

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

IN THE UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA
WESTERN DIVISION

LASER SPALLATION TECHNOLOGIES,
LLC, a California company,

Plaintiff,

v.

No. Case 2:23-cv-02294-AB-SK

THE BOEING COMPANY, a Delaware
corporation,

Defendant.

VIDEOTAPED DEPOSITION OF VIJAY GUPTA
LOS ANGELES, CALIFORNIA
MARCH 12, 2024

REPORTED BY: PATRICIA Y. SCHULER, CSR NO. 11949

1 IN THE UNITED STATES DISTRICT COURT
2 FOR THE CENTRAL DISTRICT OF CALIFORNIA
3 WESTERN DIVISION
4
5

6 LASER SPALLATION TECHNOLOGIES,
7 LLC, a California company,

8 Plaintiff,

9 v. No. Case 2:23-cv-02294-AB-SK

10 THE BOEING COMPANY, a Delaware
11 corporation,

12 Defendant.

13 _____
14 Videotaped deposition of Vijay Gupta, taken on behalf
15 of the Defendants, at 300 South Grand Avenue,
16 Suite 2900, Los Angeles, California, beginning at
17 11:21 a.m. and ending at 3:59 p.m., on March 12, 2024,
18 before PATRICIA Y. SCHULER, Certified Shorthand
19 Reporter No. 11949.
20
21
22
23
24
25

1 APPEARANCES:

2 ATTORNEYS FOR PLAINTIFF:

3 SUGHRUE MION, PLLC

4 BY: JOHN T. CALLAHAN, ESQ.

5 BY: CHID LYER, ESQ.

6 2000 Pennsylvania Avenue, NW

7 Washington, DC 20006-1811

8 jcallahan@sughrue.com

9 FOR DEFENDANTS:

10 MCKOOL SMITH, P.C.

11 BY: NICHOLAS MATICH, ESQ.

12 BY: MAKENNA MILLER, ESQ.

13 300 South Grand Avenue

14 Suite 2900

15 Los Angeles, California 90071

16 nmatich@mckoolsmith.com

17 mmiller@mckoolsmith.com

18

19 Videographer:

20 Andy Koeger

21

22

23

24

25

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

I-N-D-E-X

WITNESS:	EXAMINATION
VIJAY GUPTA	PAGE
MR. MATICH	8

E-X-H-I-B-I-T-S

DEFENDANT'S		PAGE
Exhibit 8	Copy of United States Patent No. 7,487,684 B2	9
Exhibit 1	Second Amended Complaint for Patent Infringement	13
Exhibit 5	Declaration of Vijay Gupta dated March 8, 2024	23
Exhibit 9	Image entitled "Boeing 9G2"	71
Exhibit 7	Curriculum Vitae for Vijay Gupta	99
Exhibit 11	Article entitled "Glass-modified stress waves for adhesion measurement of ultra thin films for device applications" dated March 31, 2003	104

1 SAN DIEGO, CALIFORNIA; TUESDAY, MARCH 12, 2024

2 11:21 a.m.

3 MR. MATICH: So the parties have a dispute
4 about whether or not the deposition for this
5 transcript could properly be designated "attorneys'
6 eyes only." Boeing's position is that there is no
7 "attorneys' eyes only" information likely to be
8 covered. There's no "attorneys' eyes only"
9 information in the -- in Dr. Gupta's declaration.

10 Counsel for LST told counsel for Boeing
11 that Boeing -- that Boeing in-house counsel could
12 see the declaration. After they sent it none of
13 the declaration was marked "attorneys' eyes only."
14 And most importantly, there is currently no
15 protective order in this case.

16 Nevertheless, as a courtesy to LST,
17 Boeing has agreed to treat the deposition
18 transcript as "attorneys' eyes only" for 24 hours
19 after we receive the rough to enable LST to review
20 it and determine if it wants to seek relief from
21 the court regarding whether or not it is
22 "attorneys' eyes only."

23 John, have I stated it correctly?

24 MR. CALLAHAN: The only thing I would like
25 to add is the idea that as to plaintiff's attorney

1 having communicated to Boeing's attorney that the
2 declaration could be shared with Boeing, we are
3 still checking on whether that was on the basis that
4 the attachments were public, or had been exchanged
5 between the parties and not necessarily with
6 reference to the declaration itself. Is that --

7 MR. MATICH: So we disagree. When I spoke
8 to Mr. Dave Emory, I hadn't yet fully reviewed the
9 declaration but I was on the phone with him for
10 other reasons and I asked if there was anything --
11 any reason I couldn't share the declaration with
12 Boeing, and he said it was all stuff that they
13 discussed with -- that Dr. Gupta discussed with
14 Boeing so there was no issue with us sharing it with
15 them.

16 MR. CALLAHAN: I just want to say I
17 understand your position. I have been traveling for
18 this deposition, so that issue arose in the last
19 couple of days and I have not had a chance to speak
20 to the individuals involved face-to-face.

21 And it's my understanding that it may
22 have been a miscommunication -- it's my
23 understanding there may have been a
24 miscommunication as to the declaration versus the
25 exhibits to the declaration.

1 So I just want to point that out and we
2 can resolve it at some other time.

3 MR. MATICH: Understood. But we will
4 treat the -- we will not share the rough with Boeing
5 for 24 hours to enable LST to raise whatever issues
6 it wants to raise.

7 MR. CALLAHAN: Yep, thank you for that.

8 MR. MATICH: Great.

9 Let's go off the record.

10 (Recess taken.)

11 THE VIDEOGRAPHER: We are now on the
12 record. Today's date is March 12, 2024, and the
13 time is 11:24 a.m. This is the video deposition of
14 Dr. Vijay Gupta being taken in the matter of Laser
15 Spallation Technologies versus The Boeing Company on
16 behalf of the plaintiff, pending in the
17 United States District Court for the Central
18 District of California, Western Division.

19 This deposition is taking place at
20 300 South Grand Avenue, Suite 2900, Los Angeles,
21 California 90071.

22 My name is Andy Koeger appearing for
23 Aptus Court Reporting located at 401 West A Street,
24 Suit 1680, San Diego, California 92101. I am the
25 official videographer and this is the only

1 authorized video recording of the deposition.

2 The audio and video recording will take
3 place at all times unless all counsel agree to go
4 off the record.

5 Will counsel please identify yourselves
6 and state whom you represent, starting with the
7 noticing attorney.

8 MR. MATICH: This is Nick Matich of McKool
9 Smith for defendant, The Boeing Company.

10 Ms. MILLER: Makenna Miller of McKool
11 Smith also for the Boeing Company.

12 MR. CALLAHAN: John Callahan for the
13 plaintiff from Sughrue Mion, Washington, DC.

14 MR. LYER: Chid Lyer from Sughrue Mion
15 representing LST.

16

17 VIJAY GUPTA,
18 having been administered an oath, was examined and
19 testified as follows:

20

21 EXAMINATION

22 BY MR. MATICH:

23 Q. Good morning, Dr. Gupta.

24 A. Good morning.

25 Q. Can you please state your name and

1 address for the record.

2 A. Vijay Gupta, 38-137 E, Engineering IV
3 Building, UCLA, Los Angeles, California 90095.

4 Q. And, Dr. Gupta, is that your personal
5 address?

6 A. Oh, this is my work address.

7 Q. Yeah, can you state your personal address
8 for the record.

9 A. Yes. 15135 Greenleaf Street, Sherman
10 Oaks, California 91403.

11 Q. And Dr. Gupta, do you prefer Dr. Gupta,
12 Professor Gupta, Mr. Gupta? How should I address
13 you today?

14 A. Anything is fine, Counsel.

15 Q. Thank you.

16 And, Dr. Gupta, are you an inventor on
17 U.S. Patent No. 748-7684?

18 A. Is it '586?

19 Q. This is the '684 patent.

20 (Exhibit 8 was marked for identification.)

21 BY MR. MATICH

22 Q. So, actually, could we pull up Tab 8 and
23 mark it as Exhibit 8?

24 Please scroll down to the next page.

25 Dr. Gupta, do you see Exhibit 8 on your

1 screen?

2 A. Yes.

3 Q. Do you recognize the document?

4 A. Can you make the document bigger, please?

5 Q. Yes, let me see if I can...

6 Dr. Gupta, do you recognize Exhibit 8?

7 A. Yes.

8 Q. What is Exhibit 8?

9 A. That's one of the patents that I am the

10 named inventor.

11 Q. Okay. And Exhibit 8 is U.S. Patent

12 7,487,684?

13 A. Yes.

14 Q. And you're an inventor on that patent,

15 Dr. Gupta?

16 A. Yes.

17 Q. And, Dr. Gupta, if during the course of

18 this deposition if I refer to the '684 patent,

19 you'll understand I mean Exhibit 8?

20 A. Yes.

21 Q. Thank you.

22 Have you ever been deposed before,

23 Dr. Gupta?

24 A. Yes.

25 Q. How many times?

1 A. Close to 150 times.

2 Q. Close to 150 times.

3 And in what capacity have you been
4 deposed?

5 A. As an expert witness.

6 Q. Okay. So you're familiar with how
7 depositions work?

8 A. Yes.

9 Q. And you understand that I need you to
10 provide yes-or-no answers and "Um-hmm" or "Uh-huh"
11 will not show up well on the transcript?

12 A. Yes.

13 Q. Okay. And you understand that if you
14 need a break for some reason, like, we can take a
15 break. You understand that?

16 A. Yes.

17 Q. And you understand that your counsel may
18 make objections but that you're still obliged to
19 answer unless the objection is based on privilege?

20 A. Yes.

21 Q. Okay. Is there any reason you cannot
22 testify accurately and completely today?

23 A. No.

24 Q. You don't feel sick?

25 A. No.

1 Q. You got enough sleep last night?

2 A. Yes.

3 Q. You don't have any personal concerns that
4 are distracting you?

5 A. No.

6 Q. And you understand that deposition
7 testimony is the same as testifying live in court,
8 as far as your obligation to be truthful?

9 A. Yes.

10 Q. And you have the same understanding about
11 written declarations to a court?

12 A. Yes.

13 Q. And you understand that when you submit
14 material to the patent office as part of a patent
15 application you have an obligation to be honest
16 with the patent office?

17 A. Yes.

18 Q. And you understand that you have an
19 obligation to be candid with the patent office?

20 A. Yes.

21 Q. And tell them about prior art?

22 A. Yes.

23 Q. Thank you.

24 When you applied for the '684 patent, did
25 you disclose your prior relevant publications?

1 MR. CALLAHAN: Objection; relevance. The
2 question calls for information outside the scope of
3 Dr. Gupta's March 8 Declaration. Question also for
4 information that's contrary to the Court's order of
5 February 27.

6 (Exhibit 1 was marked for identification.)

7 BY MR. MATICH:

8 Q. Dr. Gupta, you can answer the question.

9 A. Yes.

10 Q. Can we pull up Tab 1 and mark it as
11 Exhibit 1.

12 Dr. Gupta, do you see Exhibit 1?

13 A. Yes.

14 Q. Do you recognize Exhibit 1?

15 A. Just from the face of it, I mean, it's --
16 can you kindly make the screen -- or zoom in a
17 little bit, please?

18 Yes.

19 Q. What is Exhibit 1?

20 A. It says, on the face of it, "Second
21 Amended Complaint for Patent Infringement."

22 Q. Have you seen Exhibit 1 before?

23 A. Yes, I believe so.

24 Q. And you understand that Exhibit 1 is the
25 operative complaint in this lawsuit?

1 A. Yes.

2 Q. The plaintiff in the lawsuit is a company
3 called Laser Spallation Technologies, LLC. If I
4 refer to that company as "LST," will you understand
5 what I mean?

6 A. Yes.

7 Q. Are you an owner of LST?

8 MR. CALLAHAN: Objection; outside the
9 scope of the declaration of Dr. Gupta that was dated
10 March 8. And it's also contrary to the Court's
11 order of February 27.

12 BY MR. MATICH:

13 Q. Dr. Gupta?

14 A. I guess I don't know since this is beyond
15 the scope of the Court's order. I'm not sure that
16 I should answer the question or just...

17 Q. Dr. Gupta, you have to answer the
18 question and I disagree with the objection because
19 this -- the issues go to your financial interest in
20 the case. So therefore, the credibility of your
21 declaration. So we're entitled to explore this
22 issue.

23 MR. CALLAHAN: I also object on the basis
24 of privilege.

25 MR. MATICH: It's not privileged whether

1 or not he's an owner of the plaintiff.

2 MR. CALLAHAN: He's worked with attorneys
3 to establish that, so I believe it could be
4 privileged. It could be calling for information
5 that's privileged.

6 MR. MATICH: I'm just asking the fact.

7 BY MR. MATICH:

8 Q. Dr. Gupta, do you own part of LST?

9 MR. CALLAHAN: You can answer the question
10 if you can, but I will caution the witness not to
11 reveal any attorney-client privilege.

12 THE WITNESS: Yes.

13 BY MR. MATICH

14 Q. What percentage of LST do you own?

15 A. I can't disclose that.

16 Q. What -- why can't you disclose that?

17 A. It's attorney-client privilege.

18 Q. Dr. Gupta, it is not attorney-client
19 privileged what percentage LST that you own.

20 MR. CALLAHAN: Objection. He has worked
21 with an attorney to incorporate the company and that
22 information is privileged, confidential, and quite
23 frankly, not relevant to this deposition.

24 MR. MATICH: I'm not asking about any of
25 Dr. Gupta's communications with attorneys. I'm just

1 asking for the fact of what percentage of LST he
2 owns and it goes to his financial interest in the
3 case, and therefore, motivation to be truthful with
4 the court.

5 THE WITNESS: Actually, frankly speaking,
6 I don't know the answer to that question because I
7 don't know what the laws are with regards to the
8 other stakeholders in the company, there's a family
9 involved.

10 So to be very frank with you, I don't
11 know the exact answer to the question.

12 BY MR. MATICH:

13 Q. Do you know if you own more or less than
14 50 percent of LST?

15 MR. CALLAHAN: Objection.

16 THE WITNESS: Again, I won't know -- the
17 same answer.

18 BY MR. MATICH:

19 Q. So you can't tell me whether or not you
20 own more or less than 50 percent of LST?

21 MR. CALLAHAN: Objection; asked and
22 answered and harassing the witness.

23 THE WITNESS: That is correct, Counsel.

24 BY MR. MATICH:

25 Q. Dr. Gupta, you referred to a family being

1 involved. Is that your family?

2 A. Yes.

3 MR. CALLAHAN: Objection; relevance.

4 BY MR. MATICH:

5 Q. What percent -- do you know what
6 percentage of LST your family owns?

7 MR. CALLAHAN: Objection.

8 THE WITNESS: That's the -- Counsel, I'm
9 having issues with that I'm not a lawyer. I don't
10 know how the law works about ownerships. So if
11 there is a family involved and there are members
12 involved who are beyond 21 years of age, then I
13 don't know how much of that is -- ownership is to me
14 versus the other members.

15 BY MR. MATICH:

16 Q. Okay. Who are the other people that own
17 LST?

18 MR. CALLAHAN: Objection. The court order
19 of February 27th allowed you to take a deposition on
20 the substance of his declaration. This line of
21 questioning about the ownership of the plaintiff
22 company was never mentioned, never raised in his
23 declaration.

24 So the questions are in violation of the
25 Court's order.

1 MR. MATICH: John, I'm --

2 MR. CALLAHAN: And also -- I'm sorry, if I
3 could just finish.

4 And also I note that we've been taking
5 this deposition for nearly 15 minutes and you
6 haven't even introduced his declaration into
7 evidence yet. You've not asked a question about
8 it.

9 MR. MATICH: John --

10 MR. CALLAHAN: There's only 180 minutes in
11 this deposition. So I would encourage counsel to
12 get to the declaration and ask questions about it.

13 MR. MATICH: All right. John, you've been
14 eating up my time with speaking objections. You
15 make your objections, make the record. But please
16 do it unobtrusively and stop eating up the time.

17 There's nothing wrong -- the whole
18 question here is whether or not the court should
19 believe Dr. Gupta's declaration. And his financial
20 interest in this case is highly relevant to that.
21 So I am entitled to explore what, if any, financial
22 interest he has in the outcome of the case.

23 MR. CALLAHAN: The witness has already
24 testified that he doesn't know the information that
25 you've asked the question about.

1 MR. MATICH: I'm going to keep asking
2 other questions, we'll see if he knows the answer.
3 If he doesn't know the answer, he doesn't know the
4 answer. But please stop with the speaking
5 objections.

6 MR. CALLAHAN: That is fine. But I don't
7 want to be at the end of 180 minutes and you haven't
8 got to the declaration yet.

9 MR. MATICH: John, we've only been --
10 we've only started 15 minutes ago and a lot of that
11 time has been eaten with your speaking objections.
12 Please stop. Make your objections. You can object
13 to relevance, if you think it's outside the scope.
14 Make your objections, but I need to be able to
15 proceed with asking the witness the questions.

16 MR. CALLAHAN: Please do.

17 BY MR. MATICH:

18 Q. Dr. Gupta, who else owns a share of LST?

19 MR. CALLAHAN: Objection; relevance.

20 THE WITNESS: Actually, I don't know. I
21 don't have the LSTs charter in front of me. I'm not
22 prepared to -- I don't recall.

23 BY MR. MATICH:

24 Q. Do you know what percentage of any
25 recovery in this case would go to LST?

1 MR. CALLAHAN: Objection; relevance;
2 clearly outside the scope of the order.

3 THE WITNESS: And also it is
4 attorney-client privileged.

5 BY MR. MATICH:

6 Q. Dr. Gupta, you are not allowed to make
7 objections.

8 The -- what percentage of any recovery in
9 this case would go to LST?

10 MR. CALLAHAN: Objection; privileged.

11 THE WITNESS: Yes, I cannot disclose that.

12 BY MR. MATICH:

13 Q. You -- why can't you disclose that?

14 A. Because that's a discussion with the
15 attorney.

16 Q. The -- it's a discussion with an attorney
17 how much of any recovery in this case would go to
18 LST? I'm asking for a number.

19 MR. CALLAHAN: Objection.

20 THE WITNESS: Yes, that number is
21 connected to the -- an attorney discussion.

22 BY MR. MATICH:

23 Q. So, Dr. Gupta, I just want to be clear.

24 You are refusing to answer what
25 percentage of any recovery in this case would go to

1 LST?

2 MR. CALLAHAN: Objection; mischaracterizes
3 the witness' testimony.

4 THE WITNESS: And also there's a -- it is
5 connected to a discussion with the attorney and
6 several other attorneys involved in the case. So I
7 don't know if I can disclose that information.

8 BY MR. MATICH:

9 Q. Dr. Gupta, if your counsel wants to
10 object and instruct you not to answer on the basis
11 of privilege, they can do that. I think the
12 objection would be frivolous, but I'm going to ask
13 you one more time. And so the -- if -- you need to
14 give me an answer if you know the answer to the
15 question.

16 Dr. Gupta, what percentage of any
17 recovery in this case would go to LST?

18 MR. CALLAHAN: Objection. And I will --
19 objection on the basis of privilege and I will
20 instruct, now, the witness not to answer the
21 question.

22 BY MR. MATICH:

23 Q. Are you going to follow your attorney's
24 instructions?

25 A. Yes.

1 MR. MATICH: All right. John, that
2 objection is frivolous and we reserve the right to
3 bring Dr. Gupta back to get answers to that question
4 and any other answers where he has refused to
5 answer.

6 BY MR. MATICH:

7 Q. Dr. Gupta, who makes the decisions for
8 LST?

9 MR. CALLAHAN: Objection; relevance.

10 THE WITNESS: That would be me.

11 BY MR. MATICH:

12 Q. So today you speak for LST?

13 MR. CALLAHAN: Objection; that
14 mischaracterizes the witness' testimony. He is a
15 fact witness based upon his declaration testimony.

16 BY MR. MATICH:

17 Q. Dr. Gupta, are you speaking for LST
18 today?

19 MR. CALLAHAN: Objection.

20 THE WITNESS: I think I am being deposed
21 today as a fact witness and so I am not sure whether
22 I am speaking on behalf of LST or what was the --
23 and I don't know the legal language under which I
24 was asked to be deposed today. So if I am just here
25 to give the facts then some of the facts are in my

1 declaration were secured as my employment at UCLA.

2 So I'm not so sure, Counsel. I'm not a lawyer.

3 (Exhibit 5 was marked for identification.)

4 BY MR. MATICH:

5 Q. Can we pull up Tab 5 and mark it as

6 Exhibit 5? Stay on Page 1 for a second.

7 Dr. Gupta, do you recognize Exhibit 5?

8 MR. CALLAHAN: Objection; form.

9 Can we at least show him the date?

10 MR. MATICH: Yes.

11 BY MR. MATICH:

12 Q. Dr. Gupta, if you need to scroll down
13 you're welcome to scroll down and look through the
14 document.

15 A. Okay.

16 Q. But I will represent to you that this is
17 the declaration that was served on Friday.

18 THE VIDEOGRAPHER: He doesn't have scroll
19 control, I do.

20 MR. MATICH: Okay.

21 BY MR. MATICH

22 Q. Dr. Gupta, if you want to ask the
23 videographer to go to a different portion, you're
24 welcome to do that.

25 THE WITNESS: If you could kindly go down

1 quickly.

2 More, please.

3 Keep going.

4 Yes.

5 BY MR. MATICH:

6 Q. And what is Exhibit 5, Dr. Gupta?

7 A. This is one of my declarations I
8 submitted as part of the lawsuit.

9 Q. Is everything in this declaration
10 accurate?

11 A. To the best of my recollection, yes.

12 Q. Is there anything about this declaration
13 you would want to change today?

14 A. No.

15 Q. Could you please go up to Paragraph 5,
16 and Dr. Gupta, in the bottom half of Paragraph 5,
17 Line -- this is on Line 3 beginning "My research
18 has been widely disseminated in these areas with
19 over 150 papers"?

20 A. Yes.

21 Q. Do you see that sentence, Dr. Gupta?

22 A. Yes.

23 Q. Do some of those papers relate to laser
24 spallation?

25 A. Yes.

1 Q. And laser spallation is the subject of
2 the '684 patent?

3 MR. CALLAHAN: Objection.

4 THE WITNESS: Partly, yes.

5 BY MR. MATICH:

6 Q. Do you ever read the work of others in
7 the field of laser spallation?

8 A. I do.

9 Q. Who -- who are other people whose work
10 you read in the field of laser spallation?

11 MR. CALLAHAN: Objection; relevance.

12 THE WITNESS: Over the years, I don't
13 recall the names. There are people who follow my
14 work all over the world -- so I don't recall all the
15 names.

16 BY MR. MATICH:

17 Q. Do you consider yourself an expert in the
18 field of laser spallation?

19 A. Yes.

20 Q. Is there anyone else you consider an
21 expert in the field of laser spallation?

22 MR. CALLAHAN: Objection; calls for
23 speculation.

24 THE WITNESS: I don't recall any names
25 offhand but there are a lot of folks who follow my

1 work, and I'm not sure their level of expertise.

2 BY MR. MATICH:

3 Q. Is there anyone else who you think is --
4 has as much expertise in laser spallation as you
5 do?

6 A. I guess that would be my former adviser
7 Ari Alban at MIT. Could be a few other professors
8 at MIT.

9 Q. Is there anyone at any other university
10 that you consider an expert in the field of laser
11 spallation?

12 MR. CALLAHAN: Objection; the line of
13 questioning is not relevant to Dr. Gupta's
14 declaration of March 8 and is in violation of the
15 Court's order of February 27.

16 MR. MATICH: John, I'd ask you to just say
17 "Objection; relevance," and we can move on.

18 BY MR. MATICH:

19 Q. Dr. Gupta, have you ever read any of the
20 work of Nancy Sottos?

21 MR. CALLAHAN: Objection; relevance;
22 outside the scope of the declaration; and contrary
23 to the Court's order.

24 THE WITNESS: Yeah, Counsel, I need to,
25 like, really understand because I am here to answer

1 questions. I'm prepared to give answers to the
2 questions, which are related to my declaration. I
3 was told about that. So I read my declaration and I
4 think this inquiry about other aspects of the -- my
5 work is probably not relevant to this deposition.

6 BY MR. MATICH:

7 Q. Dr. Gupta, your declaration -- first off,
8 your counsel needs to make objections, and unless
9 it's on the basis of privilege you still have to
10 answer the question.

11 Your declaration puts at issue your
12 publication history, which includes who you cite
13 and whether or not you are an expert in the field
14 of laser spallation. So I'm entitled to ask about
15 that because it is in your declaration.

16 Now, I'll ask again: Dr. Gupta, have you
17 ever read any of the work of Nancy Sottos?

18 MR. CALLAHAN: Objection.

19 THE WITNESS: But that has nothing to do
20 with my expertise in this field. If you are citing
21 my papers, then you are inquiring about whether
22 expertise in my area of research, in laser
23 spallation, whether I am an expert has nothing to do
24 with somebody else as expert or not.

25 ///

1 BY MR. MATICH:

2 Q. Dr. Gupta, I'll just ask the question
3 again.

4 Are you familiar with the work of Nancy
5 Sottos?

6 MR. CALLAHAN: Objection; asked and
7 answered.

8 THE WITNESS: Yes.

9 BY MR. MATICH:

10 Q. Do you consider her an expert in the
11 field of laser spallation?

12 MR. CALLAHAN: Objection; calls for
13 speculation.

14 THE WITNESS: I can't say if she's an
15 expert or not.

16 BY MR. MATICH:

17 Q. Are you not aware of who other people --
18 who other laser spallation researchers are?

19 MR. CALLAHAN: Objection; form.

20 THE WITNESS: Yes.

21 BY MR. MATICH:

22 Q. Who are other people -- and you have no
23 opinion -- you've read the work of Dr. Nancy
24 Sottos?

25 MR. CALLAHAN: Objection; mischaracterizes

1 the witness' testimony; calls for speculation and
2 form.

3 THE WITNESS: I read the work, yes.

4 BY MR. MATICH:

5 Q. Do you think her work is good?

6 MR. CALLAHAN: Objection; calls for
7 speculation.

8 THE WITNESS: Again, she has followed my
9 work. She -- I developed a technique --

10 THE COURT REPORTER: I what?

11 THE WITNESS: I developed a technique and
12 she has communicated to me before and asking me how
13 to reproduce the experiments.

14 So, then, she essentially reproduced the
15 technique, which I had already developed. And so
16 in that sense, she has followed my work and
17 developed the same tool at her research lab.

18 BY MR. MATICH:

19 Q. So when you say she followed your work,
20 you're saying that you were the leader and the
21 innovator and she followed behind you?

22 A. Absolutely. The technique was for
23 development in laser spallation. And then at
24 several occasions at a conference she then asked
25 questions of me, how to develop the technique, and

1 then she developed the technique, I believe, and
2 Harmona Champagne.

3 So that's the history of the laser
4 spallation technique with regard to Nancy Sottos.

5 Q. When you say, "the technique," are you
6 referring to the technique of the '684 patent?

7 MR. CALLAHAN: Objection; mischaracterizes
8 the witness' testimony; also calls for a legal
9 conclusion.

10 THE WITNESS: No.

11 BY MR. MATICH:

12 Q. What technique are you referring to?

13 A. You asked the question about the laser
14 spallation technique in general.

15 Q. So you're referring to the laser
16 spallation technique you developed earlier?

17 A. Yes.

18 Q. Are you familiar with the work of Jin Lan
19 Wang?

20 MR. CALLAHAN: Objection.

21 THE WITNESS: I think there are many
22 people who follow my work. That may be a student of
23 Nancy Sottos. The whole group basically follows
24 that work.

25 ///

1 BY MR. MATICH:

2 Q. You think that whole -- can we go up to
3 Paragraph 3?

4 Dr. Gupta, you see the last sentence in
5 Paragraph 3 of your declaration, "At age 31, I
6 became the youngest full professor with tenure in
7 the United States"?

8 A. Yes, I would say one of them.

9 Q. You would say one of the youngest?

10 A. Yes.

11 Q. So your -- your -- the sentence in your
12 declaration is not accurate?

13 MR. CALLAHAN: Objection; mischaracterizes
14 the witness' testimony.

15 THE WITNESS: It is fairly accurate.

16 BY MR. MATICH:

17 Q. Fairly accurate or is it --

18 A. It's accurate. It provides the sentiment
19 that I became the youngest full professor with
20 tenure in the United States.

21 Q. So that sentence, "At age 31, I became
22 the youngest full professor with tenure in the
23 United States only five years after receiving my
24 Ph.D. degree."

25 You believe that sentence is 100 percent

1 accurate?

2 MR. CALLAHAN: Objection; mischaracterizes
3 the witness' testimony.

4 THE WITNESS: Yeah, I said "one of the
5 youngest full professors." Clearly, I did not go
6 out and check the history in hundreds of
7 universities in the United States.

8 BY MR. MATICH:

9 Q. Okay. So you didn't -- you didn't look
10 -- you don't have a list of all the full professors
11 with tenure in the United States?

12 MR. CALLAHAN: Objection; mischaracterizes
13 the witness' testimony.

14 THE WITNESS: That is correct.

15 BY MR. MATICH:

16 Q. You've never seen a list like that?

17 MR. CALLAHAN: Objection; mischaracterizes
18 the witness' testimony.

19 THE WITNESS: Yes, sir. I said I am one
20 of the youngest full professors with tenure.

21 BY MR. MATICH:

22 Q. Okay. Dr. Gupta, you are now saying "one
23 of the youngest full professors with tenure." Are
24 you amending your declaration, or are you standing
25 by the sentence as written?

1 MR. CALLAHAN: Objection; mischaracterizes
2 the witness' testimony.

3 THE WITNESS: I think if you read, in
4 totality, it basically provides a sentiment. And I
5 think the reader should be able to figure it out
6 that there's no absolutes, you know, certainty about
7 this when you say "youngest full professors" there
8 is one of the youngest full professors because there
9 is no database where you could actually go in and
10 check it out.

11 BY MR. MATICH:

12 Q. Can we scroll down to Paragraph 6?

13 Dr. Gupta, do you see Line 16 in
14 Paragraph 6 of your declaration?

15 A. Yes.

16 Q. "The work on this technique started as
17 part of my PhD thesis at MIT between 1985 and 1989
18 and a commercial version of this tool with
19 additional features was developed in 1992."

20 What is the commercial tool that that
21 sentence refers to?

22 MR. CALLAHAN: Objection; form.

23 THE WITNESS: There were some additional
24 features, which I added on to my MIT work.

25 ///

1 BY MR. MATICH:

2 Q. Was there a company that sold the tool?

3 MR. CALLAHAN: Objection.

4 THE WITNESS: No.

5 BY MR. MATICH

6 Q. What was the -- did the tool have a name?

7 A. It was the Laser Spallation Technique.

8 Q. Who -- did anyone buy the tool?

9 MR. CALLAHAN: Objection.

10 THE WITNESS: At Dartmouth, no.

11 BY MR. MATICH:

12 Q. So it was a commercial tool, but no one

13 -- no company sold it and no company bought it?

14 MR. CALLAHAN: Objection; mischaracterizes
15 the witness' testimony.

16 THE WITNESS: So the commercial version of
17 the tool, meaning that it was not a lot of the
18 companies they came to me and I was still working as
19 a consultant to the companies and in that sense, it
20 is a commercial version of the tool.

21 BY MR. MATICH:

22 Q. So did the companies -- you taught the
23 companies how to make the tool for themselves?

24 MR. CALLAHAN: Objection; mischaracterizes
25 the witness' testimony.

1 THE WITNESS: No, the commercial version
2 of the tool doesn't mean they had to build the tool
3 and sell the tool. Sometimes you can also use the
4 tool to provide data which is highly relevant to the
5 manufacturing components to the industry.

6 BY MR. MATICH:

7 Q. Dr. Gupta, I am just trying to understand
8 in what sense the tool was commercial. There was
9 no product that you were selling, correct?

10 MR. CALLAHAN: Objection; mischaracterizes
11 the witness' testimony.

12 THE WITNESS: I just told you what I meant
13 by the commercial version of the tool. And in
14 engineering the commercial version of the tool
15 doesn't mean that you are going to sell the tool.
16 If you were to test a particular component or a
17 product and help it improve it, which is a highly
18 commercial value, using your tool then that tool has
19 a commercial value.

20 BY MR. MATICH:

21 Q. Okay. And did any company use the tool
22 commercially?

23 MR. CALLAHAN: Objection.

24 THE WITNESS: Yes, several.

25 ///

1 BY MR. MATICH:

2 Q. Which companies?

3 A. I can't disclose all the names of the
4 companies because I have proprietary contracts with
5 them.

6 But some other companies are listed in
7 that paragraph later on.

8 Q. And how did these companies come into
9 possession of the tool?

10 MR. CALLAHAN: Objection; form.

11 THE WITNESS: I explained to you earlier,
12 you keep going back to the tool and possession so
13 you have to get out of that. And it is the
14 component being tested for the companies using my
15 tool so the possession, they do not have the
16 possession of the tool, but they could be sending me
17 the samples, and I could be developing the
18 technology for them using the tool.

19 BY MR. MATICH:

20 Q. Ah, okay. I understand.

21 So you -- the tool refers to the tool
22 that you had at Dartmouth?

23 MR. CALLAHAN: Objection.

24 BY MR. MATICH:

25 Q. And you were performing services for

1 companies commercially?

2 MR. CALLAHAN: Objection.

3 THE WITNESS: Yes.

4 BY MR. MATICH:

5 Q. How much were you charging for those
6 services?

7 MR. CALLAHAN: Objection; relevance;
8 outside the scope of his declaration and also
9 contrary to the Judge's order.

10 THE WITNESS: I can't answer that. It's
11 confidential with the companies.

12 BY MR. MATICH:

13 Q. I am not asking for how much a particular
14 company made. I am asking in general how much were
15 you charging?

16 MR. CALLAHAN: Objection; asked and
17 answered.

18 THE WITNESS: That is confidential.

19 BY MR. MATICH:

20 Q. So you are not going to tell me how much
21 the companies were charging?

22 MR. CALLAHAN: Objection.

23 BY MR. MATICH

24 Q. Or how -- excuse me.

25 How -- you're not going to tell me how

1 much you were charging the companies?

2 MR. CALLAHAN: Objection; asked and
3 answered and harassing the witness.

4 THE WITNESS: Correct.

5 BY MR. MATICH:

6 Q. Were you charging them for performing
7 these services?

8 MR. CALLAHAN: Objection.

9 THE WITNESS: I can't disclose that.

10 BY MR. MATICH:

11 Q. You're refusing to tell me whether or not
12 you charged anything -- these companies anything
13 for your services?

14 MR. CALLAHAN: Objection; mischaracterizes
15 the witness' testimony.

16 THE WITNESS: I can just say some
17 companies I charge. Some were just basically
18 research. So -- but I can't disclose anything
19 beyond that.

20 BY MR. MATICH:

21 Q. Okay. Staying on Paragraph 6, the
22 sentence beginning on Line 20, "This technique has
23 been virtually used by all major semiconductor
24 companies in the world for characterization of
25 adhesion and devices and packages."

1 Do you see that sentence, Dr. Gupta?

2 A. Yes.

3 Q. And just as a grammatical point, did you
4 mean the technique has been used by virtually all
5 of the major semiconductor companies?

6 MR. CALLAHAN: Objection; mischaracterizes
7 the witness' testimony.

8 THE WITNESS: Yes.

9 BY MR. MATICH:

10 Q. Have you checked with virtually all major
11 semiconductor companies to see if they use this
12 technique?

13 MR. CALLAHAN: Objection; relevance.

14 THE WITNESS: Again, I explained to you
15 that how the term "uses" discussed in my
16 declaration, it is a lot of the companies came to me
17 in my lab and optimizing the products using the
18 tool, which I had in my lab.

19 So it's not that each of these companies
20 had the tool in their premises. So I just want to
21 clarify that.

22 BY MR. MATICH:

23 Q. Understood, Dr. Gupta, but virtually all
24 major semiconductor companies came to you to do
25 work for them?

1 MR. CALLAHAN: Objection; mischaracterizes
2 the witness' testimony.

3 THE WITNESS: At that point, there was
4 some major corporations, which you have some names
5 in my declaration.

6 BY MR. MATICH:

7 Q. I understand there are a list of specific
8 companies there, but the statement in your
9 declaration is that "virtually all major
10 semiconductor companies" came to you; is that
11 statement accurate?

