

1 UNITED STATES PATENT AND TRADEMARK OFFICE
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD

3 -----
4 MOTOROLA SOLUTIONS, INC.,
5 Petitioner

6 vs

7 STA GROUP LLC,
8 Patent Owner
9 -----

10 Case IPR2023-01295
11 U.S. Patent No. 8,994,830

12 Oral deposition of

13 ROBERT AKL, Ph.D.

14
15 VIA VIDEO/TELECONFERENCE

16 TUESDAY, SEPTEMBER 10, 2024

17 10:03 a.m. EASTERN TIME
18
19

20 Job No.: 552489

21 Pages: 1 - 118

22 Reported by: Lisa V. Feissner, RDR, CRR, CLR

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

Oral deposition of ROBERT AKL, Ph.D., held
REMOTELY, via Zoom, on TUESDAY, SEPTEMBER 10, 2024,
beginning at 10:03 a.m., pursuant to Notice, before
Lisa V. Feissner, RDR, CRR, CLR, Notary Public.

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

2 ON BEHALF OF PETITIONER:

3 STEPHEN O'DONOHUE, ESQUIRE

4 CLARKE STAVINOHAN, ESQUIRE (Dallas office)

5 BAKER BOTTS

6 30 Rockefeller Plaza

7 New York, NY 10112-4498

8 212.408.2551

9 stephen.odonohue@bakerbotts.com

10 clarke.stavinoha@bakerbotts.com

11
12 ON BEHALF OF PATENT OWNER:

13 KYLE M. KANTAREK, ESQUIRE

14 K&L GATES LLP

15 70 West Madison Street

16 Suite 3300

17 Chicago, IL 60602

18 312.807.4206

19 kyle.kantarek@klgates.com

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

C O N T E N T S

EXAMINATION OF ROBERT AKL, Ph.D.	PAGE
By Mr. O'Donohue	5

E X H I B I T S

(Attached to transcript)

DEPOSITION EXHIBIT	PAGE
(None marked.)	

P R E V I O U S L Y

M A R K E D E X H I B I T S

(Referenced - not attached)

EXHIBITS	PAGE
Motorola Solutions, Inc. Exh. 1001	42
Motorola Solutions, Inc. Exh. 1004	62
Motorola Solutions, Inc. Exh. 1006	80
Motorola Solutions, Inc. Exh. 1011	66
STA Group Exhibit 2006	10
STA Group Exhibit 2007	21

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

2 ROBERT AKL, Ph.D.,

3 having been first duly sworn, was examined and
4 testified as follows:

5 EXAMINATION

6 BY MR. O'DONOHUE:

7 Q Good morning, Dr. Akl.

8 A Good morning.

9 Q Could you please state your full name for
10 the record.

11 A Robert Akl.

12 Q And you've been retained as a technical
13 expert by STA in this case?

14 A Yes. I've been retained by counsel for
15 STA.

16 Q Okay. And you submitted a declaration in
17 support of the patent owner's response in this
18 proceeding.

19 Is that correct?

20 A Yes.

21 Q And that declaration contained your
22 certain opinions about the what I'll call the '830

1 patent.

2 Does that sound familiar?

3 A Yes. It contains my opinions as of
4 today.

5 Q Okay. You've submitted other expert
6 reports in other proceedings regarding the '830
7 patent.

8 Is that correct?

9 MR. KANTAREK: Objection, scope.

10 A I was retained in the District Court
11 matter that involved the '830 patent, and I
12 submitted opinions in that matter.

13 Q Okay. More specifically, you submitted a
14 declaration regarding claim construction in the '830
15 patent in the District Court case.

16 Is that correct?

17 MR. KANTAREK: Objection, scope.

18 A I don't recall which patent off the top
19 of my head.

20 Q Okay. You don't recall if you provided a
21 declaration regarding claim construction of the '830
22 patent in District Court?

1 MR. KANTAREK: Objection, form.

2 A Not off the top of my head, no. It's
3 been a while.

4 Q Okay. You submitted an expert report
5 regarding the validity of the '830 claims.

6 Do you recall that?

7 MR. KANTAREK: Objection, scope.

8 A I did submit a rebuttal validity expert
9 report in District Court, yes.

10 Q Okay. How much time would you say you've
11 spent studying or working on the '830 patent at this
12 point?

13 MR. KANTAREK: Objection, form.

14 A It's difficult to give you a number that
15 combines the work in District Court and the work in
16 the PTAB case.

17 Q Okay. Do you have any sense of how much
18 time you spent working on it in this proceeding for
19 the PTAB?

20 A About 20 hours.

21 Q Okay. So between your work regarding the
22 '830 patent in the District Court cases and the

1 20 hours you've spent in this PTAB proceeding, would
2 you say you're fairly comfortable with the subject
3 matter of the '830 patent?

4 A That's fair.

5 Q Would you agree you have a working
6 knowledge of the '830 patent?

7 A I don't know what that means, so I don't
8 know how to answer your question.

9 Q Okay. What part of my question do you
10 not understand?

11 A I don't understand what you mean by
12 "working knowledge."

13 Q Have you ever used that phrase in your
14 everyday life?

15 MR. KANTAREK: Objection, form.

16 A I don't think so.

17 Q Okay. So you have no idea what the term
18 "working knowledge" means?

19 MR. KANTAREK: Objection, form.

20 A You're mischaracterizing what I said. I
21 don't understand your question.

22 Q Do you have an understanding of what the

1 phrase "working knowledge" means?

2 MR. KANTAREK: Objection, form.

3 A I do not in the context of how you're
4 using it to refer to the '830 patent.

5 Q Okay. So you do not have a working
6 knowledge of the '830 patent.

7 Is that what you're saying?

8 MR. KANTAREK: Objection, form.

9 A You're mischaracterizing my response.

10 Q So you're just refusing to answer the
11 question?

12 MR. KANTAREK: Objection, form.

13 A My understanding from other depositions
14 is that if you ask me a question and I don't
15 understand the question, I can tell you I do not
16 understand the question.

17 I have told you that I do not understand
18 your question. You have not clarified your
19 question. And as such, I do not have an answer to
20 the question that I do not understand.

21 Q Do you understand the subject matter of
22 the '830 patent?

1 A Yes.

2 (Previously marked Exhibit 2006
3 referenced.)

4 BY MR. O'DONOHUE:

5 Q Okay. Do you have a copy of your
6 declaration, which is Exhibit 2006, available to
7 you?

8 A Yes.

9 Q Okay. Do you have that in paper form or
10 electronic?

11 A I have the first four pages, which is the
12 table of contents, in paper form in front of me.
13 And I have a PDF on my computer for the whole
14 declaration.

15 Q Okay. And let me ask you about the paper
16 copy you have in front of you. You said it's only
17 the first four pages of Exhibit 2006?

18 A That is correct, yes.

19 Q Okay. Are there any notes, markings, or
20 anything like that on those four pages?

21 A No.

22 Q Okay. Why do you have only the first

1 four pages in front of you in paper form?

2 A Because it's easier for me to -- it's
3 a -- it's something I've been doing where I print
4 the table of contents, so it's easy for me to have
5 the table of contents in front of me, which makes it
6 easier for me to go into the PDF and answer your
7 questions in a timely fashion where I don't have to
8 keep going back and forth in the file to look at the
9 table of contents.

10 Q Okay. And the PDF version that you have
11 on your computer, does that have any notes or
12 annotations in it?

13 A No.

14 Q Okay. And I'm pretty sure the answer to
15 this is no. But is there anyone else in the room
16 with you right now that we can't see on the video?

17 A No.

18 Q Okay. Could you turn to paragraph 18 of
19 your declaration.

20 A I'm there.

21 Q Okay. And the heading above paragraph 18
22 is, Materials Relied Upon in Forming My Opinions.

1 Do you see that?

2 A Yes.

3 Q And that's labeled section III, Roman
4 numeral III? Am I correct that that is labeled
5 section Roman numeral III, Dr. Akl?

6 A Yes.

7 Q Okay. Section III contains paragraphs 18
8 and 19, right?

9 A Yes.

10 Q Do paragraphs 18 and 19 contain a
11 complete list of the materials you relied on in
12 forming your opinions?

13 A Yes.

14 Q Did you consider anything not listed in
15 paragraphs 18 or 19?

16 A I don't think so.

17 Q Okay. Paragraphs 18 and 19 do not list
18 any expert reports from other proceedings.

19 Is that fair?

20 A Yes.

21 Q Okay. So it's fair to say you did not
22 rely on any other expert reports submitted in other

1 proceedings in forming your opinions in this
2 declaration, correct?

3 MR. KANTAREK: Objection, form.

4 A Yes. This is a -- in a way, this
5 declaration is a rebuttal of the petition and the
6 declaration of Dr. Polish.

7 Q Dr. Akl, are all of your opinions in your
8 declaration submitted in this proceeding consistent
9 with the opinions you provided in the District
10 Court?

11 A They should be, but I did not compare --
12 well, I should say this.

13 When I was working on this declaration, I
14 was not -- my work in the District Court matter was
15 done. And so I was not working concurrently on
16 both.

17 I was informed that in the District Court
18 matter, I was going to be deposed, and then the
19 night of the deposition, my deposition was
20 cancelled, and my work -- I was told to, like,
21 pencils down, and I thought that case was wrapped
22 up.

1 Then after that, I worked on this
2 declaration.

3 So that's the timeline.

4 And while working on this declaration, I
5 did not actively go back to the reports that I had
6 written.

7 But my opinions, at least at a high
8 level, should be consistent. In both cases, they
9 follow the legal principles that I have been
10 informed of.

11 Q Okay. I'd just like to clarify a couple
12 of things, since that was a long answer.

13 Okay. So when you were working on your
14 declaration in this proceeding for the PTAB, you did
15 not actively go back to the reports that you had
16 submitted in District Court and compare them.

17 Is that correct?

18 A That's fair. That is not something I
19 did.

20 Q Okay. And that was -- you did not go
21 back and actively compare them, at least in part
22 because it was your understanding that the District

1 Court case was done and wrapped up.

2 Is that correct?

3 MR. KANTAREK: Objection to form.

4 A Well, my work in the District Court case
5 was done. I don't know if the matter was done, but
6 I was told my deposition was cancelled, and pencils
7 down.

8 Q Okay. Let me rephrase.

9 At least part of the reason you did not
10 go back and actively compare your declaration in
11 this case to the reports you submitted in District
12 Court because your work in the District Court was
13 done and wrapped up.

14 Is that correct?

15 MR. KANTAREK: Object to form.

16 A That is my understanding. It's not
17 uncommon for me to get an email saying, you know,
18 pencils down. That can happen for many reasons.
19 But I did get an email the night before my
20 deposition saying, you are not going to be deposed
21 tomorrow. I was not given a reason other than
22 pencils down for now.

1 Q Okay. Dr. Akl, how would you describe
2 your expertise as it relates to the opinions you've
3 provided in your declaration?

4 MR. KANTAREK: Objection, form.

5 A So I provide a section on the background
6 and qualifications -- my background and
7 qualifications. That starts on page 5 and goes all
8 the way to page 11.

9 I also provide an opinion on page 15 on
10 the level of ordinary skill in the art, pages 15 and
11 16. And I -- in paragraph 30, I believe I answer
12 your question because I state, based on my
13 qualifications, I am at least a person of ordinary
14 skill in the art under patent owner's definition of
15 a person of ordinary skill in the art.

16 So I can pause here and I can elaborate
17 if you want me to.

18 Q Yeah, no. I appreciate you not reading
19 all those paragraphs in your qualifications section.
20 Let me ask you this.

21 You testified that you're an expert in
22 the field of telecommunication systems, correct?

1 MR. KANTAREK: Objection, form.

2 Q Sorry. Was that -- I saw you nod, but I
3 didn't hear you say anything. Maybe I missed it.

4 A I did say yes.

5 Q Okay. So you're an expert in the field
6 of telecommunication systems, correct?

7 A Yes.

8 Q Okay. Are you an expert in all types of
9 telecommunication systems?

10 MR. KANTAREK: Objection, form.

11 A I'm an expert in the technology as it
12 relates to the '830 patent.

13 Q That was not my question, Dr. Akl. We'll
14 get to the '830 patent.

15 I'm just asking, do you consider yourself
16 as an expert in all types of telecommunication
17 systems?

18 MR. KANTAREK: Objection, form, scope.

19 A Your question is too vague to be able to
20 answer. So I can't answer that question because --
21 I can say there are -- in my CV -- and my CV is
22 Exhibit 2007 -- I do provide a list of my areas of

1 expertise. And even though that list is
2 comprehensive, I wouldn't say that list is
3 exhaustive. It would be very difficult to have a
4 complete list.

5 But it provides, at a high level, a good
6 idea and overview of what aspects of
7 telecommunications I am an expert in.

8 Q Can you name for me any types of
9 telecommunication systems in which you are not an
10 expert?

11 MR. KANTAREK: Objection, form, scope.

12 A I don't know the answer to that question.
13 I know what I am an expert in. I don't know what I
14 am not an expert in.

15 Q Okay. Are you an expert in --

16 (Reporter interruption.)

17 Q Are you an expert in land mobile radios?

18 A I am an expert in that field as it
19 relates to the '830 patent.

20 Q Again, I'm not asking about the '830
21 patent specifically. I'm just asking, are you an
22 expert with respect to land mobile radios?

1 MR. KANTAREK: Objection, form, scope.

2 A I answered that question to the best of
3 my ability.

4 Q Okay. So if we take the '830 patent out
5 of the question, you're not able to answer whether
6 you're an expert in land mobile radios?

7 MR. KANTAREK: Objection, form, scope.

8 A It is not something I thought about in
9 that context, so I don't have an answer for you
10 right now. Because any buzzword like that can have
11 fields and subfields within it. So I don't know
12 exactly, in your mind, what are some of those fields
13 and subfields. And it would be difficult to
14 generalize and answer your question as asked because
15 it's too broad and too vague.

16 Q What is a land mobile radio?

17 MR. KANTAREK: Objection, scope.

18 A It is a type of radio network, and it is
19 an example used in the '830 patent. Examples of LMR
20 radios include, for example, push-to-talk radios
21 that sometimes they've been referred to as
22 walkie-talkie.

1 So that would be an example of those
2 types of radio networks.

3 Q What frequency band do land mobile radios
4 usually use?

5 MR. KANTAREK: Objection, scope.

6 A The FCC regulates frequency bands. You
7 have unlicensed bands and you have licensed bands.

8 Unlicensed bands are like industrial,
9 medical. For example, 900 megahertz would be an
10 example of an IMS band. 2.5 gigahertz would be
11 another example. 5 gigahertz would be another
12 example.

13 Those bands, you can have a walkie-talkie
14 system in those bands without needing a specific
15 license, as long as you meet certain power
16 constraints.

17 There are other frequencies that allow
18 you to transmit at more power, and they are
19 regulated by the FCC, and you would need to have a
20 license to transmit at those frequencies.

21 Q Do land mobile radios use very high
22 frequencies, also known as VHF? And please just

1 answer that yes or no.

2 MR. KANTAREK: Objection, form.

3 A The patent contemplates very high
4 frequency and ultra high frequency as examples for
5 LMR radios as disclosed in the specification.

6 Q Have you ever used a land mobile radio?

7 MR. KANTAREK: Objection, scope.

8 A Yes. I worked for a company where I
9 designed land mobile radios in 2000 and 2001. I've
10 also -- I was a senior systems engineer. And I've
11 also -- so in that case, I, you know, used it
12 regularly.

13 And I've also used it -- I've used some
14 examples of land mobile radios, you know,
15 personally.

16 Q What company were you working for in 2000
17 to 2001 where you designed land mobile radios?

18 A I was working for Comspace Corporation.
19 It is in my CV, which is Exhibit 2007.

20 (Previously marked Exhibit 2007
21 referenced.)

22 A If you go to -- and I've opened that

1 exhibit. If you go to page 36.

2 Q I see. So Comspace in Coppell, Texas?

3 A It's pronounced "Coppell," yes. It's
4 just north of Dallas.

5 Q What can you tell me about the land
6 mobile radios that you designed for Comspace? Can
7 you describe them generally?

8 MR. KANTAREK: Objection, form.

9 A Yes. They were digital. It allowed
10 eight channels in an analog frequency. It used a
11 main transmitter and multiple receivers -- if you
12 had multiple radios and you had a single high-power
13 antenna that covered a city.

14 We had a system in Chicago, and we had a
15 system in Dallas. And I worked there for a little
16 over a year in my capacity as a senior systems
17 engineer.

18 Q Were these handheld radios?

19 A Yes. They were not meant for consumers;
20 they were meant for commercial customers.

21 Q When you say "commercial," do you mean
22 like municipalities and government agencies or

1 something else?

2 A Yes, or businesses. I think businesses
3 was more -- like trucking companies, distribution
4 centers, those -- I mean, I wasn't in sales, but
5 that type of business were, I think, one of the main
6 customers of Comspace.

7 Q And these handheld radios, did they have
8 a display on them?

9 A I think so, yes.

10 Q And this was some kind of digital display
11 that showed letters and numbers of some sort.

12 Is that correct?

13 MR. KANTAREK: Objection, form.

14 A Yes. I mean, it's over 20 years ago, so
15 I don't recall the details.

16 Q Okay. What information was shown on this
17 display? What are some examples of the information
18 that were shown on this display?

19 MR. KANTAREK: Objection, form.

20 A I don't recall. It was over 20 years
21 ago.

22 Q Do you recall whether the display showed

1 the user what channel they were set to?

