basis for your belief that none of your adjusted images are in your report?
 - A. Not since it was filed. But again it's unfortunate that we can't see each other or are sitting next to each other. But I'm looking at it right now as Tytell Exhibit 1.
 - Q. Right.
 - A. And on page 4 there are two images in reduced size of the scans from Exhibit -- of page 1 and page 2. And those are just -- those images were dropped in.
 - On page 7 -- excuse me, on page 5, there are cropped portions of those same images at life-size. They were cut out, but they were not adjusted in any way.
 - Similarly, on page 6 there are images from my scans and from Dr. Aginsky's scans. You had referred to those earlier. They were just cut out and dropped into the Word file, into a table in Word.

On page 7 and page 8, there are pictures showing the UV fluorescent

Tytell

characteristics. Those are the images. I am not sure if they are cropped or not, just so they would fit into the format. But those have not been adjusted in any way.

Then finally on page 10 there is an image that was taken from the VSC 400 that is just that image as it was captured on the VSC 400.

That's dropped in.

And then on page 11 there's the name Paul Ceglia from page 1 and the name Paul Ceglia from page 2. They are larger than life. But those images are just cropped from the two scans at page 1 and page 2.

And there I think on the picture of the Paul Ceglia from page 2 on that cropped part of the scan, because it's enlarged, you can see the fading of the ink.

And actually, I don't know if you have a copy of that document there, but if you take a look at my report of March 25th, 2012, filed March 26, document 330, now Tytell 1, if you take a look at page 10 and you look at the right-hand Paul Ceglia image from page 2 of the paper "work for hire" document, you'll notice that there are three

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places where you can see ink.

And the ink that goes through the final letter of Ceglia, the last A, and the ink to the right of the comma following the name Ceglia, those are what I was calling a light tan, as I see them on this printout.

However, if you look at the bottom of that image below the capital C, just above the printed letter M in the word "document," you'll see a bit of the top of I believe it's the capital P in Paul or the first letter of the signature.

And you will see that that is quite a bit darker.

So even within the same writing there are differences. There is variation in the lightening of the ink: one brown, the other tan. And brown and tan, if you go to proper color science, they'll tell you that these color names are just names of convenience, that brown and tan and all of that is a dark yellow-orange or a dark orange. But that's another story.

So yeah, those are images. They were not adjusted in any way except to be enlarged slightly and dropped.

And then finally the image, which is

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not one of mine, of the staple on page 12, that comes from the mid 2010 image of that version, that electronic version, of the TIFF file attached to the e-mail from Mr. Ceglia to Mr. Argentieri.

So my answer as to whether or not any adjusted images were used in my report is based upon looking through the copy of -- or what you have represented to me is a copy of my report which is currently marked as Tytell 1.

- Q. We talked before about your -- you don't have any liability coverage for your work on cases, especially this case; true?
- A. I don't know why you say "especially this case."
- Q. I'm asking about this case. You didn't have -- you don't have any liability insurance covering your work on this document?

MR. SOUTHWELL: Objection, asked and answered.

MR. BOLAND: Okay.

Q. Suffice it to say, sir, if during the course of your handling of this document you damaged it it would be potentially bankrupting to you financially?

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2 Α. Well, that's a question that would be, 3 I consider, contrary to fact because if you consider the fading of the document and the 4 5 yellowish cast of paper of the color of the paper of the two pages of the document -- let's say the 6 7 fading of the ink, the discoloration of the paper, the tab marks that don't -- that do luminesce at 8 9 the top of the page and the concomitant 10 indentations that go with those tab marks, which, 11 by the way, could not really have been made by a finger, whether it was contaminated. But there 12 13 are indentations there that are not at all 14 consistent with being made by an object shaped 15 like a person's finger.

O. Sir --

A. Excuse me, sir. Let me answer. If you're referring to those things as damage, they were damaged before I actually got to see the document.

So whether -- I don't really understand how I might have damaged a document which came predamaged.

Q. No, my question is if you did damage it somehow during its analysis and the document is

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worth half of whatever Facebook's worth, that's going to bankrupt you. That's my point.

MR. SOUTHWELL: Objection. This is harassing at this point, Mr. Boland. This is a ridiculous question.

- A. I suppose that might depend on whether or not the document -- any so-called damage would have any actual significance, given the nature of the document, although I don't really see that there was in fact any actual damage of any kind of significance at all during the two days that I spent with the document.
- Q. Finally, you mentioned something about printers before. I want to ask a couple last questions about that.

Is it true that if two documents -- if a document on your screen is printed, two copies of it are printed from the same printer, will those generally -- those documents be the same, they will look -- they will appear the same?