12 A. Accurate as per my understanding of who
13 were the major players. So virtually all those
14 major players came to my lab.

15 Q. And who do you define as the major
16 semiconductor companies?

17 MR. CALLAHAN: Objection; relevance.

18 THE WITNESS: At that time, Intel
19 Corporation, Texas Instruments, Freescale
20 Semiconductor, ON Semiconductor.

21 So this again, in my domain, under my
22 understanding, they were major players.

23 BY MR. MATICH:

24 Q. So the only major players at that time in
25 the semiconductor industry were the ones listed in

1 Paragraph 6?

2 MR. CALLAHAN: Objections;
3 mischaracterizes the witness' testimony.

4 THE WITNESS: That's -- yes, by my
5 understanding.

6 MR. MATICH: We can go off the record.

7 THE VIDEOGRAPHER: It's 12:04 p.m. and
8 we're going off the record.

9 (Recess taken.)

10 THE VIDEOGRAPHER: It is 12:43 p.m. We
11 are back on the record.

12 BY MR. MATICH:

13 Q. Dr. Gupta, did you have a good lunch?

14 A. Yes, thank you, Counsel.

15 Q. Do you consider Samsung a major
16 semiconductor company?

17 A. I'm not an expert in semiconductor
18 companies. I only focus on just the mechanic's
19 problems in -- phased by these companies.

20 Q. So you don't know if Samsung is a major
21 semiconductor company?

22 MR. CALLAHAN: Objection; form.
23 Objection; also mischaracterizes the witness'
24 testimony.

25 THE WITNESS: Yeah, I mean, they make

1 electronic equipment.

2 BY MR. MATICH:

3 Q. So is Samsung -- scratch that.

4 In your opinion, is Samsung a major
5 semiconductor company?

6 MR. CALLAHAN: Objection; form; also calls
7 for speculation.

8 THE WITNESS: Yeah, I'm basically not an
9 expert in semiconductor aspects of the companies.

10 When I say something in my declaration,
11 which we were reading earlier about the technology
12 being used by major semiconductor companies then
13 I'm referring -- only focusing on the problems they
14 had with regards to interfaces and how my
15 technology could benefit them. But in that
16 regards, I may have used the word "major" for my
17 domain.

18 BY MR. MATICH:

19 Q. And in your domain, is Samsung a major
20 semiconductor company?

21 MR. CALLAHAN: Objection; form. Is it
22 possible to clarify where in the declaration you are
23 referring to?

24 MR. MATICH: I'm just asking a question.

25 MR. CALLAHAN: It's unrelated to the

1 declaration.

2 MR. MATICH: It's related to the
3 declaration but I'm not referring to words in the
4 declaration.

5 MR. CALLAHAN: Okay. Understood.

6 THE WITNESS: So you need to be more
7 specific about "major" in what way.

8 BY MR. MATICH:

9 Q. In the sense that you used "major
10 semiconductors companies" in your declaration, do
11 you think Samsung is a major semiconductor company?

12 MR. CALLAHAN: Objection; form.

13 THE WITNESS: I don't know.

14 BY MR. MATICH:

15 Q. Do you think in the sense that you used
16 the worded phrase "major semiconductor company" in
17 your declaration, is TSMC a major semiconductor
18 company?

19 MR. CALLAHAN: Objection; form. And I
20 will reiterate my question about where in the
21 declaration you're referring to?

22 MR. MATICH: This is on Paragraph 6, Line
23 21.

24 I'm trying to understand what the witness
25 meant when he said, "all major semiconductor

1 companies."

2 BY MR. MATICH:

3 Q. So, Dr. Gupta, I'll ask the question
4 again.

5 As you used the phrase, do you consider
6 TSMC to be a major semiconductor company?

7 MR. CALLAHAN: Objection; form. And I
8 will also note that the paragraph refers to a
9 particular timing.

10 THE WITNESS: So I have listed only the
11 companies who have approached me. And, again, the
12 timeframe is also important, at a time when this
13 technique was developed and there were certain major
14 players throughout the world who were -- according
15 to me, were the major players.

16 So some of the major players who worked
17 with me are listed over there. So I don't have any
18 specific opinion about the semiconductor aspects of
19 it because I'm obviously not an expert in
20 semiconductor.

21 BY MR. MATICH:

22 Q. I'm just trying to understand who fits
23 into what you understood by all "major
24 semiconductor companies"?

25 MR. CALLAHAN: Objection; asked and

1 answered.

2 THE WITNESS: At the time when I developed
3 the technique that these were the players.

4 BY MR. MATICH:

5 Q. Okay. At the time when you developed the
6 technique, was Samsung a major semiconductor
7 company?

8 MR. CALLAHAN: Objection; form.

9 THE WITNESS: With regard to -- I don't
10 know, actually, whether they had any interface
11 issues or not.

12 BY MR. MATICH:

13 Q. Okay. So you don't know if Samsung was a
14 major semiconductor company?

15 MR. CALLAHAN: Objection; mischaracterizes
16 the witness' testimony.

17 THE WITNESS: Okay. So, Counsel, since
18 you asked me in the spirit in which I used that
19 term, "major" I defined that.

20 BY MR. MATICH

21 Q. Okay. Had --

22 A. Companies who had issues dealing with
23 interfaces within their devices or in the products.

24 Now, for me, that would be -- well, how I
25 define some of these major companies having

1 interest in my technique to solve their problem.
2 Now, I don't know at that time whether Samsung had
3 any issues with interfaces or not; so therefore, in
4 the spirit in which I used this technique and this
5 word in my declaration may not fit over there and I
6 don't know if they had any issues or not.

7 BY MR. MATICH:

8 Q. So when you say "major semiconductor
9 companies," you mean companies that had an interest
10 in your technology?

11 MR. CALLAHAN: Objection; mischaracterize
12 the witness' testimony.

13 THE WITNESS: The major semiconductor
14 companies who were having issues in manufacturing
15 their products and having some interface issues.
16 And so in that sense, I am using the context in
17 which this paragraph is written, so obviously
18 centered around my technology. So now I am just
19 telling through the declaration that who are the
20 other companies, right, who came to me. So I'm
21 saying there was a major semiconductor companies who
22 had interest in my technology and they had issues
23 with manufacturing the products. So they came to
24 me.

25 So how would I actually say that would be

1 some of the major companies came to my lab and they
2 had issues with their products and I helped them
3 solve these problems using my technology. Now,
4 what you're asking is whether in isolation
5 semiconductor -- you know, Samsung is a
6 semiconductor company or not, or major, I don't
7 know. I mean, I'm not an expert in semiconductor.

8 So I think it's important for me to say
9 in the context of how this Paragraph 6 is written.
10 I just wanted to clarify that.

11 BY MR. MATICH:

12 Q. And I appreciate that clarification. So
13 I'm going to just ask you about a list of
14 semiconductor companies and whether or not they
15 qualify as major semiconductor companies as you
16 used the phrase in your declaration. And you can
17 just say "yes," "no," or "I don't know."

18 A. Okay.

19 Q. Is Samsung a major semiconductor company?

20 MR. CALLAHAN: Objection; form.

21 THE WITNESS: I don't know whether they
22 had interface issues or not.

23 BY MR. MATICH:

24 Q. Is TSMC a major semiconductor company?

25 MR. CALLAHAN: Objection; form.

1 THE WITNESS: Again, I don't know whether
2 they had some interface issues or not.

3 BY MR. MATICH:

4 Q. Is Nvidia a major semiconductor company?

5 MR. CALLAHAN: Objection; form.

6 THE WITNESS: And then again, the time at
7 which I'm talking about is also important in the
8 context I mentioned earlier.

9 So I don't know whether Nvidia had any
10 interface issues or not.

11 BY MR. MATICH:

12 Q. Dr. Gupta, could you just say "yes,"
13 "no," or "I don't know." Is Nvidia a major
14 semiconductor company as you used the phrase in
15 your declaration?

16 MR. CALLAHAN: Objection; form; asked and
17 answered, also relevance.

18 THE WITNESS: Again, no, I don't know.

19 BY MR. MATICH:

20 Q. Is Fairchild Semiconductor a major
21 semiconductor company as you used that phrase in
22 your declaration?

23 MR. CALLAHAN: Objection; form and
24 relevance.

25 THE WITNESS: If I recall, Fairchild

1 engineers also worked with me, if I recall, at that
2 same timeframe.

3 BY MR. MATICH:

4 Q. Okay. So because they worked with you,
5 that means they were a major semiconductor company?

6 MR. CALLAHAN: Objection; mischaracterizes
7 the witness' testimony.

8 THE WITNESS: No. I think we went over
9 this again but I'm happy to tell you again in what
10 spirit this Paragraph 6 is written; that I have a
11 technology which measures the adhesion between
12 different layers.

13 Now, there are companies who have issues
14 with their manufacturing. Now, they came to me. I
15 solved their problem. So if I were to characterize
16 in a paragraph who came to me I would say, well,
17 there was some major semiconductor companies who
18 came to me to get the problem solved.

19 So in that context, if there were other
20 companies who never contacted me, I would never
21 know whether they had the similar issues or not.
22 So it's very important to make sure we understand
23 the context in which this Paragraph 6 is written.
24 It's not that -- when I say virtually every major
25 semiconductor companies, this is how I will

1 characterize it: If they came to me to solve the
2 problems, it's not that a totality of the whole
3 universe of semiconductor companies, some of them
4 may not even have those issues. So why would they
5 come to me?

6 BY MR. MATICH:

7 Q. So would you say that virtually all major
8 semiconductor companies came to you to use your
9 technology?

10 A. Who were having issues?

11 MR. CALLAHAN: Objection; mischaracterizes
12 the witness' testimony.

13 BY MR. MATICH:

14 Q. Virtually all semiconductor companies who
15 were having issues relevant to your technology came
16 to you --

17 MR. CALLAHAN: Objection; form.

18 BY MR. MATICH

19 Q. -- is that your testimony?

20 A. Yes and --

21 MR. CALLAHAN: Objection; form and
22 mischaracterizes the witness' testimony.

23 THE COURT REPORTER: What was your answer?

24 THE WITNESS: The companies who were
25 having adhesion issues and if they sought me out

1 then this is how I will characterize it. Who came
2 to you? Well, some other major semiconductor
3 companies came to me.

4 So I think your question appears to be
5 assuming that I am basically saying that every one
6 of those semiconductor companies came to me. If
7 they had no problems or if they had problems the
8 engineer solved internally, they probably never
9 sought me out.

10 BY MR. MATICH:

11 Q. So, Dr. Gupta, you -- the sentence in
12 your declaration -- you signed this declaration,
13 correct?

14 A. Yes.

15 Q. It says, This technique has been used by
16 virtually all major semiconductor companies in the
17 world. And I amended it there based on our
18 conversation earlier that "virtually" is in the
19 right place. But is that what it says?

20 A. No, I think it basically says it
21 correctly in the context I just mentioned, that
22 virtually all of those companies who were having
23 issues with adhesion and they came to me.

24 Q. Okay. So you're -- the -- what the
25 meaning of the sentence as you intended it was,

1 virtually all the companies who were having issues
2 with adhesion came to you?

3 MR. CALLAHAN: Objection; mischaracterize
4 the witness' testimony.

5 THE WITNESS: Well, I mean, at least the
6 ones who came to me were having issues and they were
7 some of the major players in the world.

8 BY MR. MATICH:

9 Q. So were there any companies who weren't
10 having issues with adhesion -- scratch that.

11 Were there any companies who were having
12 issues with adhesion who did not come to you?

13 MR. CALLAHAN: Objection; calls for
14 speculation.

15 THE WITNESS: I would never know, and
16 nobody would tell you that I'm having issues in my
17 company.

18 BY MR. MATICH:

19 Q. So you know who came to you?

20 A. Yes.

21 Q. But you don't know who didn't come to
22 you?

23 MR. CALLAHAN: Objection; calls for
24 speculation and vague.

25 ///

1 BY MR. MATICH:

2 Q. Scratch that.

3 You know who came to you?

4 A. Yes.

5 Q. You don't know if the people who didn't
6 come to you were having issues or not with
7 adhesion?

8 MR. CALLAHAN: Objection; calls for
9 speculation and form.

10 THE WITNESS: There is pure speculation
11 what they were having in-house. All I know is that
12 when I went to various conferences there would be
13 representatives, engineers from various companies
14 and they will talk about the -- their technique and
15 what it can do, and who knows what they are doing
16 in-house. And they may be companies who may be
17 using the technology in-house and I have no
18 knowledge of that.

19 So -- but there were some major players
20 who did come to me and I solved their problems.

21 BY MR. MATICH:

22 Q. Do you know if all -- or if virtually all
23 major semiconductor companies that were having
24 issues with adhesion came to you?

25 MR. CALLAHAN: Objection; form, also

1 mischaracterizes the witness' testimony.

2 THE WITNESS: There is no way to know what
3 problems they were having. Nobody publishes that
4 I'm having this problem. None of the major
5 companies are going to disclose that of the
6 proprietary information. But all I know is, in
7 general, working with some of the major players that
8 they were having issues with adhesion, among
9 different layers. And in conferences a lot of the
10 companies will seek me out to discuss their
11 problems, but few of them -- which I characterize
12 them as "major players" they came to my lab and sent
13 me samples and we solved the problem.

14 BY MR. MATICH

15 Q. Is it true that virtually all major
16 semiconductor manufacturers came to you to help
17 them solve their problems?

18 MR. CALLAHAN: Objection; mischaracterizes
19 the witness' testimony, also asked and answered.

20 THE WITNESS: Yeah, I think I've answered
21 that in what context this Paragraph 6 is written.

22 And so this is how I characterize if
23 somebody came to me and asked me about my laser
24 spallation technique, its application to the
25 industry, then I would say, "Oh, yeah. Oh, yes,

1 there were, in that timeframe, a lot of the major
2 semiconductor companies who were having issues with
3 their adhesion they came to me to solve the
4 problem."

5 BY MR. MATICH:

6 Q. Dr. Gupta, I'm just looking for a "yes"
7 or "no."

8 Is it true that virtually all major
9 semiconductor manufacturers came to you to help
10 them solve their problems with adhesion?

11 MR. CALLAHAN: Objection; asked and
12 answered; and the line of questioning is now
13 harassment of the witness.

14 THE WITNESS: I think I have already
15 answered this question. It's not a yes-or-no
16 question. The context is important and that is what
17 I mentioned, Counsel.

18 BY MR. MATICH:

19 Q. Is Broadcom a major semiconductor
20 manufacturer, as you used that phrase -- or scratch
21 that.

22 Is Broadcom a major semiconductor
23 company, as you used that phrase?

24 MR. CALLAHAN: Objection; form.

25 THE WITNESS: I don't know.

1 BY MR. MATICH:

2 Q. Is Qualcomm a major semiconductor
3 company, as you used that phrase?

4 MR. CALLAHAN: Objection; form.

5 THE WITNESS: I am not sure whether they
6 have any manufacturing issues or their designer of
7 the chips. But I know there is no beyond my
8 expertise whether they are semiconductor layers or
9 they are in that particular field of technology.

10 BY MR. MATICH:

11 Q. Is SK Hynix a major semiconductor
12 company, as you use that phrase?

13 SPEAKER #1: Objection form.

14 THE WITNESS: Same answer.

15 BY MR. MATICH:

16 Q. What is the answer?

17 A. Well, let's try it one more time in the
18 context of these major players who came to me, all
19 of those major players were having issues with
20 their device manufacturing, and they sought me out
21 to solve the problem.

22 Q. Is SK Hynix one of the major
23 semiconductor companies, as you use that phrase in
24 your declaration?

25 MR. CALLAHAN: Objection; asked and

1 answered; form.

2 THE WITNESS: I don't know.

3 BY MR. MATICH:

4 Q. Is AMD a major semiconductor company, as
5 you use that phrase in your declaration?

6 MR. CALLAHAN: Objection; form.

7 THE WITNESS: The same answer.

8 BY MR. MATICH:

9 Q. Which is I don't know?

10 A. Yeah, I don't know whether they had
11 adhesion issues or not. And I know a lot of these
12 -- my students, they go and staff a lot of these
13 companies you're talking about. So I don't know
14 which student is doing what or what problem they're
15 solving, but a lot of my students staff these
16 companies.

17 Q. Dr. Gupta, that is not responsive to my
18 question.

19 Is AMD a major semiconductor company, as
20 you use the phrase in your declaration?

21 MR. CALLAHAN: Objection; asked and
22 answered; form.

23 THE WITNESS: They didn't come to me for
24 specific testing in my lab.

25 ///

1 BY MR. MATICH:

2 Q. Dr. Gupta, I didn't ask if they came to
3 you. I asked if they were a major semiconductor
4 company, as they -- as you use that phrase in your
5 declaration. So I will ask it one more time.

6 Is AMD a major semiconductor company, as
7 you use that phrase in your declaration?

8 MR. CALLAHAN: Objection; asked and
9 answered; and form.

10 THE WITNESS: Again, I am telling you that
11 the reason I bring adhesion is because adhesion is a
12 connection between me and the semiconductor
13 companies. Semiconductor multi-facet technology.
14 And all I am saying is that from my perspective
15 something is major or not major is based on if there
16 was a known adhesion problem and they sought me out
17 to solve the problem. And I characterize that and
18 some other players are major players, like Texas
19 Instruments, Intel Corporations, so they are major
20 players, and I think this is the way I characterized
21 this in my characterization of some of the major
22 players. They came and I solved their problems.

23 BY MR. MATICH:

24 Q. Dr. Gupta, I am going to read back part
25 of your testimony to you and I just want to make

1 sure that it's accurate.

2 From your perspective, something is major
3 or not based on whether or not there was a known
4 adhesion problem and they sought you out to solve
5 the problem?

6 MR. CALLAHAN: Objection; relevance.

7 BY MR. MATICH:

8 Q. Is that correct?

9 MR. CALLAHAN: Objection; relevance.

10 THE WITNESS: Yes, I mean that would be
11 one aspect of it. That is a commonality of --
12 between the semiconductor company and my lab, and
13 now if they came to me and suppose there were 10
14 companies that came to me, then if somebody asked me
15 write me a blurb on your experience with the
16 semiconductor industry, so the way I describe that
17 is there are some of the major semiconductor
18 companies that came to my lab to solve the problem
19 and I did solve their problem.

20 BY MR. MATICH:

21 Q. Dr. Gupta, you told the Court that
22 virtually all major semiconductor companies have
23 used your technology; is that true?

24 MR. CALLAHAN: Objection; mischaracterizes
25 the witness' testimony; also form.

1 THE WITNESS: We have gone over this in
2 the last 20 minutes and I think the context is very
3 important and I think I have stated that now six
4 times, but I will keep stating it the same way.

5 BY MR. MATICH

6 Q. Dr. Gupta, none of your answers have been
7 responsive. I am just trying to understand.

8 You told the Court that virtually all
9 major semiconductor companies use your technology.
10 Is that true?

11 MR. CALLAHAN: Objection; form; relevance;
12 asked and answered; harassment of the witness; and
13 mischaracterizes the witness' testimony.

14 THE WITNESS: I told through my
15 declaration that some of the major semiconductor
16 companies who sought me out to solve their problems
17 and that's a truthful statement.

18 BY MR. MATICH:

19 Q. Dr. Gupta, you just said "Some major
20 semiconductor companies sought you out" but your
21 declaration says, "virtually all"?

22 A. So virtually all of them who are having
23 issues. I think we went through this very clearly.
24 I am going to be very, very clear that virtually
25 all of the major semiconductor companies who were

1 having adhesion issues and they were disclosing
2 that publicly, they came to me and I solved the
3 problem.

4 So I think it is very important that you
5 do not take this out of the context that if there
6 were other major companies, for example, and it is
7 pure speculation whether they were having some
8 issues with adhesion or not and there are major
9 companies in their own right, but from my
10 perspective if there were like major companies who
11 are having the adhesion issues they came to me, and
12 I solved the problem.

13 So some of the -- virtually all of the
14 companies who were having those issues who were
15 disclosing that in the public domain, they came to
16 me.

17 Q. Dr. Gupta, does anything in your
18 declaration, and here I am referring to Exhibit 5,
19 does anything in Exhibit 5 describe Boeing's
20 infringement of the '684 patent?

21 MR. CALLAHAN: Objection; form; calls for
22 a legal conclusion; also potentially includes
23 privileged information. So I would caution the
24 witness not to include privileged -- not to disclose
25 privileged information.

1 But you can answer if you can.

2 THE WITNESS: Yeah, I can't answer that.

3 BY MR. MATICH:

4 Q. Why can't you answer that?

5 MR. CALLAHAN: Objection; asked and
6 answered.

7 THE WITNESS: Because of the privileged
8 information I would have to disclose.

9 BY MR. MATICH:

10 Q. I am just asking what the declaration
11 says, Dr. Gupta. Is there anything, you can point
12 me to, anything in your declaration that would
13 constitute infringement of the '684 patent by
14 Boeing?

15 MR. CALLAHAN: Objection; calls for
16 privileged information.

17 THE WITNESS: Yes, I cannot disclose that.

18 BY MR. MATICH:

19 Q. I am asking you to point me to something
20 in the declaration. Please, point me to anything
21 in the declaration that you believe describes
22 infringement of the '684 patent by Boeing.

23 MR. CALLAHAN: Objection; calls for
24 privileged information; also asked and answered; and
25 harassment of the witness.

1 THE WITNESS: I can't point to anything.

2 BY MR. MATICH:

3 Q. Does anything -- can you point me to
4 anything in the declaration that describes
5 something Boeing did after 2015?

6 MR. CALLAHAN: Objection; form; calls for
7 speculation.

8 THE WITNESS: What Boeing did up to 2015 I
9 have no idea what they did.

10 BY MR. MATICH:

11 Q. So there is nothing in your declaration
12 describing something Boeing did after 2015?

13 MR. CALLAHAN: Objection; mischaracterizes
14 the witness' testimony.

15 THE WITNESS: I have no idea.

16 BY MR. MATICH:

17 Q. You have no idea of what?

18 A. About what Boeing did after 2015.

19 Q. Okay. Does anything in your declaration
20 describe something Boeing did after February 2005?

21 MR. CALLAHAN: Objection; form; calls for
22 speculation.

23 THE WITNESS: I would have to go through
24 the declaration and I -- you have to clarify what do
25 you mean by "Boeing did after 2005." Boeing is a

1 big corporation I have no idea what they do.

2 BY MR. MATICH:

3 Q. I am asking about your declaration.

4 So can you point me to anything in your
5 declaration that describes something Boeing did
6 after 2015?

7 MR. CALLAHAN: Objection; form; calls for
8 speculation.

9 THE WITNESS: Again, you would have to
10 point to a specific paragraph or in the context.
11 Otherwise, there's -- Boeing is a huge corporation.
12 It is impossible to figure out what they have been
13 doing.

14 BY MR. MATICH:

15 Q. Dr. Gupta, I am just asking about what
16 your declaration says.

17 Is there anything in your declaration
18 that says anything about Boeing doing something
19 after 2015?

20 MR. CALLAHAN: Objection; form; asked and
21 answered; calls for speculation.

22 Also, Dr. Gupta, you can take the time to
23 read your declaration again if you would like to,
24 to review it.

25 THE WITNESS: I will just going to ask if

1 you can scroll down.

2 BY MR. MATICH:

3 Q. If you need to scroll through the -- if
4 you need to ask the videographer to scroll through
5 the declaration, happy to do that.

6 A. Sure. Can you go to Page 4, please?

7 MR. CALLAHAN: Do you want to start at the
8 beginning?

9 THE WITNESS: Let's do that, in the
10 beginning mostly it is the background information.
11 Thank you. Kindly go down. Page 3, please. Can
12 you kindly go to Page 4. Go down a little bit,
13 please, so I can see Paragraph 10. Thank you. And
14 go down, please. Go down, please. More. More.
15 Okay. Okay. Continue on. That is fine. Okay.
16 More. Continue on. Okay. Okay. All right.

17 Can you repeat the question, please?

18 BY MR. MATICH:

19 Q. Dr. Gupta, does anything in your
20 declaration, Exhibit 5, describe an action by
21 Boeing occurring since 2015?

22 MR. CALLAHAN: Objection; form; asked and
23 answered; calls for speculation; also
24 mischaracterizes.

25 THE WITNESS: Possibly, yes.

1 BY MR. MATICH:

2 Q. Can you point me to what possibly
3 constitutes an action by Boeing since 2015?

4 MR. CALLAHAN: Objection; form.

5 THE WITNESS: That would be -- I think
6 that would be possibly disclosing discussions with
7 counsel I have. Because there are some issues of
8 infringement, which are being discussed in the
9 declaration.

10 BY MR. MATICH:

11 Q. Can you point me to what in your
12 declaration you are referring to?

13 MR. CALLAHAN: Objection; privilege.

14 MR. MATICH: John, it can't be privileged
15 what is in his declaration. I'm asking him to point
16 me to something in this declaration that he thinks
17 constitutes an action by Boeing after 2015.

18 MR. CALLAHAN: He's referring to
19 interactions with lawyers.

20 MR. MATICH: I'm asking him to point me to
21 a line in his declaration.

22 MR. CALLAHAN: I maintain my objection of
23 privilege?

24 THE WITNESS: I'm just saying that in
25 declaration there's a statement about the

1 infringement of the '684 patent by Boeing. And
2 there is -- so that's a discussion I had with
3 counsel, in what manner they infringe and that's
4 something --

5 BY MR. MATICH

6 Q. I'm not asking you --

7 MR. CALLAHAN: Objection.

8 MR. MATICH: John, I'm -- let me finish my
9 question before you object.

10 MR. CALLAHAN: Oh, actually, I'd like to
11 take a short break to discuss the issue of privilege
12 with the witness.

13 MR. MATICH: All right. Let's go off the
14 record.

15 THE VIDEOGRAPHER: It's 1:18 p.m. and
16 we're going off the record.

17 (Recess taken.)

18 THE VIDEOGRAPHER: It's 1:29 and we're
19 back on the record.

20 BY MR. MATICH:

21 Q. Dr. Gupta, earlier I asked you if you
22 could point me to anything in your declaration that
23 describes Boeing's alleged infringement of the '684
24 patent and you said you can't; is that correct?

25 MR. CALLAHAN: Objection; form; relevance;

1 outside the scope of the declaration of March 8;
2 also contrary to the Court's order of February 27th;
3 also calls for privileged information.

4 THE WITNESS: I just pointed out to one
5 sentence or statement in the declaration.

6 BY MR. MATICH:

7 Q. And what sentence is that?

8 A. There is -- I don't recall. As I was
9 going through the declaration there is a statement
10 about Boeing infringing the '684 patent.

11 Q. Could you please point me to that
12 sentence?

13 A. If you can scroll to the declaration,
14 please.

15 THE VIDEOGRAPHER: Yes.
16 Where?

17 THE WITNESS: I don't know. We have to
18 just go page by page. So go up in reverse order.

19 THE VIDEOGRAPHER: Oh, you want it in
20 reverse?

21 THE WITNESS: That's fine.

22 Go up.

23 Go up, please.

24 Okay.

25 Go up, please.

1 Go up, please.

2 I think Paragraph 10.

3 BY MR. MATICH:

4 Q. So which sentence in Paragraph 10 are you
5 talking about?

6 A. The very first one.

7 Q. Okay. Is there any other -- and the
8 sentence we're talking about is the first sentence
9 in Paragraph 10, which is Line 17 on Page 4?

10 A. Yes.

11 Q. And it says, "As noted in LST's
12 complaint, Boeing has been infringing my '684
13 patent"?

14 A. Yes.

15 Q. Is there anything else in your
16 declaration besides that sentence that describes
17 infringement of the '684 patent by Boeing?

18 MR. CALLAHAN: Objection; form; calls for
19 privileged information; also calls for speculation;
20 legal conclusion; and legal analysis.

21 I would caution the witness if you can
22 provide an answer not to divulge any privileged
23 communications.

24 THE WITNESS: That is the only sentence in
25 my declaration.

1 BY MR. MATICH:

2 Q. So the first sentence of Paragraph 10 is
3 the only sentence in your declaration that talks
4 about infringement by Boeing of the '684 patent?

5 MR. CALLAHAN: Objection; form; privileged
6 information.

7 THE WITNESS: That's correct. There is
8 no -- that's not the scope of this declaration.

9 BY MR. MATICH:

10 Q. And, Dr. Gupta, you've now looked at your
11 declaration again a couple of times.

12 Is there -- scratch that.

13 Dr. Gupta, I am going to ask the court
14 reporter to mark this document -- and this will be
15 a paper exhibit -- well, actually, can we pull up
16 Exhibit 8, the '684 patent?

17 And can we scroll down to the Claim 1?
18 It should be towards the bottom.

19 No keep going down.

20 All right. yeah, zoom in right there.

21 Keep zooming in on Claim 1.

22 Dr. Gupta, do you see on your screen
23 Claim 1 of the '684 patent?

24 A. Yes.

25 (Exhibit 9 was marked for identification.)

1 Q. All right. I would like to mark as
2 Exhibit 9 this document. I have provided a copy of
3 this document to your counsel.

4 Dr. Gupta, do you see Exhibit 9 in front
5 of you?

6 A. Yes.

7 Q. Is Exhibit 9 a diagram of a laser
8 spallation setup?

9 SPEAKER #1: Objection; calls for
10 speculation; also if you are going to ask him about
11 Claim 1 of the '684 patent we are going to assert
12 privilege and instruct the witness not to answer.

13 MR. MATICH: You're instructing the
14 witness not to answer a question about a claim in
15 the patent-in-suit?

16 MR. CALLAHAN: The purpose of this
17 deposition as ordered by Judge Kim in his order
18 dated February 27, is that if we submit a
19 declaration then you get a deposition on Dr. Gupta
20 on the substance of the declaration. He did not
21 describe or reference Claim 1 of the '684 patent in
22 his declaration.

23 MR. MATICH: He referenced the '684 patent
24 in his declaration and none of that amounts to
25 privilege. So if you are going to claim privilege

1 over that and instruct him not to answer we are
2 going to object and we are going to call him back
3 here.

4 MR. CALLAHAN: I am just letting you know
5 that if you are going to ask questions about the
6 scope of Claim 1 or the application of Claim 1 to
7 this diagram, it's privileged.

8 MR. MATICH: Dr. Gupta's views on the
9 scope of Claim 1 or the scope of the prior art are
10 not privileged.

11 MR. CALLAHAN: Why don't you ask a
12 question?

13 MR. MATICH: Okay.

14 MR. CALLAHAN: And I'll instruct him to
15 not answer if that's appropriate.

16 BY MR. MATICH:

17 Q. Dr. Gupta, is this -- does Exhibit 9
18 portray a laser spallation setup?

19 MR. CALLAHAN: Objection; form; relevance;
20 it is outside the scope of Dr. Gupta's March 8
21 declaration; it is also the question contrary to the
22 court order of February 27; it also calls for a
23 legal conclusion; calls for speculation.

24 Counsel, can you also tell us where this
25 figure comes from?

1 MR. MATICH: It comes from Exhibit 9.

2 MR. CALLAHAN: No, can you tell me the
3 source of the figure?

4 MR. MATICH: I'm -- well, I don't have to
5 do that.

6 MR. CALLAHAN: Well, why are you refusing
7 to give the witness relevant information?

8 MR. MATICH: I'm not refusing to give the
9 witness relevant information. I put a diagram in
10 front of the witness. I'm asking him a question
11 about it.

12 MR. CALLAHAN: Well, what's the date of
13 the diagram and who authored it?

14 BY MR. MATICH

15 Q. Dr. Gupta, does Exhibit 9 portray a laser
16 spallation setup?

17 MR. CALLAHAN: Objection; form; also
18 relevance. It's outside the scope of the
19 declaration Dr. Gupta signed on March 8. It's also
20 contrary -- in violation of the Court's order of
21 February 27, it's also asked and answered -- excuse
22 me, strike that part.

23 THE WITNESS: Yeah, this is not a part of
24 the patent-in-suit and I don't know what this --
25 your specific question whether this depicts a laser

1 spallation setup, this -- there's no setup over
2 here.

3 BY MR. MATICH:

4 Q. You don't believe that this is a laser
5 spallation -- a diagram of laser spallation?

6 MR. CALLAHAN: Objection; form. I'll also
7 note for the record, that Counsel has -- here,
8 basically ambushed the witness with this figure not
9 giving him any information about what it is, where
10 it came from, what it relates to.

11 If you could provide some information,
12 some of the background information maybe the
13 witness could provide a helpful answer.

14 BY MR. MATICH:

15 Q. If you -- Dr. Gupta, if the answer is, I
16 don't know if this is a laser spallation setup,
17 then --

18 A. No, the --

19 MR. CALLAHAN: Objection; form.

20 THE WITNESS: The setup is a technical
21 term. So, basically, you know, to answer your
22 question you asked me, the answer would be no, from
23 a technical standpoint.

24 BY MR. MATICH:

25 Q. Okay. What is -- from a technical

1 standpoint, what is the diagram in Exhibit 9?

2 MR. CALLAHAN: Objection; form; relevance.

3 The witness has no idea what this came from. How

4 can it -- he be expected to know what it is?

5 THE WITNESS: So you will have to give me

6 the entire paper where it came from.

7 BY MR. MATICH:

8 Q. Dr. Gupta, just looking at this, can you

9 tell what it is?

10 MR. CALLAHAN: Counsel, are you refusing

11 to give him the information that he's just

12 requested?

13 MR. MATICH: Counsel, I'm asking the

14 questions. This is not your deposition. Please do

15 not testify for the witness. Do not suggest to him

16 that he should ask for more information. He can

17 answer the questions or he cannot. If he needs more

18 information he can ask for it, but you don't need to

19 testify for it.

20 BY MR. MATICH

21 Q. Now, Dr. Gupta --

22 MR. CALLAHAN: That's fine, but you've put

23 a figure in front of him that has no information in

24 it.

25 ///

1 BY MR. MATICH:

2 Q. Dr. Gupta, from a technical perspective,
3 can you tell me what Exhibit 9 is?

4 MR. CALLAHAN: Objection; form; relevance.

5 THE WITNESS: Yeah, it shows a diagram of
6 a combination, appears to be a fuse quarters.
7 There's a layer in between and there's another pitch
8 55 carbon fiber schematic, there's a thin blue layer
9 and then there's a carbon ribbon, there's a silicone
10 carbon coating.

11 BY MR. MATICH:

12 Q. Is this an example of the invention in
13 the '684 patent?

14 MR. CALLAHAN: Objection; calls for a
15 legal conclusion; also privileged; also outside the
16 scope of the declaration from Dr. Gupta dated
17 March 8 and it's contrary to the Court's order of
18 February 27.

19 And I would add that giving this figure
20 to the witness without any background information
21 is an attempt to harass and ambush the witness.

22 THE WITNESS: I've read the Court order,
23 Counsel. And I'm not going to do -- is very clear
24 the questions in this deposition would be only
25 related to the substance of the declaration, which

1 is about the inventorship of the '321 patent and
2 that's it. So all of these questions you're asking,
3 I will not answer that because I have personally
4 read the Court's order. And there is nothing in
5 this declaration about the '684 infringement, the
6 claims, it is all privileged information.

7 So even though I may know all the
8 answers, but it's a court order, which I read.
9 Which is specifically about answering the questions
10 about the inventorship of the '321 patents. That's
11 it.

12 BY MR. MATICH:

13 Q. Dr. Gupta, are you refusing to answer my
14 question?

15 A. Yes, I am refusing to answer your
16 question, anything beyond the substance or the
17 declaration. And all the questions you're asking
18 right now is about the infringement of the '684
19 patent, which is separate issue altogether. It's a
20 separate declaration. It's a separate complaint.
21 And the Court's order is very, very clear, Counsel,
22 that I am here to answer the questions, if -- only
23 with regards to the declaration and since I
24 submitted a new declaration, and that is about the
25 inventorship of the '321 patent.

1 I will only answer these questions
2 upfront, right now. So absolutely no question will
3 be answered about your ways of finding out whether
4 the '684 patent is infringed by the Boeing or not
5 is out-of-the-line questioning. And I will not
6 answer that.