2 A I don't recall. It was over 20 years
3 ago.

4 Q Do you have any experience with first
5 responders?

6 MR. KANTAREK: Objection, form.

7 A I don't understand the question.

8 Q Do you know what a first responder is?

9 A Somebody who responds at the scene of an
10 accident? Is that what you mean? I don't
11 understand the question.

12 Q Yeah, no, that's fine. We can go with
13 that meaning.

14 Okay. So based on your understanding of
15 the term "first responders," do you have any
16 experience with the first responders?

17 MR. KANTAREK: Objection, form.

18 A I still don't understand your question.

19 Q What words in my question do you not
20 understand?

21 A Well, I don't understand the question.
22 It's vague. What do you mean do I have experience

1 with first responders?

2 Q Have you ever --

3 A I'm sorry. I'm not done.

4 Do I have experience being a first
5 responder? Do I have any experience calling a first
6 responder? I don't understand the question. It's
7 vague.

8 Q Do you have any professional experience
9 with first responders?

10 MR. KANTAREK: Objection, form.

11 A I still don't understand the question.
12 What does "professional" add to the question?

13 Q Have you ever worked with first responder
14 agencies?

15 MR. KANTAREK: Objection, form.

16 A I have not personally worked with first
17 responder agencies. I am a professor at the
18 University of North Texas, and I have been a
19 professor for over 20 years.

20 Q So since you have not personally worked
21 with first responder agencies, is it also fair to
22 say your experience with land mobile radios did not

1 involve first responder agencies?

2 A I would disagree with that
3 characterization. As a professor and as somebody
4 who has worked in the field of telecommunication
5 systems, I have taught my students how those type of
6 radios work. Some of the environments in which they
7 are used would involve first responders. I
8 understand that.

9 The technology of the radios is what I
10 focus on rather than the marketing or the selling to
11 different sectors.

12 Q Can you provide an example --

13 MR. KANTAREK: Objection, form.

14 MR. O'DONOHUE: I'm sorry, Counsel, I
15 hadn't finished asking my question. So let me start
16 that again.

17 Q Dr. Akl, could you please provide an
18 example where you worked with first responders
19 involving land mobile radios.

20 A I think I've already answered that
21 question. I can repeat my answer if you would like.

22 Q So is the answer, no, you cannot provide

1 an example where you worked with first responders
2 involving land mobile radios?

3 MR. KANTAREK: Objection, form.

4 A So let me go ahead and answer that
5 question again. I think you've already asked me
6 that question.

7 I have been a professor for over
8 20 years. Before I was a professor, I worked in
9 industry for a company called Comspace Corporation
10 that designed push-to-talk land mobile radios. I
11 was a senior systems engineer.

12 I do not work in sales or in marketing
13 where I interact with customers.

14 I understand that some customers for land
15 mobile radio include -- may include first
16 responders.

17 In my capacity as a senior systems
18 engineer, I was part of the engineering team, so I
19 worked on the design and the technology.

20 Then, as a professor, I teach my students
21 the technology that goes into land mobile radios. I
22 have taught many courses related to wireless

1 communication, which cover the technology in land
2 mobile radios.

3 As a professor, I don't interact with the
4 customers for the products that I teach, but I do
5 describe in some instances the market in which some
6 equipment is geared towards.

7 So in that capacity, my courses would
8 cover in some extent which markets -- or which
9 technology is geared for which market, or which
10 technology is more optimized for a specific sector.
11 But I don't personally interact with that sector.

12 MR. O'DONOHUE: I'm going to move to
13 strike all of that as nonresponsive, and I object to
14 it.

15 Q To the extent you care, Dr. Akl, this
16 will go a lot smoother and faster if you limit your
17 answer to the question that I asked.

18 Have you ever been in a patrol car that
19 contained a land mobile radio?

20 MR. KANTAREK: Objection, scope.

21 A Yes.

22 Q Please describe the situation where you

1 were in a patrol car that contained a land mobile
2 radio.

3 A When I worked for Comspace Corporation,
4 one of the things we did was field testing, and in
5 some instances, I rode in our test vehicle, and we
6 were collecting data, and I was using that data to
7 verify the simulation results for the signal
8 strength.

9 And so in that capacity, I was in a
10 patrol car with land mobile radio -- we had more
11 equipment also -- collecting data in the field.

12 Q So that test vehicle at Comspace was a
13 police car?

14 A I did not hear the word "police" in your
15 question.

16 Q Okay. What do you -- what's your
17 understanding of the term "patrol car," Dr. Akl?

18 A I took "patrol car" as a car that patrols
19 and has land mobile radio, which was what our test
20 vehicle does. It drives around, it patrols the
21 area, and collects information.

22 Q Okay. Was this, like, a security car?

1 I'm just trying to understand what you mean by
2 "patrol."

3 MR. KANTAREK: Objection, form.

4 A It was not security; it was collecting
5 data. It was for collecting actual data in the
6 field. And it patrolled the different streets that
7 we were looking to collect empirical data.

8 Q Okay. So when you say "patrol," you mean
9 it just drove around?

10 MR. KANTAREK: Objection, form.

11 A That's how I understood your question.

12 Q Okay. Have you ever been in a law
13 enforcement vehicle that contained a land mobile
14 radio?

15 MR. KANTAREK: Objection, scope.

16 A I don't think so. I've never been
17 arrested or ever been in a police car.

18 Q Okay. And have you ever worked with law
19 enforcement agencies with respect to their
20 communication systems?

21 MR. KANTAREK: Objection, scope.

22 A Yes.

1 Q Okay. When did you do that?

2 A If you go to my CV, on page 35, in 2007,
3 I worked with Collin County Sheriff's Office, and I
4 was helping them analyze telecommunications data in
5 a double homicide investigation.

6 Q I see. And on that entry in Exhibit 2007
7 on page 35, under Duties -- or next to Duties, it
8 says, Analyzed cellular record data and determined
9 user location in a double homicide investigation.

10 Do you see that?

11 A Yes.

12 Q Okay. So am I correct that that had
13 something to do with where the -- where cell phones
14 were located geographically relative to certain
15 towers and things like that?

16 MR. KANTAREK: Objection, form.

17 A That was part of the investigation is
18 assisting the police officers in analyzing cellular
19 record data to determine the location of the alleged
20 person who they were investigating.

21 Q Okay. And that work did not have
22 anything to do with land mobile radio networks,

1 correct?

2 A That work focused on a cell phone, not
3 land mobile radio.

4 Q Okay. So have you ever worked with law
5 enforcement agencies with respect to their land
6 mobile radio networks?

7 MR. KANTAREK: Objection, form.

8 A No. I'm a professor. So I teach the
9 technology; I don't -- and as a -- as somebody who
10 worked in industry for the company, again, I did not
11 interact with the customers; I focused on the
12 engineering aspect.

13 Q And have you ever worked with fire
14 department -- strike that.

15 Have you ever worked with fire
16 departments with respect to their land mobile radio
17 networks?

18 MR. KANTAREK: Objection, form.

19 A The same answer would apply. The
20 technology for the radios is what I teach; and what
21 I worked on in industry, I did not work with
22 customers.

1 Q Okay. Could we go to paragraph 26 of
2 your declaration.

3 A I'm there.

4 Q And in the first sentence, you testified
5 that, quote, I understand that if a combination of
6 two or more prior art references is used to render a
7 claimed invention obvious, there must be a
8 reasonable expectation of success in making or
9 practicing the claimed invention based on such
10 combination.

11 Do you see that?

12 A Yes.

13 Q Okay. And so you understand that
14 reasonable expectation of success is relevant to
15 whether a claim was obvious, correct?

16 MR. KANTAREK: Objection to form.

17 A Reasonable expectation of success is
18 relevant, yes.

19 Q And you understand that reasonable
20 expectation of success is one of the factors that
21 the Board will consider when determining whether the
22 challenged claims are obvious?

1 MR. KANTAREK: Objection to form.

2 A I'm not a lawyer, and I'm not here to
3 render legal opinions. But I do have an
4 understanding of legal principles from counsel.

5 Q Okay.

6 A And that's what I state in paragraph 26.

7 Q Okay. And then in paragraph 27, last
8 sentence, you testify, I further understand that
9 mere assertions that prior art references are
10 analogous art, without more, is an insufficient
11 articulation for a motivation to combine.

12 Do you see that?

13 A I do.

14 Q Is it your understanding that whether
15 prior art references are analogous art is relevant
16 to obviousness?

17 MR. KANTAREK: Objection to form.

18 A Again, I am not a lawyer, and I'm not
19 here to render legal opinions.

20 I have an understanding of legal
21 principles from counsel, which is what I state in
22 paragraph 27.

1 Q I understand that. But what I'm -- you
2 mention analogous art in that sentence. So what I'm
3 trying to unpack is if you understand that whether
4 they are -- strike that.

5 What I'm trying to understand is whether
6 you understand -- strike that again. Let's try
7 again. Third time's a charm.

8 Is it your understanding that whether
9 prior art references are, in fact, analogous art is
10 relevant to obviousness?

11 MR. KANTAREK: Objection, form.

12 A I've already answered that question.
13 Again, I'm not a lawyer. I have an understanding of
14 legal principles from counsel. And I understand
15 that analogous art is relevant. I would agree to
16 that.

17 Q Okay. Thank you.

18 A So a better way to say it, maybe it's
19 necessary but not sufficient. So it cannot just be
20 analogous; you need to provide reasons how somebody
21 would be motivated to combine, not just that they're
22 analogous and stop there. I think that's what this

1 sentence is stating.

2 Q Okay. That's fine. I appreciate that.

3 And just to unpack that a little bit, the
4 first thing you said, you'd agree that prior art
5 references being analogous is necessary, correct?

6 MR. KANTAREK: Objection, form.

7 A Again, I'm not a lawyer. I am trying to
8 -- my understanding is I am here to clarify my
9 declaration. Those words are not in paragraph 27,
10 and I'm not rendering legal opinions, but I'm trying
11 to rephrase some of what's stated in the sentence
12 that you asked me about.

13 Q No, I know your testimony isn't word for
14 word in your declaration. I appreciate that. I
15 just want to go back to what you just said. Prior
16 art references being analogous -- sorry.

17 Prior art references being analogous is
18 necessary for obviousness but not sufficient. Is
19 that -- does that fairly describe your understanding
20 of that aspect of the law?

21 MR. KANTAREK: Objection, form.

22 A No. I think you mischaracterized what I

1 said. I was trying to give you an example and not
2 stating legal principle of the sentence that you
3 read, that mere assertions that the prior art are
4 analogous without more is insufficient.

5 So I took that sentence as an example --
6 a way to rephrase maybe what's in that sentence is
7 that they could be necessary but not sufficient.
8 And that's more of when you prove a theorem,
9 sometimes you say something is necessary but not
10 sufficient.

11 So I was using math as an analogous --
12 theorems in math as an analogous expression to apply
13 here. But I'm not saying this is a legal principle.

14 Q Okay. Let's go to paragraph 35 of your
15 declaration.

16 MR. KANTAREK: We've been going for about
17 an hour, Counsel. If you're switching gears, maybe
18 it would be a good time to take a break.

19 MR. O'DONOHUE: If the witness would like
20 one, that would be fine.

21 THE WITNESS: Sure, I'd like a break.
22 Let's do that.

1 (Recess from 10:56 a.m. until 11:05 a.m.)

2 BY MR. O'DONOHUE:

3 Q Dr. Akl, could we please turn to
4 paragraph 35 of your declaration.

5 A I'm there.

6 Q Okay. And paragraph 35 is the beginning
7 of the section of your declaration titled Roman
8 numeral VII Claim Construction, correct?

9 A Yes.

10 Q And the Claim Construction section is
11 just two paragraphs, right, 35 to 36?

12 A With a table.

13 Q Yes. Paragraphs 35 to 36, including the
14 tables?

15 A Yes.

16 Q And so in paragraph 35, you state that
17 you've been informed by counsel that the proper
18 construction to be applied is articulated in
19 Phillips -- the Phillips case, correct?

20 A Yes.

21 Q And because of that, claims should be
22 given their ordinary and customary meaning, and the

1 ordinary and customary meaning of a claim term is
2 the meaning that the term would have to a POSITA in
3 question at the time of the invention.

4 Correct?

5 A Yes, that is my understanding.

6 Q Okay. And did you apply the ordinary and
7 customary meaning that the terms would have to a
8 POSITA in the August 2008 time frame in forming your
9 opinions?

10 A Yes.

11 Q In your Claim Construction section of
12 your declaration, you don't dispute the meaning of
13 any claim terms, correct?

14 A Correct.

15 Q And your declaration does not offer any
16 opinions on what the ordinary and customary meaning
17 of any claim terms are, correct?

18 MR. KANTAREK: Objection, form.

19 A I do not articulate definitions for plain
20 and ordinary meaning.

21 Q Okay. And to follow up on that, you
22 don't offer any opinions in your declaration that

1 any claim terms should be given a specific
2 definition, correct?

3 MR. KANTAREK: Objection, form.

4 A That's fair. I do not articulate a
5 definition. But my opinions are from the point of
6 view of a POSITA giving the terms their plain and
7 ordinary meaning.

8 Q Okay. And more specifically, you don't
9 offer any opinions that any claim terms, for
10 example, are defined in the specification, correct?

11 MR. KANTAREK: Objection, form.

12 A My understanding is the claims are
13 understood by a POSITA in light of the
14 specification. But I am not pulling definitions
15 from the specification and giving them to terms.

16 Q Okay. And you're familiar with the legal
17 concept in patent law of lexicography? You've heard
18 that term before, right?

19 MR. KANTAREK: Objection, form.

20 A I have.

21 Q Okay. What's your understanding of
22 lexicography?

1 MR. KANTAREK: Objection, form.

2 A I'm not a lawyer and I'm not here to
3 render legal opinions. I don't think that's
4 something that came up in this case, so I don't have
5 opinions on that.

6 Q Oh, yeah. I'm not asking if you have
7 opinions on it. Actually, just the opposite. And
8 I'm just trying to get some common ground here if
9 you have an understanding of what lexicography is in
10 patent law. That's all.

11 MR. KANTAREK: Objection, form, scope.

12 A I do have an understanding from other
13 cases, but I don't think it's relevant to this case.

14 Q Okay. Well, I appreciate your, you know,
15 opinions on what is and isn't relevant. I would
16 ask, you know -- let the attorneys and the Board
17 decide what's relevant, and please just do your best
18 to answer my question.

19 And so with that windup, my question is,
20 you don't provide any opinions in your declaration
21 that claim terms are defined in the specification
22 under the principle of lexicography, correct?

1 MR. KANTAREK: Objection, form.

2 A That's fair.

3 Q Okay. Dr. Akl, do you have a copy of the
4 '830 patent available, which is also Exhibit 1001 in
5 this case?

6 A I do.

7 Q And do you have the '830 patent
8 electronically or in paper?

9 A Electronically. I saw it in the chat and
10 I downloaded it.

11 Q Okay.

12 (Previously marked Exhibit 1001 presented
13 to the witness.)

14 BY MR. O'DONOHUE:

15 Q Could you please turn to claim 1 of the
16 '830 patent.

17 A I'm there.

18 Q Okay. And I'd like to direct your
19 attention to the claim limitation that begins with,
20 identifying at least one video feed.

21 Do you see that?

22 A Yes.

1 Q Okay. I'm not going to read the whole
2 thing, because it's quite long. But it begins by
3 saying, identifying at least one video feed by
4 selecting the at least one video feed from the
5 plurality of video feeds associated with the
6 geographic zone.

7 Do you see that?

8 A Yes.

9 Q Okay. And directing your attention to
10 the "selecting" phrase, do you agree that claim 1
11 does not specify what part of the system performs
12 the selecting?

13 MR. KANTAREK: Objection, form.

14 A That's not something I have an opinion
15 on.

16 Q Okay. So you don't know whether claim 1
17 requires a particular part of the system to perform
18 the selecting?

19 MR. KANTAREK: Objection, form.

20 A I don't think that is something I have an
21 opinion on in this declaration.

22 Q Okay. And -- okay. Let's look at --

1 well, Dr. Akl, do you have an understanding of what
2 it means for a claim term to be a dependent claim?

3 A Yes.

4 Q Okay. What's your understanding of what
5 it means for a claim to be a dependent claim?

6 A My understanding is, you have an
7 independent claim which does not reference any other
8 claims. An example here would be claim 1.

9 Claim 2 would be a dependent claim --
10 would be an example of a dependent claim because it
11 starts by saying the method of claim 1, which means
12 all the limitations and elements of claim 1 are
13 incorporated, and additionally, you have the
14 additional language that follows that phrase.

15 Q Are dependent claims more narrow or
16 broader than the claim from which they depend?

17 A I am not a lawyer, and I'm not here to
18 render legal opinions. That seems to be a legal
19 question.

20 Q Do you agree that a dependent claim must
21 be within the scope of the independent claim from
22 which it depends?

1 MR. KANTAREK: Objection, form.

2 A I'm not a lawyer, and I'm not here to
3 render legal expert opinion. So I don't have an
4 answer to your question. That strikes me as a legal
5 question.

6 Q Okay. So you don't know whether a
7 dependent claim must be within the scope of the
8 independent claim from which it depends?

9 MR. KANTAREK: Objection to form.

10 A That, to me, seems like a legal question,
11 and I am not a lawyer, and I'm not here to answer
12 legal questions.

13 Q In forming your opinions in your
14 declaration, you did not consider whether a
15 dependent claim must be within the scope of the
16 independent claim from which it depends.