A. Well, you know, the word "the same" -you mentioned ASTM standards in the past over the
course of our question and answer today, and if
you look at one of the ASTM standards that

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discusses this concept, you'll see that the term

"the same" -- "the same," close quote -- is a term

that is discouraged when comparing two things in

the forensic field.

And this goes back -- this borders on a philosophical point that no two things are the same, no two things are absolutely, totally identical at the most minute level. And indeed, there's a philosophical point that no object is the same as itself over time. And the ancient Greek wisecrack of the philosophers is you can never swim in the same river twice.

So the Exhibit Tytell 1 that was handed to me this morning and has done very little but sit in front of me and be open from time to time is not the same as it was when it was originally marked.

So to say the two printouts are going to be the same, besides being the wrong terminology, is is almost a philosophical oxymoron.

So perhaps if you would say is it possible, given the proper conditions with the proper printer, that they might be

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indistinguishable at a certain level of analysis, yes. But that depends on what level of analysis you're talking about.

If you take two documents printed out or two pages -- you have a one-page document on your screen. You go to the "please print," and you say print me two copies and it -- the machine hums and two pieces of paper come out of the printer in compliance with your request to your computer and you then take those two pieces of paper, if you glance at them, they may look to be indistinguishable.

If you examined them down to a very minute level, you probably would find numerous differences between them if for no other reason than the paper they're printed on, because paper is a random matting, felting, of different fibers.

And if you go to -- you pick out a particular comma in the text, if it's a text document, and you look at the way the paper fibers are meshed in the area immediately above that comma, you will see that they are, under magnification, entirely different from one page to the other.

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So when you say wouldn't the two pages

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24 25 be the same, the answer is what do you mean by "the same."

I mean in the sense -- and, you know --I'm sort of reluctant to ask the question again because I ask what I seem to be a simple question and I get paragraphs. That's one of the reasons we go on so long here.

We talk about comparing images scanned from two different scanners, and you pointed out reasons why that comparison would not be valid. Do you recall those questions?

- I don't recall pointing out why the Α. comparison would not be valid under any circumstance, no.
- You said things like scanner settings 0. can change the resulting image that you scan, depending on the settings of the scanner. Do you remember that?
- Well, I would agree that scanner settings can change the image of the scanner. That's what the nature of settings is, that they can change the resultant image, at a certain level.

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Q. And you talked about the levels of different colors of ink. I think you mentioned cyan at one point in a printer can change the resulting output that comes out of that printer. Do you remember that?

A. I remember mentioning cyan. I think -I didn't say the different level. I said if the
computer were -- if the printer were out of cyan.
I guess that would be a level. Zero is a level.
I think we were discussing levels of difference in
appearance when I used "levels."

I think with cyan -- perhaps we should just look back to the record rather than relying on my recall. But I don't think you're characterizing my answers correctly.

- Q. My point is if the same document is printed out of two different printers and those -- the way that document appears to your eye, you see some differences, like a text or different yellow text, for example, or one has what appears to be ink that's more faded than the other, those could easily be a result of those two different printers and how they have output that document; true?
 - A. If you see differences that are

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attributable to the printer are the differences that you see attributable to the printer.

Well, it's kind of a circular question.

I think the only possible answer is yes.

- Q. No, my question is you just see differences in the document. One has some ink that appears more faded than the other. You don't know how it happened. Someone just gave you two documents. They look identical as far as their text and the writing except one of them looks a little more faded than the other. The person tells you, Oh, by the way, they were printed on two different printers.
- A. Wait a minute. Back up. You're talking about getting two different documents, not two different images of the same document.

 Because if you get two different documents that were printed on the same printer, to me that means that you have the same words that were printed out on two different printers and then as documents they may have been separately executed.

So you're actually -- could you please be a little more --

Q. Yeah, that's not what I'm saying. I'm

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saying the identical electronic file printed on two different printers. And then you're handed the output of those two different printers, and they appear visually to you to be different, meaning one has a yellow cast, one the ink looks a little faded compared to the other. Okay? That's the hypothetical.

Obviously one of the causes for that could be differences in how printers output documents. That's one of the potential reasons they look different; true?

A. Well, I think you used the word "obviously" in your question, so it's kind of a foolish thing for me to deny the obvious.

But -- so you're suggesting that if the same file is on my computer screen and somehow my computer is linked to two different printers are these two different printers two different -- like one is a color laser printer and the other is a color ink jet printer and I tell the file to go print one on the laser color printer and the other on the color ink jet printer and the results look different might the difference be due to the fact that two different printers are involved? That

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would be one potential answer.