7 Q. So your declaration has nothing to do
8 with infringement of the '684 patent?

9 A. Absolutely --

10 MR. CALLAHAN: Objection; mischaracterizes
11 the witness' testimony.

12 THE WITNESS: It -- the declaration says
13 that there is a complaint. A complaint about the
14 '684 patent being infringed by Boeing. And that's
15 the extent of it. But there's nothing which
16 connects that '684 patent to the inventorship issue
17 for which we are over here.

18 BY MR. MATICH:

19 Q. Dr. Gupta, does your declaration have
20 anything to do with the '684 patent?

21 MR. CALLAHAN: Objection; mischaracterizes
22 the witness' testimony; calls for a legal
23 conclusion; and also asks for information that is --
24 maybe privileged. So I would instruct the witness
25 to be careful about not revealing privileged

1 information, but if it's possible for you to answer,
2 you can do so.

3 THE WITNESS: Yes, I cannot discuss the
4 infringement of the '684 patent by Boeing which is
5 outside the scope of the deposition.

6 BY MR. MATICH:

7 Q. Dr. Gupta, I asked you: Does your
8 declaration have anything to do with the '684
9 patent?

10 MR. CALLAHAN: Objection; mischaracterizes
11 the witness' testimony; asked and answered; also
12 form; relevance; it's outside the scope of the
13 March 8 declaration from Dr. Gupta. It's also
14 contrary to the Court's order of February 27.

15 THE WITNESS: I think I will repeat that
16 my declaration has -- is not -- does not address
17 this whole issue. All it says is that it is a
18 complaint is there against Boeing for infringing the
19 '684 patent. And this declaration is about the
20 inventorship issue of the '321 patent.

21 And I'm here to answer those questions
22 only. And one way to ensure that the scope of the
23 deposition was as the court order said, that if I
24 not submitted a declaration we won't be here. So
25 the only reason we are here is because I gave that

1 inventorship issue of '321 patent. And the court
2 order is very clear that only if there is a
3 declaration of that sort, questions will be limited
4 only to the declaration. And in my declaration,
5 the only statement that I made is that there is a
6 complaint against Boeing infringing the '684
7 patent, but that statement had nothing to do with
8 the infringement on the inventorship of the '321
9 patent.

10 BY MR. MATICH:

11 Q. So, Dr. Gupta, either your declaration
12 relates to the '684 or it does not.

13 MR. CALLAHAN: Objection.

14 BY MR. MATICH:

15 Q. Does your declaration relate to the '684
16 patent?

17 MR. CALLAHAN: Objection; mischaracterizes
18 the witness' testimony; form; also relevance. The
19 question is outside the scope of the declaration
20 that was submitted by Dr. Gupta on March 8. It's
21 also contrary to the Court's order of February 27.
22 It also -- the question also relates to put --
23 privileged information.

24 THE WITNESS: I think I have kind of
25 answered your question already, Counsel, about the

1 scope of the declaration being the inventorship of
2 the '321 patent.

3 BY MR. MATICH:

4 Q. So the declaration has nothing to do with
5 the '684 patent?

6 MR. CALLAHAN: Objection; mischaracterizes
7 the witness' testimony; also calls for a legal
8 conclusion; also not relevant; outside the scope of
9 the declaration; and contrary to the Court's order.

10 THE WITNESS: And I will not answer that
11 question because I don't know how the -- lot of
12 unresolved issues there might -- additional
13 information which may come by later on and so
14 whether or not all of this thing is relevant or not,
15 I can't tell you right now.

16 BY MR. MATICH:

17 Q. So, Dr. Gupta, you can't tell me whether
18 or not your declaration is relevant to the '684
19 patent?

20 MR. CALLAHAN: Objection; asked and
21 answered; mischaracterizes the witness' testimony;
22 also form; relevance; outside the scope of the
23 declaration dated March 8 by Dr. Gupta; and contrary
24 and in violation of the Court's order of
25 February 27.

1 THE WITNESS: Okay. So I am going to just
2 repeat that the -- whether or not the '684 patent
3 infringes -- or Boeing infringes '684 patent is
4 beyond the scope of this particular deposition. The
5 Court's order is very specific about answering the
6 question only about the declaration, and the
7 declaration is about the inventorship of the '321
8 patent.

9 BY MR. MATICH:

10 Q. Dr. Gupta, you don't get to refuse to
11 answer questions because you think they are
12 irrelevant.

13 So I'm going to ask you one more time:
14 Does the '684 patent have anything to do with your
15 declaration?

16 MR. CALLAHAN: Objection; form; relevance;
17 the question is outside the scope of the March 8
18 declaration that Dr. Gupta served on Boeing. The
19 question is also not relevant because it's contrary
20 to the Court's order of February 27. It potentially
21 asks for privileged information. It's been asked
22 and answered many times. Potentially calls for a
23 legal conclusion and constitutes harassment of the
24 witness.

25 THE WITNESS: So I think -- I don't know

1 at this stage because a lot of -- I am not prepared
2 to answer the question because I don't have all the
3 facts yet available to me to answer your question,
4 whether this declaration will eventually be off --
5 connected to the infringement of the '684 patent by
6 Boeing or not.

7 But as far as I know today we are here
8 and as per the Court's order to focus on the
9 declaration. And the scope of the declaration is
10 about the inventorship of the '321 patent, which
11 I'm here to answer.

12 BY MR. MATICH:

13 Q. So your declaration may, at some point,
14 be relevant to the '684 patent?

15 MR. CALLAHAN: Objection; mischaracterizes
16 the witness' testimony; form; relevance. The
17 question is outside the scope of the declaration
18 submitted by Dr. Gupta on March 8. It's contrary to
19 the Court's order of February 27. It potentially
20 implicates privileged communications. It's been
21 asked and answered numerous times. And potentially
22 calls for a legal conclusion, and also constitutes
23 harassment of the witness.

24 THE WITNESS: Correct. So I don't have
25 enough information at this stage. There may be

1 additional information which will -- through
2 discovery. And then -- so I don't know at this
3 stage sitting here whether this will be relevant to
4 the infringement issues or not. But the focus of
5 this declaration is clear about the inventorship of
6 the '321 patent and so that is my answer, Counsel.

7 BY MR. MATICH:

8 Q. Okay. So since it's possible that your
9 declaration would relate somehow to the '684
10 patent, I will ask my other question again.

11 Does Exhibit 9 portray a diagram of the
12 invention in the '684 patent?

13 MR. CALLAHAN: Objection; form; relevance;
14 the question is outside the scope of the declaration
15 submitted by Dr. Gupta on March 8th. It's also
16 contrary to the Court's order. It potentially
17 implicates privileged information. Parts of the --
18 the question has been asked and answered. Calls for
19 a legal conclusion, and constitutes harassment of
20 the witness.

21 THE WITNESS: First of all, there is not
22 enough information to answer your question,
23 technically. Second, it is way beyond the scope of
24 the declaration. I read the court order and it is
25 about the inventorship of the '321 patent. I will

1 answer only those questions.

2 MR. MATICH: So you're refusing to answer
3 any questions that you believe are not related to
4 your declaration?

5 MR. CALLAHAN: Objection; mischaracterizes
6 the witness' testimony. And the witness is correct,
7 he submitted a declaration and Judge Kim's order of
8 February 27 indicates that can be questioned on the
9 substance of that new declaration. The question is
10 not relevant per the Court's order.

11 MR. MATICH: John, I'm going to have to
12 ask you to stop with these speaking objections.
13 You're taking up more transcript space than either
14 me or the witness.

15 MR. CALLAHAN: Counsel, you are asking the
16 same question again and again and again. I have to
17 object to it to maintain my position. So if you
18 could ask a question that is free of an objection,
19 please do.

20 I mean, the Court's order is very clear,
21 if plaintiff relies upon a new declaration,
22 Dr. Gupta can be questioned on the substance of
23 that new declaration.

24 You're asking him questions that are
25 outside the scope of his declaration in violation

1 of the Court's order.

2 MR. MATICH: Let's go off the record.

3 THE VIDEOGRAPHER: 1:53 p.m. we are going
4 off the record.

5 (Recess taken.)

6 THE VIDEOGRAPHER: 2:09 p.m. and we are
7 back on the record.

8 MR. MATICH: John, as we were discussing
9 during the break, I am willing to offer a standing
10 objection because you keep making essentially the
11 same objection to all my questions. But you said
12 you were not interested in that?

13 MR. CALLAHAN: Yeah, I think I need to
14 hear the questions as you pose them and I will make
15 my objections. As I also mentioned during the
16 break, I'll try to do it in a manner that's
17 efficient for the deposition, but the best way of
18 avoiding these objections is to ask questions that
19 are free of objections. And I know that that can be
20 done.

21 MR. MATICH: John, I don't think there's
22 anything objectionable about any of the questions
23 that I've asked and your lengthy speaking objections
24 are entirely improper and obstructing the deposition
25 in addition to the other issues that we're having.

1 MR. CALLAHAN: Are we on the record?

2 MR. MATICH: Yes.

3 MR. CALLAHAN: Okay. Great.

4 Well, I think I need to address that
5 because the questions that you've been asking are
6 frequently outside the scope of the order from
7 Judge Kim, which was very clear about: If we put
8 in or rely upon a declaration from Dr. Gupta, you
9 get to take his deposition. But it wasn't a
10 wide-ranging deposition. It was a focused
11 deposition that was limited to requests on the
12 substance of that new declaration. Clearly, many
13 of the questions that you've been asking today are
14 outside the scope of the declaration.

15 So I think, you know, that's the core of
16 the issue right now. But I don't want to take up
17 any more of your time, so please proceed.

18 BY MR. MATICH:

19 Q. Can we pull up Exhibit 5? Can we go down
20 to -- and zoom in on Paragraph 10?

21 So, Dr. Gupta, we are back at Paragraph
22 10 and do you see the first sentence that we were
23 talking about, "as noted in LST complaint Boeing
24 has been infringing my '684 patent"?

25 A. Yes.

1 Q. Do you believe Boeing has infringing your
2 '684 patent?

3 MR. CALLAHAN: Objection; calls for
4 privilege.

5 MR. MATICH: Are you instructing the
6 witness not to answer?

7 MR. CALLAHAN: No, I'm just indicating
8 that the question is objectionable on the basis that
9 it calls for privileged information. The witness
10 can answer if he can, but I would caution the
11 witness not to divulge any privileged
12 communications.

13 BY MR. MATICH:

14 Q. Dr. Gupta, do you believe Boeing is
15 infringing the '684 patent?

16 MR. CALLAHAN: Objection; same reasons.

17 THE WITNESS: I guess my belief is based
18 on the discussions I had with the counsel. So I
19 don't know what the rules are, but I can't disclose
20 the discussions I had with the counsel with regards
21 to whether or not or how the infringement occurs.

22 BY MR. MATICH:

23 Q. I'm not asking for communications with
24 counsel. I'm just asking, yes or no, do you
25 believe Boeing is infringing the '684 patent?

1 A. I don't know.

2 MR. CALLAHAN: Objection; privileged; also
3 calls for a legal conclusion.

4 THE WITNESS: Yes, I don't have all the
5 information to answer your question.

6 BY MR. MATICH:

7 Q. So you don't know if Boeing is infringing
8 the '684 patent?

9 MR. CALLAHAN: Objection; mischaracterizes
10 the witness' testimony; also privileged and calls
11 for a legal conclusion.

12 THE WITNESS: I have not, for this
13 deposition, prepared myself or looked at all the
14 documents in order to answer your question.

15 BY MR. MATICH:

16 Q. But your declaration says that you
17 believe Boeing infringes the '684 patent, correct?

18 MR. CALLAHAN: Objection; asked and
19 answered; mischaracterizes the witness' testimony;
20 also privileged and calls for a legal conclusion.

21 THE WITNESS: It says that there's a --
22 LST's complaint. It just refers to a complaint.

23 BY MR. MATICH:

24 Q. Okay. And I'm asking: Do you believe
25 "Boeing has been infringing my '684 patent"?

1 MR. CALLAHAN: Objection; asked and
2 answered; privileged; calls for a legal conclusion.

3 THE WITNESS: So as I sit here now I have
4 not reviewed all of the material and there are a lot
5 of discussions with the counsel about infringement
6 or non-infringement and I can't disclose that. And
7 plus, I don't have enough information as I'm sitting
8 right now, and other relevant information which
9 might become as part of discovery process. So I
10 don't know right now.

11 BY MR. MATICH:

12 Q. So you don't know if Boeing infringes the
13 '684 patent?

14 MR. CALLAHAN: Objection; mischaracterizes
15 the witness' testimony; privileged; calls for a
16 legal conclusion.

17 THE WITNESS: I think I'm saying is that
18 it's a lot of information, which is privileged
19 information discussions with my counsel, which
20 unfortunately I can't disclose. And in order to
21 properly answer your question and outside that
22 privileged information the other information I am
23 not prepared or I don't remember because this
24 declaration was more for the inventorship issue, so
25 I am not prepared to answer your question.

1 BY MR. MATICH:

2 Q. So I am asking: Is the first sentence in
3 Paragraph 10 of your declaration true?

4 MR. CALLAHAN: Objection; asked and
5 answered; privileged; calls for a legal conclusion.

6 THE WITNESS: It says what it says. It is
7 as noted in the LST's complaint, Boeing has been
8 infringing my '684 patent. So that's basically the
9 sentence.

10 BY MR. MATICH:

11 Q. Okay. So you believe that Boeing has
12 been infringing your '684 patent?

13 MR. CALLAHAN: Objection; privileged;
14 calls for a legal conclusion.

15 THE WITNESS: Now, the actual infringement
16 process is something, again, is a discussion I had
17 with my counsel, and it's a -- I can't disclose
18 that.

19 BY MR. MATICH:

20 Q. I'm not asking you to disclose
21 communications with counsel. I'm asking you what
22 you believe, sir.

23 MR. CALLAHAN: Objection; asked and
24 answered; privileged; calls for a legal conclusion.

25 ///

1 BY MR. MATICH:

2 Q. Do you believe that Boeing is infringing
3 the '684 patent?

4 MR. CALLAHAN: Objection; same reasons.

5 THE WITNESS: It says that on -- whatever
6 it says on the face of the Item 10.

7 BY MR. MATICH:

8 Q. So, Dr. Gupta, yes, no, or I don't know:
9 Is Boeing infringing -- do you believe that Boeing
10 is infringing the '684 patent?

11 MR. CALLAHAN: Objection; asked and
12 answered; privileged; calls for a legal conclusion.

13 THE WITNESS: I don't have -- to answer
14 your question, I would have to disclose the
15 discussions I had with my counsel and I can't
16 disclose that.

17 BY MR. MATICH:

18 Q. Dr. Gupta, your lawyer has to object and
19 instruct you not to answer. You can't just not
20 answer a question and your belief is not
21 privileged. I am not asking you any communications
22 you had with your attorneys. I am asking your
23 personal belief.

24 Do you believe that Boeing is infringing
25 the '684 patent?

1 MR. CALLAHAN: Objection; asked and
2 answered; privileged; calls for a legal conclusion.

3 And I think at this point in order to
4 move forward we will instruct the witness not to
5 answer that question.

6 MR. MATICH: So, John, just so the record
7 is clear, my question is: Does Dr. Gupta believe
8 that the '684 -- that Boeing infringes the '684
9 patent? And you are instructing him not to answer?

10 MR. CALLAHAN: My objection is that it was
11 asked and answered; calls for privileged
12 information; calls for a legal conclusion. And
13 since the question has been asked multiple times it
14 also -- we're instructing the client not to answer
15 the question on the basis of attorney-client
16 privilege.

17 MR. MATICH: Okay. So you believe it is
18 privileged whether or not Dr. Gupta believes that
19 Boeing is infringing the '684 patent?

20 MR. CALLAHAN: His belief is based on
21 attorney-client privilege.

22 MR. MATICH: I'm not asking about his
23 communications with counsel. I'm asking: Does he
24 believe that Boeing infringes the '684 patent? And
25 you think that --

1 MR. CALLAHAN: Well, I stand on my
2 objection.

3 MR. MATICH: So your -- you believe that
4 -- you are saying that the fact of whether or not
5 Dr. Gupta believes that Boeing infringes the '684
6 patent is privileged information?

7 MR. CALLAHAN: What I am saying is that we
8 are objecting to your question on the basis of
9 attorney-client privilege and we are asking --
10 instructing the client -- the witness not to answer.

11 Can we please move on?

12 BY MR. MATICH:

13 Q. Dr. Gupta, are you going to follow your
14 counsel's instructions?

15 A. Yes.

16 Q. So you are not going to say whether you
17 believe Boeing infringes the '684 patent?

18 MR. CALLAHAN: Objection; mischaracterizes
19 the witness' testimony; privileged; calls for a
20 legal conclusion.

21 THE WITNESS: I think I already answered
22 your question. First of all, you did
23 mischaracterize my testimony by saying that I am
24 objecting to some -- your questions and not
25 answering them. I'm not saying that. I'm saying in

1 order to answer your question I will have to divulge
2 information which I had with my counsel.

3 So I am not saying some legal objection.
4 I am just telling you the basis on which I cannot
5 provide you with my belief or whatever it is based
6 on obviously a legal discussion with my counsel.
7 That's No. 1.

8 No. 2, I do not have all the information,
9 as I sit here today, to answer your question
10 because the focus of the declaration is on the
11 inventorship issue, which is the focus of the
12 declaration. So I am here to answer the question.
13 So on that ground, I'm not -- have all the
14 information, or preparation and information even if
15 I wanted to answer your question.

16 BY MR. MATICH:

17 Q. I'm asking about a sentence that's in
18 your declaration, Dr. Gupta. And I'm not asking
19 for the -- why you believe that. Maybe I'd ask
20 that later, but right now all I'm asking is: Do
21 you believe that "Boeing has been infringing my
22 '684 patent"?

23 So I'll ask the question again.

24 Dr. Gupta, do you believe that Boeing has
25 been infringing your '684 patent?

1 MR. CALLAHAN: Objection. Counsel, his
2 belief is -- was formed based upon the discussion
3 with his attorneys. So we've instructed him not to
4 answer the question on that basis.

5 Can we please move on?

6 THE WITNESS: I think I concur.

7 MR. MATICH: Let's go off the record.

8 THE VIDEOGRAPHER: It's 2:21 p.m. and
9 we're going off the record.

10 (Recess taken.)

11 THE VIDEOGRAPHER: It's 2:34 p.m. and
12 we're back on the record.

13 BY MR. MATICH:

14 Q. Dr. Gupta, before we went on break we
15 were talking about the first sentence of
16 Paragraph 10 in your declaration.

17 Do you still see that sentence in front
18 of you?

19 A. Yes.

20 Q. Do you believe that Boeing has been
21 infringing the '684 patent?

22 MR. CALLAHAN: Objection; privileged;
23 calls for a legal conclusion.

24 THE WITNESS: I think my answer is going
25 to be the same as I stated earlier just before the

1 break.

2 BY MR. MATICH:

3 Q. What is that answer?

4 MR. CALLAHAN: Objection. Same objection.

5 THE WITNESS: That my belief is based on
6 the discussions I had with the counsel. So as I
7 have been made to understand I cannot disclose their
8 discussion as a basis to answer your question.

9 And secondly, that -- as I sit here
10 today, I don't have all the information. I don't
11 have all the information to answer that question
12 because I was here to answer the core of the
13 declaration, which is the inventorship issues
14 related to the '321 patent.

15 BY MR. MATICH:

16 Q. So you don't have all the information to
17 answer whether or not you believe Boeing has been
18 infringing the '684 patent?

19 MR. CALLAHAN: Objection; mischaracterizes
20 the witness' testimony; relevance; privilege; and
21 calls for a legal conclusion.

22 THE WITNESS: I am going to clarify that
23 my previous answer had an "and" in between.

24 BY MR. MATICH:

25 Q. Dr. Gupta, looking at the transcript I

1 don't see what your belief is.

2 Do you believe that Boeing has been
3 infringing the '684 patent?

4 MR. CALLAHAN: Objection; asked and
5 answered; relevance; privilege; calls for a legal
6 conclusion.

7 THE WITNESS: I think the same answer,
8 which I gave earlier, three times. It is not
9 either/or. It is based on -- my understanding is
10 based on the counsel's discussions and I don't have
11 enough information and I don't -- to answer your
12 question.

13 BY MR. MATICH:

14 Q. Dr. Gupta, do you agree with Sentence 10
15 in your declaration -- or excuse me -- or do you
16 agree with the first sentence of Paragraph 10 of
17 your declaration?

18 MR. CALLAHAN: Objection; relevance;
19 privileged and calls for a legal conclusion.

20 THE WITNESS: The statement is there in my
21 declaration.

22 BY MR. MATICH:

23 Q. I see that it is there in your
24 declaration. My question is: Do you believe that
25 the sentence is true?

1 MR. CALLAHAN: Objection. Same reasons.

2 THE WITNESS: It is -- just gives a
3 factual information that in the LST's complaint
4 Boeing has been infringing my '684 patent.

5 BY MR. MATICH:

6 Q. So you believe that Boeing has been
7 infringing your '684 patent?

8 MR. CALLAHAN: Objection; mischaracterizes
9 the witness' testimony; relevance; privileged; legal
10 conclusion.

11 THE WITNESS: So we're back to the same
12 answer.

13 BY MR. MATICH

14 Q. The same answer as what?

15 A. The one I gave five times now.

16 Q. Let's take down Exhibit 5 and put up
17 Tab 7 and mark it as Exhibit 7.

18 (Exhibit 7 was marked for identification.)

19 BY MR. MATICH:

20 Q. Dr. Gupta, do you see Exhibit 7 on your
21 screen?

22 A. Yes.

23 Q. Do you recognize this document?

24 A. A portion of my CV.

25 MR. CALLAHAN: Please take the time to

1 scroll down and make sure it is complete and
2 accurate.

3 BY MR. MATICH:

4 Q. That was going to be my next question.
5 So, Dr. Gupta, do you believe -- is this CV
6 accurate?

7 MR. CALLAHAN: Please take the time to
8 review it.

9 THE WITNESS: Go down, please. Just to
10 make sure.

11 MR. CALLAHAN: It might be helpful to tell
12 the witness where the document came from.

13 MR. MATICH: I downloaded it from the UCLA
14 Website.

15 MR. CALLAHAN: Thank you.
16 When?

17 MR. MATICH: A couple of days ago.

18 MR. CALLAHAN: Thank you.

19 THE WITNESS: The next -- bring it down.
20 Scroll down to the last -- keep going,
21 please.

22 Stop there, please.

23 Keep going.

24 Keep going down.

25 Down, please.

1 Down.
2 Keep going down, please.
3 More.
4 Keep going, please.
5 More.
6 Keep going.
7 Next.
8 You can scroll down more.
9 Faster.
10 Keep going down.
11 Okay. More.
12 That's the end.
13 MR. CALLAHAN: It looks like there's some
14 text below the bottom of the screen.
15 THE WITNESS: Okay. All right. Yes,
16 Counsel.
17 BY MR. MATICH:
18 Q. Dr. Gupta, is Exhibit 7 an accurate copy
19 of your resume?
20 A. It is not updated to all the student's
21 thesis, and I noticed that there may be some
22 additions. So there might be some papers missing.
23 So it's not the most recent copy.
24 Q. It's not the most recent copy, but is the
25 information that is contained -- so it may be

1 missing information, correct?

2 A. Correct.

3 Q. But the information contained here is
4 accurate?

5 A. I have not checked each and every word of
6 it so, you know, this is on -- as you mentioned,
7 downloaded from UCLA's Website.

8 So I just want to make sure that it is
9 accurately reflects the original copy at some
10 point, which I had, or if there are any changes.

11 But again, to the best of my
12 recollection, this should be all accurate, you
13 know.

14 Q. Okay. Can you go to Page 16?

15 Dr. Gupta, I would like to draw your
16 attention to item No. 65.

17 MR. CALLAHAN: Excuse me, Counsel, would
18 you have any hard copies of it? It's a little bit
19 difficult to see on the screen now.

20 MR. MATICH: Yes, I'm handing you a
21 courtesy copy, a hard copy of Exhibit 7.

22 MR. CALLAHAN: Can I -- would you -- can I
23 offer a copy to the witness?

24 MR. MATICH: Yes, if Dr. Gupta would like
25 to look at a hard copy we can -- I've already marked

1 the electronic version.

2 MR. CALLAHAN: Right.

3 THE WITNESS: Sure.

4 BY MR. MATICH:

5 Q. I don't think it will be necessary,
6 but...

7 A. Okay.

8 Q. Dr. Gupta, if you're having trouble
9 reading it let me know. But I think we can get --
10 move past this fairly quickly.

11 Can you zoom in on Item 65?

12 Dr. Gupta, do you see at the top of your
13 screen item No. 65, "Glass-modified stress waves
14 for adhesion measurement of the ultrathin films for
15 device applications"?

16 A. Yes.

17 Q. Does this article relate to the '684
18 patent?

19 MR. CALLAHAN: Objection; form; also
20 relevance.

21 THE WITNESS: Yes, from the title.

22 BY MR. MATICH:

23 Q. And did you author this article?

24 A. Yes.

25 Q. Do you see there are coauthors listed

1 there?

2 A. Yes.

3 MR. MATICH: Can we pull down the current
4 exhibit and put up Tab 11 and mark it as Exhibit 11.

5 (Exhibit 11 was marked for
6 identification.)

7 BY MR. MATICH:

8 Q. Dr. Gupta, do you see Exhibit 11 in front
9 of you?

10 A. Yes.

11 Q. Is this a copy of the paper that we were
12 just looking at, Item No. 65 on CV?

13 MR. CALLAHAN: Please take the time,
14 Dr. Gupta, take a look at it and confirm that it is.
15 You might want to ask for it to be scrolled down so
16 you can make sure it's a complete and accurate copy.

17 THE WITNESS: Yes.

18 BY MR. MATICH:

19 Q. Dr. Gupta, is this a copy of the paper
20 that we were looking at on your CV item No. 65?

21 MR. CALLAHAN: Objection. I would like to
22 object to this question on the basis of relevance
23 because it is outside the scope of Dr. Gupta's
24 March 8 declaration and also in violation of the
25 Court's order of February 27.

1 MR. MATICH: John, his declaration talks
2 about his extensive publication record and I'm
3 exploring that. And he -- relevance objections are
4 inappropriate to begin with.

5 MR. CALLAHAN: I disagree. And the Court,
6 you know, Judge Kim specifically limited you to the
7 scope of the substance of his March 8 declaration,
8 and you have constantly veered outside of the scope
9 it in attempts to, you know, lasso in various issues
10 that you're not entitled to address. And quite
11 frankly, we're getting towards the end of the
12 three-hour period and you've yet to ask a question
13 about inventorship of the '321 patent.

14 Am I wrong?

15 MR. MATICH: John, I'm asking questions
16 about his declaration, which includes his statements
17 about his publication record in this area. I'm
18 allowed to ask about those, and I'm going to keep
19 doing it.

20 MR. CALLAHAN: I object. You're
21 attempting to lasso --

22 MR. MATICH: All right. John, you're --

23 MR. CALLAHAN: -- issues of prior art.

24 MR. MATICH: -- you're obstructing the
25 deposition.

1 MR. CALLAHAN: No, I'm not. I'm trying to
2 restrain it to what the Court ordered.

3 BY MR. MATICH:

4 Q. Dr. Gupta, do you recall working on this
5 paper and the relevant research with the other
6 authors here?

7 MR. CALLAHAN: Objection; relevance;
8 outside the scope of Dr. Gupta's March 8
9 declaration; and also contrary to the Court's order
10 of February 27.

11 THE WITNESS: I do recall this is my
12 paper, yes.

13 BY MR. MATICH:

14 Q. And do you recall working with Hiroshi
15 Yoshida, Haruo Akahoshi, and Jun Tian on this
16 paper?

17 MR. CALLAHAN: Objection; relevance;
18 outside the scope of the declaration; and contrary
19 to the Court's ruling.

20 THE WITNESS: You have to clarify
21 "working" in what way.

22 BY MR. MATICH:

23 Q. Do you recall working with them in any
24 way?

25 A. What do you mean "any way"?

1 Q. Do you recall doing any work with -- on
2 this paper with the final three listed authors?

3 MR. CALLAHAN: Objection; form; relevance;
4 outside the scope of the new dec; and contrary to
5 the Court's order.

6 THE WITNESS: So the Jun Tian's name
7 should be there in my CV. So that was missing.
8 That's just a typographical error in my CV.

9 And -- so I'm a little confused about
10 "working." So you've got to explain that. Working
11 with these authors or?

12 BY MR. MATICH:

13 Q. Understood.

14 What did Hiroshi Yoshida contribute to
15 this paper?

16 MR. CALLAHAN: Objection; form; relevance;
17 outside of the scope of the new declaration;
18 contrary to the Court's order; calls for
19 speculation; and calls for a legal conclusion.

20 THE WITNESS: So they didn't do any of the
21 technique work. So they basically provided the
22 samples, which were being tested by us.

23 BY MR. MATICH:

24 Q. So the -- Hitachi -- Mr. Yoshida worked
25 at Hitachi, correct?

1 A. Correct.

2 MR. CALLAHAN: Objection.

3 BY MR. MATICH:

4 Q. And Mr. Yoshida supplied you with

5 samples --

6 MR. CALLAHAN: Objection; form.

7 BY MR. MATICH

8 Q. -- to test?

9 MR. CALLAHAN: Excuse me.

10 Objection; form; relevance; calls for

11 speculation.

12 THE WITNESS: To the best of my

13 recollection, the last two authors, basically, their

14 -- they were not even in our lab. So they just

15 provided the samples.

16 BY MR. MATICH:

17 Q. But where was the testing done?

18 MR. CALLAHAN: Objection; form; relevance;

19 outside of the scope of the new declaration;

20 contrary to the Court's order.

21 THE WITNESS: UCLA.

22 BY MR. MATICH:

23 Q. By "UCLA" you mean the University of

24 California Los Angeles?

25 A. Yes.

1 Q. Did you have any agreements -- did you or
2 UCLA have any contracts with Hitachi regarding this
3 work?

4 MR. CALLAHAN: Objection; form; relevance;
5 outside the scope of the new declaration; contrary
6 to the Court's order; also calls for speculation.

7 THE WITNESS: Yeah, I don't believe so.

8 BY MR. MATICH:

9 Q. How did you come to work with Hitachi?

10 MR. CALLAHAN: Objection; form; relevance.

11 THE WITNESS: They sought me out based on
12 my reputation in the field and the presentations I
13 had made to the microelectronics companies in major
14 conferences, where practically everyone in the
15 semiconductor world who had issues with adhesion
16 would basically attend those conversations.

17 So I hired publications with Intel and
18 Texas Instruments, and so they were researchers
19 from various semiconductors who, obviously, first
20 of all, does get the information from me.

21 So, therefore, I think when I mentioned
22 in my earlier discussions, virtually every
23 semiconductor company who had issues with their
24 adhesion I worked with.

25 So there were a lot of these interactions

1 during these conferences where they took the data
2 from the technique. And so -- even though they may
3 not have formally sent the samples to me.

4 So I think that basis of that sentence,
5 which you were inquiring earlier, you've got to
6 also add this context.

7 In the same fashion, Hitachi researchers,
8 like many others, they approached and they had a
9 very specific problem that they wanted me to
10 address, and that's how they came to -- into my
11 lab.

12 BY MR. MATICH:

13 Q. Did Hitachi pay you for the work?

14 MR. CALLAHAN: Objection; form; relevance;
15 outside the scope of the declaration; contrary to
16 the Court's order.

17 THE WITNESS: I don't recall actually
18 whether they paid me or not as a consultant, just
19 for the time spent but not for the testing.

20 BY MR. MATICH:

21 Q. They didn't pay you for the testing?

22 A. Correct.

23 MR. CALLAHAN: Objection.

24 BY MR. MATICH:

25 Q. And did you describe to them the details

1 of the testing?

2 MR. CALLAHAN: Objection; form; relevance.

3 THE WITNESS: I think they just sent us
4 the samples and we tested them.

5 BY MR. MATICH:

6 Q. Okay. Is the -- but there's a lot of
7 detail here in the article -- and Mr. Yoshida and
8 Akahoshi are listed as authors. Presumably they
9 had that information during the course of your work
10 with them?

11 MR. CALLAHAN: Objection; form; relevance.

12 THE WITNESS: I would imagine at some
13 point, yes.

14 BY MR. MATICH:

15 Q. Did you ever present this paper anywhere?

16 MR. CALLAHAN: Objection; relevance.

17 THE WITNESS: That, I don't recall. It
18 must be some -- I don't recall. It's been a long
19 time back.

20 BY MR. MATICH:

21 Q. So can we pull back up Tab 7, your CV.

22 Go down to Page 26.

23 Keep going.

24 Sorry, it might be Page 26 of the PDF.

25 THE VIDEOGRAPHER: This is Page 26 for

1 both.

2 BY MR. MATICH:

3 Q. I'm sorry. Page 36. Can you zoom in on
4 Item 156.

5 Dr. Gupta, do you see Item 156 on your
6 CV?

7 A. Yes.

8 Q. Is that a presentation of the paper we
9 were just looking at?

10 MR. CALLAHAN: Objection; form; relevance;
11 outside the scope of the new declaration and
12 contrary to the Court's order.

13 BY MR. MATICH:

14 Q. Let me rephrase the question, just so we
15 have the full thing.

16 Dr. Gupta, is -- well, what is the AME
17 International Mechanical Engineering Congress and
18 Exposition?

19 MR. CALLAHAN: Objection; relevance;
20 outside the scope of the dec -- new dec and contrary
21 to the Court's order.

22 THE WITNESS: It's American Society of
23 Mechanical Engineer, our sponsored conference.

24 BY MR. MATICH:

25 Q. And Item 156 lists a presentation you

1 gave at that conference in 2002?

2 A. Yes.

3 Q. Is that date accurate?

4 MR. CALLAHAN: Objection; relevance.

5 BY MR. MATICH:

6 Q. November 17 to 22, 2022?

7 MR. CALLAHAN: Same objection.

8 THE WITNESS: To the best of my
9 recollection, there's some typos, but I would
10 imagine this is correct, the timeframe, yes.

11 BY MR. MATICH:

12 Q. And is that a presentation of your 2000-
13 -- of the Exhibit 11 paper we were just looking at?

14 MR. CALLAHAN: Objection; form; relevance;
15 outside of scope of the dec; and contrary to the
16 Court's order.

17 THE WITNESS: No, not necessarily.

18 BY MR. MATICH:

19 Q. Why do you say "not necessarily"?

20 A. Because these presentations are very
21 limited on time, so there -- we're just discussing
22 the results.

23 Q. In the -- in that presentation, would you
24 have had like a -- describe what -- how does the
25 presentation go if it's very limited time? Do you

1 have a PowerPoint dec? Or how does it work?

2 MR. CALLAHAN: Objection; form; compound
3 question; relevance; outside of the scope of the
4 dec -- new declaration; contrary to the Court's
5 order.

6 THE WITNESS: Yeah, I don't recall at this
7 point, but there were no PowerPoints at that time.
8 It was mostly, like, transferences and these
9 presentations are just 10 minutes.

10 So there's no way we discussed the
11 details of the testing or technology, but more of
12 the -- just of the results.

13 BY MR. MATICH:

14 Q. But you would -- there would have been
15 like a projector with transparencies to -- for
16 visuals?

17 A. Yes.

18 MR. CALLAHAN: Objection; mischaracterizes
19 the witness' testimony.

20 BY MR. MATICH:

21 Q. And did this presentation show the use of
22 glass-modified stress waves?

23 MR. CALLAHAN: Objection; mischaracterizes
24 the witness' testimony; form; relevance; outside the
25 scope of the new declaration; contrary to the

1 Court's order.

2 THE WITNESS: Yes, so I don't know about
3 this. It's a long time back what we discussed. It
4 was a short presentation, and certainly the scope of
5 the presentation was not of the paper we discussed.

6 BY MR. MATICH:

7 Q. But, Dr. Gupta, do you see the title
8 there is "Adhesion Measurement of Ultrathin
9 Multi-layers using Glass-modified Stress Waves"?