17 Is that correct?

18 MR. KANTAREK: Objection, form.

19 A We can go to the sections where I address
20 dependent claims, and we can see if that is
21 something I -- if that legal principle was necessary
22 for the opinions that I have or not.

1 Q I'm just looking for an answer to that
2 question, Dr. Akl. So do what you need to do to
3 answer the question.

4 MR. KANTAREK: Objection to form.

5 A Again, I am not a lawyer. I have an
6 understanding of legal principles from counsel, and
7 I have applied legal principles from counsel in
8 writing my declaration.

9 Q And where you applied legal principles in
10 your declaration, you stated his those legal
11 principles, correct?

12 MR. KANTAREK: Objection to form.

13 A I did provide a section on legal
14 principles. I understand that there's a lot of
15 legal principles, and I provide an overview of those
16 legal principles in the first part of my
17 declaration.

18 Q So Dr. Akl, if there is no portion of
19 your declaration that discusses the relationship
20 between the claim scope of dependent and independent
21 claims, is it fair to say that that is not a legal
22 principle you considered in forming your opinions?

1 MR. KANTAREK: Objection, form.

2 A I would not agree with that. I may have
3 considered it, but I didn't necessarily need to rely
4 upon it explicitly to provide an opinion. So
5 there's a lot of legal principles, and some may or
6 may not be as relevant to the rebuttal opinions that
7 I'm providing. Or those legal principles would not
8 impact the rebuttal opinion that I'm providing to
9 Dr. Polish's declaration. That's a better way of
10 phrasing it.

11 Q Okay. So you're saying, I think, that
12 whether a dependent claim must be within the scope
13 of the independent claim from which it depends is
14 irrelevant to your opinions in your declaration?

15 MR. KANTAREK: Objection, form.

16 A I think you mischaracterized what I
17 stated.

18 Q Okay. Well, Dr. Akl, again, I'll just
19 ask this one more time.

20 Do you have an understanding of whether a
21 dependent claim must be within the scope of the
22 independent claim from which it depends?

1 MR. KANTAREK: Objection, form.

2 A I think I've already answered that
3 question. That is a legal question, and I am not
4 here as a legal expert answering legal questions.

5 Q Okay. Let's look at claim 5 in the '830
6 patent.

7 A I'm there.

8 Q Okay. Claim 5 says, The method of claim
9 1 wherein the communications channel is a
10 push-to-talk (PTT) channel in a PTT communication
11 network and the mobile communication device is a PTT
12 radio.

13 Do you see that?

14 A I do.

15 Q Okay. So claim 5 depends from claim 1.
16 You agree with that, right?

17 A Yes.

18 Q Okay. And in claim 5, the communication
19 channel that is first -- sorry, strike that.

20 You understand that the communication
21 channel in claim 5 is referring to the communication
22 channel recited in claim 1, correct?

1 A That seems like a legal question. I do
2 have an understanding of legal principles related to
3 antecedent basis. But again, I'm not here to answer
4 legal questions.

5 But usually when you have "the"
6 something, while previously you had "a" something,
7 it's referencing back to that something.

8 Q Okay. So does that appear to be the case
9 here, the communication channel in claim 5 is
10 referencing the communication channel in claim 1,
11 right?

12 A I don't think I specifically rendered an
13 opinion on that in this declaration.

14 Q So can you answer that question?

15 A I don't have opinions on it in this
16 declaration.

17 Q Okay. And the communication channel in
18 claim 5 is a push-to-talk channel in a push-to-talk
19 communication network, correct?

20 A Yes. I see those words.

21 Q Okay. So given that claim 5 specifies
22 that the communication channel is a push-to-talk

1 channel in a push-to-talk communication network,
2 would you agree that the communication channel in
3 claim 1 could be a push-to-talk communication
4 channel in a push-to-talk communication network?

5 A Can you repeat the question, please?

6 MR. O'DONOHUE: Madam Court Reporter, can
7 you read it back, please.

8 (The court reporter read the pending
9 question from the record.)

10 A I think the answer to that question is
11 yes.

12 Q Thank you.

13 Let's go to column 7, and specifically
14 the paragraph beginning lines 19 through 37.

15 A And I do ask you when you read, if you're
16 planning on reading, to please read slowly.

17 Q Sure. I try to do that for the court
18 reporter especially. But I will endeavor to do
19 that.

20 Dr. Akl, do you want to take a minute or
21 however long you need to read the paragraph in the
22 '830 patent in column 7, lines 19 through 37.

1 A Sure. I'll read it.

2 Q Okay. Thanks.

3 A I've read it.

4 Q Okay. Great.

5 Now, directing your attention beginning
6 at the sentence beginning at line 29 of column 7
7 which says, The associated video feed may be
8 streamed to the mobile communication device if the
9 user selects the associated video feed from a subset
10 of video feeds to which he/she was provided access
11 to.

12 Do you see that?

13 A Yes.

14 Q Okay. In this embodiment in column 7, do
15 you agree that it is the user selecting the video
16 feed?

17 MR. KANTAREK: Objection to form.

18 A I do see the word, if the user selects
19 the associated video feed.

20 Q Yes. We all agree what the words say.
21 I'm asking something slightly different.

22 Do you agree that in this embodiment, it

1 is the user selecting the video feed from a subset
2 of video feeds?

3 MR. KANTAREK: Objection to form.

4 A I don't have an opinion on that, but I do
5 agree with you that line 30 and 31 uses the words,
6 if the user selects.

7 Q As an expert in land mobile radios in the
8 context of the '830 patent, can you provide a
9 substantive answer to my question? Is it the user
10 selecting the associated video feed?

11 MR. KANTAREK: Objection, form.

12 A I don't have an opinion on that in this
13 declaration, but I agree that those words appear on
14 lines 30 and 31 in column 7.

15 Q Dr. Akl, do you have any reason to
16 disagree with the characterization that in the
17 embodiment in column 7, lines 19 through 37, it is
18 the user selecting the associated video feed from a
19 subset of video feeds?

20 MR. KANTAREK: Objection, form.

21 A I don't have opinions on it one way or
22 the other.

1 Q Okay. And do you have no opinion --
2 strike that.

3 Is it fair to say you have no opinion
4 whatsoever that the '830 patent specification
5 discloses an embodiment where the user selects the
6 video feed from multiple video feeds?

7 MR. KANTAREK: Objection, form.

8 A The specification says what it says, and
9 there are a lot of different embodiments in it. I
10 don't have them all committed to memory, and I don't
11 have opinions on them.

12 Q You don't have opinions on the
13 embodiments disclosed in the specification, correct?

14 MR. KANTAREK: Objection, form.

15 A At a high level, I have not provided
16 opinions on the specification. I have provided
17 opinions on the claims and the prior art, and I've
18 provided rebuttal opinions if the prior art
19 discloses or does not disclose the limitation in a
20 claim. That is the main points in my declaration.

21 Q And sitting here today, you cannot tell
22 me whether the '830 patent specification discloses

1 an embodiment where the user selects the video feed
2 from multiple video feeds, correct?

3 MR. KANTAREK: Objection, form.

4 A I don't have opinions on that.

5 Q Okay.

6 A And my understanding is, there are
7 different embodiments. Not every claim reads on
8 every embodiment. So my focus was not on the
9 specification but on the challenged claims.

10 Q Your declaration does not contain any
11 opinions that the embodiment disclosed in column 7,
12 lines 19 through 37, are not covered by claims 1 and
13 15, correct?

14 MR. KANTAREK: Objection, form.

15 A I don't believe I rendered an opinion on
16 that.

17 Q Okay. And your declaration does not
18 contain any opinions that claims 1 and 15 do not
19 read on the embodiment disclosed in column 7,
20 lines 19 through 37, correct?

21 MR. KANTAREK: Objection, form.

22 A I did not map the claims to embodiments

1 in my declaration one way or the other.

2 Q Okay. Could we turn to column 6,
3 Dr. Akl.

4 A Yes, I'm there.

5 Q And could you take a moment to read the
6 paragraph beginning on column 6, line 3 through line
7 17?

8 A Yes, I will.
9 I have.

10 Q Okay, great. And could you tell me in
11 your words what the policy module 312 is?

12 MR. KANTAREK: Objection to form.

13 A The policy module 312 may include one or
14 more of the following policies: a policy that may
15 be set by the user, a policy that may be set by the
16 dispatcher, or administrator, a policy that governs
17 only a specific user, or a policy that may govern
18 all users of the system 300.

19 Q Okay. And your answer just now was just
20 reading verbatim from the specification, correct?

21 A I was answering your question to the best
22 of my ability, and the answer to your question is in

1 the paragraph you asked me to read.

2 Q Could you tell me in your own words what
3 the policy module 312 is?

4 MR. KANTAREK: Objection, form.

5 A I would re-read back what's stated here.
6 I have not summarized or rephrased the
7 specification, and I would not be comfortable doing
8 so on the fly.

9 Q Okay. So you're not comfortable telling
10 me in your own words what policy module 312 is.

11 Is that correct?

12 MR. KANTAREK: Objection, form.

13 A You're mischaracterizing what I said. I
14 have answered your question. I am not comfortable
15 rephrasing what's already in the specification and
16 giving you a different answer by using different
17 words than what I did previously.

18 Q Okay. And what you did previously was
19 just read the words in the patent, correct?

20 MR. KANTAREK: Objection, form.

21 A What I did previously was I answered your
22 question to the best of my ability by using the

1 specification and reading what's stated in the
2 specification to answer your question. I did not
3 read random words; I read words that answered your
4 question.

5 Q I didn't ask you if you read random
6 words. I'm just trying to understand if you can
7 tell me in your own words, without reading word for
8 word from the specification, what the policy module
9 312 is?

10 MR. KANTAREK: Objection, form.

11 A This is not a memory test or an English
12 class where I have to paraphrase. I have answered
13 the question to the best of my ability by reading
14 from the specification the answer to your question.

15 Q Going back to that last sentence,
16 beginning with, In an example embodiment, the policy
17 module may include one or more of the following
18 policies. And the last example says, or a policy
19 that may govern all users of the system 300.

20 Do you see that?

21 A I do.

22 Q Okay. Would you agree that one such

1 policy could be based on a motion sensor?

2 MR. KANTAREK: Objection, form.

3 A I don't understand the question.

4 Q Okay. So you understand that the policy
5 module 312 can automatically associate the video
6 feed from the relevant camera with the communication
7 channels that are being used.

8 Is that fair?

9 MR. KANTAREK: Objection, form.

10 A I think you're paraphrasing. I don't
11 have an opinion on your paraphrasing. I don't agree
12 or disagree with it at this point. But I understand
13 the question.

14 Q Do you have any reason to disagree that a
15 policy within policy module 312 could be based on a
16 motion sensor?

17 MR. KANTAREK: Objection to form.

18 A I don't see the word "motion sensor"
19 here, and I don't have opinions on it.

20 Q Okay. So the fact that the term "motion
21 sensor" does not appear in this paragraph, why is
22 that relevant?

1 A You asked me a question, and I answered
2 the question.

3 Q Yes. Now I'm asking you a different
4 question, Dr. Akl.

5 And that question is, the fact that the
6 term "motion sensor" does not appear in column 6,
7 lines 3 through 17, please explain why that is
8 relevant to your answer.

9 MR. KANTAREK: Objection, form.

10 A Because I do not have an opinion on
11 something that does not appear in this paragraph.

12 Q Okay. So if something isn't stated
13 explicitly in the specification, it's your
14 understanding that that cannot be part of the
15 claimed invention.

16 Is that correct?

17 MR. KANTAREK: Objection, form.

18 A No. You're mischaracterizing what I
19 stated, and you're making a generalization that I
20 disagree with.

21 Q Okay. What part of my question do you
22 disagree with?

1 A I disagree with the premise of your
2 question, and I stated that you're mischaracterizing
3 what I said.

4 Q Okay. So then you agree, then, that even
5 if something isn't stated explicitly in the
6 specification, it can still be part of the claimed
7 invention, correct?

8 A That seems like a legal question, and I
9 don't have opinions on it. It's too vague to answer
10 that question.

11 Q Are claims limited to the specification?

12 MR. KANTAREK: Objection, form.

13 A That is a legal question. I don't have
14 an answer for you.

15 Q In forming your opinions in your
16 declaration, did you assume that the claims are
17 limited to the specification?

18 MR. KANTAREK: Objection, form.

19 A I have an understanding from counsel that
20 the claims are read in light of the specification,
21 and understood by a POSITA based on that.

22 Q In forming your opinions in your

1 declaration, did you assume that the claims are
2 limited to what is disclosed in the specification?

3 MR. KANTAREK: Objection, form.

4 A I do not believe that is a legal
5 principle that counsel has told me to follow.

6 Q Okay. So you don't know whether in
7 forming your opinions in your declaration you
8 assumed that the claims are limited to what is
9 disclosed in the specification, correct?

10 MR. KANTAREK: Objection, form.

11 A I do not believe I needed to make that
12 determination for the opinions that I have in my
13 declaration one way or the other.

14 Q Okay. So in forming your opinions in
15 your declaration, you did not believe it was
16 relevant to consider whether the claims are limited
17 to what is disclosed in the specification, correct?

18 MR. KANTAREK: Objection to form.

19 A I've already answered that question.
20 That is not a legal principle that I think I have
21 been informed by counsel.

22 The legal principle that counsel has told

1 me is that the claims are understood by a person of
2 ordinary skill in the art when they are read in
3 light of the specification. That's what I -- that
4 is the legal principle that I followed.

5 Q Dr. Akl, sitting here today, do you have
6 any reason to believe that the selection of a video
7 feed through a motion sensor is not within the scope
8 of the challenged claims?

9 MR. KANTAREK: Objection, form.

10 A I don't have an opinion on it one way or
11 the other.

12 Q Okay.

13 (Previously marked Exhibit 1004 presented
14 to the witness.)

15 BY MR. O'DONOHUE:

16 Q Dr. Akl, I've put Exhibit 1004 in the
17 chat. That is the Shaffer reference. Let me know
18 when you have a copy of that available to you.

19 A I have it opened.

20 Q Great. And in forming your opinions in
21 your declaration, you reviewed the Shaffer
22 reference, correct?

1 A Yes.

2 Q And if I refer to Exhibit 1004 as Shaffer
3 or the Shaffer reference, you'll understand what I'm
4 talking about?

5 A Yes, spelled S-H-A-F-F-E-R.

6 Q Correct. Okay, great. Could you please
7 go to paragraph 25 of Shaffer.

8 A I'm there.

9 Q Okay, great. And take a minute to review
10 paragraph 25 and just let me know when you've read
11 it.

12 A I read it.

13 Q Okay, great. What are the endpoints
14 described by Shaffer?

15 MR. KANTAREK: Objection, form.

16 A The reference states, For example,
17 endpoints may include a telephone, a personal
18 computer, a video monitor, a camera, an IP phone, a
19 cell phone, a land mobile radio, a personal digital
20 assistant, a command center, or any other
21 communication hardware, software, and/or encoded
22 logic that supports the communication of audio,

1 video, or other data using packets of media (or
2 frames) or otherwise using communication network.
3 Endpoints may also include unattended or automated
4 systems, gateways, other intermediate components, or
5 other devices that establish media.

6 Q Okay. Thanks for reading that from
7 paragraph 25 of Shaffer.

8 Could you explain what the endpoints in
9 Shaffer do? What's the purpose of them?

10 MR. KANTAREK: Objection to form.

11 A That's too broad of a question. I can't
12 answer that question as asked.

13 Q Okay. Can you provide some examples of
14 what the endpoints in Shaffer do?

15 MR. KANTAREK: Objection to form.

16 A Examples of what they do is they
17 establish and support communication of audio or
18 video at a high level.

19 Q Okay. Is a personal computer a mobile
20 device?

21 MR. KANTAREK: Objection to form.

22 A It depends. A laptop may be considered a

1 mobile device, and it is a personal computer.

2 Q Okay. That's fair.

3 A personal computer could also be a
4 desktop computer, correct?

5 A Yes.

6 Q And would you agree that a desktop
7 computer is not a mobile device?

8 A I don't have an opinion on that.

9 Q Okay. Sitting here today, you can't tell
10 me whether you would consider a desktop computer to
11 be a mobile device?

12 MR. KANTAREK: Objection to form.

13 A I don't have an opinion on that.

14 Q Okay. Is a command center a mobile
15 device?

16 MR. KANTAREK: Objection to form.

17 A I don't have an opinion on that.

18 Q In forming your opinions about the
19 endpoints disclosed in Shaffer, you did not consider
20 whether a desktop computer is a mobile device,
21 correct?

22 MR. KANTAREK: Objection to form.

1 A For the rebuttal opinions that I wrote in
2 my declaration, I don't recall having to make that
3 determination one way or the other or if that
4 impacted the opinions that I have.

5 Q And in forming your opinions about the
6 endpoints disclosed in Shaffer, you did not consider
7 whether a command center is a mobile device,
8 correct?

9 MR. KANTAREK: Objection to form.

10 A The same response applies.

11 Q Okay.

12 MR. O'DONOHUE: I'm putting Exhibit 1011
13 in the chat.

14 (Previously marked Exhibit 1011 presented
15 to the witness.)

16 BY MR. O'DONOHUE:

17 Q This is the Saylor reference.

18 A Okay. I have it.

19 Q And Dr. Akl, if I refer to Exhibit 1011
20 as Saylor or the Saylor reference, will you
21 understand what I'm talking about?