Another potential answer could be the settings. When you have a print screen in front of you, up -- do you use Microsoft Word at all?

- Q. Sir, you've answered the question, and that's fine. I'm just -- I was just talking about what -- if two different printers are used to print the same document that the resulting output could look different because of the printer. And is that true?
- A. That would be one of the possible reasons, yes.
- Q. Okay. Also the settings on -- the type of computer used and the software used on the computer could cause some differences in the output of those two different printers. Is that possible as well?
- A. Well, if you -- if you send -- let's eliminate the second printer. Let's go with one printer. If you have software and you tell the software I'd like to readjust the entire way that I want this document to look, like, for instance, I'd like to print a two-page document so that it all fits -- I have two pages on one piece of

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paper, one side of the piece of paper, and then 3 the other one I say, no, just one page to one page, it's going to look differently. You have 5 adjustments that you can make to the printer preferences button in, for instance, Microsoft 6 7 Word.

Now, I know -- so yeah, you can do any number of things that would make two things look different.

If you want to ask me about 11 other things that you know could possibly make things look different, okay, fine, let's go.

However, the problem is that when we get back to the images taken of the "work for hire" paper document in the first 20 minutes that it was available for examination on the morning of July 14th, none of this is at all relevant, because the appearance of the document as I saw it was that the ink was faded and the paper was slightly yellowed and that that appearance, as I saw it, was fairly and accurately represented by the scans that I captured at 9:18 a.m. or the files are marked 9:18 a.m. and 9:22 a.m.

And you can see the scans being taken

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in the video beginning at 9:15 or so on the video

clock at the bottom of the screen. That records

that the document was I believe your term is

damaged when it got there in the morning. So that

is all documented.

The appearance of the ultraviolet phenomena is visible on the video around 11 a.m. It was documented thoroughly later that day around I guess 5 p.m., which was the next time that a UV light was turned on, and all of that was documented and visible on the video by around 5 o'clock that afternoon.

So whatever happened that caused that difference in the UV was thoroughly documented and thoroughly visible as early as less than two hours after Mr. Argentieri took the documents out of the envelope.

And the white appearance of the tabs at the tops of the two pages and the dark appearance of the triangle on the reverse of page 1 are apparent in the scans taken within the first 25 minutes or so of the documents being available for examination on the morning of the 14th with the kinds of basic adjustments that you and I used to

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do back when we had analog televisions.

All of that stuff is on the record, and none of that stuff has really anything to do with printing a single electronic file on two different printers. But let's continue to discuss the two different printers if you wish.

- Q. Would you agree with me that the -- by the time -- between the time you scanned the document at 9 o'clock July 14th and Mr. Lesnevich scanned the document a day later that the document's appearance changed in some respects?
 - A. Would I agree with you on that?
 - Q. Yes.
- A. Not even a little bit. Not a scintilla.
- Q. Have you seen a comparison side by side of Mr. Lesnevich's scan of the "work for hire" document compared to your scan a day earlier?
- A. Your question was whether or not I would agree that the document had some change between the time I first saw it -- well, not at 9 o'clock; it would be closer to 10 after -- I think 11 after 9. 9:11 is kind of a charged number here in New York.

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2 But if there was a difference in the 3 document between 9:11 in the morning and when Mr. Lesnevich did -- on the morning of the 14th 5 and when Mr. Lesnevich did his scans, there was no difference in the document. And my observations, 6 7 direct observations, of the document at that time would say otherwise.

I also took a number of photographs of the document on the afternoon of the 15th, some of them after Mr. Lesnevich had departed. And you can see the ink -- the condition of the ink of the document in those digital images on the photograph, and you can see that the ink is faded but not necessarily any more faded than it was in the scans at 9:18 and 9:22 a.m. of the 14th.

So I just totally -- I don't know how much more I can disagree with you than totally, but I would if I could.

- Have you seen Mr. Lesnevich's scans from the morning of the 15th of the "work for hire" document?
- I don't recall seeing those irrelevant I have seen images -- excuse me, I have seen images of them, I guess, that have been

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1	Tytell
2	reproduced from time to time, but I don't recall
3	seeing them per se.
4	Q. In those images of Mr. Lesnevich's
5	scans, it's your opinion that those appear
6	visually the same as your scans of the "work for
7	hire" document 24 hours earlier?
8	A. I don't know what I'm supposed to be
9	comparing here.
10	Q. I asked you if you've seen images that
11	Mr. Lesnevich took of the "work for hire" document
12	on July 15th. Did you see those?
13	A. I think so. I think I well, I don't
14	know that I've actually seen the native files. I
15	may have done. I don't recall at this time.
16	Q. So would it surprise you to learn that
17	the scan that Mr. Lesnevich took 24 hours after
18	you did appears visually different, the color of
19	the document is different? Would that surprise
20	you?
21	MR. SOUTHWELL: Objection,
22	mischaracterizes.
23	Q. If that were true, would that surprise

scan on the 14th and his on the 15th is different

you that the color of the document between your

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visually?