10 MR. CALLAHAN: Objection.

11 BY MR. MATICH:

12 Q. Was that the title of the presentation?

13 MR. CALLAHAN: Objection; asked and
14 answered.

15 THE WITNESS: Yes. And a lot of time when
16 we give the title or the presentation but when we
17 actually give the presentation, some other
18 interesting topic I want to talk about, so I go and
19 talk about those new topics.

20 So a lot of these symposiums are invited
21 symposium. So they invite me and then at a time,
22 maybe a year before the conferences, they ask us
23 for a title.

24 But actually when the conference occurs,
25 that time I actually -- so therefore I don't recall

1 what the actual substance of my presentation could
2 have been a topic at the time of packages,
3 electronic packages, which were nothing to do with
4 the glass-modified stress waves. It was just
5 testing the bond strength of a joint.

6 So I don't recall, at this point, whether
7 the specific title was, in fact, the one which I
8 presented.

9 MR. CALLAHAN: Counsel, can we check on
10 how much time is left? I think we're about 30
11 minutes into the present session. And we had 110
12 minutes already previously.

13 So would it be possible to just get a
14 check on that and see how much time is left?

15 MR. MATICH: Yeah, we've been on 141
16 minutes, so there's 39 left.

17 BY MR. MATICH:

18 Q. At conferences like the ASME
19 International Mechanically Engineering Congress and
20 Exposition, are there any confidentiality
21 restrictions on participants?

22 MR. CALLAHAN: Objection; form; relevance;
23 calls for speculation.

24 THE WITNESS: I have no idea. I mean,
25 with any -- I've not explored it, to be very frank

1 with you.

2 BY MR. MATICH:

3 Q. Do you attend the IMECE every year?

4 MR. CALLAHAN: Objection; relevance;
5 outside the scope of the dec; and contrary to the
6 Court's order.

7 THE WITNESS: I have not done it every
8 year.

9 BY MR. MATICH:

10 Q. Have you attended ICM- -- the
11 International Mechanical Engineering Congress and
12 Exposition frequently?

13 MR. CALLAHAN: Objection; form; relevance.

14 THE WITNESS: Not in the last five years.

15 BY MR. MATICH:

16 Q. Are you -- can you testify that you are
17 aware of a confidentiality restriction at the
18 International Mechanical Engineering Congress and
19 Exposition?

20 MR. CALLAHAN: Objection; calls for
21 speculation.

22 THE WITNESS: Yeah, I don't know what you
23 mean by "confidentiality agreement"?

24 BY MR. MATICH:

25 Q. If you presented the -- if you sat in and

1 watched someone's presentation at the 2002
2 International Mechanical Engineering Congress and
3 Exposition, would you be free to share that
4 information with other people?

5 MR. MATICH: Objection; calls for
6 speculation.

7 THE WITNESS: In general, yes.

8 BY MR. MATICH:

9 Q. Okay. Can we scroll back up to Item 154
10 on Dr. Gupta's CV?

11 THE VIDEOGRAPHER: Which page?

12 MR. MATICH: No, no. The same page, just
13 a couple items can up. Item 154.

14 BY MR. MATICH:

15 Q. Dr. Gupta, do you see Item 154 on your CV
16 "glass-modified waves for decohesion of ultrathin
17 films presented at Intent Corporation Channeler,
18 Arizona on August 9, 2002"?

19 A. Yes.

20 Q. Do you recall giving that presentation?

21 A. Yes, that presentation had actually the
22 -- maybe the wrong title there. The presentation
23 to Intel Corporation was more for their packages,
24 which I was testing. So it was not about the
25 glass-modified stress waves.

1 Q. So, Dr. Gupta, why does it say that the
2 presentation related to glass-modified stress waves
3 on CV?

4 MR. CALLAHAN: Objection; relevance;
5 outside the scope of the dec; and the Court's order.

6 THE WITNESS: So that could be -- I don't
7 know. Could be a typo or I misplaced the title, but
8 clearly the Intel presentation in 2002 timeframe was
9 a substantial work, which related to the testing of
10 their packages, and there is also a research paper
11 which came out of that testing.

12 So when I went to Intel the whole
13 discussion was about that testing, so that I know
14 for sure.

15 BY MR. MATICH:

16 Q. Do you have a copy of the presentation
17 you gave to Intel?

18 MR. CALLAHAN: Objection.

19 THE WITNESS: No.

20 BY MR. MATICH:

21 Q. Were you under an NDA with Intel when you
22 gave that presentation?

23 MR. CALLAHAN: Objection; relevance.

24 THE WITNESS: I don't believe so because
25 that work was published in a conference.

1 BY MR. MATICH:

2 Q. What conference was that work published
3 in?

4 MR. CALLAHAN: Objection; relevance.

5 THE WITNESS: There's -- I -- there must
6 be a citation someplace. It is one of the
7 conferences which I attended by virtually all of
8 these semiconductor companies and was focused on
9 adhesion issues.

10 BY MR. MATICH:

11 Q. Did the conference occur before or after
12 the presentation you gave to Intel?

13 MR. CALLAHAN: Objection; relevance; calls
14 for speculation.

15 THE WITNESS: That, I don't recall,
16 Counsel.

17 BY MR. MATICH

18 Q. Dr. Gupta, do you understand that if you
19 disclosed the technique in the '684 patent to Intel
20 in 2002, it would invalidate the '684 patent?

21 MR. CALLAHAN: Objection; calls for a
22 legal conclusion; privileged.

23 THE WITNESS: Yeah, so I don't know. All
24 I know is that the presentation I made to Intel was
25 not about this technology. And was all about using

1 the '402 technology on the, you know, our prior
2 patent on -- actually leads you to testing of
3 packages and their silicon chips.

4 BY MR. MATICH:

5 Q. So your testimony is that the
6 presentation listed in Item No. 154, actually dealt
7 with your earlier patent, not the '684 technology?

8 MR. CALLAHAN: Objection; mischaracterizes
9 the witness' testimony; outside relevance; outside
10 the scope of the new dec and the Court's order.

11 THE WITNESS: Yes, there was no discussion
12 about any of the glass-modified waves. It was more
13 about using the stress waves for decohesion of
14 interfaces within the packages.

15 BY MR. MATICH:

16 Q. I want to talk back about Exhibit 11.

17 Dr. Gupta, do you recall Exhibit 11 as
18 the article you wrote after working with Hitachi?

19 MR. CALLAHAN: Can we see the exhibit
20 again?

21 MR. MATICH: Sure. Can we pull up
22 Exhibit 11?

23 MR. CALLAHAN: What was the question?

24 MR. MATICH: Oh, I hadn't asked a
25 question. I was explaining that we were -- I want

1 to reorient Dr. Gupta to Exhibit 11.

2 MR. CALLAHAN: Understood.

3 Let me ask a question: Does this

4 correlate to one of the entries on the CV?

5 MR. MATICH: Exhibit 11?

6 MR. CALLAHAN: Yes.

7 MR. MATICH: Yes.

8 MR. CALLAHAN: Which number is that again?

9 MR. MATICH: It's in the transcript.

10 Dr. Gupta testified to that. I forget exactly which

11 one.

12 MR. CALLAHAN: Can we have that read back?

13 MR. MATICH: Can we go off the record?

14 THE VIDEOGRAPHER: It's 3:12 p.m. and

15 we're going off the record.

16 (Recess taken.)

17 THE VIDEOGRAPHER: It's 3:24 p.m. and

18 we're back on the record.

19 BY MR. MATICH:

20 Q. Dr. Gupta, during the break did you talk

21 to your counsel?

22 A. Yes.

23 Q. Did you discuss this case with them?

24 A. No.

25 Q. Did you discuss your article, Exhibit 11

1 that we've been going over with them?

2 A. No.

3 Q. Dr. Gupta, you have still in front of you
4 Exhibit 9, the paper exhibit. Is this an example
5 of -- is Exhibit 9 an example of the glass-modified
6 stress waves described in Exhibit 11?

7 MR. CALLAHAN: Objection; form; relevance;
8 outside the scope of the new dec and the Court's
9 order.

10 THE WITNESS: Yeah, I don't know. I don't
11 have enough -- I can't tell.

12 BY MR. MATICH:

13 Q. What more information would you need to
14 evaluate whether or not the diagram in Exhibit 9
15 reflects the invention in Claim 1 of the '684
16 patent?

17 MR. CALLAHAN: Objection; form; relevance.
18 The question is outside the scope of the declaration
19 that Dr. Gupta signed on March 8. It's also
20 contrary and in violation of the Court's order of
21 February 27. It calls for potentially privileged
22 information and it calls for a legal conclusion.

23 This is a line of questioning that
24 counsel explored earlier today, gave up on, and now
25 has returned to. I think it's harassment of the

1 witness. It calls for speculation.

2 THE WITNESS: Yes, there are too many
3 unknowns. Because of that, I cannot even begin to
4 answer your question.

5 BY MR. MATICH:

6 Q. Can you name one unknown that you would
7 need?

8 MR. CALLAHAN: Objection; form; relevance.

9 THE WITNESS: Some of the unknowns are my
10 discussions with the counsel, which are basically --
11 I can't disclose, as I understand.

12 BY MR. MATICH:

13 Q. I'm not asking about your discussions
14 with counsel. I'm asking as a man who does laser
15 spallation for a living, can you tell me whether or
16 not Exhibit 9 describes an invention under Claim 1
17 of your '684 patent?

18 MR. CALLAHAN: Objection; form; relevance;
19 outside the scope of the new dec and the Court's
20 order. It also calls for potentially privileged
21 information and understanding the scope of the
22 claim; calls for a legal conclusion; and
23 speculation.

24 THE WITNESS: Yes, I cannot answer the
25 question. I can't do that analysis because it

1 depends upon a lot of the discussions I had with my
2 counsel and in addition to that, the other
3 information, which I don't have in order to answer
4 your question.

5 BY MR. MATICH:

6 Q. Can you identify one piece of information
7 you don't have that you would need to answer my
8 question?

9 MR. CALLAHAN: He already has. Asked and
10 answered. He indicated that he would need to know
11 the scope of the claims and that is privileged
12 information.

13 So again I object on the basis of form;
14 relevance; privilege; and the question calls for a
15 legal conclusion.

16 THE WITNESS: And I think that's, in a
17 sense, the -- the problem I'm having to answer your
18 question is, there's a starting point is the
19 discussion with my counsel regarding the legal
20 meanings of these terms; and so therefore, I cannot
21 begin to even do any kind of analysis without
22 disclosing that privileged information.

23 BY MR. MATICH:

24 Q. So again, I'm not asking for your
25 communications with counsel. I'm asking your

1 technical understanding.

2 Do you -- can you name one piece of
3 information that you would need to analyze whether
4 or not the diagram in Exhibit 9 is an example of
5 the invention in Claim 1 of the '684 patent?

6 MR. CALLAHAN: Objection; asked and
7 answered; form; relevance; outside the scope of the
8 declaration; and also contrary to the Court's order.
9 The question calls for privileged information, and
10 it calls for a legal conclusion.

11 THE WITNESS: The answer is the same,
12 Counsel, which I gave earlier.

13 BY MR. MATICH:

14 Q. Dr. Gupta, there's a -- Claim 1 of the
15 '684 patent refers to a glass element, are you
16 aware of that?

17 MR. CALLAHAN: Objection; form; relevance;
18 calls for a legal conclusion; and potentially
19 privileged information.

20 THE WITNESS: I -- yes.

21 BY MR. MATICH:

22 Q. What is your understanding of what a
23 glass element is?

24 SPEAKER #1: Objection; form; relevance;
25 privilege; calls for a legal conclusion.

1 THE WITNESS: Yeah, that -- to answer the
2 question I would have to discuss the communication
3 with my counsel, which I understand, is not
4 something which I can disclose.

5 BY MR. MATICH:

6 Q. I'm not asking you to tell me about your
7 communications with counsel. I am just asking you
8 to tell me what your understanding of a term in the
9 patent is.

10 MR. CALLAHAN: Objection; form; relevance.

11 MR. MATICH: John, I haven't asked a
12 question yet.

13 MR. CALLAHAN: Okay.

14 MR. MATICH: And I'll -- your speaking
15 objections are completely improper and have eaten up
16 a lot of our time today.

17 BY MR. MATICH

18 Q. Dr. Gupta, are you willing to tell me
19 what your understanding of the glass element is in
20 Claim 1 of the '684 patent?

21 MR. CALLAHAN: Objection; privilege.

22 And I will instruct the witness not to
23 reveal any privileged communication.

24 If you can answer, you can, but if you
25 cannot, I instruct you not to answer.

1 THE WITNESS: Yeah, unfortunately, to
2 answer your question properly I will have to
3 disclose the discussions with my counsel, which I
4 understand, I cannot disclose.

5 BY MR. MATICH:

6 Q. Dr. Gupta, I think I have the answer, but
7 I'm going to ask a few more questions along this
8 line to make a record because we'll probably be
9 moving to compel a second deposition.

10 Dr. Gupta, do you have an understanding
11 of what it means for a glass element in Claim 1 of
12 the '684 patent to be configured to modify and
13 propagate a stress wave?

14 MR. CALLAHAN: Objection; form; relevance;
15 privilege; calls for a legal conclusion.

16 THE WITNESS: Same answer that I will have
17 to disclose information discussed with my counsel in
18 order to answer your question properly.

19 BY MR. MATICH:

20 Q. So, Dr. Gupta, when you say you would
21 have to disclose information discussed with your
22 counsel, does that mean that you have no opinion
23 about the terms in the '684 patent apart from what
24 your lawyers have told you?

25 MR. CALLAHAN: Objection; mischaracterizes

1 the witness' testimony; calls for privileged
2 information.

3 THE WITNESS: That's not what I said.

4 BY MR. MATICH:

5 Q. Do you have an opinion about the meaning
6 of the terms in the '684 patent apart from what
7 your lawyers have told you?

8 MR. CALLAHAN: Objection; form; relevance;
9 privilege; calls for a legal conclusion.

10 THE WITNESS: There are certain legal
11 meanings of the term that the counsel has explained
12 to me, which of course I cannot disclose that
13 communication in this deposition.

14 BY MR. MATICH

15 Q. Dr. Gupta, I asked if you had an
16 understanding of the meaning of any term in the
17 '684 patent apart from what your lawyers have told
18 you?

19 MR. CALLAHAN: Objection; mischaracterizes
20 the witness' testimony; asked and answered; calls
21 for privileged information.

22 THE WITNESS: I have the same answer, plus
23 these are beyond the scope of this deposition and
24 that's not the reason, I'm just adding that. This
25 is actually violating the Court's order.

1 I've read the court order, you've not
2 asked a single question about the scope of the
3 declaration and you are definitely violating the
4 court order. As my understanding is, but that's
5 not the reason I'm not giving you the answer, but
6 I'm giving the answer because in order to properly
7 give you an answer I would have to disclose the
8 communication with my counsel, which clearly is --
9 cannot be disclosed.

10 BY MR. MATICH

11 Q. Okay. So, Dr. Gupta, you cannot say
12 anything about the meaning of the terms in the '684
13 patent without disclosing privileged information,
14 is that your testimony?

15 MR. CALLAHAN: Objection; mischaracterizes
16 the witness' testimony; privilege; form; relevance.

17 THE WITNESS: As long as there is a
18 connection to the patent and its language, yes, that
19 would be something which will be based on
20 discussions with my counsel and that would not be
21 disclosed.

22 MR. MATICH: Can we go off the record?

23 THE VIDEOGRAPHER: It's 3:36 p.m. and
24 we're going off the record.

25 (Recess taken.)

1 THE VIDEOGRAPHER: It's 3:38 p.m. and
2 we're back on the record.

3 BY MR. MATICH:

4 Q. Dr. Gupta, we've been primarily
5 discussing your '684 patent but you have an earlier
6 laser spallation patent; is that correct?

7 A. Yes.

8 Q. That is patent -- U.S. Patent
9 No. 5,438,402; is that correct?

10 A. Yes.

11 Q. Is there anything disclosed -- excuse me.

12 Is there anything in Claim 1 of the '684
13 patent that is not already disclosed in the '402
14 patent?

15 MR. CALLAHAN: Objection; form; calls for
16 a legal conclusion; also not relevant.

17 THE WITNESS: Again, comparing the '684
18 patent with the '402 patent will require me to
19 disclose the discussions with my counsel, and would
20 not be possible to do that analysis.

21 BY MR. MATICH:

22 Q. So you cannot -- who is the most
23 prominent laser spallation expert in the country?

24 MR. CALLAHAN: Objection; calls for
25 speculation; also not relevant.

1 THE WITNESS: Well, I mean, I developed
2 this tool in the beginning --

3 THE COURT REPORTER: I what tool in the
4 beginning?

5 THE WITNESS: I developed this tool, I
6 quantified the laser spallation technique and then I
7 followed that work and invented new additions to the
8 technology to increase the scope of the work. So, I
9 mean, I have been a part of this technology for
10 several decades and the other researchers who have
11 followed this work I have guided them, their
12 companies, their individuals like Professor Sottos
13 and Harmona Champagne, they are students who have
14 followed the technique.

15 So I would say there are other folks
16 around the world who have used this technology --
17 there are others who have in the companies, but I
18 may not have even any knowledge of that. So -- and
19 I think the perspective on who is the leader, who
20 is not, is just personal to some extent.

21 BY MR. MATICH:

22 Q. And of the people that you know, other
23 than yourself, who do you think the leader in laser
24 spallation technology is?

25 MR. CALLAHAN: Objection; form; relevance;

1 calls for speculation.

2 THE WITNESS: I mean, "the leader" is a
3 very complicated term. I mean, one could follow the
4 work and they're a competent engineer and you just
5 follow the work. And you do more different types of
6 materials, so there are people who fall in that
7 category and a leader would be one who's creating
8 new technology while doing, you know, adding to the
9 technology by innovation.

10 But then I personally distinguish people
11 who are great followers and they may do even
12 better, for example, if they do a simulation they
13 can do the simulation in more detail, but that
14 doesn't create innovation. So I would, at that
15 point, there are many people who are followers of
16 the technology.

17 BY MR. MATICH:

18 Q. Who are the great followers of the
19 technology?

20 MR. CALLAHAN: Objection; form; relevance.

21 BY MR. MATICH

22 Q. In your opinion?

23 MR. CALLAHAN: Objection; form; relevance;
24 calls for speculation.

25 THE WITNESS: I don't even actually know.

1 I know Professor Sottos and her group has basically
2 followed my work. They've also followed the newer
3 applications I have done of the laser-induced stress
4 waves in biological materials. I understand one of,
5 you know, her students have followed that aspect.

6 BY MR. MATICH:

7 Q. Which students are you speaking about?

8 A. I don't recall the name, but I think
9 there might be somebody by the name of Van who may
10 have, you know, looked at the applications of
11 stress waves in cellular adhesion.

12 So a lot of their followers of this laser
13 spallation technology.

14 Q. Do you consider Wang a good follower of
15 the technology?

16 MR. CALLAHAN: Objection; form; relevance;
17 calls for speculation.

18 THE WITNESS: I have not followed her
19 work, actually to be very frank with you, to make
20 that determination except for I've seen just a few
21 of the papers in the title form.

22 BY MR. MATICH:

23 Q. Have you ever cited her work?

24 MR. CALLAHAN: Objection; form; relevance.

25 THE WITNESS: I don't know. I have cited

1 work of researchers, which are relevant to my work,
2 but I don't recall as I sit here today.

3 BY MR. MATICH:

4 Q. So other than Nancy Sottos you can't name
5 any people that have followed you and made
6 significant contributions to the field?

7 MR. CALLAHAN: Objection; mischaracterizes
8 the witness' testimony; form; and relevance.

9 THE WITNESS: So first of all, let me be
10 very clear, I never made any statement here about
11 significant contributions by Nancy Sottos. So I
12 just said they're followers of the work. So this is
13 your characterization. So let's be very clear about
14 it. There are many citations of my work. So all
15 the citations mean they are following my work.

16 So I don't keep track of the people who
17 follow my work. There are people in Intel who
18 follow my work. There are people in Hitachi that
19 follow my work. There are people in Texas
20 Instruments who follow my work. There are people
21 in universities across the world in Japan, in
22 India, in Europe, they follow my work. And there
23 are University in Canada, they follow my work.
24 They're former students who follow my work. I have
25 former students who are all over the world working

1 in different types of industries television,
2 aerospace, automobile, they follow my work. There
3 are people in General Motors and Ford, they follow
4 my work.

5 So I don't have all the names, but I know
6 I have had discussions with them over the last 30,
7 35 years and from that, phone calls and inquiring
8 about my papers, and asking me to give
9 presentations. It's just evidence that they follow
10 my work.

11 So Nancy Sottos is not the only person
12 who follows my work, and the only reason her name
13 came up is because you brought it up in the
14 deposition. Otherwise, there is no reason to --
15 for me to just focus on Nancy Sottos and her group.
16 BY MR. MATICH:

17 Q. Did you invent lacer spallation?

18 MR. CALLAHAN: Objection; form; relevance;
19 called for privileged information; calls for a legal
20 conclusion.

21 THE WITNESS: So the -- your statement is
22 a blanket statement. Spallation is a word used
23 since the 50s, but quantification of the stresses
24 and adhesion to the films that was my contribution.
25 I invented that. I got a U.S. patent, the '402

1 patent for that technology. So -- and that's
2 basically under the laws of the United States
3 patent, I obtained the patent and went through the
4 process.

5 So your question about a blanket
6 statement about did he invent laser spallation, so
7 that's an incomplete question in some sense,
8 because spallation is a word used before laser
9 having been used to spall things off but there were
10 no quantification or application of thin film.

11 So it's like saying Newton's law, did you
12 invent Newton's law? No. So if -- a lot of the
13 inventions are based on Newton's law so nobody
14 invented Newton's law, but you have a patent on
15 certain applications of the Newton's law to a
16 particular design, particular thing, that is
17 basically in the context. So what you are asking
18 the question would be, hey, did you invent Newton's
19 law? No, I did not.

20 BY MR. MATICH:

21 Q. So is the answer you did invent laser
22 spallation?

23 MR. CALLAHAN: Objection --

24 THE WITNESS: No, I --

25 MR. CALLAHAN: -- mischaracterizes the

1 witness' testimony.

2 THE WITNESS: Yeah, that's why I explained
3 to you in details and now you can basically decide
4 the answer to your question is that there was
5 specific applications for the laser spallation to
6 multilayer thin films and actual quantification of
7 the interface stress using interferometry, the whole
8 connection to do the entire process is what I may
9 have called laser spallation technique, but that's
10 the invention.

11 BY MR. MATICH:

12 Q. And what did you invent with the '684
13 patent?

14 MR. CALLAHAN: Objection; form; relevance;
15 calls for privileged information; calls for a legal
16 conclusion.

17 THE WITNESS: So that is again, a
18 modification to the '402 patent and that's a patent
19 that says what it says. Like, it says a
20 modification.

21 BY MR. MATICH:

22 Q. So what's the modification of the '684
23 over the 402?

24 MR. CALLAHAN: Objection; calls for
25 privileged information; calls for a legal

1 conclusion.

2 I am going to instruct the witness not to
3 answer that question.

4 BY MR. MATICH:

5 Q. Dr. Gupta, are you going to follow your
6 counsel's advice?

7 A. Yes.

8 Q. Dr. Gupta, do you have your
9 communications with Hitachi related to Exhibit 11
10 the article we were looking at earlier?

11 MR. CALLAHAN: Objection; relevance;
12 outside the scope of the declaration; and the
13 Court's order.

14 THE WITNESS: I have not looked for that,
15 Counsel, and I don't know where to look for it
16 because I have not looked for it.

17 BY MR. MATICH:

18 Q. How far back do your emails at UCLA go?

19 MR. CALLAHAN: Objection; form; relevance;
20 outside the scope of the declaration; outside the
21 scope of the Court's order.

22 THE WITNESS: So I don't know. We changed
23 the email systems and early on I had printed out,
24 you know, emails, which were attached to my
25 declaration. But right now all those actual email

1 systems are no longer available and I have not
2 inquired whether even UCLA keeps, you know, those
3 emails from 2000 or not. So I don't know the answer
4 to your question.

5 BY MR. MATICH:

6 Q. Do you keep in touch with Jun Tian?

7 MR. CALLAHAN: Objection; outside the
8 scope of the Court's order; and Dr. Gupta's March 8
9 declaration; also objection to the basis of form.

10 THE WITNESS: No, I have not kept in touch
11 with Jun Tian.

12 BY MR. MATICH:

13 Q. Do you keep in touch with Vassili Kireev?

14 MR. CALLAHAN: Objection; form; relevance;
15 outside the scope of the declaration; and the
16 Court's order.

17 THE WITNESS: No.

18 BY MR. MATICH:

19 Q. What contribution did Mr. Kireev or
20 Dr. Kireev make to the '684 patent?

21 MR. CALLAHAN: Objection; form; relevance;
22 outside the scope of the declaration; and the
23 Court's order; also calls for privileged
24 information.

25 I would instruct the witness not to

1 answer that question.

2 BY MR. MATICH:

3 Q. Dr. Gupta, are you going to follow your
4 counsel's instruction?

5 A. Yes.

6 MR. MATICH: How much time do we have
7 left?

8 THE VIDEOGRAPHER: Two and a half minutes.

9 BY MR. MATICH:

10 Q. Dr. Gupta, when did you conceive of the
11 invention in the '684 patent?

12 MR. CALLAHAN: Objection; calls for
13 privileged information; also calls for a legal
14 conclusion; object to the form; I object to its
15 relevance based upon the question being outside the
16 scope of the new declaration; and also contrary to
17 the Court's order.

18 THE WITNESS: I don't recall the actual
19 date and time.

20 BY MR. MATICH:

21 Q. Do you recall approximately when you
22 conceived the invention in the '684 patent?

23 MR. CALLAHAN: Objection; calls for
24 privileged information; a legal conclusion; also
25 form and relevance.

1 THE WITNESS: I don't. I don't.

2 MR. MATICH: Can we go off the record?

3 MR. CALLAHAN: How much time would be left

4 then?

5 THE VIDEOGRAPHER: It's 3:56 p.m. and

6 we're going off the record again.

7 (Recess taken.)

8 THE VIDEOGRAPHER: It's 3:57 p.m. and

9 we're back on the record.

10 MR. MATICH: Well, Dr. Gupta, since

11 there's less than two minutes left, I don't think I

12 have any other further questions for today. But

13 we're going to leave the deposition open because

14 we'll be asking the Court for a second one.

15 THE WITNESS: Okay.

16 MR. CALLAHAN: We're finished, then, for

17 today --

18 MR. MATICH: For today.

19 MR. CALLAHAN: -- with the 180 minutes?

20 MR. MATICH: Yes.

21 MR. CALLAHAN: Okay. We would also like

22 to make a statement on the record that our position

23 is that this deposition was conducted in bad faith.

24 Counsel for Boeing did not refer to any of the

25 exhibits to Dr. Gupta's declaration. Didn't ask any

1 questions about those exhibits. Clearly was not
2 interested in the core aspect of that declaration,
3 which is the inventorship of the '321 patent.

4 This deposition was used and I'll borrow
5 the phrase again from Judge Kim, as a discovery
6 lasso to try to -- to attempt to get discovery on
7 prior art issues and other issues related to the
8 '684 patent. Judge Kim expressly excluded that
9 subject matter from this deposition and we will ask
10 the Court for sanctions and costs in connection
11 with this deposition. Thank you.

12 THE VIDEOGRAPHER: It's 3:59 p.m. and
13 we're going off the record.

14 (The videotaped deposition of VIJAY GUPTA
15 concluded at 3:59 p.m.)

16
17
18
19
20
21
22
23
24
25

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

I, VIJAY GUPTA, do hereby declare under the penalty of perjury that I have read the foregoing transcript; that I have made any corrections as appear noted, in ink, initialed by me, or attached hereto; that my testimony as contained herein, as corrected, is true and correct.

EXECUTED this _____ day of _____,
20____, at _____, _____.
(City) (State)

VIJAY GUPTA

1 I, Patricia Y. Schuler, a Certified
2 Shorthand Reporter of the State of California, do
3 hereby certify:

4 That the foregoing proceedings were taken
5 before me at the time and place herein set forth;
6 that any witnesses in the foregoing proceedings,
7 prior to testifying, were duly sworn; that a
8 verbatim record of the proceedings was made by me
9 using machine shorthand which was thereafter
10 transcribed under my direction; that the foregoing
11 transcript is a true record of the testimony given.

12 Further, that if the foregoing pertains
13 to the original transcript of a deposition in a
14 Federal Case, before completion of the proceedings,
15 review of the transcript [X] was [] was not
16 requested.

17 I further certify I am neither
18 financially interested in the action nor a relative
19 or employee of any attorney or party to this
20 action.

21 IN WITNESS WHEREOF, I have this date
22 subscribed my name.

23 Dated: March 13, 2024

24 Patricia Y. Schuler
25 PATRICIA Y. SCHULER
CSR NO. 11949

1 DEPOSITION ERRATA SHEET

2 CASE NAME: LASER SPALLATION TECHNOLOGIES, LLC
3 v. THE BOEING COMPANY

4 DEPOSITION DATE: MARCH 12, 2024

5 WITNESS NAME: VIJAY GUPTA

6 Reason Codes: 1. To clarify the record.

7 2. To conform to the facts.

8 3. To correct transcription errors.

9 Page _____ Line _____ Reason Code _____

10 From _____ to _____

11 Page _____ Line _____ Reason Code _____

12 From _____ to _____

13 Page _____ Line _____ Reason Code _____

14 From _____ to _____

15 Page _____ Line _____ Reason Code _____

16 From _____ to _____

17 Page _____ Line _____ Reason Code _____

18 From _____ to _____

19 Page _____ Line _____ Reason Code _____

20 From _____ to _____

21 Page _____ Line _____ Reason Code _____

22 From _____ to _____

23 Page _____ Line _____ Reason Code _____

24 From _____ to _____

25 Page _____ Line _____ Reason Code _____

From _____ to _____

1 Page _____ Line _____ Reason Code _____
2 From _____ to _____
3 Page _____ Line _____ Reason Code _____
4 From _____ to _____
5 Page _____ Line _____ Reason Code _____
6 From _____ to _____
7 Page _____ Line _____ Reason Code _____
8 From _____ to _____
9 Page _____ Line _____ Reason Code _____
10 From _____ to _____
11 Page _____ Line _____ Reason Code _____
12 From _____ to _____
13 Page _____ Line _____ Reason Code _____
14 From _____ to _____
15 Page _____ Line _____ Reason Code _____
16 From _____ to _____
17 Page _____ Line _____ Reason Code _____
18 From _____ to _____

19
20 _____ Subject to the above changes, I certify that the
transcript is true and correct.

21 _____ No changes have been made. I certify that the
22 transcript is true and correct.

23

24

25

VIJAY GUPTA

MR. CALLAHAN: [283] MR. LYER: [1] 8/14 MR. MATICH: [71] 5/3 6/7 7/3 7/8 8/8 14/25 15/6 15/24 18/1 18/9 18/13 19/1 19/9 22/1 23/10 23/20 26/16 41/6 42/24 43/2 43/22 66/14 66/20 67/8 67/13 71/13 71/23 72/8 72/13 73/1 73/4 73/8 75/13 85/2 85/11 86/2 86/8 86/21 87/2 88/5 93/6 93/17 93/22 94/3 96/7 100/13 100/17 102/20 102/24 104/3 105/1 105/15 105/22 105/24 116/15 118/5 118/12 121/21 121/24 122/5 122/7 122/9 122/13 127/11 127/14 130/22 141/6 142/2 142/10 142/18 142/20 Ms. MILLER: [1] 8/10 SPEAKER #1: [3] 56/13 71/9 126/24 THE COURT REPORTER: [3] 29/10 50/23 132/3	THE VIDEOGRAPHER: [22] 7/11 23/18 41/7 41/10 67/15 67/18 68/15 68/19 86/3 86/6 96/8 96/11 111/25 118/11 122/14 122/17 130/23 131/1 141/8 142/5 142/8 143/12 THE WITNESS: [202] ' '321 [14] 77/1 77/10 77/25 79/20 80/1 80/8 81/2 82/7 83/10 84/6 84/25 97/14 105/13 143/3 '402 [5] 121/1 131/13 131/18 136/25 138/18 '586 [1] 9/18 '684 [91] 9/19 10/18 12/24 25/2 30/6 61/20 62/13 62/22 67/1 67/23 68/10 69/12 69/17 70/4 70/16 70/23 71/11 71/21 71/23 76/13 77/5 77/18 78/4 78/8 78/14 78/16 78/20 79/4 79/8 79/19 80/6 80/12 80/15 81/5 81/18 82/2 82/3 82/14 83/5 83/14 84/9 84/12 87/24 88/2 88/15 88/25 89/8 89/17 89/25	90/13 91/8 91/12 92/3 92/10 92/25 93/8 93/8 93/19 93/24 94/5 94/17 95/22 95/25 96/21 97/18 98/3 99/4 99/7 103/17 120/19 120/20 121/7 123/15 124/17 126/5 126/15 127/20 128/12 128/23 129/6 129/17 130/12 131/5 131/12 131/17 138/12 138/22 140/20 141/11 141/22 143/8 1 10 [14] 59/13 65/13 69/2 69/4 69/9 70/2 87/20 87/22 91/3 92/6 96/16 98/14 98/16 114/9 100 percent [1] 31/25 11 [13] 104/4 104/4 104/5 104/8 113/13 121/16 121/17 121/22 122/1 122/5 122/25 123/6 139/9 110 [1] 116/11 11949 [3] 1/19 2/18 145/25 11:21 [2] 2/16 5/2 11:24 a.m [1]
---	---	--

1	144/16	2:23-cv-02294-AB-S
11:24 a.m... [1] 7/13	20 minutes [1] 60/2	K [2] 1/8 2/8
12 [5] 1/15 2/16 5/1 7/12 146/3	2000 [3] 3/6 113/12 140/3	2:34 p.m [1] 96/11
12:04 p.m [1] 41/7	20006-1811 [1] 3/7	3
12:43 p.m [1] 41/10	2002 [5] 113/1 118/1 118/18 119/8 120/20	30 [2] 116/10 136/6
13 [1] 145/23	2003 [1] 4/18	300 [2] 2/14 3/13
137 [1] 9/2	2005 [2] 63/20 63/25	300 South Grand [1] 7/20
141 [1] 116/15	2015 [9] 63/5 63/8 63/12 63/18 64/6 64/19 65/21 66/3 66/17	31 [3] 4/18 31/5 31/21
15 [2] 18/5 19/10	2022 [1] 113/6	35 years [1] 136/7
150 [3] 11/1 11/2 24/19	2024 [7] 1/15 2/16 4/12 5/1 7/12 145/23 146/3	36 [1] 112/3
15135 Greenleaf [1] 9/9	21 [2] 17/12 43/23	38-137 [1] 9/2
154 [4] 118/9 118/13 118/15 121/6	22 [1] 113/6	39 [1] 116/16
156 [3] 112/4 112/5 112/25	24 hours [2] 5/18 7/5	3:12 p.m [1] 122/14
16 [2] 33/13 102/14	26 [3] 111/22 111/24 111/25	3:24 p.m [1] 122/17
1680 [1] 7/24	27 [16] 13/5 14/11 26/15 71/18 72/22 73/21 76/18 79/14 80/21 81/25 82/20 83/19 85/8 104/25 106/10 123/21	3:36 p.m [1] 130/23
17 [2] 69/9 113/6	27th [2] 17/19 68/2	3:38 p.m [1] 131/1
180 [2] 18/10 19/7	2900 [3] 2/15 3/14 7/20	3:56 p.m [1] 142/5
180 minutes [1] 142/19	2:09 p.m [1] 86/6	3:57 p.m [1] 142/8
1811 [1] 3/7	2:21 p.m [1] 96/8	3:59 [2] 2/16 143/15
1985 [1] 33/17		3:59 p.m [1] 143/12
1989 [1] 33/17		4
1992 [1] 33/19		401 West A [1] 7/23
1:18 p.m [1] 67/15		402 [1] 138/23
1:29 [1] 67/18		5
1:53 p.m [1] 86/3		5,438,402 [1]
2		
20 [2] 38/22		