22 A Yes, with Saylor spelled S-A-Y-L-O-R.

1 Q And in forming your opinions in your
2 declaration, you reviewed Saylor, correct?

3 A Yes.

4 Q Let's go to column 10 of Saylor, and in
5 particular, the paragraph beginning on line 62 and
6 going over to column 11, line 3.

7 A Okay, I'm there.

8 Q Okay. Take a minute to read that
9 paragraph and let me know when you've done that.

10 A Okay.

11 I read it.

12 Q Okay. Do you see the sentence, I believe
13 it's the second sentence, beginning -- the second
14 sentence of that paragraph beginning in column 10,
15 line 65, For example, a user may request to receive
16 alert notification that a house in the user's
17 neighborhood was burglarized.

18 Do you see that?

19 A I see those words, yes.

20 Q Okay. And in this example in Saylor, the
21 alert that is being set by the user is specific to a
22 house, right?

1 MR. KANTAREK: Objection to form.

2 A I don't understand the question.

3 Q Okay. Well, in the first sentence in
4 that paragraph, beginning in column 10, line 62, it
5 says, The user may request to receive network
6 alerts. Oh, sorry. I guess it's two sentences.
7 Network alerts may be based on alert notifications
8 associated with property, personal property and/or
9 individuals within a defined area or locality.

10 Do you see that?

11 A Yes.

12 Q So the alert notifications described here
13 in Saylor are specific to a defined area or
14 locality, correct?

15 MR. KANTAREK: Objection to form.

16 A They could be within a defined area or
17 locality.

18 Q Okay. And then in the example provided
19 in the next sentence, that area or locality is a
20 house.

21 Is that fair?

22 A I don't know if I would characterize it

1 that way. I think it could also apply to different
2 parts of the previous sentence like "property" or
3 "personal property."

4 Q Okay. Would you agree that this example
5 in Saylor is not agnostic to location?

6 MR. KANTAREK: Objection to form.

7 A It does use the term, within a defined
8 area or locality. So I would agree.

9 Q Okay. And then going up higher in the
10 column -- let's see. So column 10 of Saylor,
11 line 32. And that paragraph goes down to line 43, I
12 think. So take a minute to read that paragraph.

13 A Okay. Will do.

14 I read it.

15 Q Okay. And the first sentence beginning
16 in column 10, line 32, says, For example, within a
17 house, a user may have window and door contacts,
18 smoke detectors and motion sensors, video cameras,
19 key chain control, temperature monitors, CO and
20 other gas detectors, vibration sensors, and others.

21 Do you see that?

22 A Yes, I do.

1 Q Okay. And where it mentions video
2 cameras, do you agree that it's talking about
3 multiple video cameras?

4 MR. KANTAREK: Objection to form.

5 A It's used in the plural sense. It says,
6 video cameras, plural. I would agree that it's
7 plural, how it's used.

8 Q And you understand that the plural means
9 more than one, right?

10 A That's fair.

11 Q Okay. So would you agree that Saylor
12 discloses multiple video cameras?

13 A It doesn't use the word "multiple"
14 explicitly, but it uses "video cameras," plural.

15 Q Okay. And let's go to column 16 of
16 Saylor.

17 A I'm there.

18 Q Okay. And let's see. I'd like you to
19 look, please, at the paragraph beginning in
20 column 16 of Saylor, line 52 going on to column 17,
21 line 9. And let me know when you've had a minute to
22 read that.

1 A Okay. Will do.

2 I read it.

3 Q Okay. And beginning around line 61 of
4 column 16, do you see the sentence that begins, In
5 addition, the recorded images, for example, video
6 clips, may be compressed, at step 1016, to reduce
7 the amount of data that may be stored in a database,
8 as shown by step 1018, and/or sent to a central
9 security network, as shown by step 1020?

10 Do you see that?

11 A I do.

12 Q Okay. So would you agree that Saylor
13 discloses sending video clips to a central security
14 network?

15 A That is described here in this sentence,
16 yes.

17 Q Okay. And does your -- strike that.

18 Is it fair to say your declaration does
19 not provide any opinions distinguishing video clips
20 from video feeds?

21 MR. KANTAREK: Objection to form.

22 A I don't understand the question. Both

1 terms appear in my declaration.

2 Q Okay. Let me rephrase it.

3 As I understand it, your declaration does
4 not provide any opinions that video clips are not
5 within the scope of the term "video feed."

6 Is that correct?

7 MR. KANTAREK: Objection to form.

8 A A good example in my declaration would
9 be, for example, paragraphs 83 and 84. I am
10 disagreeing with the petition and Dr. Polish of why
11 something is not disclosed, but I am not -- for
12 different reasons, but the basis is not because a
13 video clip is not a video feed.

14 So that is not a distinction I emphasize.

15 I don't agree or disagree whether it is
16 or it isn't, but I have not specifically provided a
17 rebuttal opinion that a video clip -- because the
18 word "video clip" is different than a video feed,
19 that's why I would disagree that something is
20 disclosed.

21 Q Right.

22 A But there are other reasons associated

1 with this disclosure, but not on the difference
2 between a video clip and a video feed.

3 Q Right. So in the -- and that's kind of
4 where I'm going with this, Dr. Akl, in the sort of
5 spirit of clarifying your declaration.

6 You don't provide any opinions that
7 "video clips," as used in Saylor, are not within the
8 scope of the term "video feed" in the '830 patent.

9 Is that fair?

10 MR. KANTAREK: Objection to form.

11 A The video clips would not be the claimed
12 video feeds for other reasons, and I provide the
13 reasons. But that reason isn't because the word
14 "clip" and "feed" are different.

15 Q So a video clip could be a video feed?

16 MR. KANTAREK: Objection to form, scope.

17 A I'm not sure I've -- I would agree or
18 disagree with that. The reason that I'm trying to
19 be careful in my response is, there is -- sometimes
20 in some cases, there is a distinction between
21 something that's streamed and something that is not
22 streamed.

1 And a clip may be a file -- I mean, a
2 clip is like a video segment. And whether that is
3 streamed or stored as a file, can be viewed while
4 streaming or has to be downloaded completely, those
5 might be distinctions between a video clip and a
6 video feed.

7 But those distinctions are not what I'm
8 basing my opinion on of why what's disclosed in
9 Saylor in combination with Shaffer meets the claim
10 language for the element we're discussing in this
11 section of my declaration.

12 And we've been going about an hour. I
13 don't know if you want to have a question or two,
14 but is this a good time for a break?

15 MR. O'DONOHUE: That's fine.

16 (Recess from 12:09 p.m. until 12:20 p.m.)

17 BY MR. O'DONOHUE:

18 Q Dr. Akl, could you please turn to
19 Figure 10 of Saylor, which is Exhibit 1011.

20 A I'm there.

21 Q Figure 10 is a flow chart, correct?

22 A Yes.

1 Q And Figure 10 describes a series of steps
2 labeled 1010 through 1028?

3 A Yes.

4 Q Okay. Do you have an understanding of
5 what the process described in Figure 10 is?

6 A Yes.

7 Q Okay. Could you explain what your
8 understanding of the process described in Figure 10
9 is?

10 A Figure 10 is a flow chart that
11 illustrates the process for accessing video images
12 provided by a security system according to an
13 embodiment of the present invention.

14 Q Okay. And do you see step 1020 that
15 says, Send images and/or information to central
16 security network?

17 A Yes.

18 Q Okay. And step 1020 occurs before step
19 1022, which is labeled Access User Information,
20 correct?

21 A In the flow chart, that is correct. It's
22 above it.

1 Q Okay. And you understand that, with the
2 way the arrows are drawn, that the accessing user
3 information occurs after sending images and/or
4 information to central security network, correct?

5 A In the flow chart, box 1022 is after box
6 1020.

7 Q Okay. And then after it accesses the
8 user information in step 1022, it moves on to step
9 1024, process images and/or information, correct?

10 MR. KANTAREK: Objection to form.

11 A Box 1024 is after box 1022, I agree to
12 that.

13 Q And you agree that box 1026, execute
14 notifications and/or other operations, is after
15 1024, correct?

16 A Yes. In Figure 10, the boxes are in that
17 order.

18 Q Okay. And lastly, you agree that box
19 1028, enable user to view images and/or other
20 information, happens after box 1026, right?

21 A The way it is drawn in Figure 10, that is
22 the flow. I agree.

1 Q Okay. Let's go to, please, column 9 of
2 Saylor and, in particular, column 9, lines 54
3 through 58. It's a short paragraph.

4 A I'm there.

5 Q Okay. Just take a minute to read that, I
6 guess that's one sentence in column 9, lines 54 to
7 58.

8 A I read it.

9 Q And that sentence discloses that the
10 profile, which contains user identification
11 information, can include an email address.

12 Is that fair?

13 A Yes, I see those words.

14 Q Okay. Do you know whether the data
15 transmitted in emails contain IP address
16 information?

17 MR. KANTAREK: Objection, form.

18 A Your question is too vague.

19 Q Okay. Does the metadata contained in an
20 email, so just in the header, contain IP addresses,
21 or at least one IP address?

22 MR. KANTAREK: Objection to form, scope.

1 A Your question is too vague. I can't
2 answer it.

3 Q Okay. What part of my question is too
4 vague? Help me understand what's wrong with it.

5 A The question itself is too vague.

6 Q Yeah, I know you're talking about the
7 question. But you don't know what I mean by email?
8 IP address? Do you know what an IP address is?

9 A Yes.

10 Q Okay, great. Do you know what an email
11 is?

12 A Yes.

13 Q Okay. Do you know what I mean by --
14 Do you have an understanding of what
15 metadata within an email is?

16 A I am not sure what you're referring to.

17 Q Okay. Do you have an understanding of
18 what the word or term "metadata" is?

19 A I'm not sure how you're using it in this
20 context.

21 Q No, I know. I'm trying to use it however
22 you understand it to mean. So let's start with

1 that.

2 Do you know what metadata is in an email?

3 A No. I'm not sure how you're using it in
4 this context.

5 Q Do you know what information is contained
6 within an email?

7 MR. KANTAREK: Objection to form.

8 A Again, that's very broad. Are you
9 talking about the email itself, or are you talking
10 about the message that the email is transmitted on?

11 Q Well, the email itself, the email file.

12 A So when you get an email, you have a
13 field for the recipient and a field for the sender
14 and then a field for the subject and a field for the
15 body of the email.

16 Is that what you're referring to?

17 Q Sure. Let's start with that.

18 Does the field for the recipient contain
19 an IP address?

20 MR. KANTAREK: Objection to form, scope.

21 A No. I mean, usually, it contains letters
22 and characters separated by, like an "@"

1 field and a .com or .edu field. That's how the
2 address is normally typed.

3 So an example would be, my email at UNT
4 would be robert.akl@unt.edu. There is no IP
5 address.

6 Q Do you understand that a domain in an
7 email may be an IP address?

8 MR. KANTAREK: Objection to scope.

9 A I don't have an opinion on that.

10 MR. O'DONOHUE: I'm putting into the chat
11 Exhibit 1006, which is the Gogic reference.

12 (Previously marked Exhibit 1006 presented
13 to the witness.)

14 THE WITNESS: I see it, spelled
15 G-O-G-I-C.

16 BY MR. O'DONOHUE:

17 Q Okay. So, Dr. Akl, if I refer to Exhibit
18 1006, will you understand that -- or strike that.

19 If I refer to Exhibit 1006 as Gogic or
20 the Gogic reference, will you understand what I'm
21 talking about?

22 A Yes.

1 Q Okay. And in your declaration, you
2 provided some opinions about Gogic, correct?

3 A Yes.

4 Q Okay. So, again, in the spirit of sort
5 of clarifying what your declaration is saying, you
6 know, I'm going to ask some questions that I think
7 you don't dispute and kind of keep going on those
8 until you say, no, actually, I dispute that and
9 here's where in the declaration I dispute it. And
10 hopefully that will kind of streamline this.

11 So my understanding from reading your
12 declaration, Dr. Akl, is that you don't dispute
13 that, in Gogic, the users communicate over a
14 channel, correct?

15 MR. KANTAREK: Objection to form.

16 A It's very difficult to answer those
17 questions in vacuum. This is not a memory test.
18 And I don't recall whether I have an opinion on
19 something or not, if you're just asking me like
20 that.

21 So I can go back to my declaration and I
22 can -- we can walk through where I provide opinions.

1 But I would not be able to answer those questions at
2 a high level without walking through specific
3 paragraphs.

4 Q Sure. Dr. Akl, I'm not trying to make
5 this a memory test. You have your declaration
6 available. And I assume, of course, you know what
7 your (inaudible) opinions are. So I'm just, you
8 know (inaudible) what you do and do not dispute.

9 So read whatever you want. And let me
10 know, you know, when you're ready to answer the
11 question, or if you'd like me to repeat it.

12 A My declaration is 70 pages, and the
13 section Ground 2 starts on page 47. We can walk
14 through headings, and I point to headings for my
15 opinions of what claim elements I am disputing.

16 So you can tell which elements I have an
17 opinion on and I am disputing because I've made that
18 explicit in the headings that I have in this
19 section.

20 Q Okay. So there's no heading in your
21 declaration that Gogic does not disclose users
22 communicating over a communication channel, correct?

1 A If we go to paragraph -- sorry, yeah,
2 paragraph 120, I do provide a heading where I am
3 stating that Gogic fails to teach the first
4 limitation, which includes some of those words.

5 Q Sure. But my understanding of that
6 section, which is paragraphs 120 through 128, is
7 that your opinions are about the selection and
8 monitoring a selection and not about whether a
9 channel exists.

10 Is that fair?

11 A Your question is two questions. So it's
12 hard to answer your question because it really is
13 two parts.

14 I would agree to the first part, that I
15 am looking at the entire limitation and I'm
16 providing opinions why that limitation is missing.

17 Q Do you dispute that Gogic teaches the
18 users communicating over a communication channel?

19 A I don't think I provide an opinion on
20 that in vacuum.

21 Q Okay. So, Dr. Akl, just so we have a
22 common vocabulary, Gogic uses the abbreviation CD to

1 stand for communication device.

2 Do you understand that?

3 A Yes.

4 Q Okay. So if I say CD or communication
5 device with respect to Gogic, I'm talking about the
6 same thing.

7 Is that fair?

8 A Yes.

9 Q Okay. Do you understand that the
10 petition in this case argues that Gogic's
11 communication device user communicates over a
12 communication channel by activating a push-to-talk
13 key? Do you understand that?

14 MR. KANTAREK: Objection to form.

15 A Yes.

16 Q Okay. And --

17 A I think to better phrase what you asked
18 me, in paragraph 121, I have a quote from the
19 petition which states, the user of a mobile CD also
20 selects a communication channel to set the CD to
21 that channel, for example, through the activation of
22 push-to-talk, if that's what you're referring to.

1 Q Sure, right. And in that sentence in
2 paragraph 121, you italicize the word "selects,"
3 right?

4 A I do. And I say -- well, actually, I say
5 emphasis is in original, which implies that the
6 petition does that.

7 Q Fine. No, that's totally fair.
8 And then the first sentence of paragraph
9 122, you say, This citation also wrongly suggests
10 that the PTT key or switch is used to select a
11 channel.

12 Correct?

13 A Correct.

14 Q Okay. So if I understand your testimony
15 correctly, it's that pushing the PTT switch is not
16 selecting a channel.

17 Is that correct?

18 A That is correct. It does not disclose
19 what the claim requires in terms of selecting a
20 communication channel. What you're doing is, the
21 user is requesting the floor, "floor" being in
22 quotes. And it's not disclosing the claimed

1 selecting a communications channel. But you're
2 asking or requesting the floor after the CD is in an
3 existing communication channel.

4 Q Do you agree that before floor access is
5 granted, the CD user does not have the ability to
6 transmit on the channel?

7 MR. KANTAREK: Objection to form.

8 A I don't have an opinion one way or the
9 other because your question is vague.

10 Q Okay. You do not have an opinion on
11 whether in Gogic, before floor access is granted,
12 the CD user does not have the ability to transmit on
13 the channel, correct?

14 MR. KANTAREK: Objection to form.

15 A I'm struggling with the word "ability" in
16 your question. I think a better term is
17 "permission" because the hardware has the ability.
18 The push-to-talk is what activates permission where
19 you request the floor of an existing communication
20 channel, and then you can transmit. Just to kind of
21 short-circuit this question.

22 Q Okay. So that's fine. We can work with

1 your word "permission."

2 So would you agree that in Gogic, before
3 floor access is granted, the CD user does not have
4 permission to transmit on the channel, correct?

5 MR. KANTAREK: Objection to form.

6 A I would agree with that.

7 Q Okay.

8 A They can listen to the channel. There is
9 a channel there. They are listening. But you only
10 want one person to talk at a time, kind of like what
11 we're doing here.

12 So you do not have -- you don't have
13 permission yet. The system doesn't grant you
14 permission until you press the push-to-talk, and if
15 someone else isn't transmitting, then you can
16 transmit.

17 Q Dr. Akl, are you familiar with Gogic's
18 communication manager 218 or CM 218?

19 A We can go to the reference and discuss
20 it. I don't know if I have opinions on it off the
21 top of my head. I do cite it in my declaration.

22 Q Okay. You don't dispute in your

1 declaration that CM 218 keeps track of which CDs
2 have transmission problem -- privileges, excuse me,
3 at any point in time, correct?