A. I don't know whether -- I think we're going back to before as to the level of difference and the significance of the kind of difference, the qualitative and quantitative difference, between whatever might appear in Mr. Lesnevich's scan and whatever might appear in my scan, whether that would be within the kind of variation that could be expected between any two scans from the same scanner, from different scanners, and then we go through a list of the possible variables.

So whether or not I would be surprised would be -- depend upon whether or not there actually was any difference that was detectible and the level of significance of any difference should a difference exist.

- Q. Would you be surprised if there was a detectible difference between how the document appeared in Mr. Lesnevich's scan 24 hours after you scanned it? Would that surprise you is the question.
- A. It depends upon the sensitivity of the detecting device as to how large a difference might be detectible. At the electronic level? If

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we have two printouts, are you talking about differences at a subatomic quantum level or are you talking about a difference -- are you talking about a difference between black and almost invisible like the difference between the Aginsky scan and the appearance of the actual paper document when I saw it on the morning of July 11? That was a surprising difference.

So you would want to have a difference at that level of magnitude at this point in the game. Considering the shock and surprise that I experienced on the morning of July 11th, surprising me now would require a really, really big difference.

And I don't think that any difference that might be detectible between a scan taken by Mr. Lesnevich and a scan taken by myself would rise to that level of difference that would cause me to be surprised at this point after having been so surprised on the morning of July 14th.

Q. I'm talking about a difference that's visible to your eye, that one document appears a different color than the other document. Would it surprise you to see a scan from Mr. Lesnevich on

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2	the 15th where the document looks like it's a
3	different color than the one you scanned on the
4	14th?
5	MR. SOUTHWELL: Objection.
6	Q. Would it surprise you if that's true?
7	MR. SOUTHWELL: Objection, asked and
8	answered.
9	MR. BOLAND: No, he did not answer.
10	MR. SOUTHWELL: He did, he did. You
11	just don't like his answer, Mr. Boland. But
12	he did answer it.
13	MR. BOLAND: No.
14	A. Okay. I'll try again. If one document
15	were bright kelly green such as you see on
16	St. Patrick's Day in New York and the other
17	document were fire engine red, then that would be
18	a difference that I would find somewhat
19	surprising.
20	However, my degree of surprise would be
21	infinitely less than the surprise which I
22	experienced on the morning of July 14th when I saw
23	the paper document taken out of the envelope by

Mr. Argentieri and put on the table, comparing

that to what I had expected, having previously

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viewed the scans of -- attached to the complaint from mid 2010 and attached to the June 16th declarations of Mr. Osborn and Dr. Aginsky.

That level of surprise would be what I would now consider to be surprising and would be exceedingly difficult to reach based upon the kinds of small differences which might exist between two scans in terms of shades of -- slight shades of yellow difference.

- Q. Would you expect any change in the color of that document to occur during your and the other experts' examination of it from July 14th forward? Would that examination cause the document to become discolored, yellow or green or red or whatever?
- A. I do not believe that the examination procedures conducted on July 14th and 15th did in fact cause any significant, noticeable change in the appearance of that document.
- Q. I'm not saying whether they did. I'm saying could they. Could the procedures employed by you and the other experts actually cause the document to change color, slightly or dramatically, either way?

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- 2 Α. I don't believe that the procedures employed on those -- on that document that showed 3 up, the actual paper document? Anything is 4 5 possible, sir. Anything could happen. I do not at this moment believe that any such thing did 6 7 happen, nor do I believe that the nature of the 8 examination was such that it would have caused any 9 such change.
 - Q. Okay. Would you agree with this statement, that there appears to be some discoloration in this document that occurred between July 14th and July 15th?
 - A. No.
 - Q. And if the court in this case made that statement on the record, you would disagree with the court, would you not?

MR. SOUTHWELL: Objection, mischaracterizes.