5	44/18 47/13 48/7	101/18 102/4
5,438,402... [1]	53/14 54/23 57/13	102/12 104/16
131/9	63/18 64/3 64/15	113/3
50 percent [2]	64/18 66/25 68/10	accurately [2]
16/14 16/20	69/5 69/8 70/4	11/22 102/9
50s [1] 136/23	71/10 71/14 72/5	across [1] 135/21
55 [1] 76/8	73/11 74/9 77/1	action [5] 65/20
	77/5 77/9 77/10	66/3 66/17 145/18
6	77/18 77/24 78/3	145/20
	78/13 78/25 79/19	actual [5] 91/15
65 [5] 102/16	80/25 82/5 82/6	116/1 138/6
103/11 103/13	82/7 83/10 84/5	139/25 141/18
104/12 104/20	84/25 86/22 87/7	actually [18]
7	87/23 90/5 93/22	9/22 16/5 19/20
7,487,684 [2] 4/9	95/17 96/15 105/2	33/9 45/10 46/25
10/12	105/13 105/16	67/10 70/15
7684 [1] 9/17	105/17 105/18	110/17 115/17
	107/9 115/2	115/24 115/25
8	115/18 115/19	118/21 121/2
8th [1] 84/15	116/10 118/24	121/6 129/25
9	119/13 120/25	133/25 134/19
	120/25 121/12	add [3] 5/25
90071 [2] 3/15	121/13 121/16	76/19 110/6
7/21	124/13 127/6	added [1] 33/24
90095 [1] 9/3	128/23 129/5	adding [2] 129/24
91403 [1] 9/10	130/2 130/12	133/8
92101 [1] 7/24	134/7 135/10	addition [2]
9G2 [1] 4/13	135/13 136/8	86/25 125/2
A	137/5 137/6 143/1	additional [4]
a.m [3] 2/16 5/2	above [1] 147/19	33/19 33/23 81/12
7/13	absolutely [3]	84/1
AB [2] 1/8 2/8	29/22 78/2 78/9	additions [2]
able [2] 19/14	absolutes [1]	101/22 132/7
33/5	33/6	address [9] 9/1
about [93] 5/4	according [1]	9/5 9/6 9/7 9/12
12/10 12/21 15/24	44/14	79/16 87/4 105/10
17/10 17/21 18/7	accurate [16]	110/10
18/12 18/25 24/12	24/10 31/12 31/15	adhesion [28]
27/3 27/4 27/14	31/17 31/18 32/1	4/17 38/25 49/11
27/21 30/13 33/6	40/11 40/12 59/1	50/25 51/23 52/2
42/11 43/7 43/20	100/2 100/6	52/10 52/12 53/7

A	agree [3] 8/3 98/14 98/16	along [1] 128/7
adhesion... [19] 53/24 54/8 55/3 55/10 57/11 58/11 58/11 58/16 59/4 61/1 61/8 61/11 103/14 109/15 109/24 115/8 120/9 134/11 136/24	agreed [1] 5/17	already [9] 18/23 29/15 55/14 80/25 94/21 102/25 116/12 125/9 131/13
administered [1] 8/18	agreement [1] 117/23	also [74] 8/11 13/3 14/10 14/23 18/2 18/4 20/3 21/4 30/8 35/3 37/8 41/23 42/6 44/8 44/12 48/7 48/17 49/1 53/25 54/19 59/25 61/22 62/24 64/22 65/23 68/2 68/3 69/19 71/10 72/21 72/22 72/24 73/17 73/19 73/21 74/6 76/15 76/15 78/23 79/11 79/13 80/18 80/21 80/22 80/22 81/7 81/8 81/22 82/19 83/22 84/15 86/15 89/2 89/10 89/20 93/14 103/19 104/24 106/9 109/6 110/6 119/10 123/19 124/20 126/8 131/16 131/25 134/2 140/9 140/23 141/13 141/16 141/24 142/21
advice [1] 139/6	agreements [1] 109/1	altogether [1] 77/19
adviser [1] 26/6	Ah [1] 36/20	am [49] 7/24 10/9 18/21 22/20 22/21 22/22 22/24 26/25 27/23 32/19 35/7
aerospace [1] 136/2	Akahoshi [2] 106/15 111/8	
after [13] 5/12 5/19 31/23 63/5 63/12 63/18 63/20 63/25 64/6 64/19 66/17 120/11 121/18	Alban [1] 26/7	
again [32] 16/16 27/16 28/3 29/8 39/14 40/21 44/4 44/11 48/1 48/6 48/18 49/9 49/9 58/10 64/9 64/23 70/11 84/10 85/16 85/16 85/16 91/16 95/23 102/11 121/20 122/8 125/13 125/24 131/17 138/17 142/6 143/5	all [72] 6/12 8/3 8/3 18/13 22/1 25/14 25/14 32/10 36/3 38/23 39/4 39/10 39/23 40/9 40/13 43/25 44/23 50/7 50/14 51/16 51/22 52/1 53/11 53/22 53/22 54/6 54/15 55/8 56/18 58/14 59/22 60/8 60/21 60/22 60/25 61/13 65/16 67/13 70/20 71/1 77/2 77/6 77/7 77/17 79/17 81/14 83/2 84/21 86/11 89/4 89/13 90/4 94/22 95/8 95/13 95/20 97/10 97/11 97/16 101/15 101/20 102/12 105/22 109/20 120/7 120/23 120/25 135/9 135/14 135/25 136/5 139/25	
against [2] 79/18 80/6	alleged [1] 67/23	
age [3] 17/12 31/5 31/21	allowed [3] 17/19 20/6 105/18	
ago [2] 19/10 100/17		

A		
am... [38] 37/13	16/11 16/17 19/2	58/9 60/12 62/6
37/14 46/16 46/18	19/3 19/4 20/24	62/24 64/21 65/23
51/5 56/5 58/10	21/10 21/14 21/14	73/21 78/3 79/11
58/14 58/24 60/7	21/20 22/5 26/25	80/25 81/21 82/22
60/24 61/18 62/10	27/10 37/10 50/23	83/21 84/18 89/19
62/19 64/3 64/15	56/14 56/16 57/7	90/2 91/5 91/24
70/13 72/4 77/15	62/1 62/2 62/4	92/12 93/2 93/11
77/22 82/1 83/1	69/22 71/12 71/14	94/21 98/5 115/14
86/9 90/22 90/25	72/1 72/15 74/13	125/10 126/7
91/2 92/21 92/22	74/15 74/21 74/22	129/20
94/7 94/23 95/3	75/17 77/3 77/13	answering [3]
95/4 95/12 97/22	77/15 77/22 78/1	77/9 82/5 94/25
105/14 127/7	78/6 79/1 79/21	answers [6] 11/10
139/2 145/17	81/10 82/11 83/2	22/3 22/4 27/1
ambush [1] 76/21	83/3 83/11 84/6	60/6 77/8
ambushed [1] 74/8	84/22 85/1 85/2	any [57] 6/11
AMD [3] 57/4	88/6 88/10 89/5	11/21 12/3 15/11
57/19 58/6	89/14 90/21 90/25	15/24 18/21 19/24
AME [1] 112/16	92/13 92/19 92/20	20/8 20/17 20/25
amended [3] 4/10	93/5 93/9 93/14	21/16 22/4 25/24
13/21 51/17	94/10 95/1 95/9	26/9 26/19 27/17
amending [1]	95/12 95/15 96/4	35/21 44/17 45/10
32/24	96/24 97/3 97/8	46/3 46/6 48/9
American [1]	97/11 97/12 97/17	52/9 52/11 56/6
112/22	97/23 98/7 98/11	69/7 69/22 74/9
among [1] 54/8	99/12 99/14 124/4	76/20 85/3 86/22
amounts [1] 71/24	124/24 125/3	87/17 88/11 92/21
analysis [4]	125/7 125/17	102/10 102/18
69/20 124/25	126/11 127/1	106/23 106/25
125/21 131/20	127/24 127/25	107/1 107/20
analyze [1] 126/3	128/2 128/6	109/1 109/2
Andy [2] 3/20	128/16 128/18	116/20 116/25
7/22	129/22 130/5	121/12 125/21
ANGELES [6] 1/14	130/6 130/7	127/23 129/16
2/15 3/15 7/20	137/21 138/4	132/18 135/5
9/3 108/24	139/3 140/3 141/1	135/10 142/12
another [1] 76/7	answered [39]	142/24 142/25
answer [105]	16/22 28/7 37/17	144/11 145/6
11/19 13/8 14/16	38/3 45/1 48/17	145/19
14/17 15/9 16/6	54/19 54/20 55/12	anyone [4] 25/20
	55/15 57/1 57/22	26/3 26/9 34/8

A	are [133] 6/2	132/15 132/17
anything [29]	7/11 9/16 12/4	133/6 133/11
6/10 9/14 24/12	14/7 16/7 17/11	133/15 133/15
38/12 38/12 38/18	17/12 17/16 17/24	133/18 134/7
61/17 61/19 62/11	20/6 20/24 21/23	135/1 135/14
62/12 62/20 63/1	22/17 22/25 25/9	135/15 135/17
63/3 63/4 63/19	25/13 25/25 27/2	135/18 135/19
64/4 64/17 64/18	27/13 27/20 27/21	135/20 135/23
65/19 67/22 69/15	28/4 28/17 28/18	135/25 136/3
77/16 78/20 79/8	28/22 30/5 30/12	137/13 137/17
82/14 86/22	30/18 30/21 32/22	139/5 140/1 141/3
130/12 131/11	32/23 32/24 35/15	area [2] 27/22
131/12	36/6 37/20 40/7	105/17
anywhere [1]	41/11 42/22 44/17	areas [1] 24/18
111/15	46/19 49/13 53/15	Ari [1] 26/7
apart [3] 128/23	54/5 56/8 56/9	Arizona [1]
129/6 129/17	58/18 58/19 59/17	118/18
appear [1] 144/11	60/22 61/8 61/11	arose [1] 6/18
APPEARANCES [1]	66/7 66/8 66/12	around [2] 46/18
2/19	69/4 71/10 71/11	132/16
appearing [1]	71/25 72/1 72/2	art [4] 12/21
7/22	72/5 72/9 73/6	72/9 105/23 143/7
appears [2] 51/4	75/10 77/13 78/17	article [7] 4/16
76/6	79/25 82/11 83/7	103/17 103/23
application [4]	85/3 85/15 85/24	111/7 121/18
12/15 54/24 72/6	86/3 86/6 86/19	122/25 139/10
137/10	86/24 87/1 87/5	as [81] 5/16 5/18
applications [6]	87/13 87/21 88/5	5/25 6/24 8/19
4/18 103/15 134/3	88/19 90/4 93/9	9/23 11/5 12/7
134/10 137/15	94/4 94/8 94/9	12/8 12/8 12/14
138/5	94/13 94/16	13/10 14/4 22/21
applied [1] 12/24	102/10 103/25	23/1 23/5 24/8
appreciate [1]	105/3 111/8	26/4 26/4 27/24
47/12	113/20 114/9	32/25 33/16 34/18
approached [2]	115/20 116/20	39/3 40/12 40/15
44/11 110/8	117/16 117/16	44/5 47/15 47/15
appropriate [1]	124/2 124/9	48/14 48/21 51/25
72/15	124/10 126/15	54/12 55/20 55/23
approximately [1]	127/15 127/18	56/3 56/12 56/23
141/21	129/10 129/23	57/4 57/19 58/4
Aptus [1] 7/23	130/3 132/13	58/4 58/6 68/8

A		
as... [37] 69/11	74/22 79/7 79/11	6/4
71/1 71/17 79/23	81/20 82/21 83/21	attempt [2] 76/21
83/7 83/7 83/8	84/18 86/23 89/18	143/6
86/8 86/14 86/15	90/1 91/4 91/23	attempting [1]
87/23 90/3 90/7	92/11 93/1 93/11	105/21
90/9 91/7 95/9	93/13 98/4 115/13	attempts [1]
96/25 97/6 97/8	121/24 125/9	105/9
97/9 99/14 99/17	126/6 127/11	attend [2] 109/16
102/6 104/4	129/15 129/20	117/3
110/18 111/8	130/2	attended [2]
121/17 124/11	asking [50] 15/6	117/10 120/7
124/14 130/4	15/24 16/1 19/1	attention [1]
130/17 130/17	19/15 20/18 29/12	102/16
135/2 143/5	37/13 37/14 42/24	attorney [16]
144/11 144/13	47/4 62/10 62/19	5/25 6/1 8/7
144/13	64/3 64/15 66/15	15/11 15/17 15/18
ask [34] 18/12	66/20 67/6 73/10	15/21 20/4 20/15
21/12 23/22 26/16	75/13 77/2 77/17	20/16 20/21 21/5
27/14 27/16 28/2	85/15 85/24 87/5	93/15 93/21 94/9
44/3 47/13 58/2	87/13 88/23 88/24	145/19
58/5 64/25 65/4	89/24 91/2 91/20	attorney's [1]
70/13 71/10 72/5	91/21 92/21 92/22	21/23
72/11 75/16 75/18	93/22 93/23 94/9	attorney-client
82/13 84/10 85/12	95/17 95/18 95/20	[7] 15/11 15/17
85/18 86/18 95/19	105/15 124/13	15/18 20/4 93/15
95/23 104/15	124/14 125/24	93/21 94/9
105/12 105/18	125/25 127/6	attorneys [6] 3/2
115/22 122/3	127/7 136/8	15/2 15/25 21/6
128/7 142/25	137/17 142/14	92/22 96/3
143/9	asks [2] 78/23	attorneys' [6]
asked [53] 6/10	82/21	5/5 5/7 5/8 5/13
16/21 18/7 18/25	ASME [1] 116/18	5/18 5/22
22/24 28/6 29/24	aspect [3] 59/11	audio [1] 8/2
30/13 37/16 38/2	134/5 143/2	August [1] 118/18
44/25 45/18 48/16	aspects [3] 27/4	August 9 [1]
54/19 54/23 55/11	42/9 44/18	118/18
56/25 57/21 58/3	assert [1] 71/11	author [1] 103/23
58/8 59/14 60/12	assuming [1] 51/5	authored [1]
62/5 62/24 64/20	attached [2]	73/13
65/22 67/21 73/21	139/24 144/12	authorized [1]
	attachments [1]	8/1

A	109/16 124/10 134/1 137/2 137/17 138/3	137/18 142/3 142/14
authors [5] 106/6 107/2 107/11 108/13 111/8	basis [15] 6/3 14/23 21/10 21/19 27/9 88/8 93/15 94/8 95/4 96/4 97/8 104/22 110/4 125/13 140/9	became [3] 31/6 31/19 31/21
automobile [1] 136/2		because [35] 14/18 16/6 20/14 26/25 27/15 33/8 36/4 44/19 49/4 58/11 62/7 66/7 77/3 79/25 81/11 82/11 82/19 83/1 83/2 86/10 87/5 90/23 95/10 97/12 104/23 113/20 119/24 124/3 124/25 128/8 130/6 136/13 137/8 139/16 142/13
available [2] 83/3 140/1	be [85] 5/5 5/7 6/2 12/8 12/15 12/19 15/3 15/4 16/3 16/10 19/7 19/14 20/23 21/12 22/10 22/24 26/6 26/7 30/22 33/5 36/16 36/17 43/6 44/6 45/24 46/25 51/4 53/12 53/16 53/16 59/10 60/24 66/5 66/6 66/14 70/14 70/18 74/22 75/4 76/6 76/24 78/3 78/25 79/24 80/3 83/4 83/14 83/25 84/3 85/8 85/22 86/19 96/25 100/4 100/11 101/21 101/22 101/25 102/12 103/5 104/15 107/7 111/18 111/24 116/13 116/25 118/3 119/6 119/7 120/6 128/8 128/12 130/9 130/19 130/19 130/20 131/20 133/7 134/9 134/19 135/9 135/13	
Avenue [4] 2/14 3/6 3/13 7/20		become [1] 90/9
avoiding [1] 86/18		been [45] 6/4 6/17 6/22 6/23 8/18 10/22 11/3 18/4 18/13 19/9 19/11 24/18 38/23 39/4 51/15 60/6 64/12 69/12 82/21 83/20 84/18 87/5 87/13 87/24 89/25 91/7 91/12 93/13 95/21 95/25 96/20 97/7 97/17 98/2 99/4 99/6 111/18 114/14 116/2 116/15 123/1 131/4 132/9 137/9 147/21
aware [3] 28/17 117/17 126/16		before [12] 2/17 10/22 13/22 29/12 67/9 96/14 96/25 115/22 120/11
B		
B2 [1] 4/9		
back [20] 22/3 36/12 41/11 58/24 67/19 72/2 86/7 87/21 96/12 99/11 111/19 111/21 115/3 118/9 121/16 122/12 122/18 131/2 139/18 142/9		
background [3] 65/10 74/12 76/20		
bad [1] 142/23		
based [16] 11/19 22/15 51/17 58/15 59/3 88/17 93/20 95/5 96/2 97/5 98/9 98/10 109/11 130/19 137/13 141/15		
basically [17] 30/23 33/4 38/17 42/8 51/5 51/20 74/8 74/21 91/8 107/21 108/13		

B	86/17 102/11 108/12 113/8	95/24 96/20 97/17 98/2 99/4 99/6 142/24 146/2
before... [3] 137/8 145/5 145/14	better [1] 133/12	Boeing's [4] 5/6 6/1 61/19 67/23
begin [3] 105/4 124/3 125/21	between [7] 6/5 33/17 49/11 58/12 59/12 76/7 97/23	bond [1] 116/5
beginning [7] 2/15 24/17 38/22 65/8 65/10 132/2 132/4	beyond [8] 14/14 17/12 38/19 56/7 77/16 82/4 84/23 129/23	borrow [1] 143/4
behalf [3] 2/13 7/16 22/22	big [1] 64/1	both [1] 112/1
behind [1] 29/21	bigger [1] 10/4	bottom [3] 24/16 70/18 101/14
being [10] 7/14 16/25 22/20 36/14 42/12 66/8 78/14 81/1 107/22 141/15	biological [1] 134/4	bought [1] 34/13
belief [8] 88/17 92/20 92/23 93/20 95/5 96/2 97/5 98/1	bit [3] 13/17 65/12 102/18	break [8] 11/14 11/15 67/11 86/9 86/16 96/14 97/1 122/20
believe [34] 13/23 15/3 18/19 30/1 31/25 62/21 74/4 85/3 88/1 88/14 88/25 89/17 89/24 91/11 91/22 92/2 92/9 92/24 93/7 93/17 93/24 94/3 94/17 95/19 95/21 95/24 96/20 97/17 98/2 98/24 99/6 100/5 109/7 119/24	blanket [2] 136/22 137/5	bring [3] 22/3 58/11 100/19
believes [2] 93/18 94/5	blue [1] 76/8	Broadcom [2] 55/19 55/22
below [1] 101/14	blurb [1] 59/15	brought [1] 136/13
benefit [1] 42/15	BOEING [70] 1/9 2/9 4/13 5/10 5/11 5/11 5/17 6/2 6/12 6/14 7/4 7/15 8/9 8/11 62/14 62/22 63/5 63/8 63/12 63/18 63/20 63/25 63/25 64/5 64/11 64/18 65/21 66/3 66/17 67/1 68/10 69/12 69/17 70/4 78/4 78/14 79/4 79/18 80/6 82/3 82/18 83/6 87/23 88/1 88/14 88/25 89/7 89/17 89/25 90/12 91/7 91/11 92/2 92/9 92/9 92/24 93/8 93/19 93/24 94/5 94/17 95/21	build [1] 35/2
besides [1] 69/16		Building [1] 9/3
best [5] 24/11		buy [1] 34/8
		C
		CALIFORNIA [15] 1/2 1/6 1/14 2/2 2/6 2/15 3/15 5/1 7/18 7/21 7/24 9/3 9/10 108/24 145/2
		call [1] 72/2
		CALLAHAN [2] 3/4 8/12
		called [3] 14/3 136/19 138/9
		calling [1] 15/4
		calls [87] 13/2 25/22 28/12 29/1 29/6 30/8 42/6

C		
calls... [80]		
52/13 52/23 53/8	51/6 51/23 52/2	127/24 127/24
61/21 62/15 62/23	52/6 52/19 53/3	130/22 133/13
63/6 63/21 64/7	53/24 54/12 54/16	138/3 142/2
64/21 65/23 68/3	54/23 55/3 55/9	can't [26] 15/15
69/18 69/19 71/9	56/18 58/2 58/22	15/16 16/19 20/13
72/22 72/23 76/14	59/13 59/14 59/18	28/14 36/3 37/10
78/22 81/7 82/22	61/2 61/11 61/15	38/9 38/18 62/2
83/22 84/18 88/3	74/10 75/3 75/6	62/4 63/1 66/14
88/9 89/3 89/10	100/12 110/10	67/24 81/15 81/17
89/20 90/2 90/15	119/11 136/13	88/19 90/6 90/20
91/5 91/14 91/24	can [88] 7/2 8/25	91/17 92/15 92/19
92/12 93/2 93/11	9/7 10/4 10/5	123/11 124/11
93/12 94/19 96/23	11/14 13/8 13/10	124/25 135/4
97/21 98/5 98/19	13/16 15/9 15/10	Canada [1] 135/23
107/18 107/19	19/12 21/7 21/11	candid [1] 12/19
108/10 109/6	23/5 23/9 26/17	cannot [16] 11/21
116/23 117/20	31/2 33/12 35/3	20/11 62/17 75/17
118/5 120/13	38/16 41/6 47/16	79/3 95/4 97/7
120/21 123/21	53/15 62/1 62/1	124/3 124/24
123/22 124/1	62/11 63/3 64/4	125/20 127/25
124/20 124/22	64/22 65/1 65/6	128/4 129/12
125/14 126/9	65/11 65/13 65/17	130/9 130/11
126/10 126/18	66/2 66/11 68/13	131/22
126/25 128/15	69/21 70/15 70/17	capacity [1] 11/3
129/1 129/9	72/24 73/2 75/4	carbon [3] 76/8
129/20 131/15	75/8 75/16 75/18	76/9 76/10
131/24 133/1	76/3 79/2 85/8	careful [1] 78/25
133/24 134/17	85/22 86/19 87/19	case [16] 1/8 2/8
136/7 136/19	87/19 88/10 88/10	5/15 14/20 16/3
138/15 138/15	94/11 96/5 101/8	18/20 18/22 19/25
138/24 138/25	102/14 102/22	20/9 20/17 20/25
140/23 141/12	102/22 102/25	21/6 21/17 122/23
141/13 141/23	103/9 103/11	145/14 146/2
came [44] 34/18	104/3 104/16	category [1]
39/16 39/24 40/10	111/21 112/3	133/7
40/14 46/20 46/23	116/9 117/16	caution [4] 15/10
47/1 49/14 49/16	118/9 118/13	61/23 69/21 88/10
49/18 50/1 50/8	121/19 121/21	cellular [1]
50/15 51/1 51/3	122/12 122/13	134/11
	124/6 124/15	centered [1]
	125/6 126/2 127/4	46/18

C	116/14	80/2 84/5 85/20
CENTRAL [3] 1/2 2/2 7/17	checked [2] 39/10 102/5	87/7 93/7 135/10 135/13
certain [3] 44/13 129/10 137/15	checking [1] 6/3	clearly [7] 20/2 32/5 60/23 87/12
certainly [1] 115/4	CHID [2] 3/5 8/14	119/8 130/8 143/1
certainty [1] 33/6	chips [2] 56/7 121/3	client [9] 15/11 15/17 15/18 20/4
Certified [2] 2/17 145/1	citation [1] 120/6	93/14 93/15 93/21 94/9 94/10
certify [4] 145/3 145/17 147/19 147/21	citations [2] 135/14 135/15	Close [2] 11/1 11/2
Champagne [2] 30/2 132/13	cite [1] 27/12	coating [1] 76/10
chance [1] 6/19	cited [2] 134/23 134/25	coauthors [1] 103/25
change [1] 24/13	citing [1] 27/20	Code [18] 146/8 146/10 146/12
changed [1] 139/22	City [1] 144/17	146/14 146/16 146/18 146/20
changes [3] 102/10 147/19 147/21	claim [18] 70/17 70/21 70/23 71/11 71/14 71/21 71/25 72/6 72/6 72/9 123/15 124/16 124/22 126/5 126/14 127/20 128/11 131/12	146/22 146/24 147/1 147/3 147/5 147/7 147/9 147/11 147/13 147/15 147/17
Channeler [1] 118/17	Claim 1 [15] 70/17 70/21 70/23 71/11 71/21 72/6 72/6 72/9 123/15 124/16 126/5 126/14 127/20 128/11 131/12	Codes [1] 146/5
characterization [3] 38/24 58/21 135/13	claims [2] 77/6 125/11	combination [1] 76/6
characterize [6] 49/15 50/1 51/1 54/11 54/22 58/17	clarification [1] 47/12	come [9] 36/8 50/5 52/12 52/21 53/6 53/20 57/23 81/13 109/9
characterized [1] 58/20	clarify [7] 39/21 42/22 47/10 63/24 97/22 106/20 146/5	comes [2] 72/25 73/1
charge [1] 38/17	clear [11] 20/23 60/24 76/23 77/21	commercial [11] 33/18 33/20 34/12 34/16 34/20 35/1 35/8 35/13 35/14 35/18 35/19
charged [1] 38/12		commercially [2] 35/22 37/1
charging [5] 37/5 37/15 37/21 38/1 38/6		commonality [1]
charter [1] 19/21		
check [4] 32/6 33/10 116/9		

C	109/13 120/8 132/12 132/17	compound [1] 114/2
commonality... [1] 59/11	company [45] 1/6 1/9 2/6 2/9 7/15	conceive [1] 141/10
communicated [2] 6/1 29/12	8/9 8/11 14/2 14/4 15/21 16/8	conceived [1] 141/22
communication [4] 127/2 127/23 129/13 130/8	17/22 34/2 34/13 34/13 35/21 37/14	concerns [1] 12/3
communications [11] 15/25 69/23 83/20 88/12 88/23 91/21 92/21 93/23 125/25 127/7 139/9	41/16 41/21 42/5 42/20 43/11 43/16 43/18 44/6 45/7 45/14 47/6 47/19 47/24 48/4 48/14 48/21 49/5 52/17 55/23 56/3 56/12 57/4 57/19 58/4 58/6 59/12 109/23 146/2	concluded [1] 143/15
companies [82] 34/18 34/19 34/22 34/23 36/2 36/4 36/6 36/8 36/14 37/1 37/11 37/21 38/1 38/12 38/17 38/24 39/5 39/11 39/16 39/19 39/24 40/8 40/10 40/16 41/18 41/19 42/9 42/12 43/10 44/1 44/11 44/24 45/22 45/25 46/9 46/9 46/14 46/20 46/21 47/1 47/14 47/15 49/13 49/17 49/20 49/25 50/3 50/8 50/14 50/24 51/3 51/6 51/16 51/22 52/1 52/9 52/11 53/13 53/16 53/23 54/5 54/10 55/2 56/23 57/13 57/16 58/13 59/14 59/18 59/22 60/9 60/16 60/20 60/25 61/6 61/9 61/10 61/14	comparing [1] 131/17 compel [1] 128/9 competent [1] 133/4 complaint [14] 4/10 13/21 13/25 69/12 77/20 78/13 78/13 79/18 80/6 87/23 89/22 89/22 91/7 99/3 complete [2] 100/1 104/16 completely [2] 11/22 127/15 completion [1] 145/14 complicated [1] 133/3 component [2] 35/16 36/14 components [1] 35/5	conclusion [43] 30/9 61/22 69/20 72/23 76/15 78/23 81/8 82/23 83/22 84/19 89/3 89/11 89/20 90/2 90/16 91/5 91/14 91/24 92/12 93/2 93/12 94/20 96/23 97/21 98/6 98/19 99/10 107/19 120/22 123/22 124/22 125/15 126/10 126/18 126/25 128/15 129/9 131/16 136/20 138/16 139/1 141/14 141/24 concur [1] 96/6 conducted [1] 142/23 conference [7] 29/24 112/23 113/1 115/24 119/25 120/2 120/11 conferences [7] 53/12 54/9 109/14 110/1 115/22 116/18 120/7 confidential [3] 15/22 37/11 37/18

C	46/16 47/9 48/8	104/16 104/19
confidentiality	49/19 49/23 51/21	119/16
[3] 116/20	54/21 55/16 56/18	core [3] 87/15
117/17 117/23	60/2 61/5 64/10	97/12 143/2
configured [1]	110/6 137/17	corporation [7]
128/12	Continue [2]	1/10 2/10 40/19
confirm [1]	65/15 65/16	64/1 64/11 118/17
104/14	contracts [2]	118/23
conform [1] 146/6	36/4 109/2	corporations [2]
confused [1]	contrary [31]	40/4 58/19
107/9	13/4 14/10 26/22	correct [23]
Congress [5]	37/9 68/2 72/21	16/23 32/14 35/9
112/17 116/19	73/20 76/17 79/14	38/4 51/13 59/8
117/11 117/18	80/21 81/9 81/23	67/24 70/7 83/24
118/2	82/19 83/18 84/16	85/6 89/17 102/1
connected [3]	106/9 106/18	102/2 107/25
20/21 21/5 83/5	107/4 107/18	108/1 110/22
connection [4]	108/20 109/5	113/10 131/6
58/12 130/18	110/15 112/12	131/9 144/14
138/8 143/10	112/20 113/15	146/7 147/20
connects [1]	114/4 114/25	147/21
78/16	117/5 123/20	corrected [1]
consider [7]	126/8 141/16	144/13
25/17 25/20 26/10	contribute [1]	corrections [1]
28/10 41/15 44/5	107/14	144/11
134/14	contribution [2]	correctly [2]
constantly [1]	136/24 140/19	5/23 51/21
105/8	contributions [2]	correlate [1]
constitute [1]	135/6 135/11	122/4
62/13	control [1] 23/19	costs [1] 143/10
constitutes [5]	conversation [1]	could [24] 5/5
66/3 66/17 82/23	51/18	5/11 6/2 9/22
83/22 84/19	conversations [1]	15/3 15/4 18/3
consultant [2]	109/16	23/25 24/15 26/7
34/19 110/18	copies [1] 102/18	33/9 36/16 36/17
contacted [1]	copy [14] 4/9	42/15 48/12 67/22
49/20	71/2 101/18	68/11 74/11 74/13
contained [3]	101/23 101/24	85/18 116/1 119/6
101/25 102/3	102/9 102/21	119/7 133/3
144/13	102/21 102/23	couldn't [1] 6/11
context [14]	102/25 104/11	counsel [65] 5/10

C		
counsel... [64]	59/21 60/8 70/13	4/14
5/10 5/11 8/3 8/5	72/22 76/22 77/8	cv [14] 1/8 2/8
9/14 11/17 16/23	79/23 80/1 84/24	99/24 100/5
17/8 18/11 21/9	105/5 106/2 130/1	104/12 104/20
23/2 26/24 27/8	130/4 142/14	107/7 107/8
41/14 45/17 55/17	143/10	111/21 112/6
66/7 67/3 71/3	Court's [50] 13/4	118/10 118/15
72/24 74/7 75/10	14/10 14/15 17/25	119/3 122/4
75/13 76/23 77/21	26/15 26/23 68/2	
80/25 84/6 85/15	73/20 76/17 77/4	D
88/18 88/20 88/24	77/21 79/14 80/21	Dartmouth [2]
90/5 90/19 91/17	81/9 81/24 82/5	34/10 36/22
91/21 92/15 93/23	82/20 83/8 83/19	data [2] 35/4
95/2 95/6 96/1	84/16 85/10 85/20	110/1
97/6 101/16	86/1 104/25 106/9	database [1] 33/9
102/17 116/9	106/19 107/5	date [7] 7/12
120/16 122/21	107/18 108/20	23/9 73/12 113/3
123/24 124/10	109/6 110/16	141/19 145/21
124/14 125/2	112/12 112/21	146/3
125/19 125/25	113/16 114/4	dated [7] 4/12
126/12 127/3	115/1 117/6 119/5	4/18 14/9 71/18
127/7 128/3	121/10 123/8	76/16 81/23
128/17 128/22	123/20 124/19	145/23
129/11 130/8	126/8 129/25	Dave [1] 6/8
130/20 131/19	139/13 139/21	day [1] 144/15
139/15 142/24	140/8 140/16	days [2] 6/19
counsel's [4]	140/23 141/17	100/17
94/14 98/10 139/6	courtesy [2] 5/16	DC [2] 3/7 8/13
141/4	102/21	dealing [1] 45/22
country [1]	covered [1] 5/8	dealt [1] 121/6
131/23	create [1] 133/14	dec [11] 107/4
couple [4] 6/19	creating [1]	112/20 112/20
70/11 100/17	133/7	113/15 114/1
118/13	credibility [1]	114/4 117/5 119/5
course [3] 10/17	14/20	121/10 123/8
111/9 129/12	CSR [2] 1/19	124/19
court [25] 1/1	145/25	decades [1]
2/1 5/21 7/17	current [1] 104/3	132/10
7/23 12/7 12/11	currently [1]	decide [1] 138/3
16/4 17/18 18/18	5/14	decisions [1]
	Curriculum [1]	22/7

D	145/13 146/1 146/3	devices [2] 38/25 45/23
declaration [184]		diagram [10] 71/7 72/7 73/9 73/13 74/5 75/1 76/5 84/11 123/14 126/4
declarations [2] 12/11 24/7	depositions [1] 11/7	did [45] 12/24 32/5 34/6 34/8 34/22 35/21 36/8 39/3 41/13 52/12 53/20 59/19 63/5 63/8 63/9 63/12 63/18 63/20 63/25 64/5 71/20 94/22 103/23 107/14 109/1 109/1 109/9 110/13 110/25 111/15 114/21 120/11 122/20 122/23 122/25 136/17 137/6 137/11 137/18 137/19 137/21 138/12 140/19 141/10 142/24
declare [1] 144/9	describe [7] 59/16 61/19 63/20 65/20 71/21 110/25 113/24	didn't [9] 32/9 32/9 52/21 53/5 57/23 58/2 107/20 110/21 142/25
decohesion [2] 118/16 121/13	described [1] 123/6	DIEGO [2] 5/1 7/24
defendant [3] 1/11 2/11 8/9	describes [6] 62/21 63/4 64/5 67/23 69/16 124/16	different [5] 23/23 49/12 54/9 133/5 136/1
DEFENDANT'S [1] 4/8	describing [1] 63/12	difficult [1] 102/19
Defendants [2] 2/14 3/9	design [1] 137/16	direction [1] 145/10
define [2] 40/15 45/25	designated [1] 5/5	disagree [3] 6/7 14/18 105/5
defined [1] 45/19	designer [1] 56/6	
definitely [1] 130/3	detail [2] 111/7 133/13	
degree [1] 31/24	details [3] 110/25 114/11 138/3	
Delaware [2] 1/9 2/9	determination [1] 134/20	
depends [1] 125/1	determine [1] 5/20	
depicts [1] 73/25	develop [1] 29/25	
deposed [4] 10/22 11/4 22/20 22/24	developed [12] 29/9 29/11 29/15 29/17 30/1 30/16 33/19 44/13 45/2 45/5 132/1 132/5	
deposition [42] 1/13 2/13 5/4 5/17 6/18 7/13 7/19 8/1 10/18 12/6 15/23 17/19 18/5 18/11 27/5 71/17 71/19 75/14 76/24 79/5 79/23 82/4 86/17 86/24 87/9 87/10 87/11 89/13 105/25 128/9 129/13 129/23 136/14 142/13 142/23 143/4 143/9 143/11 143/14	developing [1] 36/17	
	development [1] 29/23	
	device [3] 4/17 56/20 103/15	