4 MR. KANTAREK: Objection to form.

5 A In paragraphs 126 and 127, I provide an
6 opinion what I agree and disagree CM 218 does. And
7 I state that, I agree CM 218 receives a CD's request
8 to communicate, and it determines whether any other
9 group is currently assigned the transmission
10 privilege. But I disagree that this means that
11 CM 218 is monitoring the selection of a
12 communication channel.

13 It's monitoring a request to transmit.

14 Q And so when CM 218 determines whether any
15 other group member is currently assigned the
16 transmission privilege, CM 218 is keeping track of
17 what other CDs have transmission privileges at that
18 point in time.

19 Is that fair?

20 A I stated that it's preventing multiple
21 users from transmitting at the same time. It's
22 trying to prevent cross-talk. So it's checking if

1 you -- so that's the purpose of CM 218. And that's
2 in paragraph 127 of my report -- my declaration.

3 Q But how does -- well, let me ask it this
4 way.

5 How does CM 218 determine whether any
6 other group member is currently assigned a
7 transmission privilege?

8 A That's described in paragraph 39 and 40,
9 for example, in the reference. And the parts that
10 are relevant to the opinions here is that, again,
11 CM 218 is not monitoring the selection of a
12 communication channel by a user. And that's the
13 claim language that we're looking for.

14 Q Right. But you see in paragraph 40 of
15 Gogic it says, CM 218 maintains a list of defined
16 groups.

17 Do you see that?

18 A Yes.

19 Q And then in paragraph 39, it also says,
20 CM 218 manages, and I'm skipping ahead here, the
21 distribution of group membership and registration
22 lists.

1 Do you see that?

2 A Yes, I see those words.

3 Q Okay. So CM 218 uses group membership
4 and registration lists to determine whether any
5 other group member is currently assigned a
6 transmission privilege.

7 MR. KANTAREK: Objection to form.

8 Q Is that fair?

9 A No, I disagree with that
10 characterization. It's checking to see -- it's
11 managing the operation, including push-to-talk,
12 request arbitration, which it says, floor
13 request/grant/deny. That's the part that's really
14 relevant to -- or more relevant to the opinion here.

15 But again, managing request arbitration
16 isn't -- is not the same as what the claim requires,
17 which is monitoring the selection of a communication
18 channel, because that's -- the users are -- the
19 channel is already selected. Everybody is on that
20 channel. There is no selection of a communication
21 channel, as I have stated. We're just deciding who
22 gets to talk.

1 It's like us right now, we already are on
2 a Zoom call. We have the channel, the communication
3 set. And, you know, we can decide who talks and so
4 we don't talk over each other. But we're not
5 opening up a new Zoom. We're already on a
6 communication channel.

7 Q Okay. Let me ask you this, Dr. Akl.

8 If the Board agrees with the petitioner
9 that pressing the push-to-talk button is selecting a
10 communication channel, do you have a separate
11 argument or opinions that Gogic still fails to
12 disclose monitoring the selection of a communication
13 channel?

14 A My declaration speaks for itself. We can
15 walk through the opinions that I have.

16 Q Well, what I'm trying to understand is
17 whether your argument about monitoring is distinct
18 from your opinions about selection or selecting.

19 In other words, my understanding, as I
20 read your declaration, is that the two arguments
21 rise and fall together. And if -- but if you have
22 some separate argument about that in your

1 declaration, that's what I'm trying to get at.

2 MR. KANTAREK: Objection to form.

3 A My opinions specific to this limitation
4 here are in paragraphs 120 through 128.

5 Q Okay. And so could you identify for me,
6 within paragraphs 120 through 128 of your
7 declaration, anywhere you say something along the
8 lines of, even if pressing the push-to-talk button
9 is selecting a communication channel, Gogic
10 nevertheless still doesn't disclose monitoring the
11 selection of a communication channel?

12 MR. KANTAREK: Objection, form.

13 Q And feel free to take time to look
14 through those nine paragraphs and let me know if you
15 see a place that says something like that.

16 A We can go to paragraphs 124 and 125 and
17 126. Those are providing an opinion that the CDs do
18 monitor an emergency broadcast, and when the CD
19 makes the determination, it's going to accept the
20 invitation, but it's, again, not making a selection.

21 Q Okay. And your testimony just now
22 was seems like focused on the making a selection.

1 Is that fair?

2 A It's not in relation to push-to-talk, but
3 I am looking at the entire limitation. And so I'm
4 giving you another example that's not push-to-talk,
5 per se, that even if the Board feels that the
6 push-to-talk discloses selecting a channel, which I
7 disagree with, again, there is no selection. You're
8 not monitoring a selection when you accept an
9 invitation.

10 Q Okay. So let's look at paragraph 124 to
11 start. The first sentence says, In my opinion,
12 Gogic does not provide any way for a user of a
13 mobile communication device to select a channel.

14 Correct?

15 A Yes.

16 Q Okay. Paragraph 124 does not contain any
17 statement regarding, well, if this is selecting a
18 channel, Gogic doesn't disclose monitoring the
19 selection of the channel.

20 Correct?

21 MR. KANTAREK: Objection to form.

22 Q Just in paragraph 124.

1 MR. KANTAREK: Same objection.

2 A So if you're not selecting, you cannot
3 monitor something because you don't have the
4 selecting part.

5 Q Right. I understand that part of your
6 argument. I'm just focusing on what's in paragraph
7 124. You're talking about there's no selection of a
8 channel, correct?

9 A Yes.

10 Q Okay. Paragraph 125, first sentence,
11 That the CD makes the determination and accordingly
12 accepts the invitation means the user of the CD does
13 not make a selection, the CD itself makes the
14 connection and the dispatcher 400 amends 442 the
15 group list to include CD1, 412, as a confirmed
16 member of the group.

17 Do you see that?

18 A Yes.

19 Q Okay. So again, it seems like paragraph
20 125 is opining on the aspect of selection that you
21 say Gogic does not disclose, correct?

22 A That's fair.

1 Q Okay. And then paragraph 126, let's see,
2 you quote the petition in your first sentence.

3 Is that correct?

4 A Yes.

5 Q Okay. And that quote is about the
6 selection of the communication channel, correct?

7 A Both the selection and that it's being
8 monitored by the communication manager.

9 Q Okay. And then at the end of the last
10 sentence you say, but I disagree that this means
11 CM 218 is monitoring the selection of a
12 communication channel.

13 Correct?

14 A Yes. I'm saying -- and then I expand
15 that it's monitoring the request to transmit.

16 Q Okay. So in paragraph 127, you say --
17 you agree that CM 218 is monitoring the request to
18 transmit, correct?

19 A Yes.

20 Q Okay. So it's monitoring something?
21 CM -- strike that.

22 You agree that CM 218 is monitoring

1 something, correct?

2 MR. KANTAREK: Objection, form.

3 A That's fair. It's monitoring requests to
4 transmit.

5 Q Okay. And if the --

6 A To prevent cross-talk between users.

7 Q Right. So here's where I was going.

8 If the Board agrees with the petitioner
9 that the request to transmit is selecting a
10 communication channel, then CM 218 is monitoring
11 that, correct?

12 A No. It is monitoring a request to
13 transmit.

14 Q Could you go to paragraph 112 of your
15 declaration, Dr. Akl.

16 A I'm there.

17 Q Okay. Okay. And the first sentence
18 says -- of paragraph 112 says, Gogic also explains
19 that its "CDs 102, 104, and 106 transmit and receive
20 signals from base stations 108 and/or 110, generally
21 depending on their proximity to each base station."

22 Do you see that?

1 A I do.

2 Q And then you italicized "depending on
3 their proximity to each base station."

4 Do you see that?

5 A Yes, that's correct.

6 Q This time it's "emphasis added," right?

7 A Yes.

8 Q We'll be careful about that. Okay.

9 Why did you emphasize "depending on their
10 proximity to each base station"?

11 A I'm -- here, I'm focusing on the opinion
12 that when they are in range, and that's what
13 "depending on proximity," which means they are in
14 range, they can communicate without -- with that
15 base station, without a need to make an initial
16 connection. So you're close enough and then you can
17 communicate, depending on their proximity.

18 So that's what -- I'm trying to explain
19 how a POSITA would understand that sentence.

20 Q Okay. So would you agree that this
21 disclosure from Gogic is talking about the CDs
22 communicating with the base station based on their

1 proximity?

2 A That's fair.

3 Q Okay. This disclosure does not discuss
4 making initial connections with a base station based
5 on proximity, correct?

6 A That's fair. Because I explain in
7 paragraph 113 how you can make an initial
8 connection. So I elaborate on that in the next
9 paragraph.

10 Q Okay. Can we go to paragraph 110.

11 A I'm there.

12 Q Okay. You see the second sentence that
13 says, In my opinion, while the initial connection
14 between CD and base station is immaterial to Gogic's
15 functionality, Gogic does provide a long list of
16 ways that CDs and base stations can be connected.

17 Do you see that?

18 A I do.

19 Q After that sentence, you do not provide a
20 citation to Gogic, right?

21 A I do not after that sentence. I do after
22 the next sentence.

1 Q Okay. And that's paragraph 60 of Gogic,
2 correct?

3 A Yes.

4 Q Okay. Is paragraph 60 the long list of
5 ways that CDs and base stations can be connected
6 that you refer to in the previous paragraph?

7 A I think paragraph 60 is supporting the
8 sentence right before it which talks about -- and I
9 cite to paragraph 60 a couple times, how the
10 reference discloses a common channel that's used. I
11 mean, we can go to paragraph 60.

12 Q Yeah, I'm just -- so what I'm looking
13 for, Dr. Akl, is where that long list is in Gogic
14 that you testify about. I'm hoping you can identify
15 that for me.

16 MR. KANTAREK: Objection to form.

17 A Would you want me to go through Gogic and
18 give you examples? Is that what you're asking? I
19 don't think it's in one specific location. So this
20 is --

21 (Cross-talk.)

22 Q Yeah, if you can. I mean, I'm just --

1 yeah, I'm not sure where to look for this long list
2 of ways that CDs and base stations can be connected.
3 So if you can tell me what they are, that would be
4 great.

5 A Figure 1 would be one example. Figure 2
6 would be another example. Figure 4 is describing
7 the call flow.

8 So those all are examples supporting the
9 opinion that I have. And we can go through those
10 specific sections, but I'll pause here and see if
11 you want me to elaborate further.

12 Q Okay. So you're saying that figures 1,
13 2, and 4 are the long list of ways that CDs and base
14 stations can be connected that you describe in
15 paragraph 60 of your declaration -- sorry. Let me
16 rephrase that. I'm sorry. I'm getting my paragraph
17 numbers screwed up.

18 So you're saying paragraphs 1, 2, and 4
19 provide the long list of ways that CDs and base
20 stations can be connected disclosed by Gogic, as you
21 state in paragraph 110 of your declaration.

22 Is that correct?

1 MR. KANTAREK: Objection to form.

2 A No. I think you're mischaracterizing
3 what I said. I said Figure 1, Figure 2, Figure 4,
4 and the accompanying texts of those figures are
5 examples.

6 Q Okay. Anything besides Figure 1,
7 Figure 2, Figure 4, and the associated text of those
8 figures support your opinion that Gogic provides a
9 long list of ways that CDs and base stations can be
10 connected?

11 A Those are examples that I can see right
12 away without having to re-read Gogic in detail. I
13 don't want to, like, use a lot of time. But being
14 able to answer the question at a high level, those
15 would be the sections and the accompanying texts of
16 how the reference is describing different ways a CD
17 can be connected to a base station, whether it's
18 close or you already have an initial connection or
19 you're doing an audio connection. And those are
20 discussed in different points of the reference.

21 Q Okay. Sitting here today, can you
22 identify anything besides figures 1, 2, and 4, and

1 the accompanying text of those figures to support
2 that opinion? I'm just trying to get the full
3 universe of what you think supports it, and then
4 we'll go into each example.

5 MR. KANTAREK: Objection to form.

6 A It's difficult for me to box myself in
7 like that, because, again, I am trying to answer
8 your question, and I'm giving you examples. But I'm
9 not saying these are the only examples. I would not
10 be comfortable admitting to that because that would
11 not be accurate.

12 Q Okay. But you understand that this is my
13 chance to depose you, right? And the petitioner has
14 the right to be on notice of what is supporting your
15 opinions.

16 So the floor is yours. I'll just give
17 you one more opportunity if you can identify any
18 other examples, go ahead, and then we'll move on.

19 MR. KANTAREK: Objection to form.

20 A Well, this statement is my -- is in my
21 declaration, so you are -- you understand the
22 opinion that I have.

1 Q Right. But we also have the right to be
2 on notice of what supports that opinion. Because
3 right now there's nothing in your declaration. So
4 let's -- last call, anything besides figures 1, 2,
5 4, and the accompanying text?

6 A Well, I think --

7 MR. KANTAREK: Objection to form.

8 A -- my declaration speaks for itself, so
9 whatever is already in my declaration that I point
10 to in addition to those would be examples that I can
11 answer right now.

12 Q All right. Let's look at Figure 1.

13 A Well, actually, before we switch gears,
14 can we go ahead and break for lunch?

15 MR. O'DONOHUE: That's fine with me.

16 (Recess from 1:15 p.m. until 2:01 p.m.)

17 BY MR. O'DONOHUE:

18 Q Dr. Akl, since we just got back from the
19 lunch break -- we've taken a number of breaks today,
20 I just want to ask you about those briefly.

21 During any of the breaks today, have you
22 had any discussions with counsel for the patent

1 owner?

2 A No.

3 Q Okay. So you haven't spoken with
4 Mr. Kantarek at all today since the deposition
5 started?

6 MR. KANTAREK: Objection to form.

7 A Correct.

8 Q All right. Can we go to paragraph 121 of
9 your declaration, please.

10 A I'm there.

11 Q Great. And in the last sentence of
12 paragraph 121, you say, Notably, this argument
13 refers to "a communication channel," and not the
14 "dedicated channel" or "dedicated forward channel"
15 that was mapped to the claimed communication
16 channel.

17 Do you see that?

18 A Yes.

19 Q I think the answer is no, reading your
20 declaration, but the question is, do you provide any
21 testimony explaining the difference between a
22 communications channel, a dedicated channel, and

1 dedicated forward channel?

2 MR. KANTAREK: Objection to form.

3 A I do not provide definitions of those, if
4 that's what you're asking.

5 Q Well, that's one part of it, I suppose.
6 But more specifically, does your declaration ever
7 explain any substantive differences between a
8 communication channel or a dedicated channel?

9 A I am providing rebuttal opinions here to
10 what's in the petition and in Dr. Polish's
11 declaration. So I am rebutting the opinions that he
12 has, and that's why this sentence is here, referring
13 to what's in the petition.

14 Q Okay. So can you identify for me any
15 paragraphs or sentences where you provide a
16 substantive -- where you explain a substantive
17 difference between a communication channel and a
18 dedicated channel?

19 A Well, the difference is coming because
20 the petition itself is switching terms. And in the
21 previous paragraph, I'm citing to the petition; I'm
22 citing to the art that it's relying on where it's

1 describing a dedicated forward channel as they
2 appear in the prior art.

3 Those terms are understood by a POSITA.
4 And so a forward channel is normally a channel --

5 Q No, Dr. Akl, I'm sorry. I'm not asking
6 you to provide new opinions; I'm asking you to
7 identify any in your declaration. This is not a --
8 this was not an open-ended question. If it's in
9 your declaration, please just identify it for me. I
10 apologize for interrupting you, but --

11 MR. KANTAREK: I'd just like to note for
12 the record it was an open-ended question, and that
13 you interrupted Dr. Akl in his answer.

14 A Those are terms that appear in the art,
15 for example, the Gogic, and there is a distinction.
16 A forward channel is from a base station to a user.

17 Q Dr. Akl, I'm asking about your
18 declaration. If your counsel wants to redirect and
19 ask more about this later, that's his choice. I'm
20 just asking you to explain to me where in your
21 declaration you explain any substantive difference
22 between those terms. That's it.

1 A A POSITA understands those terms. These
2 are terms of art. That's my answer to your
3 question.

4 Q Okay. Let's go to -- starting at
5 paragraph 107 of your declaration.

6 Above paragraph 107, there's a heading
7 that says, There is No Motivation to Combine Gogic
8 and Opitz.

9 Do you see that?

10 A Yes. Opitz spelled O-P-I-T-Z.

11 Q And your opinions regarding a lack of a
12 motivation to combine Gogic and Opitz are in
13 paragraphs 107 through 119.

14 Is that correct?

15 A That's fair. At least in this section.

16 Q Okay. Again, limiting -- I'm limiting my
17 question to what's in your declaration.

18 Am I correct that nowhere in paragraphs
19 107 through 119 do you provide any opinions that
20 Gogic teaches away from Opitz's disclosure of
21 displaying and selecting radiofrequencies?

22 A I don't think this section is

1 describing -- or is focusing on the display. I do
2 address that in a different section.

3 Q Okay.

4 A Starting on paragraph, I think -- sorry.
5 On page 58, I have a section related to the display.

6 Q I understand that.

7 But in paragraphs 107 through 119, you do
8 not testify that Gogic teaches away from Opitz's
9 disclosure of displaying and selecting
10 radiofrequencies, correct?

11 MR. KANTAREK: Objection to form.

12 A This section is not focused on that
13 limitation.

14 Q Okay. So then -- so let's go to
15 paragraph 139 of your declaration.

16 A I'm there.

17 Q Okay. And the title of subheading C is,
18 Opitz's Vehicle Radios Would Not Interface With
19 Video Systems.

20 Do you see that?

21 A Yes.

22 Q Okay. And in paragraphs 139 through 141,

1 you don't ever reach the conclusion that Gogic
2 teaches away from Opitz's disclosure of displaying
3 and selecting radiofrequencies, correct?