A. I have infinite respect for any and all courts. But if a court chose to make a statement which is contrary to fact, I would have to disagree with that statement. I would prefer to believe that no court would ever make a statement contrary to fact. But anything is possible, as

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1	Tytell
2	you have asked me to agree with.
3	Q. And did you alter any of the images
4	that you placed into your report before putting
5	them into your report?
6	MR. SOUTHWELL: Objection, asked and
7	answered.
8	A. I altered them by reducing them in size
9	so they would fit into the area allotted to them,
10	such as the overall pictures of the scans of page
11	1 and page 2 had to be reduced considerably so
12	they would fit side by side on within the
13	margins of the page and other images were cut out,
14	cropped, and then reproduced one to one.
15	And other images were cropped, such as
16	the name Paul Ceglia, from page 1 and page 2 of
17	the scans of the paper document. And they were
18	enlarged somewhat.
19	But other than cutting them out and
20	adjusting the overall dimensions, I made no
21	adjustments other than that.
22	Q. No changes to the contrast in the
23	image?

Α.

Q.

No.

The brightness?

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1	Tytell
2	A. I picked the image up; I put the image
3	down. That was what I did with the image. Drag
4	and drop I think is the technical term. Or insert
5	picture is another way to do it in Word.
6	MR. BOLAND: Very well. I have no
7	further questions.
8	EXAMINATION BY
9	MR. SOUTHWELL:
10	Q. Mr. Tytell, you were asked earlier
11	about whether during the course of your
12	examination and the question I think had
13	there were a series of questions, and there was
14	some lack of precision as to dates whether in
15	the course of your examination you had touched the
16	"work for hire" document but without gloves.
17	Do you remember those general
18	questions?
19	A. Yes.
20	Q. Are you aware of when, as in which day,
21	that may have occurred?
22	A. Yes.
23	Q. And did that occur that you touched the
24	"work for hire" document without gloves on July

14th?

25

1	Tytell
2	A. No.
3	Q. When did it occur?
4	A. I think on July 15th on I think on
5	the afternoon. I'm not sure of the exact time,
6	but sometime on July 15th.
7	MR. SOUTHWELL: Nothing further.
8	MR. BOLAND: I have nothing based on
9	that.
10	MR. SOUTHWELL: Mr. Boland, I'm just
11	going to put our request on the record for the
12	opportunity to review the transcript or errors
13	and confidentiality designations and to
14	confirm that you are going to be sending the
15	payment out we sent you an e-mail with a
16	different address to send it to. All right?
17	MR. BOLAND: You just send e-mails from
18	Ms. Aycock or you?
19	MR. SOUTHWELL: That's correct,
20	Ms. Aycock sent it.
21	MR. BOLAND: Okay. I'll send it to the
22	address she gave me, and I'll put it in a
23	FedEx envelope. I will do that at the last
24	pickup is at 7. I will do it by 7 o'clock
25	today.

1	Tytell
2	MR. SOUTHWELL: Great. It will be the
3	full amount?
4	MR. BOLAND: Correct.
5	What's the time? Can you ask the court
6	reporter to give us how many time we spent?
7	MR. SOUTHWELL: Do we have four and a
8	half hours?
9	MR. BOLAND: Is someone recording it,
10	instead of guessing, if you could?
11	(Discussion off the record.)
12	MR. SOUTHWELL: Four hours and
13	thirty-six minutes.
14	And Mr. Boland, you will send me the
15	tracking number for the payments, as you said
16	you would?
17	MR. BOLAND: Yes, I will.
18	MR. SOUTHWELL: All right.
19	MR. BOLAND: By e-mail.
20	(Continued on the following page.)
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						Pag	ge 208	
1			T	ytell				
2		MR.	SOUTHWEL	L: All	right,	then.	We're	
3	done.							
4		MR.	BOLAND:	Okay.	We're	done.	Thank	
5	you.							
6		(Ti	me noted:	4:25 j	p.m.)			
7								
8						_		
9	PETI	ER V	. TYTELL					
10								
11	Subscribed	and	sworn to	before	me			
12	this	day	of		2012.			
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COUNTY OF NEW YORK

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I, LAURIE A. COLLINS, a Registered Professional Reporter and Notary Public within and for the State of New York, do hereby certify:

CERTIFICATE

: ss.

That PETER V. TYTELL, 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 7th day of August, 2012.

LAURIE A. COLLINS, RPR

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VERITEXT REPORTING CO	MPANY
1250 Broadway	
New York, New York 1	0001
(212) 279-9424	
CASE: Ceglia v. Zuckerberg	
DEPOSITION DATE: August 3, 20	12
DEPONENT: Peter V. Tytell	
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PETER V. TYTELL	
SUBSCRIBED AND SWORN TO BEFORE	M E
THIS DAY OF	
(NOTARY PUBLIC) MY COMMISSI	ON EXPIRES:

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