D	66/6 88/18 88/20	86/16 87/22 88/1
disclose [30]	90/5 90/19 92/15	88/14 88/24 89/24
12/25 15/15 15/16	97/6 98/10 109/22	92/2 92/9 92/24
20/11 20/13 21/7	124/10 124/13	95/8 95/20 95/24
36/3 38/9 38/18	125/1 128/3	96/17 96/20 98/2
54/5 61/24 62/8	130/20 131/19	98/14 98/15 98/24
62/17 88/19 90/6	136/6	99/20 99/23 100/5
90/20 91/17 91/20	dispute [1] 5/3	103/12 103/25
92/14 92/16 97/7	disseminated [1]	104/8 106/4
124/11 127/4	24/18	106/11 106/14
128/3 128/4	distinguish [1]	106/23 106/25
128/17 128/21	133/10	107/1 107/20
129/12 130/7	distracting [1]	112/5 113/19
131/19	12/4	113/25 115/7
disclosed [5]	DISTRICT [6] 1/1	116/3 117/3
120/19 130/9	1/2 2/1 2/2 7/17	118/15 118/20
130/21 131/11	7/18	119/16 120/18
131/13	DIVISION [3] 1/3	121/17 124/25
disclosing [5]	2/3 7/18	125/21 126/2
61/1 61/15 66/6	divulge [3] 69/22	128/10 129/5
125/22 130/13	88/11 95/1	131/20 132/23
discovery [4]	do [121] 9/11	133/5 133/11
84/2 90/9 143/5	9/25 10/3 10/6	133/12 133/13
143/6	13/12 13/14 15/8	134/14 138/8
discuss [6] 54/10	15/14 16/13 17/5	139/8 139/18
67/11 79/3 122/23	18/16 19/16 19/24	140/6 140/13
122/25 127/2	21/11 23/7 23/19	141/6 141/21
discussed [9]	23/24 24/21 24/23	144/9 145/2
6/13 6/13 39/15	25/6 25/8 25/17	document [8] 10/3
66/8 114/10 115/3	26/5 27/19 27/23	10/4 23/14 70/14
115/5 128/17	28/10 29/5 33/13	71/2 71/3 99/23
128/21	36/15 39/1 39/24	100/12
discussing [3]	40/15 41/15 43/10	documents [1]
86/8 113/21 131/5	43/15 44/5 53/15	89/14
discussion [12]	53/22 61/5 63/24	does [24] 61/17
20/14 20/16 20/21	64/1 65/5 65/7	61/19 63/3 63/19
21/5 67/2 91/16	65/9 70/22 71/4	65/19 72/17 73/15
95/6 96/2 97/8	73/5 75/14 75/15	78/19 79/7 79/16
119/13 121/11	76/23 78/7 78/20	80/12 80/15 82/14
125/19	79/2 79/8 80/7	84/11 93/7 93/23
discussions [16]	81/4 82/14 85/19	103/17 109/20

D	115/2 115/25	22/7 22/17 23/7
does... [6]	116/6 117/22	23/12 23/22 24/6
113/24 114/1	119/6 119/24	24/16 24/21 26/19
119/1 122/3	120/15 120/23	27/7 27/16 28/2
124/14 128/22	123/10 123/10	31/4 32/22 33/13
doesn't [7] 18/24	125/3 125/7	35/7 39/1 39/23
19/3 19/3 23/18	133/25 134/8	41/13 44/3 48/12
35/2 35/15 133/14	134/25 135/2	51/11 55/6 57/17
doing [7] 53/15	135/16 136/5	58/2 58/24 59/21
57/14 64/13 64/18	139/15 139/22	60/6 60/19 61/17
105/19 107/1	140/3 141/18	62/11 64/15 64/22
133/8	142/1 142/1	65/19 67/21 70/10
domain [4] 40/21	142/11	70/13 70/22 71/4
42/17 42/19 61/15	done [4] 86/20	71/19 72/17 73/15
don't [102] 11/24	108/17 117/7	73/19 74/15 75/8
12/3 14/14 16/6	134/3	76/2 76/16 77/13
16/7 16/10 17/9	down [27] 9/24	78/19 79/7 79/13
17/13 19/6 19/20	23/12 23/13 23/25	80/11 80/20 81/17
19/21 19/22 21/7	33/12 65/1 65/11	81/23 82/10 82/18
22/23 25/12 25/14	65/12 65/14 65/14	83/18 84/15 85/22
25/24 32/10 41/20	70/17 70/19 87/19	87/8 87/21 88/14
43/13 44/17 45/9	99/16 100/1 100/9	92/8 92/18 93/7
45/13 46/2 46/6	100/19 100/20	93/18 94/5 94/13
47/6 47/17 47/21	100/24 100/25	95/18 95/24 96/14
48/1 48/9 48/13	101/1 101/2 101/8	97/25 98/14 99/20
48/18 52/21 53/5	101/10 104/3	100/5 101/18
55/25 57/2 57/9	104/15 111/22	102/15 102/24
57/10 57/13 68/8	downloaded [2]	103/8 103/12
68/17 72/11 73/4	100/13 102/7	104/8 104/14
73/24 74/4 74/16	Dr [3] 21/9 75/21	104/19 106/4
75/18 81/11 82/10	121/17	112/5 112/16
82/25 83/2 83/24	Dr. [148]	115/7 118/15
84/2 86/21 87/16	Dr. Gupta [133]	119/1 120/18
88/19 89/1 89/4	6/13 8/23 9/4	122/1 122/10
89/7 90/7 90/10	9/11 9/11 9/16	122/20 123/3
90/12 90/23 92/8	9/25 10/6 10/15	123/19 126/14
92/13 97/10 97/10	10/17 10/23 13/8	127/18 128/6
97/16 98/1 98/10	13/12 14/9 14/13	128/10 128/20
98/11 103/5 109/7	14/17 15/8 15/18	129/15 130/11
110/17 111/17	16/25 19/18 20/6	131/4 139/5 139/8
111/18 114/6	20/23 21/16 22/3	141/3 141/10

D	85/13 98/9	entirely [1] 86/24
Dr. Gupta... [1] 142/10	either/or [1] 98/9	entitled [6] 4/13 4/16 14/21 18/21 27/14 105/10
Dr. Gupta's [12] 5/9 13/3 15/25 18/19 26/13 72/8 72/20 104/23 106/8 118/10 140/8 142/25	electronic [3] 42/1 103/1 116/3	entries [1] 122/4
Dr. Kireev [1] 140/20	element [4] 126/15 126/23 127/19 128/11	equipment [1] 42/1
Dr. Nancy [1] 28/23	else [5] 19/18 25/20 26/3 27/24 69/15	ERRATA [1] 146/1
Dr. Vijay [1] 7/14	email [2] 139/23 139/25	error [1] 107/8
draw [1] 102/15	emails [3] 139/18 139/24 140/3	errors [1] 146/7
duly [1] 145/7	Emory [1] 6/8	ESQ [4] 3/4 3/5 3/11 3/12
during [6] 10/17 86/9 86/15 110/1 111/9 122/20	employee [1] 145/19	essentially [2] 29/14 86/10
	employment [1] 23/1	establish [1] 15/3
	enable [2] 5/19 7/5	Europe [1] 135/22
E	encourage [1] 18/11	evaluate [1] 123/14
E-X-H-I-B-I-T-S [1] 4/7	end [3] 19/7 101/12 105/11	even [12] 18/6 50/4 77/7 95/14 108/14 110/2 124/3 125/21 132/18 133/11 133/25 140/2
each [2] 39/19 102/5	ending [1] 2/16	eventually [1] 83/4
earlier [15] 30/16 36/11 42/11 48/8 51/18 67/21 96/25 98/8 109/22 110/5 121/7 123/24 126/12 131/5 139/10	engineer [3] 51/8 112/23 133/4	ever [6] 10/22 25/6 26/19 27/17 111/15 134/23
early [1] 139/23	engineering [7] 9/2 35/14 112/17 116/19 117/11 117/18 118/2	every [6] 49/24 51/5 102/5 109/22 117/3 117/7
eaten [2] 19/11 127/15	engineers [2] 49/1 53/13	everyone [1] 109/14
eating [2] 18/14 18/16	enough [6] 12/1 83/25 84/22 90/7 98/11 123/11	everything [1] 24/9
efficient [1] 86/17	ensure [1] 79/22	evidence [2] 18/7 136/9
either [3] 80/11	entire [2] 75/6 138/8	exact [1] 16/11

E	124/16 126/4 139/9	42/9 44/19 47/7 131/23
exactly [1] 122/10	Exhibit 1 [6] 13/11 13/12 13/14 13/19 13/22 13/24	expertise [5] 26/1 26/4 27/20 27/22 56/8
EXAMINATION [2] 4/2 8/21	Exhibit 11 [11] 104/4 104/8 113/13 121/16 121/17 121/22 122/1 122/5 122/25 123/6 139/9	explain [1] 107/10
examined [1] 8/18		explained [4] 36/11 39/14 129/11 138/2
example [6] 61/6 76/12 123/4 123/5 126/4 133/12		explaining [1] 121/25
except [1] 134/20	Exhibit 5 [8] 23/6 23/7 24/6 61/18 61/19 65/20 87/19 99/16	explore [2] 14/21 18/21
exchanged [1] 6/4	Exhibit 7 [4] 99/17 99/20 101/18 102/21	explored [2] 116/25 123/24
excluded [1] 143/8	Exhibit 8 [7] 9/23 9/25 10/6 10/8 10/11 10/19 70/16	exploring [1] 105/3
excuse [6] 37/24 73/21 98/15 102/17 108/9 131/11	Exhibit 9 [14] 71/2 71/4 71/7 72/17 73/1 73/15 75/1 76/3 84/11 123/4 123/5 123/14 124/16 126/4	Exposition [5] 112/18 116/20 117/12 117/19 118/3
EXECUTED [1] 144/15	exhibits [3] 6/25 142/25 143/1	expressly [1] 143/8
exhibit [60] 9/20 9/23 9/25 10/6 10/8 10/11 10/19 13/6 13/11 13/12 13/14 13/19 13/22 13/24 23/3 23/6 23/7 24/6 61/18 61/19 65/20 70/15 70/16 70/25 71/2 71/4 71/7 72/17 73/1 73/15 75/1 76/3 84/11 87/19 99/16 99/17 99/18 99/20 101/18 102/21 104/4 104/4 104/5 104/8 113/13 121/16 121/17 121/19 121/22 122/1 122/5 122/25 123/4 123/4 123/5 123/6 123/14	expected [1] 75/4	extensive [1] 105/2
	experience [1] 59/15	extent [2] 78/15 132/20
	experiments [1] 29/13	eyes [6] 5/6 5/7 5/8 5/13 5/18 5/22
	expert [14] 11/5 25/17 25/21 26/10 27/13 27/23 27/24 28/10 28/15 41/17	F
		face [5] 6/20 6/20 13/15 13/20 92/6
		facet [1] 58/13
		fact [6] 15/6 16/1 22/15 22/21 94/4 116/7
		facts [4] 22/25

F	145/14	five years [1] 31/23
facts... [3] 22/25 83/3 146/6	feel [1] 11/24	focus [6] 41/18 83/8 84/4 95/10 95/11 136/15
factual [1] 99/3	few [4] 26/7 54/11 128/7 134/20	focused [2] 87/10 120/8
Fairchild [2] 48/20 48/25	fiber [1] 76/8	focusing [1] 42/13
fairly [3] 31/15 31/17 103/10	field [11] 25/7 25/10 25/18 25/21 26/10 27/13 27/20 28/11 56/9 109/12 135/6	folks [2] 25/25 132/15
faith [1] 142/23	figure [7] 33/5 64/12 72/25 73/3 74/8 75/23 76/19	follow [19] 21/23 25/13 25/25 30/22 94/13 133/3 133/5 135/17 135/18 135/19 135/20 135/22 135/23 135/24 136/2 136/3 136/9 139/5 141/3
fall [1] 133/6	film [1] 137/10	followed [12] 29/8 29/16 29/19 29/21 132/7 132/11 132/14 134/2 134/2 134/5 134/18 135/5
familiar [3] 11/6 28/4 30/18	films [5] 4/17 103/14 118/17 136/24 138/6	follower [1] 134/14
family [5] 16/8 16/25 17/1 17/6 17/11	final [1] 107/2	followers [5] 133/11 133/15 133/18 134/12 135/12
far [3] 12/8 83/7 139/18	financial [4] 14/19 16/2 18/19 18/21	following [1] 135/15
fashion [1] 110/7	financially [1] 145/18	follows [3] 8/19 30/23 136/12
Faster [1] 101/9	finding [1] 78/3	Ford [1] 136/3
features [2] 33/19 33/24	fine [5] 9/14 19/6 65/15 68/21 75/22	foregoing [5] 144/10 145/4 145/6 145/10 145/12
February [19] 13/5 14/11 17/19 26/15 63/20 68/2 71/18 72/22 73/21 76/18 79/14 80/21 81/25 82/20 83/19 85/8 104/25 106/10 123/21	finish [2] 18/3 67/8	
February 2005 [1] 63/20	finished [1] 142/16	
February 27 [16] 13/5 14/11 26/15 71/18 72/22 73/21 76/18 79/14 80/21 81/25 82/20 83/19 85/8 104/25 106/10 123/21	first [12] 27/7 69/6 69/8 70/2 84/21 87/22 91/2 94/22 96/15 98/16 109/19 135/9	
February 27th [2] 17/19 68/2	fit [1] 46/5	
Federal [1]	fits [1] 44/22	
	five [3] 31/23 99/15 117/14	

F	140/21 141/14	general [5] 30/14
forget [1] 122/10	141/25	37/14 54/7 118/7
form [97] 23/8	formally [1]	136/3
28/19 29/2 33/22	110/3	get [11] 18/12
36/10 41/22 42/6	formed [1] 96/2	22/3 36/13 49/18
42/21 43/12 43/19	former [3] 26/6	71/19 82/10 87/9
44/7 45/8 47/20	135/24 135/25	103/9 109/20
47/25 48/5 48/16	forth [1] 145/5	116/13 143/6
48/23 50/17 50/21	forward [1] 93/4	getting [1]
53/9 53/25 55/24	frank [3] 16/10	105/11
56/4 56/13 57/1	116/25 134/19	give [11] 21/14
57/6 57/22 58/9	frankly [3] 15/23	22/25 27/1 73/7
59/25 60/11 61/21	16/5 105/11	73/8 75/5 75/11
63/6 63/21 64/7	free [3] 85/18	115/16 115/17
64/20 65/22 66/4	86/19 118/3	130/7 136/8
67/25 69/18 70/5	Freescale [1]	given [1] 145/11
72/19 73/17 74/6	40/19	gives [1] 99/2
74/19 75/2 76/4	frequently [2]	giving [5] 74/9
79/12 80/18 81/22	87/6 117/12	76/19 118/20
82/16 83/16 84/13	Friday [1] 23/17	130/5 130/6
103/19 107/3	frivolous [2]	glass [14] 4/16
107/16 108/6	21/12 22/2	103/13 114/22
108/10 108/18	front [7] 19/21	115/9 116/4
109/4 109/10	71/4 73/10 75/23	118/16 118/25
110/14 111/2	96/17 104/8 123/3	119/2 121/12
111/11 112/10	full [10] 31/6	123/5 126/15
113/14 114/2	31/19 31/22 32/5	126/23 127/19
114/24 116/22	32/10 32/20 32/23	128/11
117/13 123/7	33/7 33/8 112/15	glass-modified
123/17 124/8	fully [1] 6/8	[10] 4/16 103/13
124/18 125/13	further [3]	114/22 115/9
126/7 126/17	142/12 145/12	116/4 118/16
126/24 127/10	145/17	118/25 119/2
128/14 129/8	fuse [1] 76/6	121/12 123/5
130/16 131/15	G	go [42] 7/9 8/3
132/25 133/20	gave [9] 79/25	14/19 19/25 20/9
133/23 134/16	98/8 99/15 113/1	20/17 20/25 21/17
134/21 134/24	119/17 119/22	23/23 23/25 24/15
135/8 136/18	120/12 123/24	31/2 32/5 33/9
138/14 139/19	126/12	41/6 57/12 63/23
140/9 140/14		65/6 65/11 65/12

G	39/3	121/24
go... [22] 65/12	Grand [3] 2/14	half [2] 24/16
65/14 65/14 67/13	3/13 7/20	141/8
68/18 68/18 68/22	great [4] 7/8	handing [1]
68/23 68/25 69/1	87/3 133/11	102/20
86/2 87/19 96/7	133/18	happy [2] 49/9
100/9 102/14	Greenleaf [1] 9/9	65/5
111/22 113/25	ground [1] 95/13	harass [1] 76/21
115/18 122/13	group [3] 30/23	harassing [2]
130/22 139/18	134/1 136/15	16/22 38/3
142/2	guess [3] 14/14	harassment [7]
goes [1] 16/2	26/6 88/17	55/13 60/12 62/25
going [54] 19/1	guided [1] 132/11	82/23 83/23 84/19
21/12 21/23 24/3	GUPTA [151]	123/25
35/15 36/12 37/20	Gupta's [12] 5/9	hard [3] 102/18
37/25 41/8 47/13	13/3 15/25 18/19	102/21 102/25
54/5 58/24 60/24	26/13 72/8 72/20	Harmona [2] 30/2
64/25 67/16 68/9	104/23 106/8	132/13
70/13 70/19 71/10	118/10 140/8	Harmona Champagne
71/11 71/25 72/2	142/25	[1] 30/2
72/2 72/5 76/23	H	Haruo [1] 106/15
82/1 82/13 85/11	had [47] 6/4 6/19	has [43] 5/17
86/3 94/13 94/16	29/15 35/2 36/22	15/20 18/22 18/23
96/9 96/24 97/22	39/18 39/20 42/14	19/11 22/4 24/18
100/4 100/20	45/10 45/21 45/22	26/4 27/19 27/23
100/23 100/24	46/2 46/6 46/9	29/8 29/12 29/16
101/2 101/4 101/6	46/22 46/22 47/2	35/18 38/22 39/4
101/10 105/18	47/22 48/2 48/9	51/15 69/12 74/7
111/23 122/15	49/21 51/7 51/7	75/3 75/23 78/7
123/1 128/7	57/10 67/2 80/7	79/16 81/4 84/18
130/24 139/2	88/18 88/20 91/16	87/24 88/1 89/25
139/5 141/3 142/6	92/15 92/22 95/2	91/7 91/11 92/18
142/13 143/13	97/6 97/23 102/10	93/13 95/21 95/24
gone [1] 60/1	109/13 109/15	96/20 97/17 98/2
good [5] 8/23	109/23 110/8	99/4 99/6 123/25
8/24 29/5 41/13	111/9 113/24	125/9 129/11
134/14	116/11 118/21	134/1
got [5] 12/1 19/8	125/1 129/15	have [145] 5/3
107/10 110/5	136/6 139/23	5/23 6/17 6/19
136/25	hadn't [2] 6/8	6/22 6/23 10/22
grammatical [1]		11/3 12/3 12/10

H	130/7 131/5 132/9	he's [4] 15/1
have... [135]	132/10 132/11	15/2 66/18 75/11
12/15 12/18 13/22	132/13 132/16	hear [1] 86/14
14/17 19/21 23/18	132/17 132/18	help [3] 35/17
26/19 27/9 27/16	134/3 134/5	54/16 55/9
28/22 32/10 34/6	134/10 134/18	helped [1] 47/2
36/4 36/13 36/15	134/23 134/25	helpful [2] 74/13
39/10 40/4 41/13	135/5 135/24	100/11
42/16 44/10 44/11	136/5 136/6	her [9] 28/10
44/17 49/10 49/13	137/14 138/9	29/5 29/17 134/1
50/4 53/17 55/14	139/8 139/14	134/5 134/18
56/6 59/22 60/1	139/16 140/1	134/23 136/12
60/3 60/6 62/8	140/10 141/6	136/15
63/9 63/15 63/17	142/12 144/10	here [25] 18/18
63/23 63/24 64/1	144/11 145/21	22/24 26/25 61/18
64/9 64/12 66/7	147/21	72/3 74/2 74/7
68/17 71/2 73/4	haven't [3] 18/6	77/22 78/17 79/21
75/5 77/3 78/19	19/7 127/11	79/24 79/25 83/7
79/8 80/24 82/14	having [32] 6/1	83/11 84/3 90/3
83/2 83/24 85/11	8/18 17/9 45/25	95/9 95/12 97/9
85/16 89/4 89/12	46/14 46/15 50/10	97/12 102/3 106/6
90/3 90/7 92/13	50/15 50/25 51/22	111/7 135/2
92/14 95/1 95/8	52/1 52/6 52/10	135/10
95/13 97/7 97/10	52/11 52/16 53/6	hereby [2] 144/9
97/11 97/16 98/10	53/11 53/23 54/3	145/3
102/5 102/18	54/4 54/8 55/2	herein [2] 144/13
105/8 106/20	56/19 60/22 61/1	145/5
109/1 109/2 110/3	61/7 61/11 61/14	hereto [1] 144/12
112/15 113/24	86/25 103/8	hey [1] 137/18
114/1 114/14	125/17 137/9	highly [3] 18/20
116/2 116/24	he [29] 6/12	35/4 35/17
117/7 117/10	15/20 16/1 18/22	him [16] 6/9 23/9
119/16 122/12	18/24 19/2 19/3	66/15 66/20 71/10
123/3 123/11	19/3 22/4 22/14	72/1 72/2 72/14
125/3 125/7 127/2	23/18 43/25 66/16	73/10 74/9 75/11
127/15 128/2	71/20 71/23 75/4	75/15 75/23 85/24
128/6 128/10	75/16 75/16 75/17	93/9 96/3
128/16 128/21	75/17 75/18 85/7	hired [1] 109/17
128/22 128/24	88/10 93/23 105/3	Hiroshi [2]
129/5 129/7	125/9 125/10	106/14 107/14
129/17 129/22	125/10 137/6	his [24] 16/2

H	hundreds [1] 32/6	130/5 130/6
his... [23] 17/20	Hynix [2] 56/11	I've [7] 54/20
17/22 18/6 18/19	56/22	76/22 86/23
22/15 37/8 66/15	I	102/25 116/25
66/21 71/17 71/22	I'd [3] 26/16	130/1 134/20
71/24 85/25 87/9	67/10 95/19	I-N-D-E-X [1]
93/20 93/22 96/1	I'll [9] 27/16	3/21
96/3 105/1 105/2	28/2 44/3 72/14	ICM [1] 117/10
105/7 105/16	74/6 86/16 95/23	idea [7] 5/25
105/16 105/17	127/14 143/4	63/9 63/15 63/17
history [3] 27/12	I'm [82] 14/15	64/1 75/3 116/24
30/3 32/6	15/6 15/24 15/25	identification [6]
Hitachi [9]	17/8 17/9 18/1	9/20 13/6 23/3
107/24 107/25	18/2 19/1 19/21	70/25 99/18 104/6
109/2 109/9 110/7	20/18 21/12 23/2	identify [2] 8/5
110/13 121/18	23/2 26/1 27/1	125/6
135/18 139/9	27/14 41/17 42/8	Image [1] 4/13
hmm [1] 11/10	42/13 42/24 43/3	imagine [2]
honest [1] 12/15	43/24 44/19 44/22	111/12 113/10
hour [1] 105/12	46/20 47/7 47/13	IMECE [1] 117/3
hours [2] 5/18	48/7 49/9 52/16	implicates [2]
7/5	54/4 55/6 66/15	83/20 84/17
house [4] 5/11	66/20 66/24 67/6	important [7]
53/11 53/16 53/17	67/8 73/4 73/8	44/12 47/8 48/7
how [37] 9/12	73/10 75/13 76/23	49/22 55/16 60/3
10/25 11/6 17/10	79/21 82/13 83/11	61/4
17/13 20/17 29/12	85/11 88/7 88/23	importantly [1]
29/25 34/23 36/8	88/24 89/24 90/7	5/14
37/5 37/13 37/14	90/17 91/20 91/21	impossible [1]
37/20 37/24 37/25	93/22 93/23 94/25	64/12
37/25 39/15 42/14	94/25 95/13 95/17	improper [2]
45/24 46/25 47/9	95/18 95/20	86/24 127/15
49/25 51/1 54/22	102/20 105/2	improve [1] 35/17
75/3 81/11 88/21	105/15 105/17	inappropriate [1]
109/9 110/10	105/18 106/1	105/4
113/24 114/1	106/1 107/9 112/3	include [1] 61/24
116/10 116/14	124/13 124/14	includes [3]
139/18 141/6	125/17 125/24	27/12 61/22
142/3	125/25 127/6	105/16
huge [1] 64/11	128/7 129/24	incomplete [1]
huh [1] 11/10		137/7

I	118/4 123/13	29/21
incorporate [1] 15/21	123/22 124/21	inquired [1] 140/2
increase [1] 132/8	125/3 125/6	inquiring [3] 27/21 110/5 136/7
India [1] 135/22	125/12 125/22	inquiry [1] 27/4
indicated [1] 125/10	126/3 126/9	instruct [12] 21/10 21/20 71/12
indicates [1] 85/8	126/19 128/17	72/1 72/14 78/24
indicating [1] 88/7	128/21 129/2	92/19 93/4 127/22
individuals [2] 6/20 132/12	129/21 130/13	127/25 139/2
induced [1] 134/3	136/19 138/15	140/25
industries [1] 136/1	138/25 140/24	instructed [1] 96/3
industry [4] 35/5	141/13 141/24	instructing [5] 71/13 88/5 93/9
40/25 54/25 59/16	infringe [1] 67/3	93/14 94/10
information [84] 5/7 5/9 13/2 13/4	infringed [2] 78/4 78/14	instruction [1] 141/4
15/4 15/22 18/24	infringement [21] 4/11 13/21 61/20	instructions [2] 21/24 94/14
21/7 54/6 61/23	62/13 62/22 66/8	Instruments [4] 40/19 58/19
61/25 62/8 62/16	67/1 67/23 69/17	109/18 135/20
62/24 65/10 68/3	70/4 77/5 77/18	Intel [12] 40/18
69/19 70/6 73/7	78/8 79/4 80/8	58/19 109/17
73/9 74/9 74/11	83/5 84/4 88/21	118/23 119/8
74/12 75/11 75/16	90/5 90/6 91/15	119/12 119/17
75/18 75/23 76/20	infringes [8] 82/3 82/3 89/17	119/21 120/12
77/6 78/23 79/1	90/12 93/8 93/24	120/19 120/24
80/23 81/13 82/21	94/5 94/17	135/17
83/25 84/1 84/17	infringing [24] 68/10 69/12 79/18	intended [1] 51/25
84/22 88/9 89/5	80/6 87/24 88/1	Intent [1] 118/17
90/7 90/8 90/18	88/15 88/25 89/7	interactions [2] 66/19 109/25
90/19 90/22 90/22	89/25 91/8 91/12	interest [7] 14/19 16/2 18/20
93/12 94/6 95/2	92/2 92/9 92/10	18/22 46/1 46/9
95/8 95/14 95/14	92/24 93/19 95/21	46/22
97/10 97/11 97/16	95/25 96/21 97/18	interested [3]
98/11 99/3 101/25	98/3 99/4 99/7	
102/1 102/3	initialed [1] 144/12	
109/20 111/9	ink [1] 144/12	
	innovation [2] 133/9 133/14	
	innovator [1]	

I	77/1 77/10 77/25	it's [65] 6/21
interested... [3]	78/16 79/20 80/1	6/22 13/15 14/10
86/12 143/2	80/8 81/1 82/7	14/25 15/17 19/13
145/18	83/10 84/5 84/25	20/16 27/9 31/18
interesting [1]	90/24 95/11 97/13	37/10 39/19 41/7
115/18	105/13 143/3	42/25 43/2 47/8
interface [6]	invite [1] 115/21	49/22 49/24 50/2
45/10 46/15 47/22	invited [1]	55/15 59/1 67/15
48/2 48/10 138/7	115/20	67/18 72/7 73/18
interfaces [4]	involved [6] 6/20	73/19 73/21 76/17
42/14 45/23 46/3	16/9 17/1 17/11	77/8 77/19 77/20
121/14	17/12 21/6	79/1 79/12 79/13
interferometry [1]	irrelevant [1]	80/20 82/19 82/21
138/7	82/12	83/18 83/20 84/8
internally [1]	is [347]	84/15 90/18 91/17
51/8	isolation [1]	96/8 96/11 101/23
International [5]	47/4	101/24 102/18
112/17 116/19	issue [13] 6/14	104/16 111/18
117/11 117/18	6/18 14/22 27/11	112/22 113/25
118/2	67/11 77/19 78/16	115/3 122/9
introduced [1]	79/17 79/20 80/1	122/14 122/17
18/6	87/16 90/24 95/11	123/19 123/25
invalidate [1]	issues [50] 7/5	130/23 131/1
120/20	14/19 17/9 45/11	136/9 137/11
invent [6] 136/17	45/22 46/3 46/6	142/5 142/8
137/6 137/12	46/14 46/15 46/22	143/12
137/18 137/21	47/2 47/22 48/2	item [13] 92/6
138/12	48/10 49/13 49/21	102/16 103/11
invented [3]	50/4 50/10 50/15	103/13 104/12
132/7 136/25	50/25 51/23 52/1	104/20 112/4
137/14	52/6 52/10 52/12	112/5 112/25
invention [8]	52/16 53/6 53/24	118/9 118/13
76/12 84/12	54/8 55/2 56/6	118/15 121/6
123/15 124/16	56/19 57/11 60/23	items [1] 118/13
126/5 138/10	61/1 61/8 61/11	its [3] 54/24
141/11 141/22	61/14 66/7 81/12	130/18 141/14
inventions [1]	84/4 86/25 97/13	itself [1] 6/6
137/13	105/9 105/23	IV [1] 9/2
inventor [3] 9/16	109/15 109/23	
10/10 10/14	120/9 143/7 143/7	J
inventorship [17]	it [170]	Japan [1] 135/21

J	110/18 111/3	46/2 46/6 47/5
jcallahan [1] 3/8	112/9 112/14	47/7 47/17 47/21
Jin [1] 30/18	113/13 113/21	48/1 48/9 48/13
JOHN [19] 3/4	114/9 114/12	48/18 49/21 52/15
5/23 8/12 18/1	116/4 116/13	52/19 52/21 53/3
18/9 18/13 19/9	118/12 127/7	53/5 53/11 53/22
22/1 26/16 66/14	129/24 132/20	54/2 54/6 55/25
67/8 85/11 86/8	133/4 134/20	56/7 57/2 57/9
86/21 93/6 105/1	135/12 136/9	57/10 57/11 57/13
105/15 105/22	136/15	68/17 72/4 73/24
127/11	K	74/16 74/21 75/4
joint [1] 116/5	keep [19] 19/1	77/7 81/11 82/25
Judge [6] 71/17	24/3 36/12 60/4	83/7 84/2 86/19
85/7 87/7 105/6	70/19 70/21 86/10	87/15 88/19 89/1
143/5 143/8	100/20 100/23	89/7 90/10 90/12
Judge Kim [4]	100/24 101/2	92/8 102/6 102/13
71/17 105/6 143/5	101/4 101/6	103/9 105/6 105/9
143/8	101/10 105/18	115/2 117/22
Judge's [1] 37/9	111/23 135/16	119/7 119/13
Jun [4] 106/15	140/6 140/13	120/23 120/24
107/6 140/6	keeps [1] 140/2	121/1 123/10
140/11	kept [1] 140/10	125/10 132/22
just [72] 6/16	Kim [5] 71/17	133/8 133/25
7/1 13/15 14/16	87/7 105/6 143/5	134/1 134/5
15/6 15/25 18/3	143/8	134/10 134/25
20/23 22/24 26/16	Kim's [1] 85/7	136/5 139/15
28/2 35/7 35/12	kind [2] 80/24	139/22 139/24
38/16 38/17 39/3	125/21	140/2 140/3
39/20 41/18 42/24	kindly [4] 13/16	knowledge [2]
44/22 46/18 47/10	23/25 65/11 65/12	53/18 132/18
47/13 47/17 48/12	Kireev [3] 140/13	known [2] 58/16
51/21 55/6 58/25	140/19 140/20	59/3
60/7 60/19 62/10	know [95] 14/14	knows [2] 19/2
64/15 64/25 66/24	16/6 16/7 16/11	53/15
68/4 68/18 72/4	16/13 16/16 17/5	Koeger [2] 3/20
75/8 75/11 82/1	17/10 17/13 18/24	7/22
88/7 88/24 89/22	19/3 19/3 19/20	L
92/19 93/6 95/4	19/24 21/7 21/14	lab [11] 29/17
96/25 99/2 100/9	22/23 33/6 41/20	39/17 39/18 40/14
102/8 104/12	43/13 45/10 45/13	47/1 54/12 57/24
107/8 108/14		

L	lawsuit [3] 13/25 14/2 24/8	141/13 141/24
lab... [4] 59/12 59/18 108/14 110/11	lawyer [3] 17/9 23/2 92/18	lengthy [1] 86/23
lacer [1] 136/17	lawyers [4] 66/19 128/24 129/7 129/17	less [3] 16/13 16/20 142/11
Lan [1] 30/18	layer [2] 76/7 76/8	let [6] 10/5 67/8 103/9 112/14 122/3 135/9
language [2] 22/23 130/18	layers [4] 49/12 54/9 56/8 115/9	let's [8] 7/9 56/17 65/9 67/13 86/2 96/7 99/16 135/13
laser [42] 1/6 2/6 7/14 14/3 24/23 25/1 25/7 25/10 25/18 25/21 26/4 26/10 27/14 27/22 28/11 28/18 29/23 30/3 30/13 30/15 34/7 54/23 71/7 72/18 73/15 73/25 74/4 74/5 74/16 124/14 131/6 131/23 132/6 132/23 134/3 134/12 137/6 137/8 137/21 138/5 138/9 146/2	leader [5] 29/20 132/19 132/23 133/2 133/7	letting [1] 72/4
laser-induced [1] 134/3	leads [1] 121/2	level [1] 26/1
lasso [3] 105/9 105/21 143/6	least [2] 23/9 52/5	like [22] 5/24 11/14 26/25 32/16 58/18 61/10 64/23 67/10 71/1 101/13 102/15 102/24 104/21 110/8 113/24 114/8 114/15 116/18 132/12 137/11 138/19 142/21
last [8] 6/18 12/1 31/4 60/2 100/20 108/13 117/14 136/6	leave [1] 142/13	likely [1] 5/7
later [3] 36/7 81/13 95/20	left [6] 116/10 116/14 116/16 141/7 142/3 142/11	limited [5] 80/3 87/11 105/6 113/21 113/25
law [7] 17/10 137/11 137/12 137/13 137/14 137/15 137/19	legal [49] 22/23 30/8 61/22 69/20 69/20 72/23 76/15 78/22 81/7 82/23 83/22 84/19 89/3 89/11 89/20 90/2 90/16 91/5 91/14 91/24 92/12 93/2 93/12 94/20 95/3 95/6 96/23 97/21 98/5 98/19 99/9 107/19 120/22 123/22 124/22 125/15 125/19 126/10 126/18 126/25 128/15 129/9 129/10 131/16 136/19 138/15 138/25	line [31] 17/20 24/17 24/17 26/12 33/13 38/22 43/22 55/12 66/21 69/9 78/5 123/23 128/8 146/8 146/10 146/12 146/14 146/16 146/18 146/20 146/22 146/24 147/1 147/3 147/5 147/7 147/9 147/11 147/13 147/15 147/17
laws [2] 16/7 137/2		