4 A I don't believe I render that opinion.
5 My understanding is, to show that something teaches
6 away, there's certain things you need to show, and
7 I -- it's -- the opinion that I have here is whether
8 something is disclosed or not, and the opinion that
9 I'm rendering here relates to the Gogic and the
10 Opitz reference do not teach or suggest this
11 limitation, which is different than what you're
12 asking me, which is not addressed in this section.

13 Q Okay. Dr. Akl, what is an interoperable
14 network?

15 MR. KANTAREK: Objection to form.

16 MR. O'DONOHUE: Please explain the basis
17 for your objection so I can cure it, Counsel.

18 MR. KANTAREK: There's no foundation.
19 What interoperable network are you talking about,
20 what reference. I mean, I can keep going.

21 MR. O'DONOHUE: Anything else?

22 MR. KANTAREK: It's vague.

1 MR. O'DONOHUE: Anything else?

2 MR. KANTAREK: I think that's about it.

3 Q Dr. Akl, do you have an understanding of
4 what an interoperable network is?

5 A At a high level, an interoperable network
6 may allow different protocols or different networks
7 to work together.

8 Q And when you say "work together," what do
9 you mean by that?

10 A I think the only reference that really
11 discusses interoperability is Shaffer. So I think
12 in the context of Shaffer, that term is used very
13 broadly, and I discuss that in paragraph 65.

14 But my opinions related to that I think
15 are in that context of Shaffer that uses that term.

16 Q Suppose for a moment that there were two
17 neighboring cities, for example, city A and city B,
18 that had different first responder agencies, and you
19 wanted those agencies to be able to communicate with
20 each other. Would interoperable networks be a
21 solution to achieving that?

22 MR. KANTAREK: Objection to form.

1 A Your question is too vague. I don't
2 think interoperable network is a solution, per se.
3 I think it's more of a description.

4 But interoperable network doesn't really
5 lend itself to specific implementation. So when you
6 say interoperable network, that doesn't really
7 inform somebody on how you do something but rather
8 the goal.

9 Q Okay. Well, again, sticking with this
10 example of two neighboring cities with first
11 responder agencies that want to communicate with
12 each other, would creating interoperable networks
13 that could talk to each other be a goal?

14 MR. KANTAREK: Objection to form.

15 A Your example is too vague, and it
16 lacks -- I can't answer it as asked. It's too
17 vague. So there's no yes or no answer because I
18 don't know any of the details of those two networks
19 in those two cities.

20 Q Well, right. But you just told me that
21 interoperable networks, that's a goal of the
22 network, not describing the network. So that's why

1 I'm trying to use your words to ask the question.

2 So if you had neighboring cities with
3 first responder agencies that want to talk to each
4 other, would creating interoperable networks be an
5 obvious goal?

6 MR. KANTAREK: Objection to form.

7 A Again, I can't answer that question
8 because your question itself is vague. I don't know
9 if that is a goal or not.

10 Q Okay. Do claims 1 and 15 of the '830
11 patent exclude ad hoc networks?

12 MR. KANTAREK: Objection to form.

13 A That seems to be a legal question in
14 terms of what is the scope. The word "ad hoc" does
15 not appear, I think, anywhere in the patent, not
16 just in those claims.

17 Q Okay. And you don't have any -- you
18 don't offer any opinions that the '830 patent
19 disclaimed ad hoc networks, correct?

20 A I discuss ad hoc communication networks
21 in my declaration because I think the Gogic
22 reference uses it. And they're ad hoc. But that's

1 I believe, the only place that term is used.

2 Q Right. And what I'm trying to narrow
3 down here is the fact that you haven't offered
4 opinions that the '830 patent disclaims ad hoc
5 networks, whether they're from Gogic or something
6 else.

7 MR. KANTAREK: Objection to form.

8 A I mean, my declaration speaks for itself.
9 It's very confusing when you're asking me questions
10 because sometimes you ask me a question and you
11 don't want me to answer that question if it's not in
12 my declaration. Now you're asking me the same
13 question, but you want me --

14 So again, I'm confused by the scope of
15 your questions sometimes because you're giving me
16 conflicting instructions per question.

17 Q Okay. I'm sorry you think my questions
18 are unfair.

19 So you're -- just zooming in on your
20 statement that your declaration speaks for itself --
21 strike that. Never mind.

22 Let's go to page 31 of your declaration.

1 A I'm there.

2 Q Now, on page 31, there's a subheading
3 labeled D that says, Shaffer's IS Would Work With
4 Any Network, There is No Reason to Look to Saylor.

5 Do you see that?

6 A I do.

7 Q And when you say "Shaffer's IS," you're
8 talking about -- IS stands for interoperable system,
9 correct?

10 MR. KANTAREK: Objection to form.

11 A Yes.

12 Q Okay. So it's your opinion that
13 Shaffer's interoperable system would work with any
14 network, correct?

15 A I'm saying the description is very broad,
16 that it would apply to a wide range of networks.
17 And it's so broad to the point where there's
18 really -- that on its own would not be a reason to
19 look to Saylor. There is no hook.

20 Q Yeah, okay. I'm just -- I'm zooming in
21 on the first part of that statement there, and I
22 just want to know whether you stand by the opinion

1 that Shaffer's interoperable system would work with
2 any network.

3 Do you stand by that?

4 A I stand by the opinion in the paragraph,
5 and by the heading, and you're reading part of the
6 heading. I want to make sure that it's not taken
7 out of context.

8 Q Okay. So you don't have any reason to
9 believe that there are certain networks that
10 Shaffer's interoperable system would not work with?

11 A I have not provided an exhaustive list,
12 but I do state that the petition and Dr. Polish
13 state that IS is so broadly interoperable that it
14 would work with a wide range of networks. And
15 that's really Dr. Polish's opinion.

16 MR. O'DONOHUE: Counsel, if it's okay,
17 can we take a break, and I think I'm just about
18 done. But I would like a few minutes to
19 double-check that, but I think we'll be done.

20 MR. KANTAREK: Absolutely.

21 (Recess from 2:24 p.m. until 2:34 p.m.)

22 MR. O'DONOHUE: I pass the witness.

1 MR. KANTAREK: Let's take a quick break
2 just so I can talk to Robert. We might not have any
3 questions. But I think ten minutes is sufficient.

4 (Recess from 2:34 p.m. until 2:39 p.m.)

5 MR. KANTAREK: No questions from patent
6 owner. Thanks for everyone's time.

7 MR. O'DONOHUE: Dr. Akl, pleasure as
8 always.

9 THE WITNESS: Thank you.

10 (Transcript orders discussed.)

11 COURT REPORTER: Thank you. That's all I
12 need.

13 (Off the record at 2:42 p.m.)

14

15

16

17

18

19

20

21

22

1 CERTIFICATE OF SHORTHAND REPORTER - NOTARY PUBLIC

2
3 I, Lisa V. Feissner, RDR, CRR and Notary
4 Public in and for the District of Columbia, do
5 hereby certify:

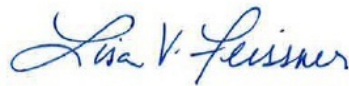
6
7 That ROBERT AKL, Ph.D., the witness whose
8 deposition is hereinbefore set forth, was duly sworn
9 by me before the commencement of such deposition,
10 and that such deposition was taken before me and is
11 a true record of the testimony given by such
12 witness.

13
14 I further certify that the adverse party,
15 STA GROUP LLC, was represented by counsel at the
16 deposition.

17
18 I further certify that the deposition of
19 ROBERT AKL, Ph.D., occurred REMOTELY on TUESDAY,
20 SEPTEMBER 10, 2024, commencing at 10:03 and
21 concluding at 2:42.
22

1 I further certify that I am not related
2 to any of the parties to this action by blood or
3 marriage, I am not employed by or an attorney to any
4 of the parties to this action, and that I am in no
5 way interested, financially or otherwise, in the
6 outcome of this matter.

7
8 IN WITNESS WHEREOF, I have hereunto set
9 my hand this 11th day of SEPTEMBER, 2024.

10
11 
12 _____

13 NOTARY PUBLIC IN AND FOR

14 THE DISTRICT OF COLUMBIA

15 MY COMMISSION EXPIRES JUNE 15, 2028
16
17
18
19
20
21
22

A			
abbreviation 83:22	accessing 75:11, 76:2	78:8, 79:19, 80:2, 80:5, 80:7, 108:2	48:16, 50:2, 51:15, 51:20, 51:22, 52:5, 52:13, 57:22, 58:11, 60:4, 65:6, 69:4, 69:8, 70:2, 70:6, 70:11, 71:12, 72:15, 73:17, 76:11, 76:13, 76:18, 76:22, 83:14, 86:4, 87:2, 87:6, 88:6, 88:7, 95:17, 95:22, 97:20
ability 19:3, 55:22, 56:22, 57:13, 86:5, 86:12, 86:15, 86:17	accident 24:10	addressed 109:12	agrees 91:8, 96:8
able 17:19, 19:5, 82:1, 101:14, 110:19	accompanying 101:4, 101:15, 102:1, 103:5	addresses 77:20	ahead 27:4, 89:20, 102:18, 103:14
about 5:22, 7:20, 10:15, 18:20, 19:8, 22:5, 36:12, 37:16, 63:4, 65:18, 66:5, 66:21, 70:2, 74:12, 78:6, 79:9, 79:10, 80:21, 81:2, 83:7, 83:8, 84:5, 91:17, 91:18, 91:22, 94:7, 95:5, 97:8, 97:21, 99:8, 99:14, 103:20, 106:17, 106:19, 109:19, 110:2, 114:8, 115:17	according 75:12	administrator 55:16	akl 1:18, 2:3, 4:2, 5:2, 5:7, 5:11, 12:5, 13:7, 16:1, 17:13, 26:17, 28:15, 29:17, 38:3, 42:3, 44:1, 46:2, 46:18, 47:18, 50:20, 52:15, 55:3, 59:4, 62:5, 62:16, 66:19, 73:4, 74:18, 80:17, 81:12, 82:4, 83:21, 87:17, 91:7, 96:15, 99:13, 103:18, 106:5, 106:13, 106:17, 109:13, 110:3, 116:7, 117:7, 117:19
above 11:21, 75:22, 107:6	achieving 110:21	admitting 102:10	akl@unt 80:4
absolutely 115:20	action 118:2, 118:4	adverse 117:14	alert 67:16, 67:21,
accept 92:19, 93:8	activates 86:18	after 14:1, 76:3, 76:5, 76:7, 76:11, 76:14, 76:20, 86:2, 98:19, 98:21	
accepts 94:12	activating 84:12	again 18:20, 26:16, 27:5, 32:10, 34:18, 35:6, 35:7, 35:13, 36:7, 46:5, 47:18, 49:3, 79:8, 81:4, 89:10, 90:15, 92:20, 93:7, 94:19, 102:7, 107:16, 111:9, 112:7, 113:14	
access 51:10, 75:19, 86:4, 86:11, 87:3	activation 84:21	agencies 22:22, 25:14, 25:17, 25:21, 26:1, 30:19, 32:5, 110:18, 110:19, 111:11, 112:3	
accesses 76:7	actively 14:5, 14:15, 14:21, 15:10	agnostic 69:5	
	actual 30:5	ago 23:14, 23:21, 24:3	
	actually 41:7, 81:8, 85:4, 103:13	agree 8:5, 35:15, 36:4, 43:10, 44:20, 47:2,	
	ad 112:11, 112:14, 112:19, 112:20, 112:22, 113:4		
	add 25:12		
	added 97:6		
	addition 71:5, 103:10		
	additional 44:14		
	additionally 44:13		
	address 45:19, 77:11, 77:15, 77:21,		

68:7, 68:12 alerts 68:6, 68:7 all 13:7, 16:7, 16:19, 17:8, 17:16, 28:13, 41:10, 44:12, 51:20, 53:10, 55:18, 57:19, 100:8, 103:12, 104:4, 104:8, 116:11 alleged 31:19 allow 20:17, 110:6 allowed 22:9 along 92:7 already 26:20, 27:5, 35:12, 48:2, 56:15, 61:19, 90:19, 91:1, 91:5, 101:18, 103:9 also 16:9, 20:22, 21:10, 21:11, 21:13, 25:21, 29:11, 42:4, 64:3, 65:3, 69:1, 84:19, 85:9, 89:19, 96:18, 103:1 always 116:8 amends 94:14 amount 71:7 analog 22:10 analogous 34:10, 34:15, 35:2, 35:9,	35:15, 35:20, 35:22, 36:5, 36:16, 36:17, 37:4, 37:11, 37:12 analyze 31:4 analyzed 31:8 analyzing 31:18 annotations 11:12 another 20:11, 93:4, 100:6 answer 8:8, 9:10, 9:19, 11:6, 11:14, 14:12, 16:11, 17:20, 18:12, 19:5, 19:9, 19:14, 21:1, 26:21, 26:22, 27:4, 28:17, 32:19, 41:18, 45:4, 45:11, 46:1, 46:3, 49:3, 49:14, 50:10, 52:9, 55:19, 55:22, 56:16, 57:2, 57:14, 59:8, 60:9, 60:14, 64:12, 78:2, 81:16, 82:1, 82:10, 83:12, 101:14, 102:7, 103:11, 104:19, 106:13, 107:2, 111:16, 111:17, 112:7, 113:11 answered 19:2, 26:20, 35:12, 48:2, 56:14, 56:21, 57:3, 57:12,	59:1, 61:19 answering 48:4, 55:21 antecedent 49:3 antenna 22:13 any 7:17, 10:19, 11:11, 12:18, 12:22, 18:8, 19:10, 24:4, 24:15, 25:5, 25:8, 39:13, 39:15, 39:17, 39:22, 40:1, 40:9, 41:20, 44:7, 52:15, 54:10, 54:18, 58:14, 62:6, 63:20, 71:19, 72:4, 73:6, 88:3, 88:8, 88:14, 89:5, 90:4, 93:12, 93:16, 102:17, 103:21, 103:22, 104:20, 105:7, 105:14, 106:7, 106:21, 107:19, 111:18, 112:17, 112:18, 114:4, 114:13, 115:2, 115:8, 116:2, 118:2, 118:3 anyone 11:15 anything 10:20, 12:14, 17:3, 31:22, 101:6, 101:22, 103:4, 109:21, 110:1 anywhere 92:7, 112:15 apologize 106:10 appeal 1:2	appear 49:8, 52:13, 58:21, 59:6, 59:11, 72:1, 106:2, 106:14, 112:15 applied 38:18, 46:7, 46:9 applies 66:10 apply 32:19, 37:12, 39:6, 69:1, 114:16 appreciate 16:18, 36:2, 36:14, 41:14 arbitration 90:12, 90:15 area 29:21, 68:9, 68:13, 68:16, 68:19, 69:8 areas 17:22 argues 84:10 argument 91:11, 91:17, 91:22, 94:6, 104:12 arguments 91:20 around 29:20, 30:9, 71:3 arrested 30:17 arrows 76:2 art 16:10, 16:14, 16:15, 33:6, 34:9, 34:10, 34:15, 35:2, 35:9, 35:15, 36:4, 36:16,
---	--	--	---

36:17, 37:3, 53:17, 53:18, 62:2, 105:22, 106:2, 106:14, 107:2 articulate 39:19, 40:4 articulated 38:18 articulation 34:11 asked 19:14, 27:5, 28:17, 36:12, 56:1, 59:1, 64:12, 84:17, 111:16 asking 17:15, 18:20, 18:21, 26:15, 41:6, 51:21, 59:3, 81:19, 86:2, 99:18, 105:4, 106:5, 106:6, 106:17, 106:20, 109:12, 113:9, 113:12 aspect 32:12, 36:20, 94:20 aspects 18:6 assertions 34:9, 37:3 assigned 88:9, 88:15, 89:6, 90:5 assistant 63:20 assisting 31:18 associate 58:5 associated 43:5, 51:7, 51:9, 51:19, 52:10, 52:18, 68:8, 72:22,	101:7 assume 60:16, 61:1, 82:6 assumed 61:8 attached 4:7, 4:14 attention 42:19, 43:9, 51:5 attorney 118:3 attorneys 41:16 audio 63:22, 64:17, 101:19 august 39:8 automated 64:3 automatically 58:5 available 10:6, 42:4, 62:18, 82:6 away 101:12, 107:20, 108:8, 109:2, 109:6 B back 11:8, 14:5, 14:15, 14:21, 15:10, 36:15, 49:7, 50:7, 56:5, 57:15, 81:21, 103:18 background 16:5, 16:6 baker 3:5 band 20:3, 20:10 bands 20:6, 20:7,	20:8, 20:13, 20:14 base 96:20, 96:21, 97:3, 97:10, 97:15, 97:22, 98:4, 98:14, 98:16, 99:5, 100:2, 100:13, 100:19, 101:9, 101:17, 106:16 based 16:12, 24:14, 33:9, 58:1, 58:15, 60:21, 68:7, 97:22, 98:4 basing 74:8 basis 49:3, 72:12, 109:16 because 11:2, 14:22, 15:12, 16:12, 17:20, 19:10, 19:14, 38:21, 43:2, 44:10, 59:10, 72:12, 72:17, 73:13, 82:17, 83:12, 86:9, 86:17, 90:18, 94:3, 98:6, 102:7, 102:10, 103:2, 105:19, 111:17, 112:8, 112:21, 113:10, 113:15 been 5:3, 5:12, 5:14, 7:3, 11:3, 14:9, 19:21, 25:18, 27:7, 28:18, 30:12, 30:16, 30:17, 37:16, 38:17, 61:21, 74:12 before 1:2, 2:5,	15:19, 27:8, 40:18, 75:18, 86:4, 86:11, 87:2, 99:8, 103:13, 117:9, 117:10 beginning 2:5, 38:6, 50:14, 51:5, 51:6, 55:6, 57:16, 67:5, 67:13, 67:14, 68:4, 69:15, 70:19, 71:3 begins 42:19, 43:2, 71:4 behalf 3:2, 3:12 being 25:4, 36:5, 36:16, 36:17, 58:7, 67:21, 85:21, 95:7, 101:13 believe 16:11, 54:15, 61:4, 61:11, 61:15, 62:6, 67:12, 109:4, 113:1, 115:9 besides 101:6, 101:22, 103:4 best 19:2, 41:17, 55:21, 56:22, 57:13 better 35:18, 47:9, 84:17, 86:16 between 7:21, 46:20, 73:2, 73:20, 74:5, 96:6, 98:14, 104:21, 105:7, 105:17, 106:22
---	--	---	--

bit 36:3	buzzword 19:10	41:4, 41:13, 42:5, 49:8, 84:10	challenged 33:22, 54:9, 62:8
blood 118:2	C	cases 7:22, 14:8, 41:13, 73:20	chance 102:13
board 1:2, 33:21, 41:16, 91:8, 93:5, 96:8	call 5:22, 91:2, 100:7, 103:4	cd 83:22, 84:4, 84:19, 84:20, 86:2, 86:5, 86:12, 87:3, 92:18, 94:11, 94:12, 94:13, 98:14, 101:16	channel 24:1, 48:9, 48:10, 48:19, 48:21, 48:22, 49:9, 49:10, 49:17, 49:18, 49:22, 50:1, 50:2, 50:4, 81:14, 82:22, 83:9, 83:18, 84:12, 84:20, 84:21, 85:11, 85:16, 85:20, 86:1, 86:3, 86:6, 86:13, 86:20, 87:4, 87:8, 87:9, 88:12, 89:12, 90:18, 90:19, 90:20, 90:21, 91:2, 91:6, 91:10, 91:13, 92:9, 92:11, 93:6, 93:13, 93:18, 93:19, 94:8, 95:6, 95:12, 96:10, 99:10, 104:13, 104:14, 104:16, 104:22, 105:1, 105:8, 105:17, 105:18, 106:1, 106:4, 106:16
body 79:15	called 27:9	cd's 88:7	channels 22:10, 58:7
both 13:16, 14:8, 71:22, 95:7	calling 25:5	cd1 94:15	characterization 26:3, 52:16, 90:10
botts 3:5	came 41:4	cds 88:1, 88:17, 92:17, 96:19, 97:21, 98:16, 99:5, 100:2, 100:13, 100:19, 101:9	characterize 68:22
box 76:5, 76:11, 76:13, 76:18, 76:20, 102:6	camera 58:6, 63:18	cell 31:13, 32:2, 63:19	characters 79:22
boxes 76:16	cameras 69:18, 70:2, 70:3, 70:6, 70:12, 70:14	cellular 31:8, 31:18	charm 35:7
break 37:18, 37:21, 74:14, 103:14, 103:19, 115:17, 116:1	can't 11:16, 17:20, 64:11, 65:9, 78:1, 111:16, 112:7	center 63:20, 65:14, 66:7	
breaks 103:19, 103:21	cancelled 13:20, 15:6	centers 23:4	
briefly 103:20	cannot 26:22, 35:19, 53:21, 59:14, 94:2	central 71:8, 71:13, 75:15, 76:4	
broad 19:15, 64:11, 79:8, 114:15, 114:17	capacity 22:16, 27:17, 28:7, 29:9	certain 5:22, 20:15, 31:14, 109:6, 115:9	
broadcast 92:18	car 28:18, 29:1, 29:10, 29:13, 29:17, 29:18, 29:22, 30:17	certificate 117:1	
broader 44:16	care 28:15	certify 117:5, 117:14, 117:18, 118:1	
broadly 110:13, 115:13	careful 73:19, 97:8	chain 69:19	
burglarized 67:17	case 1:13, 5:13, 6:15, 7:16, 13:21, 15:1, 15:4, 15:11, 21:11, 38:19,		
business 23:5			
businesses 23:2			
button 91:9, 92:8			

chart 74:21, 75:10, 75:21, 76:5 chat 42:9, 62:17, 66:13, 80:10 checking 88:22, 90:10 chicago 3:17, 22:14 choice 106:19 citation 85:9, 98:20 cite 87:21, 99:9 cities 110:17, 111:10, 111:19, 112:2 citing 105:21, 105:22 city 22:13, 110:17 claim 6:14, 6:21, 33:15, 38:8, 38:10, 39:1, 39:11, 39:13, 39:17, 40:1, 40:9, 41:21, 42:15, 42:19, 43:10, 43:16, 44:2, 44:5, 44:7, 44:8, 44:9, 44:10, 44:11, 44:12, 44:16, 44:20, 44:21, 45:7, 45:8, 45:15, 45:16, 46:20, 47:12, 47:13, 47:21, 47:22, 48:5, 48:8, 48:15, 48:18, 48:21, 48:22, 49:9, 49:10, 49:18, 49:21, 50:3, 53:20,	54:7, 74:9, 82:15, 85:19, 89:13, 90:16 claimed 33:7, 33:9, 59:15, 60:6, 73:11, 85:22, 104:15 claims 7:5, 33:22, 38:21, 40:12, 44:8, 44:15, 45:20, 46:21, 53:17, 54:9, 54:12, 54:18, 54:22, 60:11, 60:16, 60:20, 61:1, 61:8, 61:16, 62:1, 62:8, 112:10, 112:16 clarified 9:18 clarify 14:11, 36:8 clarifying 73:5, 81:5 clarke 3:4, 3:10 class 57:12 clip 72:13, 72:17, 72:18, 73:2, 73:14, 73:15, 74:1, 74:2, 74:5 clips 71:6, 71:13, 71:19, 72:4, 73:7, 73:11 close 97:16, 101:18 clr 1:27, 2:6 cm 87:18, 88:1, 88:6, 88:7, 88:11, 88:14,	88:16, 89:1, 89:5, 89:11, 89:15, 89:20, 90:3, 95:11, 95:17, 95:21, 95:22, 96:10 collect 30:7 collecting 29:6, 29:11, 30:4, 30:5 collects 29:21 collin 31:3 columbia 117:4, 118:14 column 50:13, 50:22, 51:6, 51:14, 52:14, 52:17, 54:11, 54:19, 55:2, 55:6, 59:6, 67:4, 67:6, 67:14, 68:4, 69:10, 69:16, 70:15, 70:20, 71:4, 77:1, 77:2, 77:6 com 3:9, 3:10, 3:19, 80:1 combination 33:5, 33:10, 74:9 combine 34:11, 35:21, 107:7, 107:12 combines 7:15 comfortable 8:2, 56:7, 56:9, 56:14, 102:10 coming 105:19 command 63:20, 65:14,	66:7 commencement 117:9 commencing 117:20 commercial 22:20, 22:21 commission 118:15 committed 53:10 common 41:8, 83:22, 99:10 communicate 81:13, 88:8, 97:14, 97:17, 110:19, 111:11 communicates 84:11 communicating 82:22, 83:18, 97:22 communication 28:1, 30:20, 48:10, 48:11, 48:18, 48:20, 48:21, 49:9, 49:10, 49:17, 49:19, 49:22, 50:1, 50:2, 50:3, 50:4, 51:8, 58:6, 63:21, 63:22, 64:2, 64:17, 82:22, 83:18, 84:1, 84:4, 84:11, 84:12, 84:20, 85:20, 86:3, 86:19, 87:18, 88:12, 89:12, 90:17, 90:20, 91:2, 91:6, 91:10, 91:12, 92:9, 92:11, 93:13, 95:6, 95:8, 95:12, 96:10,
---	---	--	--

104:13, 104:15, 105:8, 105:17, 112:20 communications 48:9, 86:1, 104:22 companies 23:3 company 21:8, 21:16, 27:9, 32:10 compare 13:11, 14:16, 14:21, 15:10 complete 12:11, 18:4 completely 74:4 components 64:4 comprehensive 18:2 compressed 71:6 computer 10:13, 11:11, 63:18, 64:19, 65:1, 65:3, 65:4, 65:7, 65:10, 65:20 comspace 21:18, 22:2, 22:6, 23:6, 27:9, 29:3, 29:12 concept 40:17 concluding 117:21 conclusion 109:1 concurrently 13:15 confirmed 94:15 conflicting 113:16 confused 113:14	confusing 113:9 connected 98:16, 99:5, 100:2, 100:14, 100:20, 101:10, 101:17 connection 94:14, 97:16, 98:8, 98:13, 101:18, 101:19 connections 98:4 consider 12:14, 17:15, 33:21, 45:14, 61:16, 65:10, 65:19, 66:6 considered 46:22, 47:3, 64:22 consistent 13:8, 14:8 constraints 20:16 construction 6:14, 6:21, 38:8, 38:10, 38:18, 39:11 consumers 22:19 contacts 69:17 contain 12:10, 54:10, 54:18, 77:15, 77:20, 79:18, 93:16 contained 5:21, 28:19, 29:1, 30:13, 77:19, 79:5 contains 6:3, 12:7, 77:10, 79:21 contemplates 21:3 contents 10:12, 11:4,	11:5, 11:9 context 9:3, 19:9, 52:8, 78:20, 79:4, 110:12, 110:15, 115:7 control 69:19 coppell 22:2, 22:3 copy 10:5, 10:16, 42:3, 62:18 corporation 21:18, 27:9, 29:3 correct 5:19, 6:8, 6:16, 10:18, 12:4, 13:2, 14:17, 15:2, 15:14, 16:22, 17:6, 23:12, 31:12, 32:1, 33:15, 36:5, 38:8, 38:19, 39:4, 39:13, 39:14, 39:17, 40:2, 40:10, 41:22, 45:17, 46:11, 48:22, 49:19, 53:13, 54:2, 54:13, 54:20, 55:20, 56:11, 56:19, 59:16, 60:7, 61:9, 61:17, 62:22, 63:6, 65:4, 65:21, 66:8, 67:2, 68:14, 72:6, 74:21, 75:20, 75:21, 76:4, 76:9, 76:15, 81:2, 81:14, 82:22, 85:12, 85:13, 85:17, 85:18, 86:13,	87:4, 88:3, 93:14, 93:20, 94:8, 94:21, 95:3, 95:6, 95:13, 95:18, 96:1, 96:11, 97:5, 98:5, 99:2, 100:22, 104:7, 107:14, 107:18, 108:10, 109:3, 112:19, 114:9, 114:14 correctly 85:15 could 5:9, 11:18, 26:17, 33:1, 37:7, 38:3, 42:15, 50:3, 55:2, 55:5, 55:10, 56:2, 58:1, 58:15, 63:6, 64:8, 65:3, 68:16, 69:1, 73:15, 74:18, 75:7, 92:5, 96:14, 111:13 counsel 5:14, 26:14, 34:4, 34:21, 35:14, 37:17, 38:17, 46:6, 46:7, 60:19, 61:5, 61:21, 61:22, 103:22, 106:18, 109:17, 115:16, 117:15 county 31:3 couple 14:11, 99:9 course 82:6 courses 27:22, 28:7 court 6:10, 6:15,
---	--	--	---

6:22, 7:9, 7:15, 7:22, 13:10, 13:14, 13:17, 14:16, 15:1, 15:4, 15:12, 50:6, 50:8, 50:17, 116:11 cover 28:1, 28:8 covered 22:13, 54:12 creating 111:12, 112:4 cross-talk 88:22, 96:6, 99:21 crr 1:27, 2:6, 117:3 cure 109:17 currently 88:9, 88:15, 89:6, 90:5 customary 38:22, 39:1, 39:7, 39:16 customers 22:20, 23:6, 27:13, 27:14, 28:4, 32:11, 32:22 cv 17:21, 21:19, 31:2	day 118:9 decide 41:17, 91:3 deciding 90:21 declaration 5:16, 5:21, 6:14, 6:21, 10:6, 10:14, 11:19, 13:2, 13:5, 13:6, 13:8, 13:13, 14:2, 14:4, 14:14, 15:10, 16:3, 33:2, 36:9, 36:14, 37:15, 38:4, 38:7, 39:12, 39:15, 39:22, 41:20, 43:21, 45:14, 46:8, 46:10, 46:17, 46:19, 47:9, 47:14, 49:13, 49:16, 52:13, 53:20, 54:10, 54:17, 55:1, 60:16, 61:1, 61:7, 61:13, 61:15, 62:21, 66:2, 67:2, 71:18, 72:1, 72:3, 72:8, 73:5, 74:11, 81:1, 81:5, 81:9, 81:12, 81:21, 82:5, 82:12, 82:21, 87:21, 88:1, 89:2, 91:14, 91:20, 92:1, 92:7, 96:15, 100:15, 100:21, 102:21, 103:3, 103:8, 103:9, 104:9, 104:20, 105:6, 105:11,	106:7, 106:9, 106:18, 106:21, 107:5, 107:17, 108:15, 112:21, 113:8, 113:12, 113:20, 113:22 dedicated 104:14, 104:22, 105:1, 105:8, 105:18, 106:1 defined 40:10, 41:21, 68:9, 68:13, 68:16, 69:7, 89:15 definition 16:14, 40:2, 40:5 definitions 39:19, 40:14, 105:3 deny 90:13 department 32:14 departments 32:16 depend 44:16 dependent 44:2, 44:5, 44:9, 44:10, 44:15, 44:20, 45:7, 45:15, 45:20, 46:20, 47:12, 47:21 depending 96:21, 97:2, 97:9, 97:13, 97:17 depends 44:22, 45:8, 45:16, 47:13, 47:22, 48:15, 64:22 depose 102:13 deposed 13:18, 15:20	deposition 1:17, 2:3, 4:8, 13:19, 15:6, 15:20, 104:4, 117:8, 117:9, 117:10, 117:16, 117:18 depositions 9:13 describe 16:1, 22:7, 28:5, 28:22, 36:19, 100:14 described 63:14, 68:12, 71:15, 75:5, 75:8, 89:8 describes 75:1 describing 100:6, 101:16, 106:1, 108:1, 111:22 description 111:3, 114:15 design 27:19 designed 21:9, 21:17, 22:6, 27:10 desktop 65:4, 65:6, 65:10, 65:20 detail 101:12 details 23:15, 111:18 detectors 69:18, 69:20 determination 61:12, 66:3, 92:19, 94:11 determine 31:19, 89:5, 90:4 determined 31:8 determines 88:8, 88:14
D			
dallas 3:4, 22:4, 22:15 data 29:6, 29:11, 30:5, 30:7, 31:4, 31:8, 31:19, 64:1, 71:7, 77:14 database 71:7			

determining 33:21 device 48:11, 51:8, 64:20, 65:1, 65:7, 65:11, 65:15, 65:20, 66:7, 84:1, 84:5, 84:11, 93:13 devices 64:5 difference 73:1, 104:21, 105:17, 105:19, 106:21 differences 105:7 different 26:11, 30:6, 51:21, 53:9, 54:7, 56:16, 59:3, 69:1, 72:12, 72:18, 73:14, 101:16, 101:20, 108:2, 109:11, 110:6, 110:18 difficult 7:14, 18:3, 19:13, 81:16, 102:6 digital 22:9, 23:10, 63:19 direct 42:18 directing 43:9, 51:5 disagree 26:2, 52:16, 58:12, 58:14, 59:20, 59:22, 60:1, 72:15, 72:19, 73:18, 88:6, 88:10, 90:9, 93:7, 95:10	disagreeing 72:10 disclaimed 112:19 disclaims 113:4 disclose 53:19, 82:21, 85:18, 91:12, 92:10, 93:18, 94:21 disclosed 21:5, 53:13, 54:11, 54:19, 61:2, 61:9, 61:17, 65:19, 66:6, 72:11, 72:20, 74:8, 100:20, 109:8 discloses 53:5, 53:19, 53:22, 70:12, 71:13, 77:9, 93:6, 99:10 disclosing 85:22 disclosure 73:1, 97:21, 98:3, 107:20, 108:9, 109:2 discuss 87:19, 98:3, 110:13, 112:20 discussed 101:20, 116:10 discusses 46:19, 110:11 discussing 74:10 discussions 103:22 dispatcher 55:16, 94:14 display 23:8, 23:10, 23:17, 23:18, 23:22, 108:1, 108:5	displaying 107:21, 108:9, 109:2 dispute 39:12, 81:7, 81:8, 81:9, 81:12, 82:8, 83:17, 87:22 disputing 82:15, 82:17 distinct 91:17 distinction 72:14, 73:20, 106:15 distinctions 74:5, 74:7 distinguishing 71:19 distribution 23:3, 89:21 district 6:10, 6:15, 6:22, 7:9, 7:15, 7:22, 13:9, 13:14, 13:17, 14:16, 14:22, 15:4, 15:11, 15:12, 117:4, 118:14 doing 11:3, 56:7, 85:20, 87:11, 101:19 domain 80:6 done 13:15, 15:1, 15:5, 15:13, 25:3, 67:9, 115:18, 115:19 door 69:17 double 31:5, 31:9 double-check 115:19 down 13:21, 15:7, 15:18, 15:22, 69:11, 113:3 downloaded 42:10, 74:4 dr 5:7, 12:5, 13:6, 13:7, 16:1, 17:13, 26:17, 28:15, 29:17, 38:3, 42:3, 44:1, 46:2, 46:18, 47:9, 47:18, 50:20, 52:15, 55:3, 59:4, 62:5, 62:16, 66:19, 72:10, 73:4, 74:18, 80:17, 81:12, 82:4, 83:21, 87:17, 91:7, 96:15, 99:13, 103:18, 105:10, 106:5, 106:13, 106:17, 109:13, 110:3, 115:12, 115:15, 116:7 drawn 76:2, 76:21 drives 29:20 drove 30:9 duly 5:3, 117:8 during 103:21 duties 31:7 E each 91:4, 96:21, 97:3, 97:10, 102:4, 110:20, 111:12, 111:13, 112:3 easier 11:2, 11:6
---	---	---