L	109/25 111/6	46/21 47/1 47/6
Line 3 [1] 24/17	115/15 115/20	47/15 47/19 47/24
list [4] 32/10	125/1 127/16	48/4 48/13 48/20
32/16 40/7 47/13	134/12 137/12	49/5 49/17 49/24
listed [8] 36/6	LST [26] 5/10	50/7 51/2 51/16
40/25 44/10 44/17	5/16 5/19 7/5	52/7 53/19 53/23
103/25 107/2	8/15 14/4 14/7	54/4 54/7 54/12
111/8 121/6	15/8 15/14 15/19	54/15 55/1 55/8
lists [1] 112/25	16/1 16/14 16/20	55/19 55/22 56/2
little [4] 13/17	17/6 17/17 19/18	56/11 56/18 56/19
65/12 102/18	19/25 20/9 20/18	56/22 57/4 57/19
107/9	21/1 21/17 22/8	58/3 58/6 58/15
live [1] 12/7	22/12 22/17 22/22	58/15 58/18 58/19
living [1] 124/15	87/23	58/21 59/2 59/17
LLC [4] 1/6 2/6	LST's [4] 69/11	59/22 60/9 60/15
14/3 146/2	89/22 91/7 99/3	60/19 60/25 61/6
located [1] 7/23	LSTs [1] 19/21	61/8 61/10 109/13
long [3] 111/18	lunch [1] 41/13	make [22] 10/4
115/3 130/17	LYER [2] 3/5 8/14	11/18 13/16 18/15
longer [1] 140/1	M	18/15 19/12 19/14
look [5] 23/13	machine [1] 145/9	20/6 27/8 34/23
32/9 102/25	made [10] 37/14	41/25 49/22 58/25
104/14 139/15	80/5 97/7 109/13	86/14 100/1
looked [5] 70/10	120/24 135/5	100/10 102/8
89/13 134/10	135/10 144/11	104/16 128/8
139/14 139/16	145/8 147/21	134/19 140/20
looking [8] 55/6	maintain [2]	142/22
75/8 97/25 104/12	66/22 85/17	MAKENNA [2] 3/12
104/20 112/9	major [85] 38/23	8/10
113/13 139/10	39/5 39/10 39/24	makes [1] 22/7
looks [1] 101/13	40/4 40/9 40/13	making [1] 86/10
LOS [6] 1/14 2/15	40/14 40/15 40/22	man [1] 124/14
3/15 7/20 9/3	40/24 41/15 41/20	manner [2] 67/3
108/24	42/4 42/12 42/16	86/16
Los Angeles [2]	42/19 43/7 43/9	manufacturer [1]
7/20 9/3	43/11 43/16 43/17	55/20
lot [21] 19/10	43/25 44/6 44/13	manufacturers [2]
25/25 34/17 39/16	44/15 44/16 44/23	54/16 55/9
54/9 55/1 57/11	45/6 45/14 45/19	manufacturing [6]
57/12 57/15 81/11	45/25 46/8 46/13	35/5 46/14 46/23
83/1 90/4 90/18		49/14 56/6 56/20

M	143/9	74/22 75/5 76/3
many [8] 10/25	may [20] 6/21	81/17 83/3 85/14
30/21 82/22 87/12	6/23 11/17 30/22	98/15 102/17
110/8 124/2	42/16 46/5 50/4	103/9 108/9
133/15 135/14	53/16 53/16 77/7	109/11 109/20
MARCH [26] 1/15	81/13 83/13 83/25	110/3 110/9
2/16 4/12 4/18	101/21 101/25	110/18 112/14
5/1 7/12 13/3	110/2 132/18	115/21 122/3
14/10 26/14 68/1	133/11 134/9	124/15 127/6
72/20 73/19 76/17	138/8	127/8 127/18
79/13 80/20 81/23	maybe [5] 74/12	129/12 131/11
82/17 83/18 84/15	78/24 95/19	131/18 135/9
104/24 105/7	115/22 118/22	136/8 136/15
106/8 123/19	MCKOOL [3] 3/10	144/12 145/5
140/8 145/23	8/8 8/10	145/8
146/3	mckoolsmith.com	mean [23] 10/19
March 12 [1] 7/12	[2] 3/16 3/17	13/15 14/5 35/2
March 8 [17] 13/3	me [101] 10/5	35/15 39/4 41/25
14/10 26/14 68/1	16/19 17/13 19/21	46/9 47/7 52/5
72/20 73/19 76/17	21/14 22/10 29/12	59/10 63/25 85/20
79/13 80/20 81/23	29/12 29/25 34/18	106/25 108/23
82/17 83/18	36/16 37/20 37/24	116/24 117/23
104/24 105/7	37/25 38/11 39/16	128/22 132/1
106/8 123/19	44/11 44/15 44/17	132/9 133/2 133/3
140/8	45/18 45/24 46/20	135/15
March 8th [1]	46/24 47/8 49/1	meaning [5] 34/17
84/15	49/14 49/16 49/18	51/25 129/5
mark [7] 9/23	49/20 50/1 50/5	129/16 130/12
13/10 23/5 70/14	50/25 51/3 51/6	meanings [2]
71/1 99/17 104/4	51/9 51/23 52/6	125/20 129/11
marked [8] 5/13	53/20 54/10 54/13	means [2] 49/5
9/20 13/6 23/3	54/23 54/23 55/3	128/11
70/25 99/18	56/18 56/20 57/23	meant [2] 35/12
102/25 104/5	58/12 58/16 59/13	43/25
material [2]	59/14 59/14 59/15	measurement [3]
12/14 90/4	60/16 61/2 61/11	4/17 103/14 115/8
materials [2]	61/16 62/12 62/19	measures [1]
133/6 134/4	62/20 63/3 64/4	49/11
MATICH [2] 3/11	66/2 66/11 66/16	mechanic's [1]
8/8	66/20 67/8 67/22	41/18
matter [2] 7/14	68/11 73/2 73/22	Mechanical [5]

M	59/24 60/13 63/13	morning [2] 8/23
Mechanical... [5]	65/24 78/10 78/21	8/24
112/17 112/23	79/10 80/17 81/6	most [4] 5/14
117/11 117/18	81/21 83/15 85/5	101/23 101/24
118/2	89/9 89/19 90/14	131/22
Mechanically [1]	94/18 97/19 99/8	mostly [2] 65/10
116/19	114/18 114/23	114/8
members [2] 17/11	121/8 128/25	motivation [1]
17/14	129/19 130/15	16/3
mentioned [7]	135/7 137/25	Motors [1] 136/3
17/22 48/8 51/21	miscommunication	move [5] 26/17
55/17 86/15 102/6	[2] 6/22 6/24	93/4 94/11 96/5
109/21	misplaced [1]	103/10
microelectronics	119/7	moving [1] 128/9
[1] 109/13	missing [3]	Mr. [6] 6/8 9/12
might [7] 81/12	101/22 102/1	107/24 108/4
90/9 100/11	107/7	111/7 140/19
101/22 104/15	MIT [4] 26/7 26/8	Mr. Dave [1] 6/8
111/24 134/9	33/17 33/24	Mr. Gupta [1]
MILLER [2] 3/12	mmiller [1] 3/17	9/12
8/10	modification [3]	Mr. Kireev [1]
minutes [12] 18/5	138/18 138/20	140/19
18/10 19/7 19/10	138/22	Mr. Yoshida [3]
60/2 114/9 116/11	modified [10]	107/24 108/4
116/12 116/16	4/16 103/13	111/7
141/8 142/11	114/22 115/9	much [12] 17/13
142/19	116/4 118/16	20/17 26/4 37/5
MION [3] 3/3 8/13	118/25 119/2	37/13 37/14 37/20
8/14	121/12 123/5	38/1 116/10
mischaracterize	modify [1] 128/12	116/14 141/6
[3] 46/11 52/3	more [27] 16/13	142/3
94/23	16/20 21/13 24/2	multi [2] 58/13
mischaracterizes	43/6 56/17 58/5	115/9
[49] 21/2 22/14	65/14 65/14 65/16	multi-facet [1]
28/25 30/7 31/13	75/16 75/17 82/13	58/13
32/2 32/12 32/17	85/13 87/17 90/24	Multi-layers [1]
33/1 34/14 34/24	101/3 101/5 101/8	115/9
35/10 38/14 39/6	101/11 114/11	multilayer [1]
40/1 41/3 41/23	118/23 121/12	138/6
45/15 49/6 50/11	123/13 128/7	multiple [1]
50/22 54/1 54/18	133/5 133/13	93/13

M		
must [2] 111/18 120/5	125/7 125/19 127/3 128/3 128/17 130/4 130/8 130/20 131/19 134/2 135/1 135/14 135/15 135/17 135/18 135/19 135/20 135/22 135/23 135/24 136/2 136/4 136/8 136/10 136/12 136/24 139/24 144/12 145/10 145/22	23/12 26/24 43/6 65/3 65/4 75/18 86/13 87/4 123/13 124/7 125/7 125/10 126/3 needs [2] 27/8 75/17 neither [1] 145/17 never [8] 17/22 17/22 32/16 49/20 49/20 51/8 52/15 135/10 Nevertheless [1] 5/16 new [20] 77/24 85/9 85/21 85/23 87/12 107/4 107/17 108/19 109/5 112/11 112/20 114/4 114/25 115/19 121/10 123/8 124/19 132/7 133/8 141/16 newer [1] 134/2 Newton's [6] 137/11 137/12 137/13 137/14 137/15 137/18 next [4] 9/24 100/4 100/19 101/7 NICHOLAS [1] 3/11 Nick [1] 8/8 night [1] 12/1 nmatich [1] 3/16 no [76] 1/8 1/19 2/8 4/9 5/6 5/8 5/14 6/14 11/10 11/23 11/25 12/5
my [137] 6/21 6/22 7/22 9/6 18/14 22/25 23/1 24/7 24/11 24/17 25/13 25/25 26/6 27/2 27/3 27/4 27/20 27/21 27/22 29/8 29/16 30/22 31/23 33/17 33/24 36/14 39/15 39/17 39/18 40/5 40/12 40/14 40/21 40/21 41/4 42/10 42/14 42/16 43/20 46/1 46/5 46/18 46/22 47/1 47/3 52/16 54/12 54/23 56/7 57/12 57/15 57/17 57/24 58/14 58/21 59/12 59/18 60/14 61/9 66/22 67/8 69/12 69/25 77/13 79/16 80/4 84/6 84/10 85/17 86/11 86/15 87/24 88/17 89/25 90/19 91/8 91/17 92/15 93/7 93/10 94/1 94/23 95/2 95/5 95/6 95/21 96/24 97/5 97/23 98/9 98/20 98/24 99/4 99/24 100/4 102/11 106/11 107/7 107/8 108/12 109/12 109/22 110/10 113/8 116/1 124/9 125/1	myself [1] 89/13	
N		
	name [13] 7/22 8/25 34/6 107/6 124/6 126/2 134/8 134/9 135/4 136/12 145/22 146/2 146/4 named [1] 10/10 names [6] 25/13 25/15 25/24 36/3 40/4 136/5 Nancy [10] 26/20 27/17 28/4 28/23 30/4 30/23 135/4 135/11 136/11 136/15 NDA [1] 119/21 nearly [1] 18/5 necessarily [3] 6/5 113/17 113/19 necessary [1] 103/5 need [17] 11/9 11/14 19/14 21/13	

N		O
no... [64] 24/14 28/22 30/10 33/6 33/9 34/4 34/10 34/12 34/13 34/13 35/1 35/9 47/17 48/13 48/18 49/8 51/7 51/20 53/17 54/2 55/7 55/15 56/7 63/9 63/15 63/17 64/1 70/8 70/19 73/2 74/1 74/18 74/22 75/3 75/23 78/2 88/7 88/24 92/8 102/16 103/13 106/1 113/17 114/7 114/10 116/24 118/12 118/12 119/19 121/6 121/11 122/24 123/2 128/22 136/14 137/10 137/12 137/19 137/24 140/1 140/10 140/17 145/25 147/21	54/3 137/13 non [1] 90/6 non-infringement [1] 90/6 none [4] 5/12 54/4 60/6 71/24 not [192] note [3] 18/4 44/8 74/7 noted [4] 69/11 87/23 91/7 144/11 nothing [10] 18/17 27/19 27/23 63/11 77/4 78/7 78/15 80/7 81/4 116/3 noticed [1] 101/21 noticing [1] 8/7 November [1] 113/6 November 17 [1] 113/6 now [29] 7/11 21/20 27/16 32/22 45/24 46/2 46/18 47/3 49/13 49/14 55/12 59/13 60/3 70/10 75/21 77/18 78/2 81/15 87/16 90/3 90/8 90/10 91/15 95/20 99/15 102/19 123/24 138/3 139/25 number [3] 20/18 20/20 122/8 numerous [1] 83/21 Nvidia [3] 48/4 48/9 48/13 NW [1] 3/6	Oaks [1] 9/10 oath [1] 8/18 object [12] 14/23 19/12 21/10 67/9 72/2 85/17 92/18 104/22 105/20 125/13 141/14 141/14 objecting [2] 94/8 94/24 objection [238] objectionable [2] 86/22 88/8 objections [17] 11/18 18/14 18/15 19/5 19/11 19/12 19/14 20/7 27/8 41/2 85/12 86/15 86/18 86/19 86/23 105/3 127/15 obligation [3] 12/8 12/15 12/19 obliged [1] 11/18 obstructing [2] 86/24 105/24 obtained [1] 137/3 obviously [4] 44/19 46/17 95/6 109/19 occasions [1] 29/24 occur [1] 120/11 occurring [1] 65/21 occurs [2] 88/21 115/24 off [20] 7/9 8/4 27/7 41/6 41/8 67/13 67/16 83/4

O	99/15 116/7 120/6	107/5 107/18
off... [12] 86/2	122/4 122/11	108/20 109/6
86/4 96/7 96/9	124/6 125/6 126/2	110/16 112/12
122/13 122/15	133/3 133/7 134/4	112/21 113/16
130/22 130/24	142/14	114/5 115/1 117/6
137/9 142/2 142/6	ones [2] 40/25	119/5 121/10
143/13	52/6	123/9 123/20
offer [2] 86/9	only [30] 5/6 5/7	124/20 125/3
102/23	5/8 5/13 5/18	126/8 128/18
offhand [1] 25/25	5/22 5/24 7/25	129/25 130/1
office [3] 12/14	18/10 19/9 19/10	130/4 130/6
12/16 12/19	31/23 40/24 41/18	139/13 139/21
official [1] 7/25	42/13 44/10 69/24	140/8 140/16
Oh [6] 9/6 54/25	70/3 76/24 77/22	140/23 141/17
54/25 67/10 68/19	78/1 79/22 79/25	ordered [2] 71/17
121/24	80/2 80/4 80/5	106/2
okay [46] 10/11	82/6 85/1 136/11	original [2]
11/6 11/13 11/21	136/12	102/9 145/13
17/16 23/15 23/20	open [1] 142/13	other [36] 6/10
32/9 32/22 35/21	operative [1]	7/2 16/8 17/14
36/20 38/21 43/5	13/25	17/16 19/2 21/6
45/5 45/13 45/17	opinion [6] 28/23	22/4 25/9 26/7
45/21 47/18 49/4	42/4 44/18 128/22	26/9 27/4 28/17
51/24 63/19 65/15	129/5 133/22	28/18 28/22 36/6
65/15 65/15 65/16	optimizing [1]	46/20 49/19 51/2
65/16 68/24 69/7	39/17	58/18 61/6 69/7
72/13 74/25 82/1	order [72] 5/15	84/10 86/25 90/8
84/8 87/3 89/24	13/4 14/11 14/15	90/22 106/5
91/11 93/17	17/18 17/25 20/2	115/17 118/4
101/11 101/15	26/15 26/23 37/9	125/2 132/10
102/14 103/7	68/2 68/18 71/17	132/15 132/22
111/6 118/9	72/22 73/20 76/17	135/4 142/12
127/13 130/11	76/22 77/4 77/8	143/7
142/15 142/21	77/21 79/14 79/23	others [3] 25/6
one [31] 10/9	80/2 80/21 81/9	110/8 132/17
21/13 24/7 31/8	81/24 82/5 82/20	Otherwise [2]
31/9 32/4 32/19	83/8 83/19 84/16	64/11 136/14
32/22 33/8 34/12	84/24 85/7 85/10	our [6] 51/17
51/5 56/17 56/22	85/20 86/1 87/6	108/14 112/23
58/5 59/11 68/4	89/14 90/20 93/3	121/1 127/16
69/6 79/22 82/13	95/1 104/25 106/9	142/22

O	owner [2] 14/7 15/1 ownership [2] 17/13 17/21 ownerships [1] 17/10 owns [3] 16/2 17/6 19/18	Page 26 [3] 111/22 111/24 111/25 Page 3 [1] 65/11 Page 36 [1] 112/3 Page 4 [3] 65/6 65/12 69/9 paid [1] 110/18 paper [15] 70/15 75/6 104/11 104/19 106/5 106/12 106/16 107/2 107/15 111/15 112/8 113/13 115/5 119/10 123/4 papers [6] 24/19 24/23 27/21 101/22 134/21 136/8 paragraph [28] 24/15 24/16 31/3 31/5 33/12 33/14 36/7 38/21 41/1 43/22 44/8 46/17 47/9 49/10 49/16 49/23 54/21 64/10 65/13 69/2 69/4 69/9 70/2 87/20 87/21 91/3 96/16 98/16 Paragraph 10 [8] 65/13 69/2 69/4 69/9 70/2 91/3 96/16 98/16 Paragraph 3 [2] 31/3 31/5 Paragraph 5 [2] 24/15 24/16 Paragraph 6 [2] 33/12 33/14
out [21] 7/1 32/6 33/5 33/10 36/13 50/25 51/9 54/10 56/20 58/16 59/4 60/16 60/20 61/5 64/12 68/4 78/3 78/5 109/11 119/11 139/23 outcome [1] 18/22 outside [51] 13/2 14/8 19/13 20/2 26/22 37/8 68/1 72/20 73/18 76/15 79/5 79/12 80/19 81/8 81/22 82/17 83/17 84/14 85/25 87/6 87/14 90/21 104/23 105/8 106/8 106/18 107/4 107/17 108/19 109/5 110/15 112/11 112/20 113/15 114/3 114/24 117/5 119/5 121/9 121/9 123/8 123/18 124/19 126/7 139/12 139/20 139/20 140/7 140/15 140/22 141/15 over [14] 24/19 25/12 25/14 44/17 46/5 49/8 60/1 72/1 74/1 78/17 123/1 135/25 136/6 138/23 own [7] 15/8 15/14 15/19 16/13 16/20 17/16 61/9	P P.C [1] 3/10 p.m [16] 2/16 41/7 41/10 67/15 86/3 86/6 96/8 96/11 122/14 122/17 130/23 131/1 142/5 142/8 143/12 143/15 packages [7] 38/25 116/2 116/3 118/23 119/10 121/3 121/14 page [35] 4/3 4/8 9/24 23/6 65/6 65/11 65/12 68/18 68/18 69/9 102/14 111/22 111/24 111/25 112/3 118/11 118/12 146/8 146/10 146/12 146/14 146/16 146/18 146/20 146/22 146/24 147/1 147/3 147/5 147/7 147/9 147/11 147/13 147/15 147/17 Page 1 [1] 23/6 Page 16 [1] 102/14	

P	91/8 91/12 92/3	118/4 132/22
part [9] 12/14	92/10 92/25 93/9	133/6 133/10
15/8 24/8 33/17	93/19 93/24 94/6	133/15 135/5
58/24 73/22 73/23	94/17 95/22 95/25	135/16 135/17
90/9 132/9	96/21 97/14 97/18	135/18 135/19
participants [1]	98/3 99/4 99/7	135/20 136/3
116/21	103/18 105/13	per [3] 40/12
particular [7]	120/19 120/20	83/8 85/10
35/16 37/13 44/9	121/2 121/7	percent [4] 16/14
56/9 82/4 137/16	123/16 124/17	16/20 17/5 31/25
137/16	126/5 126/15	percentage [8]
parties [2] 5/3	127/9 127/20	15/14 15/19 16/1
6/5	128/12 128/23	17/6 19/24 20/8
Partly [1] 25/4	129/6 129/17	20/25 21/16
Parts [1] 84/17	130/13 130/18	performing [2]
party [1] 145/19	131/5 131/6 131/8	36/25 38/6
past [1] 103/10	131/8 131/13	period [1] 105/12
patent [127] 4/9	131/14 131/18	perjury [1]
4/11 9/17 9/19	131/18 136/25	144/10
10/11 10/14 10/18	137/1 137/3 137/3	person [1] 136/11
12/14 12/14 12/16	137/14 138/13	personal [5] 9/4
12/19 12/24 13/21	138/18 138/18	9/7 12/3 92/23
25/2 30/6 61/20	140/20 141/11	132/20
62/13 62/22 67/1	141/22 143/3	personally [2]
67/24 68/10 69/13	143/8	77/3 133/10
69/17 70/4 70/16	patents [2] 10/9	perspective [5]
70/23 71/11 71/15	77/10	58/14 59/2 61/10
71/21 71/23 73/24	PATRICIA [4] 1/19	76/2 132/19
76/13 77/1 77/19	2/17 145/1 145/24	pertains [1]
77/25 78/4 78/8	PATRICIA Y.	145/12
78/14 78/16 78/20	SCHULER [1] 2/17	Ph.D [1] 31/24
79/4 79/9 79/19	pay [2] 110/13	phased [1] 41/19
79/20 80/1 80/7	110/21	PhD [1] 33/17
80/9 80/16 81/2	PDF [1] 111/24	phone [2] 6/9
81/5 81/19 82/2	penalty [1] 144/9	136/7
82/3 82/8 82/14	pending [1] 7/16	phrase [15] 43/16
83/5 83/10 83/14	Pennsylvania [1]	44/5 47/16 48/14
84/6 84/10 84/12	3/6	48/21 55/20 55/23
84/25 87/24 88/2	people [19] 17/16	56/3 56/12 56/23
88/15 88/25 89/8	25/9 25/13 28/17	57/5 57/20 58/4
89/17 89/25 90/13	28/22 30/22 53/5	58/7 143/5

P	66/20 67/22 68/11	111/15 116/11
piece [2] 125/6	83/13 93/3 102/10	presentation [23]
126/2	111/13 114/7	112/8 112/25
pitch [1] 76/7	116/6 125/18	113/12 113/23
place [4] 7/19	133/15	113/25 114/21
8/3 51/19 145/5	pointed [1] 68/4	115/4 115/5
plaintiff [9] 1/7	portion [2] 23/23	115/12 115/16
2/7 3/2 7/16 8/13	99/24	115/17 116/1
14/2 15/1 17/21	portray [3] 72/18	118/1 118/20
85/21	73/15 84/11	118/21 118/22
plaintiff's [1]	pose [1] 86/14	119/2 119/8
5/25	position [4] 5/6	119/16 119/22
players [18]	6/17 85/17 142/22	120/12 120/24
40/13 40/14 40/22	possession [4]	121/6
40/24 44/14 44/15	36/9 36/12 36/15	presentations [4]
44/16 45/3 52/7	36/16	109/12 113/20
53/19 54/7 54/12	possible [5]	114/9 136/9
56/18 56/19 58/18	42/22 79/1 84/8	presented [3]
58/18 58/20 58/22	116/13 131/20	116/8 117/25
please [37] 8/5	possibly [3]	118/17
8/25 9/24 10/4	65/25 66/2 66/6	Presumably [1]
13/17 18/15 19/4	potentially [9]	111/8
19/12 19/16 24/2	61/22 82/20 82/22	previous [1]
24/15 62/20 65/6	83/19 83/21 84/16	97/23
65/11 65/13 65/14	123/21 124/20	previously [1]
65/14 65/17 68/11	126/18	116/12
68/14 68/23 68/25	PowerPoint [1]	primarily [1]
69/1 75/14 85/19	114/1	131/4
87/17 94/11 96/5	PowerPoints [1]	printed [1]
99/25 100/7 100/9	114/7	139/23
100/21 100/22	practically [1]	prior [7] 12/21
100/25 101/2	109/14	12/25 72/9 105/23
101/4 104/13	prefer [1] 9/11	121/1 143/7 145/7
PLLC [1] 3/3	premises [1]	privilege [25]
plus [2] 90/7	39/20	11/19 14/24 15/11
129/22	preparation [1]	15/17 21/11 21/19
point [24] 7/1	95/14	27/9 66/13 66/23
39/3 40/3 62/11	prepared [6]	67/11 71/12 71/25
62/19 62/20 63/1	19/22 27/1 83/1	71/25 88/4 93/16
63/3 64/4 64/10	89/13 90/23 90/25	93/21 94/9 97/20
66/2 66/11 66/15	present [2]	98/5 125/14

P		
privilege... [5] 126/25 127/21 128/15 129/9 130/16	41/19 42/13 47/3 50/2 51/7 51/7 53/20 54/3 54/11 54/17 55/10 58/22 60/16	provided [3] 71/2 107/21 108/15
privileged [67] 14/25 15/4 15/5 15/19 15/22 20/4 20/10 61/23 61/24 61/25 62/7 62/16 62/24 66/14 68/3 69/19 69/22 70/5 72/7 72/10 76/15 77/6 78/24 78/25 80/23 82/21 83/20 84/17 88/9 88/11 89/2 89/10 89/20 90/2 90/15 90/18 90/22 91/5 91/13 91/24 92/12 92/21 93/2 93/11 93/18 94/6 94/19 96/22 98/19 99/9 120/22 123/21 124/20 125/11 125/22 126/9 126/19 127/23 129/1 129/21 130/13 136/19 138/15 138/25 140/23 141/13 141/24	proceed [2] 19/15 87/17 proceedings [4] 145/4 145/6 145/8 145/14 process [4] 90/9 91/16 137/4 138/8 product [2] 35/9 35/17 products [5] 39/17 45/23 46/15 46/23 47/2 professor [6] 9/12 31/6 31/19 31/22 132/12 134/1 professors [7] 26/7 32/5 32/10 32/20 32/23 33/7 33/8 projector [1] 114/15 prominent [1] 131/23 propagate [1] 128/13 properly [5] 5/5 90/21 128/2 128/18 130/6 proprietary [2] 36/4 54/6 protective [1] 5/15 provide [6] 11/10 35/4 69/22 74/11 74/13 95/5	provides [2] 31/18 33/4 public [2] 6/4 61/15 publication [3] 27/12 105/2 105/17 publications [2] 12/25 109/17 publicly [1] 61/2 published [2] 119/25 120/2 publishes [1] 54/3 pull [8] 9/22 13/10 23/5 70/15 87/19 104/3 111/21 121/21 pure [2] 53/10 61/7 purpose [1] 71/16 put [6] 73/9 75/22 80/22 87/7 99/16 104/4 puts [1] 27/11
probably [3] 27/5 51/8 128/8		Q
problem [18] 46/1 49/15 49/18 54/4 54/13 55/4 56/21 57/14 58/16 58/17 59/4 59/5 59/18 59/19 61/3 61/12 110/9 125/17		Qualcomm [1] 56/2 qualify [1] 47/15 quantification [3] 136/23 137/10 138/6 quantified [1] 132/6 quarters [1] 76/6 question [104] 13/2 13/3 13/8 14/16 14/18 15/9 16/6 16/11 18/7
problems [13]		

Q	17/21 26/13 55/12 78/5 123/23	146/12 146/14 146/16 146/18 146/20 146/22 146/24 147/1 147/3 147/5 147/7 147/9 147/11 147/13 147/15 147/17
question... [95]	questions [33]	reasons [4] 6/10 88/16 92/4 99/1
18/18 18/25 21/15	17/24 18/12 19/2	recall [25] 19/22
21/21 22/3 27/10	19/15 27/1 27/2	25/13 25/14 25/24
28/2 30/13 42/24	29/25 72/5 75/14	48/25 49/1 68/8
43/20 44/3 51/4	75/17 76/24 77/2	106/4 106/11
55/15 55/16 57/18	77/9 77/17 77/22	106/14 106/23
65/17 67/9 71/14	78/1 79/21 80/3	107/1 110/17
72/12 72/21 73/10	82/11 85/1 85/3	111/17 111/18
73/25 74/22 77/14	85/24 86/11 86/14	114/6 115/25
77/16 78/2 80/19	86/18 86/22 87/5	116/6 118/20
80/22 80/25 81/11	87/13 94/24	120/15 121/17
82/6 82/17 82/19	105/15 128/7	134/8 135/2
83/2 83/3 83/17	142/12 143/1	141/18 141/21
84/10 84/14 84/18	quickly [2] 24/1	receive [1] 5/19
84/22 85/9 85/16	103/10	receiving [1]
85/18 88/8 89/5	quite [2] 15/22	31/23
89/14 90/21 90/25	105/10	recent [2] 101/23
92/14 92/20 93/5	R	101/24
93/7 93/13 93/15	raise [2] 7/5 7/6	Recess [8] 7/10
94/8 94/22 95/1	raised [1] 17/22	41/9 67/17 86/5
95/9 95/12 95/15	ranging [1] 87/10	96/10 122/16
95/23 96/4 97/8	read [17] 25/6	130/25 142/7
97/11 98/12 98/24	25/10 26/19 27/3	recognize [5]
100/4 104/22	27/17 28/23 29/3	10/3 10/6 13/14
105/12 112/14	33/3 58/24 64/23	23/7 99/23
114/3 121/23	76/22 77/4 77/8	recollection [4]
121/25 122/3	84/24 122/12	24/11 102/12
123/18 124/4	130/1 144/10	108/13 113/9
124/25 125/4	reader [1] 33/5	record [38] 7/9
125/8 125/14	reading [2] 42/11	7/12 8/4 9/1 9/8
125/18 126/9	103/9	18/15 41/6 41/8
127/2 127/12	really [1] 26/25	41/11 67/14 67/16
128/2 128/18	reason [28] 6/11	
130/2 137/5 137/7	11/14 11/21 58/11	
137/18 138/4	79/25 129/24	
139/3 140/4 141/1	130/5 136/12	
141/15	136/14 146/5	
questioned [2]	146/8 146/10	
85/8 85/22		
questioning [5]		

R	73/8 75/10 77/13 77/15 85/2	113/4 113/14 114/3 114/24
record... [27] 67/19 74/7 86/2 86/4 86/7 87/1 93/6 96/7 96/9 96/12 105/2 105/17 122/13 122/15 122/18 128/8 130/22 130/24 131/2 142/2 142/6 142/9 142/22 143/13 145/8 145/11 146/5	regard [2] 30/4 45/9 regarding [3] 5/21 109/2 125/19 regards [5] 16/7 42/14 42/16 77/23 88/20 reiterate [1] 43/20 relate [4] 24/23 80/15 84/9 103/17 related [9] 27/2 43/2 76/25 85/3 97/14 119/2 119/9 139/9 143/7 relates [3] 74/10 80/12 80/22 relative [1] 145/18 relevance [87] 13/1 17/3 19/13 19/19 20/1 22/9 25/11 26/17 26/21 37/7 39/13 40/17 48/17 48/24 59/6 59/9 60/11 67/25 72/19 73/18 75/2 76/4 79/12 80/18 81/22 82/16 83/16 84/13 97/20 98/5 98/18 99/9 103/20 104/22 105/3 106/7 106/17 107/3 107/16 108/10 108/18 109/4 109/10 110/14 111/2 111/11 111/16 112/10 112/19	116/22 117/4 117/13 119/4 119/23 120/4 120/13 121/9 123/7 123/17 124/8 124/18 125/14 126/7 126/17 126/24 127/10 128/14 129/8 130/16 132/25 133/20 133/23 134/16 134/24 135/8 136/18 138/14 139/11 139/19 140/14 140/21 141/15 141/25 relevant [21] 12/25 15/23 18/20 26/13 27/5 35/4 50/15 73/7 73/9 81/8 81/14 81/18 82/19 83/14 84/3 85/10 90/8 106/5 131/16 131/25 135/1 relief [1] 5/20 relies [1] 85/21 rely [1] 87/8 remember [1] 90/23 reorient [1] 122/1 repeat [3] 65/17 79/15 82/2 rephrase [1] 112/14 REPORTED [1] 1/19 reporter [3] 2/18
recording [2] 8/1 8/2 recovery [5] 19/25 20/8 20/17 20/25 21/17 refer [3] 10/18 14/4 142/24 reference [2] 6/6 71/21 referenced [1] 71/23 referred [1] 16/25 referring [10] 30/6 30/12 30/15 42/13 42/23 43/3 43/21 61/18 66/12 66/18 refers [5] 33/21 36/21 44/8 89/22 126/15 reflects [2] 102/9 123/15 refuse [1] 82/10 refused [1] 22/4 refusing [8] 20/24 38/11 73/6		

R	results [2] 113/22 114/12	88/16 92/4 96/25
reporter... [2] 70/14 145/2	resume [1] 101/19	97/4 98/7 99/1
Reporting [1] 7/23	returned [1] 123/25	99/11 99/14 110/7
represent [2] 8/6 23/16	reveal [2] 15/11 127/23	113/7 118/12
representatives [1] 53/13	revealing [1] 78/25	126/11 128/16
representing [1] 8/15	reverse [2] 68/18 68/20	129/22
reproduce [1] 29/13	review [4] 5/19 64/24 100/8 145/15	samples [7] 36/17 54/13 107/22
reproduced [1] 29/14	reviewed [2] 6/8 90/4	108/5 108/15
reputation [1] 109/12	ribbon [1] 76/9	110/3 111/4
requested [2] 75/12 145/16	right [22] 18/13 22/1 22/2 46/20 51/19 61/9 65/16 67/13 70/20 70/20 71/1 77/18 78/2 81/15 87/16 90/8 90/10 95/20 101/15 103/2 105/22 139/25	Samsung [11] 41/15 41/20 42/3 42/4 42/19 43/11 45/6 45/13 46/2 47/5 47/19
requests [1] 87/11	rough [2] 5/19 7/4	SAN [2] 4/19 7/24
require [1] 131/18	rules [1] 88/19	San Diego [1] 7/24
research [6] 24/17 27/22 29/17 38/18 106/5 119/10	ruling [1] 106/19	sanctions [1] 143/10
researchers [5] 28/18 109/18 110/7 132/10 135/1	S	sat [1] 117/25
reserve [1] 22/2	said [10] 6/12 32/4 32/19 43/25 60/19 67/24 79/23 86/11 129/3 135/12	say [25] 6/16 26/16 28/14 29/19 30/5 31/8 31/9 33/7 38/16 42/10 46/8 46/25 47/8 47/17 48/12 49/16 49/24 50/7 54/25 94/16 113/19 119/1 128/20 130/11 132/15
resolve [1] 7/2	same [24] 12/7 12/10 16/17 29/17 49/2 56/14 57/7 60/4 85/16 86/11	saying [14] 29/20 32/22 46/21 51/5 58/14 66/24 90/17 94/4 94/7 94/23 94/25 94/25 95/3 137/11
responsive [2] 57/17 60/7		says [20] 13/20 51/15 51/19 51/20 60/21 62/11 64/16 64/18 69/11 78/12
restrain [1] 106/2		
restriction [1] 117/17		
restrictions [1] 116/21		

S	70/12	41/16 41/17 41/21
says... [10]	screen [7] 10/1	42/5 42/9 42/12
79/17 89/16 89/21	13/16 70/22 99/21	42/20 43/11 43/16
91/6 91/6 92/5	101/14 102/19	43/17 43/25 44/6
92/6 138/19	103/13	44/18 44/20 44/24
138/19 138/19	scroll [14] 9/24	45/6 45/14 46/8
schematic [1]	23/12 23/13 23/18	46/13 46/21 47/5
76/8	33/12 65/1 65/3	47/6 47/7 47/14
SCHULER [4] 1/19	65/4 68/13 70/17	47/15 47/19 47/24
2/17 145/1 145/24	100/1 100/20	48/4 48/14 48/20
scope [66] 13/2	101/8 118/9	48/21 49/5 49/17
14/9 14/15 19/13	scrolled [1]	49/25 50/3 50/8
20/2 26/22 37/8	104/15	50/14 51/2 51/6
68/1 70/8 72/6	second [6] 4/10	51/16 53/23 54/16
72/9 72/9 72/20	13/20 23/6 84/23	55/2 55/9 55/19
73/18 76/16 79/5	128/9 142/14	55/22 56/2 56/8
79/12 79/22 80/19	secondly [1] 97/9	56/11 56/23 57/4
81/1 81/8 81/22	secured [1] 23/1	57/19 58/3 58/6
82/4 82/17 83/9	see [27] 5/12	58/12 58/13 59/12
83/17 84/14 84/23	9/25 10/5 13/12	59/16 59/17 59/22
85/25 87/6 87/14	19/2 24/21 31/4	60/9 60/15 60/20
104/23 105/7	33/13 39/1 39/11	60/25 109/15
105/8 106/8	65/13 70/22 71/4	109/23 120/8
106/18 107/4	87/22 96/17 98/1	semiconductors [2]
107/17 108/19	98/23 99/20	43/10 109/19
109/5 110/15	102/19 103/12	sending [1] 36/16
112/11 112/20	103/25 104/8	sense [8] 29/16
113/15 114/3	112/5 115/7	34/19 35/8 43/9
114/25 115/4	116/14 118/15	43/15 46/16
117/5 119/5	121/19	125/17 137/7
121/10 123/8	seek [2] 5/20	sent [4] 5/12
123/18 124/19	54/10	54/12 110/3 111/3
124/21 125/11	seen [3] 13/22	sentence [31]
126/7 129/23	32/16 134/20	24/21 31/4 31/11
130/2 132/8	sell [2] 35/3	31/21 31/25 32/25
139/12 139/20	35/15	33/21 38/22 39/1
139/21 140/8	selling [1] 35/9	51/11 51/25 68/5
140/15 140/22	semiconductor [76]	68/7 68/12 69/4
141/16	38/23 39/5 39/11	69/8 69/8 69/16
scratch [5] 42/3	39/24 40/10 40/16	69/24 70/2 70/3
52/10 53/2 55/20	40/20 40/20 40/25	87/22 91/2 91/9

S	102/12 107/7	solved [8] 49/15
sentence... [7]	show [3] 11/11	49/18 51/8 53/20
95/17 96/15 96/17	23/9 114/21	54/13 58/22 61/2
98/14 98/16 98/25	shows [1] 76/5	61/12
110/4	sick [1] 11/24	solving [1] 57/15
sentiment [2]	signed [3] 51/12	some [45] 7/2
31/18 33/4	73/19 123/19	11/14 22/25 24/23
separate [3]	significant [2]	33/23 36/6 38/16
77/19 77/20 77/20	135/6 135/11	38/17 40/4 40/4
served [2] 23/17	silicon [1] 121/3	44/16 45/25 46/15
82/18	silicone [1] 76/9	47/1 48/2 49/17
services [4]	similar [1] 49/21	50/3 51/2 52/7
36/25 37/6 38/7	simulation [2]	53/19 54/7 58/18
38/13	133/12 133/13	58/21 59/17 60/15
session [1]	since [9] 14/14	60/19 61/7 61/13
116/11	45/17 65/21 66/3	66/7 74/11 74/12
set [1] 145/5	77/23 84/8 93/13	83/13 94/24 95/3
setup [7] 71/8	136/23 142/10	101/13 101/21
72/18 73/16 74/1	single [1] 130/2	101/22 102/9
74/1 74/16 74/20	sir [2] 32/19	111/12 111/18
several [4] 21/6	91/22	113/9 115/17
29/24 35/24	sit [4] 90/3 95/9	124/9 132/20
132/10	97/9 135/2	137/7
share [4] 6/11	sitting [2] 84/3	somebody [4]
7/4 19/18 118/3	90/7	27/24 54/23 59/14
shared [1] 6/2	six [1] 60/3	134/9
sharing [1] 6/14	SK [4] 1/8 2/8	somehow [1] 84/9
she [9] 29/8 29/9	56/11 56/22	someone's [1]
29/12 29/14 29/16	sleep [1] 12/1	118/1
29/19 29/21 29/24	SMITH [3] 3/10	someplace [1]
30/1	8/9 8/11	120/6
she's [1] 28/14	so [224]	something [14]
SHEET [1] 146/1	Society [1]	42/10 58/15 59/2
Sherman [1] 9/9	112/22	62/19 63/5 63/12
short [2] 67/11	sold [2] 34/2	63/20 64/5 64/18
115/4	34/13	66/16 67/4 91/16
shorthand [3]	solve [12] 46/1	127/4 130/19
2/17 145/2 145/9	47/3 50/1 54/17	Sometimes [1]
should [8] 9/12	55/3 55/10 56/21	35/3
14/16 18/18 33/5	58/17 59/4 59/18	sorry [3] 18/2
70/18 75/16	59/19 60/16	111/24 112/3

S	specific [10]	starting [2] 8/6
sort [1] 80/3	40/7 43/7 44/18	125/18
Sottos [12] 26/20	57/24 64/10 73/25	state [5] 8/6
27/17 28/5 28/24	82/5 110/9 116/7	8/25 9/7 144/17
30/4 30/23 132/12	138/5	145/2
134/1 135/4	specifically [2]	stated [3] 5/23
135/11 136/11	77/9 105/6	60/3 96/25
136/15	speculation [31]	statement [14]
sought [8] 50/25	25/23 28/13 29/1	40/8 40/11 60/17
51/9 56/20 58/16	29/7 42/7 52/14	66/25 68/5 68/9
59/4 60/16 60/20	52/24 53/9 53/10	80/5 80/7 98/20
109/11	61/7 63/7 63/22	135/10 136/21
source [1] 73/3	64/8 64/21 65/23	136/22 137/6
South [3] 2/14	69/19 71/10 72/23	142/22
3/13 7/20	107/19 108/11	statements [1]
space [1] 85/13	109/6 116/23	105/16
spall [1] 137/9	117/21 118/6	STATES [10] 1/1
spallation [43]	120/14 124/1	2/1 4/9 7/17 31/7
1/6 2/6 7/15 14/3	124/23 131/25	31/20 31/23 32/7
24/24 25/1 25/7	133/1 133/24	32/11 137/2
25/10 25/18 25/21	134/17	stating [1] 60/4
26/4 26/11 27/14	spent [1] 110/19	Stay [1] 23/6
27/23 28/11 28/18	spirit [3] 45/18	Staying [1] 38/21
29/23 30/4 30/14	46/4 49/10	still [6] 6/3
30/16 34/7 54/24	spoke [1] 6/7	11/18 27/9 34/18
71/8 72/18 73/16	sponsored [1]	96/17 123/3
74/1 74/5 74/5	112/23	stop [5] 18/16
74/16 124/15	staff [2] 57/12	19/4 19/12 85/12
131/6 131/23	57/15	100/22
132/6 132/24	stage [3] 83/1	Street [2] 7/23
134/13 136/17	83/25 84/3	9/9
136/22 137/6	stakeholders [1]	strength [1]
137/8 137/22	16/8	116/5
138/5 138/9 146/2	stand [1] 94/1	stress [13] 4/16
speak [2] 6/19	standing [2]	103/13 114/22
22/12	32/24 86/9	115/9 116/4
speaking [10]	standpoint [2]	118/25 119/2
16/5 18/14 19/4	74/23 75/1	121/13 123/6
19/11 22/17 22/22	start [1] 65/7	128/13 134/3
85/12 86/23	started [2] 19/10	134/11 138/7
127/14 134/7	33/16	stresses [1]

S	supplied [1] 108/4	121/16 122/20
stresses... [1] 136/23	suppose [1] 59/13	talking [6] 48/7
strike [1] 73/22	sure [15] 14/15	57/13 69/5 69/8
student [2] 30/22	22/21 23/2 26/1	87/23 96/15
57/14	49/22 56/5 59/1	talks [2] 70/3
student's [1]	65/6 100/1 100/10	105/1
101/20	102/8 103/3	taught [1] 34/22
students [7]	104/16 119/14	technical [5]
57/12 57/15	121/21	74/20 74/23 74/25
132/13 134/5	sworn [1] 145/7	76/2 126/1
134/7 135/24	symposium [1]	technically [1]
135/25	115/21	84/23
stuff [1] 6/12	symposiums [1]	technique [31]
subject [3] 25/1	115/20	29/9 29/11 29/15
143/9 147/19	systems [2]	29/22 29/25 30/1
submit [2] 12/13	139/23 140/1	30/4 30/5 30/6
71/18		30/12 30/14 30/16
submitted [7]	T	33/16 34/7 38/22
24/8 77/24 79/24	Tab [6] 9/22	39/4 39/12 44/13
80/20 83/18 84/15	13/10 23/5 99/17	45/3 45/6 46/1
85/7	104/4 111/21	46/4 51/15 53/14
subscribed [1]	Tab 11 [1] 104/4	54/24 107/21
145/22	Tab 5 [1] 23/5	110/2 120/19
substance [9]	Tab 7 [1] 99/17	132/6 132/14
17/20 71/20 76/25	Tab 8 [1] 9/22	138/9
77/16 85/9 85/22	take [13] 8/2	TECHNOLOGIES [5]
87/12 105/7 116/1	11/14 17/19 61/5	1/6 2/6 7/15 14/3
substantial [1]	64/22 67/11 87/9	146/2
119/9	87/16 99/16 99/25	technology [30]
suggest [1] 75/15	100/7 104/13	36/18 42/11 42/15
SUGHRUE [3] 3/3	104/14	46/10 46/18 46/22
8/13 8/14	taken [11] 2/13	47/3 49/11 50/9
sughrue.com [1]	7/10 7/14 41/9	50/15 53/17 56/9
3/8	67/17 86/5 96/10	58/13 59/23 60/9
suit [3] 7/24	122/16 130/25	114/11 120/25
71/15 73/24	142/7 145/4	121/1 121/7 132/8
Suite [3] 2/15	taking [3] 7/19	132/9 132/16
3/14 7/20	18/4 85/13	132/24 133/8
Suite 2900 [2]	talk [5] 53/14	133/9 133/16
2/15 7/20	115/18 115/19	133/19 134/13
		134/15 137/1

T	41/24 45/16 46/12	68/21 70/7 70/8
television [1]	49/7 50/12 50/19	72/15 75/22 77/2
136/1	50/22 52/4 54/1	77/10 78/14 86/16
tell [19] 12/21	54/19 58/25 59/25	87/15 91/8 95/7
16/19 37/20 37/25	60/13 63/14 78/11	95/17 101/12
38/11 49/9 52/16	78/22 79/11 80/18	107/8 110/10
72/24 73/2 75/9	81/7 81/21 83/16	125/16 129/3
76/3 81/15 81/17	85/6 89/10 89/19	129/24 130/4
100/11 123/11	90/15 94/19 94/23	137/1 137/7 138/2
124/15 127/6	97/20 99/9 114/19	138/9 138/18
127/8 127/18	114/24 121/5	their [29] 26/1
telling [3] 46/19	121/9 129/1	39/20 45/23 46/1
58/10 95/4	129/20 130/14	46/15 47/2 49/14
tenure [6] 31/6	130/16 135/8	49/15 53/14 53/20
31/20 31/22 32/11	138/1 144/13	54/10 54/17 55/3
32/20 32/23	145/11	55/10 56/6 56/20
term [7] 39/15	testing [12]	58/22 59/19 60/16
45/19 74/21 127/8	57/24 108/17	61/9 97/7 108/13
129/11 129/16	110/19 110/21	109/23 118/23
133/3	111/1 114/11	119/10 121/3
terms [4] 125/20	116/5 118/24	132/11 132/12
128/23 129/6	119/9 119/11	134/12
130/12	119/13 121/2	them [25] 6/15
test [2] 35/16	Texas [4] 40/19	12/21 31/8 36/5
108/8	58/18 109/18	36/18 38/6 39/25
tested [3] 36/14	135/19	42/15 47/2 50/3
107/22 111/4	text [1] 101/14	54/11 54/12 54/17
testified [3]	than [6] 16/13	55/10 60/22 86/14
8/19 18/24 122/10	16/20 85/13	94/25 106/23
testify [4] 11/22	132/23 135/4	110/25 111/4
75/15 75/19	142/11	111/10 122/23
117/16	thank [10] 7/7	123/1 132/11
testifying [2]	9/15 10/21 12/23	136/6
12/7 145/7	41/14 65/11 65/13	themselves [1]
testimony [59]	100/15 100/18	34/23
12/7 21/3 22/14	143/11	then [22] 17/12
22/15 29/1 30/8	that [407]	22/25 27/21 29/14
31/14 32/3 32/13	that's [35] 10/9	29/23 29/24 30/1
32/18 33/2 34/15	13/4 15/5 17/8	35/18 42/12 48/6
34/25 35/11 38/15	20/14 30/3 41/4	51/1 54/25 59/14
39/7 40/2 41/3	60/17 67/2 67/3	71/19 74/17 76/9

T		
then... [6] 84/2	133/6 133/15	42/13 45/10 46/6
115/21 132/6	134/9 135/14	46/22 46/23 47/1
133/10 142/4	135/17 135/18	47/14 47/21 48/2
142/16	135/19 135/20	49/4 49/5 49/14
there [106] 5/6	135/22 136/2	49/21 50/1 50/4
5/14 6/10 6/14	136/14 137/9	50/25 51/7 51/7
6/23 11/21 17/11	138/4	51/8 51/23 52/6
17/11 24/12 25/13	there's [26] 5/8	53/11 53/14 53/15
25/20 25/25 26/3	16/8 18/10 18/17	53/16 54/3 54/8
26/9 30/21 33/7	21/4 33/6 64/11	54/12 55/3 56/5
33/8 33/23 34/2	66/25 74/1 76/7	56/8 56/9 56/20
35/8 40/3 40/7	76/7 76/8 76/9	57/10 57/12 57/23
40/8 44/13 44/17	76/9 78/15 86/21	58/2 58/3 58/4
46/5 46/21 49/13	89/21 101/13	58/16 58/19 58/22
49/17 49/19 51/17	111/6 113/9	59/4 59/13 61/1
52/9 52/11 53/10	114/10 116/16	61/2 61/7 61/11
53/12 53/19 54/2	120/5 125/18	61/15 63/9 64/1
55/1 56/7 58/15	126/14 142/11	64/12 67/3 82/11
59/3 59/13 59/17	thereafter [1]	107/20 107/21
61/5 61/8 61/10	145/9	108/14 108/14
62/11 63/11 64/17	therefore [6]	109/11 109/18
66/7 67/2 68/8	14/20 16/3 46/3	110/1 110/2 110/8
68/9 69/7 69/15	109/21 115/25	110/8 110/9
70/7 70/12 70/20	125/20	110/10 110/18
77/4 78/13 79/18	these [26] 24/18	110/21 111/3
80/2 80/5 81/12	36/8 38/7 38/12	111/8 115/21
83/25 84/21 90/4	39/19 41/19 45/3	115/22 132/13
98/20 98/23	45/25 47/3 56/18	133/11 133/12
100/22 101/21	57/11 57/12 57/15	133/12 135/15
101/22 102/10	77/2 78/1 85/12	135/22 135/23
103/25 104/1	86/18 107/11	136/2 136/3 136/9
107/7 109/25	109/25 110/1	they're [4] 57/14
113/21 114/7	113/20 114/8	133/4 135/12
114/14 115/8	115/20 120/8	135/24
116/20 118/22	125/20 129/23	They've [1] 134/2
119/10 120/5	thesis [2] 33/17	thin [4] 4/17
121/11 124/2	101/21	76/8 137/10 138/6
129/10 130/17	they [92] 5/12	thing [4] 5/24
131/11 131/12	6/12 21/11 34/18	81/14 112/15
132/15 132/17	35/2 36/15 36/16	137/16
	39/11 40/22 41/25	things [1] 137/9

T	54/22 55/15 58/20	51/6 51/22 56/19
think [53] 19/13	58/21 60/1 60/23	61/14 79/21 85/1
21/11 22/20 26/3	61/5 66/16 70/8	105/18 109/16
27/4 29/5 30/21	70/14 70/14 71/2	115/19 139/25
31/2 33/3 33/5	71/3 71/16 72/7	140/2 143/1
43/11 43/15 47/8	72/17 72/24 73/23	though [2] 77/7
49/8 51/4 51/20	73/24 73/25 74/1	110/2
54/20 55/14 58/20	74/4 74/8 74/16	three [3] 98/8
60/2 60/3 60/23	75/3 75/8 75/14	105/12 107/2
61/4 66/5 69/2	76/12 76/19 76/24	three-hour [1]
79/15 80/24 82/11	77/5 79/17 79/19	105/12
82/25 86/13 86/21	81/14 82/4 83/1	through [10]
87/4 87/15 90/17	83/4 83/25 84/2	23/13 46/19 60/14
93/3 93/25 94/21	84/3 84/5 89/12	60/23 63/23 65/3
96/6 96/24 98/7	90/23 93/3 99/23	65/4 68/9 84/1
103/5 103/9	100/5 102/6	137/3
109/21 110/4	102/12 103/10	throughout [1]
111/3 116/10	103/17 103/23	44/14
123/25 125/16	104/11 104/19	Tian [3] 106/15
128/6 132/19	104/22 105/17	140/6 140/11
132/23 134/8	106/4 106/11	Tian's [1] 107/6
142/11	106/15 107/2	time [38] 7/2
thinks [1] 66/16	107/15 109/2	7/13 18/14 18/16
this [145] 5/4	110/6 111/15	19/11 21/13 40/18
5/15 6/18 7/13	111/25 113/10	40/24 44/12 45/2
7/19 7/25 8/8 9/6	114/6 114/21	45/5 46/2 48/6
9/19 10/18 13/25	115/3 116/6	56/17 58/5 64/22
14/14 14/19 14/21	120/25 122/3	82/13 87/17 99/25
15/23 17/20 18/5	122/23 123/4	100/7 104/13
18/11 18/20 19/25	123/23 128/7	110/19 111/19
20/9 20/17 20/25	129/13 129/23	113/21 113/25
21/17 23/16 24/7	129/24 132/2	114/7 115/3
24/9 24/12 24/17	132/5 132/9	115/15 115/21
27/4 27/5 27/20	132/11 132/16	115/25 116/2
33/7 33/16 33/18	134/12 135/12	116/10 116/14
38/22 39/11 40/21	142/23 143/4	127/16 141/6
43/22 44/12 46/4	143/9 143/11	141/19 142/3
46/4 46/17 47/9	144/15 145/19	145/5
49/9 49/10 49/23	145/21	timeframe [5]
49/25 51/1 51/12	those [16] 24/23	44/12 49/2 55/1
51/15 54/4 54/21	37/5 40/13 50/4	113/10 119/8

T	116/2	44/6 47/24
times [11] 8/3	topics [1] 115/19	TUESDAY [1] 5/1
10/25 11/1 11/2	totality [2] 33/4	two [3] 108/13
60/4 70/11 82/22	50/2	141/8 142/11
83/21 93/13 98/8	touch [3] 140/6	two minutes [1]
99/15	140/10 140/13	142/11
timing [1] 44/9	towards [2] 70/18	types [2] 133/5
title [9] 103/21	105/11	136/1
115/7 115/12	track [1] 135/16	typo [1] 119/7
115/16 115/23	transcribed [1]	typographical [1]
116/7 118/22	145/10	107/8
119/7 134/21	transcript [12]	typos [1] 113/9
today [17] 9/13	5/5 5/18 11/11	U
11/22 22/12 22/18	85/13 97/25 122/9	U.S [4] 9/17
22/21 22/24 24/13	144/10 145/11	10/11 131/8
83/7 87/13 95/9	145/13 145/15	136/25
97/10 123/24	147/20 147/21	UCLA [8] 9/3 23/1
127/16 135/2	transcription [1]	100/13 108/21
142/12 142/17	146/7	108/23 109/2
142/18	transferences [1]	139/18 140/2
Today's [1] 7/12	114/8	UCLA's [1] 102/7
told [9] 5/10	transparencies [1]	Uh [1] 11/10
27/3 35/12 59/21	114/15	Uh-huh [1] 11/10
60/8 60/14 128/24	traveling [1]	ultra [1] 4/17
129/7 129/17	6/17	ultrathin [3]
too [1] 124/2	treat [2] 5/17	103/14 115/8
took [1] 110/1	7/4	118/16
tool [33] 29/17	trouble [1] 103/8	Um [1] 11/10
33/18 33/20 34/2	true [10] 54/15	Um-hmm [1] 11/10
34/6 34/8 34/12	55/8 59/23 60/10	under [7] 22/23
34/17 34/20 34/23	91/3 98/25 144/13	40/21 119/21
35/2 35/2 35/3	145/11 147/20	124/16 137/2
35/4 35/8 35/13	147/21	144/9 145/10
35/14 35/15 35/18	truthful [3] 12/8	understand [25]
35/18 35/21 36/9	16/3 60/17	6/17 10/19 11/9
36/12 36/15 36/16	try [3] 56/17	11/13 11/15 11/17
36/18 36/21 36/21	86/16 143/6	12/6 12/13 12/18
39/18 39/20 132/2	trying [5] 35/7	13/24 14/4 26/25
132/3 132/5	43/24 44/22 60/7	35/7 36/20 40/7
top [1] 103/12	106/1	43/24 44/22 49/22
topic [2] 115/18	TSMC [3] 43/17	

U	81/12	121/13 138/7 145/9
understand... [7] 60/7 97/7 120/18 124/11 127/3 128/4 134/4	up [28] 9/22 11/11 13/10 18/14 18/16 23/5 24/15 31/2 63/8 68/18 68/22 68/23 68/25 69/1 70/15 85/13 87/16 87/19 99/16 104/4 111/21 118/9 118/13 121/21 123/24 127/15 136/13 136/13	V
understanding [15] 6/21 6/23 12/10 40/12 40/22 41/5 98/9 124/21 126/1 126/22 127/8 127/19 128/10 129/16 130/4	updated [1] 101/20	vague [1] 52/24 value [2] 35/18 35/19
understood [6] 7/3 39/23 43/5 44/23 107/13 122/2	upfront [1] 78/2	Van [1] 134/9 various [4] 53/12 53/13 105/9 109/19
unfortunately [2] 90/20 128/1	upon [6] 22/15 85/21 87/8 96/2 125/1 141/15	Vassili [1] 140/13
UNITED [10] 1/1 2/1 4/9 7/17 31/7 31/20 31/23 32/7 32/11 137/2	us [5] 6/14 72/24 107/22 111/3 115/22	veered [1] 105/8 verbatim [1] 145/8
United States [6] 7/17 31/7 31/20 32/7 32/11 137/2	use [12] 35/3 35/21 39/11 50/8 56/12 56/23 57/5 57/20 58/4 58/7 60/9 114/21	version [7] 33/18 34/16 34/20 35/1 35/13 35/14 103/1
universe [1] 50/3	used [22] 38/23 39/4 42/12 42/16 43/9 43/15 44/5 45/18 46/4 47/16 48/14 48/21 51/15 55/20 55/23 56/3 59/23 132/16 136/22 137/8 137/9 143/4	versus [3] 6/24 7/15 17/14
universities [2] 32/7 135/21		very [23] 16/10 49/22 60/2 60/23 60/24 60/24 61/4 69/6 76/23 77/21 77/21 80/2 82/5 85/20 87/7 110/9 113/20 113/25 116/25 133/3 134/19 135/10 135/13
university [3] 26/9 108/23 135/23		video [3] 7/13 8/1 8/2
unknown [1] 124/6		videographer [4] 3/19 7/25 23/23 65/4
unknowns [2] 124/3 124/9		videotaped [3] 1/13 2/13 143/14
unless [3] 8/3 11/19 27/8	uses [1] 39/15	views [1] 72/8
unobtrusively [1] 18/16	using [12] 35/18 36/14 36/18 39/17 46/16 47/3 53/17 115/9 120/25	VIJAY [13] 1/13 2/13 4/3 4/12
unrelated [1] 42/25		
unresolved [1]		

V	6/9 6/10 6/12	121/13 123/6
VIJAY... [9] 4/14	6/14 8/18 9/20	134/4 134/11
7/14 8/17 9/2	13/6 14/9 17/22	way [12] 43/7
143/14 144/9	22/22 22/24 23/3	54/2 58/20 59/16
144/20 146/4	23/17 27/3 29/22	60/4 79/22 84/23
147/25	33/19 34/2 34/6	86/17 106/21
violating [2]	34/7 34/12 34/17	106/24 106/25
129/25 130/3	34/18 35/8 35/8	114/10
violation [7]	40/3 44/13 45/6	ways [1] 78/3
17/24 26/14 73/20	45/13 46/21 49/17	we [81] 5/19 6/2
81/24 85/25	50/23 51/25 58/16	6/7 7/1 7/3 7/4
104/24 123/20	59/3 68/8 70/25	7/11 9/22 11/14
virtually [24]	79/23 80/20 87/7	13/10 22/2 23/5
38/23 39/4 39/10	87/10 87/11 90/24	23/9 26/17 31/2
39/23 40/9 40/13	93/10 96/2 97/12	33/12 41/6 41/10
49/24 50/7 50/14	99/18 100/4 104/5	42/11 49/8 49/22
51/16 51/18 51/22	107/7 108/17	54/13 60/1 60/23
52/1 53/22 54/15	114/8 115/4 115/5	68/17 70/15 70/17
55/8 59/22 60/8	115/12 116/4	71/11 71/18 72/1
60/21 60/22 60/24	116/7 118/23	72/2 78/17 79/24
61/13 109/22	118/24 118/24	79/25 83/7 86/3
120/7	119/8 119/13	86/6 86/8 87/1
visuals [1]	119/25 120/2	87/7 87/19 87/19
114/16	120/8 120/24	87/21 87/22 93/4
Vitae [1] 4/14	120/25 121/11	94/7 94/9 94/11
W	121/12 121/23	96/5 96/14 96/14
Wang [2] 30/19	121/25 136/24	102/25 103/9
134/14	138/4 142/23	104/3 104/11
want [16] 6/16	143/1 143/4 145/8	104/20 111/4
7/1 19/7 20/23	145/9 145/15	111/21 112/8
23/22 24/13 39/20	145/15	112/14 113/13
58/25 65/7 68/19	Washington [2]	114/10 115/3
87/16 102/8	3/7 8/13	115/5 115/16
104/15 115/18	wasn't [1] 87/9	115/16 116/9
121/16 121/25	watched [1] 118/1	116/11 118/9
wanted [3] 47/10	wave [1] 128/13	121/19 121/21
95/15 110/9	waves [13] 4/16	121/25 122/12
wants [3] 5/20	103/13 114/22	122/13 130/22
7/6 21/9	115/9 116/4	139/10 139/22
was [81] 5/13 6/3	118/16 118/25	141/6 142/2
	119/2 121/12	142/21 143/9

W	52/6 52/9 52/11	73/24 74/9 74/10
we'll [3] 19/2	52/11 53/6 53/11	74/25 75/1 75/3
128/8 142/14	53/19 53/23 54/3	75/4 75/9 76/3
we're [22] 14/21	54/8 55/1 55/2	88/19 91/6 91/21
41/8 67/16 67/18	56/19 58/3 59/13	94/7 97/3 98/1
69/8 86/25 93/14	60/25 61/1 61/6	99/14 106/2
96/9 96/12 99/11	61/7 61/10 61/14	106/21 106/25
105/11 113/21	61/14 86/8 86/12	107/14 112/16
116/10 122/15	87/22 96/15	113/24 115/3
122/18 130/24	104/11 104/20	116/1 117/22
131/2 142/6 142/9	107/22 108/14	120/2 121/23
142/13 142/16	109/18 109/25	123/13 126/22
143/13	110/5 112/9	126/22 127/8
we've [7] 18/4	113/13 114/7	127/19 128/11
19/9 19/10 96/3	116/3 119/21	128/23 129/3
116/15 123/1	121/25 137/9	129/6 129/17
131/4	139/10 139/24	132/3 137/17
Website [2]	145/4 145/7	138/8 138/12
100/14 102/7	weren't [1] 52/9	138/19 140/19
welcome [2] 23/13	West [1] 7/23	what's [2] 73/12
23/24	WESTERN [3] 1/3	138/22
well [15] 11/11	2/3 7/18	whatever [3] 7/5
45/24 49/16 51/2	what [98] 10/8	92/5 95/5
52/5 56/17 70/15	11/3 13/19 14/5	when [24] 6/7
73/4 73/6 73/12	15/14 15/16 15/19	12/13 12/24 29/19
87/4 94/1 112/16	16/1 16/7 17/5	30/5 33/7 42/10
132/1 142/10	17/5 18/21 19/24	43/25 44/12 45/2
went [6] 49/8	20/8 20/24 21/16	45/5 46/8 49/24
53/12 60/23 96/14	22/22 24/6 29/10	53/12 100/16
119/12 137/3	30/12 33/20 34/6	109/21 115/15
were [75] 6/4	35/8 35/12 43/7	115/16 115/24
23/1 29/20 33/23	43/24 44/23 47/4	119/12 119/21
35/9 35/16 36/25	49/9 50/23 51/19	128/20 141/10
37/5 37/14 37/21	51/24 53/11 53/15	141/21
38/1 38/6 38/17	53/15 54/2 54/21	where [13] 22/4
40/13 40/22 40/25	55/16 56/16 57/14	33/9 42/22 43/20
42/11 44/13 44/14	57/14 62/10 63/8	68/16 72/24 74/9
44/15 45/3 46/14	63/9 63/17 63/18	75/6 100/12
49/5 49/15 49/19	63/24 64/1 64/12	108/17 109/14
50/10 50/15 50/24	64/15 66/2 66/11	110/1 139/15
51/22 52/1 52/6	66/15 67/3 68/7	WHEREOF [1]

W	127/3 127/4 128/3	138/7
WHEREOF... [1]	129/12 130/8	whom [1] 8/6
145/21	130/19 134/7	whose [1] 25/9
whether [42] 5/4	135/1 139/24	why [10] 15/16
5/21 6/3 14/25	143/3 145/9	20/13 50/4 62/4
16/19 18/18 22/21	while [1] 133/8	72/11 73/6 95/19
27/13 27/21 27/23	who [79] 17/12	113/19 119/1
38/11 45/10 46/2	17/16 19/18 22/7	138/2
47/4 47/14 47/21	25/9 25/9 25/13	wide [1] 87/10
48/1 48/9 49/21	25/25 26/3 27/12	wide-ranging [1]
56/5 56/8 57/10	28/17 28/18 28/22	87/10
59/3 61/7 73/25	30/22 34/8 40/12	widely [1] 24/18
78/3 81/14 81/17	40/15 44/11 44/14	will [43] 7/3 7/4
82/2 83/4 84/3	44/16 44/22 45/22	8/2 8/5 11/11
88/21 93/18 94/4	46/14 46/19 46/20	14/4 15/10 21/18
94/16 97/17	46/21 49/13 49/16	21/19 23/16 43/20
110/18 116/6	49/17 49/20 50/10	44/8 49/25 51/1
123/14 124/15	50/14 50/24 51/1	53/14 54/10 58/5
126/3 140/2	51/22 52/1 52/6	60/4 64/25 70/14
which [69] 22/23	52/9 52/11 52/12	75/5 77/3 78/1
27/2 27/12 29/15	52/19 52/21 53/3	78/2 78/5 79/15
33/24 35/4 35/17	53/5 53/15 53/16	80/3 81/10 83/4
36/2 39/18 40/4	53/20 55/2 56/18	84/1 84/3 84/10
42/11 45/18 46/4	60/16 60/22 60/25	84/25 86/14 93/4
46/17 48/7 49/11	61/10 61/14 61/14	95/1 103/5 127/22
49/23 54/11 57/9	73/13 109/15	128/2 128/16
57/14 66/8 69/4	109/19 109/23	130/19 131/18
69/9 76/25 77/8	124/14 131/22	143/9
77/9 77/19 78/15	132/10 132/13	willing [2] 86/9
78/17 79/4 81/13	132/16 132/17	127/18
83/10 84/1 87/7	132/19 132/19	within [2] 45/23
90/8 90/18 90/19	132/23 133/6	121/14
95/2 95/4 95/11	133/11 133/15	without [3] 76/20
97/13 98/8 102/10	133/18 134/9	125/21 130/13
105/16 107/22	135/16 135/17	witness [47] 4/2
110/5 116/3 116/7	135/20 135/24	11/5 15/10 16/22
118/11 118/24	135/25 136/12	18/23 19/15 21/20
119/9 119/11	who's [1] 133/7	22/15 22/21 38/3
120/7 122/8	whole [7] 18/17	43/24 55/13 60/12
122/10 124/10	30/23 31/2 50/2	61/24 62/25 67/12
125/3 126/12	79/17 119/12	69/21 71/12 71/14

W	work [56] 9/6	would [74] 5/24
witness... [28]	11/7 25/6 25/9	18/11 19/25 20/9
73/7 73/9 73/10	25/14 26/1 26/20	20/17 20/25 21/12
74/8 74/13 75/3	27/5 27/17 28/4	21/17 22/10 24/13
75/15 76/20 76/21	28/23 29/3 29/5	26/6 31/8 31/9
78/24 82/24 83/23	29/9 29/16 29/19	45/24 46/25 46/25
84/20 85/6 85/14	30/18 30/22 30/24	49/16 49/20 50/4
88/6 88/9 88/11	33/16 33/24 39/25	50/7 52/15 52/16
93/4 94/10 100/12	107/1 107/21	53/12 54/25 59/10
102/23 124/1	109/3 109/9	61/23 62/8 62/12
127/22 139/2	110/13 111/9	63/23 64/9 64/23
140/25 145/21	114/1 119/9	66/5 66/6 69/21
146/4	119/25 120/2	71/1 74/22 76/19
witness' [50]	132/7 132/8	76/24 78/24 84/9
21/3 22/14 29/1	132/11 133/4	88/10 92/14
30/8 31/14 32/3	133/5 134/2	102/15 102/17
32/13 32/18 33/2	134/19 134/23	102/22 102/24
34/15 34/25 35/11	135/1 135/1	104/21 109/16
38/15 39/7 40/2	135/12 135/14	111/12 113/9
41/3 41/23 45/16	135/15 135/17	113/23 114/14
46/12 49/7 50/12	135/18 135/19	114/14 116/13
50/22 52/4 54/1	135/20 135/22	118/3 120/20
54/19 59/25 60/13	135/23 135/24	123/13 124/6
63/14 78/11 78/22	136/2 136/4	125/7 125/10
79/11 80/18 81/7	136/10 136/12	126/3 127/2
81/21 83/16 85/6	worked [7] 15/2	128/20 130/7
89/10 89/19 90/15	15/20 44/16 49/1	130/19 130/20
94/19 97/20 99/9	49/4 107/24	131/19 132/15
114/19 114/24	109/24	133/7 133/14
121/9 129/1	working [10]	137/18 140/25
129/20 130/16	34/18 54/7 106/4	142/3 142/21
135/8 138/1	106/14 106/21	write [1] 59/15
witnesses [1]	106/23 107/10	written [7] 12/11
145/6	107/10 121/18	32/25 46/17 47/9
won't [2] 16/16	135/25	49/10 49/23 54/21
79/24	works [1] 17/10	wrong [3] 18/17
word [5] 42/16	world [9] 25/14	105/14 118/22
46/5 102/5 136/22	38/24 44/14 51/17	wrote [1] 121/18
137/8	52/7 109/15	
worded [1] 43/16	132/16 135/21	Y
words [1] 43/3	135/25	Y. [1] 2/17

Y	88/24 89/4 92/8	87/5 87/13 105/12
yeah [22] 9/7	94/15 96/19 99/22	107/10 110/5
26/24 32/4 41/25	101/15 102/20	130/1
42/8 54/20 54/25	102/24 103/16	youngest [9] 31/6
57/10 62/2 70/20	103/21 103/24	31/9 31/19 31/22
73/23 76/5 86/13	104/2 104/10	32/5 32/20 32/23
109/7 114/6	104/17 106/12	33/7 33/8
116/15 117/22	108/25 111/13	your [171]
120/23 123/10	112/7 113/2	yourself [2]
127/1 128/1 138/2	113/10 114/17	25/17 132/23
year [3] 115/22	115/2 115/15	yourselves [1]
117/3 117/8	118/7 118/19	8/5
years [5] 17/12	118/21 121/11	Z
25/12 31/23	122/6 122/7	zoom [5] 13/16
117/14 136/7	122/22 124/2	70/20 87/20
Yep [1] 7/7	124/24 126/20	103/11 112/3
yes [113] 9/9	130/18 131/7	zooming [1] 70/21
10/2 10/5 10/7	131/10 139/7	
10/13 10/16 10/20	141/5 142/20	
10/24 11/8 11/10	yet [6] 6/8 18/7	
11/12 11/16 11/20	19/8 83/3 105/12	
12/2 12/9 12/12	127/12	
12/17 12/20 12/22	Yoshida [5]	
13/9 13/13 13/18	106/15 107/14	
13/23 14/1 14/6	107/24 108/4	
15/12 17/2 20/11	111/7	
20/20 21/25 23/10	you [487]	
24/4 24/11 24/20	you'll [1] 10/19	
24/22 24/25 25/4	you're [24] 10/14	
25/19 28/8 28/20	11/6 11/18 23/13	
29/3 30/17 31/8	23/23 29/20 30/15	
31/10 32/19 33/15	37/25 38/11 43/21	
35/24 37/3 39/2	47/4 51/24 57/13	
39/8 41/4 41/14	71/13 77/2 77/17	
47/17 48/12 50/20	85/2 85/13 85/24	
51/14 52/20 53/4	103/8 105/10	
54/25 55/6 55/15	105/20 105/22	
59/10 62/17 65/25	105/24	
68/15 69/10 69/14	you've [13] 18/7	
70/24 71/6 77/15	18/13 18/25 28/23	
79/3 87/2 87/25	32/16 70/10 75/22	