eastern 1:22 easy 11:4 edu 80:1, 80:4 eight 22:10 elaborate 16:16, 98:8, 100:11 electronic 10:10 electronically 42:8, 42:9 element 74:10 elements 44:12, 82:15, 82:16 else 11:15, 23:1, 87:15, 109:21, 110:1, 113:6 email 15:17, 15:19, 77:11, 77:20, 78:7, 78:10, 78:15, 79:2, 79:6, 79:9, 79:10, 79:11, 79:12, 79:15, 80:3, 80:7 emails 77:15 embodiment 51:14, 51:22, 52:17, 53:5, 54:1, 54:8, 54:11, 54:19, 57:16, 75:13 embodiments 53:9, 53:13, 54:7, 54:22 emergency 92:18 emphasis 85:5, 97:6	emphasize 72:14, 97:9 empirical 30:7 employed 118:3 enable 76:19 encoded 63:21 end 95:9 endeavor 50:18 endpoints 63:13, 63:17, 64:3, 64:8, 64:14, 65:19, 66:6 enforcement 30:13, 30:19, 32:5 engineer 21:10, 22:17, 27:11, 27:18 engineering 27:18, 32:12 english 57:11 enough 97:16 entire 83:15, 93:3 entry 31:6 environments 26:6 equipment 28:6, 29:11 especially 50:18 esquire 3:3, 3:4, 3:13 establish 64:5, 64:17 even 18:1, 60:4, 92:8, 93:5	ever 8:13, 21:6, 25:2, 25:13, 28:18, 30:12, 30:17, 30:18, 32:4, 32:13, 32:15, 105:6, 109:1 every 54:7, 54:8 everybody 90:19 everyday 8:14 everyone's 116:6 exactly 19:12 examination 4:2, 5:5 examined 5:3 example 19:19, 19:20, 20:1, 20:9, 20:10, 20:11, 20:12, 26:12, 26:18, 27:1, 37:1, 37:5, 40:10, 44:8, 44:10, 57:16, 57:18, 63:16, 67:15, 67:20, 68:18, 69:4, 69:16, 71:5, 72:8, 72:9, 80:3, 84:21, 89:9, 93:4, 100:5, 100:6, 102:4, 106:15, 110:17, 111:10, 111:15 examples 19:19, 21:4, 21:14, 23:17, 64:13, 64:16, 99:18, 100:8, 101:5, 101:11,	102:8, 102:9, 102:18, 103:10 exclude 112:11 excuse 88:2 execute 76:13 exh 4:16, 4:17, 4:18, 4:19 exhaustive 18:3, 115:11 exhibit 4:8, 4:20, 4:21, 10:2, 10:6, 10:17, 17:22, 21:19, 21:20, 22:1, 31:6, 42:4, 42:12, 62:13, 62:16, 63:2, 66:12, 66:14, 66:19, 74:19, 80:11, 80:12, 80:17, 80:19 exhibits 4:15 existing 86:3, 86:19 exists 83:9 expand 95:14 expectation 33:8, 33:14, 33:17, 33:20 experience 24:4, 24:16, 24:22, 25:4, 25:5, 25:8, 25:22 expert 5:13, 6:5, 7:4, 7:8, 12:18, 12:22, 16:21, 17:5, 17:8, 17:11, 17:16,
--	--	---	---

18:7, 18:10, 18:13, 18:14, 18:15, 18:17, 18:18, 18:22, 19:6, 45:3, 48:4, 52:7 expertise 16:2, 18:1 expires 118:15 explain 59:7, 64:8, 75:7, 97:18, 98:6, 105:7, 105:16, 106:20, 106:21, 109:16 explaining 104:21 explains 96:18 explicit 82:18 explicitly 47:4, 59:13, 60:5, 70:14 expression 37:12 extent 28:8, 28:15 F fact 35:9, 58:20, 59:5, 113:3 factors 33:20 fails 83:3, 91:11 fair 8:4, 12:19, 12:21, 14:18, 25:21, 40:4, 42:2, 46:21, 53:3, 58:8, 65:2, 68:21, 70:10, 71:18, 73:9, 77:12, 83:10, 84:7,	85:7, 88:19, 90:8, 93:1, 94:22, 96:3, 98:2, 98:6, 107:15 fairly 8:2, 36:19 fall 91:21 familiar 6:2, 40:16, 87:17 fashion 11:7 faster 28:16 fcc 20:6, 20:19 feed 42:20, 43:3, 43:4, 51:7, 51:9, 51:16, 51:19, 52:1, 52:10, 52:18, 53:6, 54:1, 58:6, 62:7, 72:5, 72:13, 72:18, 73:2, 73:8, 73:14, 73:15, 74:6 feeds 43:5, 51:10, 52:2, 52:19, 53:6, 54:2, 71:20, 73:12 feel 92:13 feels 93:5 feissner 1:27, 2:6, 117:3 few 115:18 field 16:22, 17:5, 18:18, 26:4, 29:4, 29:11,	30:6, 79:13, 79:14, 79:18, 80:1 fields 19:11, 19:12 figure 74:19, 74:21, 75:1, 75:5, 75:8, 75:10, 76:16, 76:21, 100:5, 100:6, 101:3, 101:6, 101:7, 103:12 figures 100:12, 101:4, 101:8, 101:22, 102:1, 103:4 file 11:8, 74:1, 74:3, 79:11 financially 118:5 fine 24:12, 36:2, 37:20, 74:15, 85:7, 86:22, 103:15 finished 26:15 fire 32:13, 32:15 first 5:3, 10:11, 10:17, 10:22, 24:4, 24:8, 24:15, 24:16, 25:1, 25:4, 25:5, 25:9, 25:13, 25:16, 25:21, 26:1, 26:7, 26:18, 27:1, 27:15, 33:4, 36:4, 46:16, 48:19, 68:3, 69:15, 83:3, 83:14, 85:8, 93:11, 94:10, 95:2,	96:17, 110:18, 111:10, 112:3, 114:21 floor 85:21, 86:2, 86:4, 86:11, 86:19, 87:3, 90:12, 102:16 flow 74:21, 75:10, 75:21, 76:5, 76:22, 100:7 fly 56:8 focus 26:10, 54:8 focused 32:2, 32:11, 92:22, 108:12 focusing 94:6, 97:11, 108:1 follow 14:9, 39:21, 61:5 followed 62:4 following 55:14, 57:17 follows 5:4, 44:14 forming 11:22, 12:12, 13:1, 39:8, 45:13, 46:22, 60:15, 60:22, 61:7, 61:14, 62:20, 65:18, 66:5, 67:1 forth 11:8, 117:8 forward 104:14, 105:1, 106:1, 106:4, 106:16 foundation 109:18 four 10:11, 10:17,
---	--	---	--

10:20, 11:1 frame 39:8 frames 64:2 free 92:13 frequencies 20:17, 20:20, 20:22 frequency 20:3, 20:6, 21:4, 22:10 front 10:12, 10:16, 11:1, 11:5 full 5:9, 102:2 functionality 98:15 further 34:8, 100:11, 117:14, 117:18, 118:1	getting 100:16 gigahertz 20:10, 20:11 give 7:14, 37:1, 99:18, 102:16 given 15:21, 38:22, 40:1, 49:21, 117:11 giving 40:6, 40:15, 56:16, 93:4, 102:8, 113:15 go 11:6, 14:5, 14:15, 14:20, 15:10, 21:22, 22:1, 24:12, 27:4, 28:16, 31:2, 33:1, 36:15, 37:14, 45:19, 50:13, 63:7, 67:4, 70:15, 77:1, 81:21, 83:1, 87:19, 92:16, 96:14, 98:10, 99:11, 99:17, 100:9, 102:4, 102:18, 103:14, 104:8, 107:4, 108:14, 113:22 goal 111:8, 111:13, 111:21, 112:5, 112:9 goes 16:7, 27:21, 69:11 gogic 80:11, 80:19, 80:20, 81:2, 81:13, 82:21, 83:3, 83:17, 83:22, 84:5, 86:11, 87:2,	89:15, 91:11, 92:9, 93:12, 93:18, 94:21, 96:18, 97:21, 98:15, 98:20, 99:1, 99:13, 99:17, 100:20, 101:8, 101:12, 106:15, 107:7, 107:12, 107:20, 108:8, 109:1, 109:9, 112:21, 113:5 gogic's 84:10, 87:17, 98:14 going 11:8, 13:18, 15:20, 28:12, 37:16, 43:1, 57:15, 67:6, 69:9, 70:20, 73:4, 74:12, 81:6, 81:7, 92:19, 96:7, 109:20 good 5:7, 5:8, 18:5, 37:18, 72:8, 74:14 govern 55:17, 57:19 government 22:22 governs 55:16 grant 87:13, 90:13 granted 86:5, 86:11, 87:3 great 51:4, 55:10, 62:20, 63:6, 63:9, 63:13, 78:10, 100:4, 104:11 ground 41:8, 82:13	group 1:9, 4:20, 4:21, 88:9, 88:15, 89:6, 89:21, 90:3, 90:5, 94:15, 94:16, 117:15 groups 89:16 guess 68:6, 77:6 H hand 118:9 handheld 22:18, 23:7 happen 15:18 happens 76:20 hard 83:12 hardware 63:21, 86:17 head 6:19, 7:2, 87:21 header 77:20 heading 11:21, 82:20, 83:2, 107:6, 115:5, 115:6 headings 82:14, 82:18 hear 17:3, 29:14 heard 40:17 held 2:3 help 78:4 helping 31:4 here 16:16, 34:2,
G			
g-o-g-i-c 80:15 gas 69:20 gates 3:14 gateways 64:4 geared 28:6, 28:9 gears 37:17, 103:13 generalization 59:19 generalize 19:14 generally 22:7, 96:20 geographic 43:6 geographically 31:14			

34:19, 36:8, 37:13, 41:2, 41:8, 44:8, 44:17, 45:2, 45:11, 48:4, 49:3, 49:9, 53:21, 56:5, 58:19, 62:5, 65:9, 68:12, 71:15, 87:11, 89:10, 89:20, 90:14, 92:4, 97:11, 100:10, 101:21, 105:9, 105:12, 109:7, 109:9, 113:3 here's 81:9, 96:7 hereby 117:5 hereinbefore 117:8 hereunto 118:8 high 14:7, 18:5, 20:21, 21:3, 21:4, 53:15, 64:18, 82:2, 101:14, 110:5 high-power 22:12 higher 69:9 hoc 112:11, 112:14, 112:19, 112:20, 112:22, 113:4 homicide 31:5, 31:9 hook 114:19 hopefully 81:10 hoping 99:14 hour 37:17, 74:12	hours 7:20, 8:1 house 67:16, 67:22, 68:20, 69:17 however 50:21, 78:21 I idea 8:17, 18:6 identification 77:10 identify 92:5, 99:14, 101:22, 102:17, 105:14, 106:7, 106:9 identifying 42:20, 43:3 iii 12:3, 12:4, 12:5, 12:7 il 3:17 illustrates 75:11 images 71:5, 75:11, 75:15, 76:3, 76:9, 76:19 immaterial 98:14 impact 47:8 impacted 66:4 implementation 111:5 implies 85:5 ims 20:10 inc 1:6, 4:16, 4:17, 4:18, 4:19 include 19:20, 27:15,	55:13, 57:17, 63:17, 64:3, 77:11, 94:15 includes 83:4 including 38:13, 90:11 incorporated 44:13 independent 44:7, 44:21, 45:8, 45:16, 46:20, 47:13, 47:22 individuals 68:9 industrial 20:8 industry 27:9, 32:10, 32:21 inform 111:7 information 23:16, 23:17, 29:21, 75:15, 75:19, 76:3, 76:4, 76:8, 76:9, 76:20, 77:11, 77:16, 79:5 informed 13:17, 14:10, 38:17, 61:21 initial 97:15, 98:4, 98:7, 98:13, 101:18 instances 28:5, 29:5 instructions 113:16 insufficient 34:10, 37:4 interact 27:13, 28:3, 28:11, 32:11 interested 118:5	interface 108:18 intermediate 64:4 interoperability 110:11 interoperable 109:13, 109:19, 110:4, 110:5, 110:20, 111:2, 111:4, 111:6, 111:12, 111:21, 112:4, 114:8, 114:13, 115:1, 115:10, 115:13 interrupted 106:13 interrupting 106:10 interruption 18:16 invention 33:7, 33:9, 39:3, 59:15, 60:7, 75:13 investigating 31:20 investigation 31:5, 31:9, 31:17 invitation 92:20, 93:9, 94:12 involve 26:1, 26:7 involved 6:11 involving 26:19, 27:2 ip 63:18, 77:15, 77:20, 77:21, 78:8, 79:19, 80:4, 80:7 ipr 1:13 irrelevant 47:14
--	---	---	--

italicize 85:2 italicized 97:2 itself 78:5, 79:9, 79:11, 91:14, 94:13, 103:8, 105:20, 111:5, 112:8, 113:8, 113:20	74:13, 77:14, 78:6, 78:7, 78:8, 78:10, 78:13, 78:21, 79:2, 79:5, 81:6, 82:6, 82:8, 82:10, 87:20, 91:3, 92:14, 111:18, 112:8, 114:22 knowledge 8:6, 8:12, 8:18, 9:1, 9:6 known 20:22 kyle 3:13, 3:19	last 34:7, 57:15, 57:18, 95:9, 103:4, 104:11 lastly 76:18 later 106:19 law 30:12, 30:18, 32:4, 36:20, 40:17, 41:10 lawyer 34:2, 34:18, 35:13, 36:7, 41:2, 44:17, 45:2, 45:11, 46:5 least 14:7, 14:21, 15:9, 16:13, 42:20, 43:3, 43:4, 77:21, 107:15 legal 14:9, 34:3, 34:4, 34:19, 34:20, 35:14, 36:10, 37:2, 37:13, 40:16, 41:3, 44:18, 45:3, 45:4, 45:10, 45:12, 45:21, 46:6, 46:7, 46:9, 46:10, 46:13, 46:15, 46:16, 46:21, 47:5, 47:7, 48:3, 48:4, 49:1, 49:2, 49:4, 60:8, 60:13, 61:4, 61:20, 61:22, 62:4, 112:13 lend 111:5 let's 35:6, 37:14,	37:22, 43:22, 48:5, 50:13, 67:4, 69:10, 70:15, 70:18, 77:1, 78:22, 79:17, 93:10, 95:1, 103:4, 103:12, 107:4, 108:14, 113:22, 116:1 letters 23:11, 79:21 level 14:8, 16:10, 18:5, 53:15, 64:18, 82:2, 101:14, 110:5 lexicography 40:17, 40:22, 41:9, 41:22 license 20:15, 20:20 licensed 20:7 life 8:14 light 40:13, 60:20, 62:3 limit 28:16 limitation 42:19, 53:19, 83:4, 83:15, 83:16, 92:3, 93:3, 108:13, 109:11 limitations 44:12 limited 60:11, 60:17, 61:2, 61:8, 61:16 limiting 107:16 line 51:6, 52:5, 55:6, 67:5,
J			
job 1:25 june 118:15			
K			
k&l 3:14 kantarek@klgates 3:19 keep 11:8, 81:7, 109:20 keeping 88:16 keeps 88:1 key 69:19, 84:13, 85:10 kind 23:10, 73:3, 81:7, 81:10, 86:20, 87:10 know 8:7, 8:8, 15:5, 15:17, 18:12, 18:13, 19:11, 21:11, 21:14, 24:8, 36:13, 41:14, 41:16, 43:16, 45:6, 61:6, 62:17, 63:10, 67:9, 68:22, 70:21,	L labeled 12:3, 12:4, 75:2, 75:19, 114:3 lack 107:11 lacks 111:16 land 18:17, 18:22, 19:6, 19:16, 20:3, 20:21, 21:6, 21:9, 21:14, 21:17, 22:5, 25:22, 26:19, 27:2, 27:10, 27:14, 27:21, 28:1, 28:19, 29:1, 29:10, 29:19, 30:13, 31:22, 32:3, 32:5, 32:16, 52:7, 63:19 language 44:14, 74:10, 89:13 laptop 64:22		

67:6, 67:15, 68:4, 69:11, 69:16, 70:20, 70:21, 71:3 lines 50:14, 50:22, 52:14, 52:17, 54:12, 54:20, 59:7, 77:2, 77:6, 92:8 lisa 1:27, 2:6, 117:3 list 12:11, 12:17, 17:22, 18:1, 18:2, 18:4, 89:15, 94:15, 98:15, 99:4, 99:13, 100:1, 100:13, 100:19, 101:9, 115:11 listed 12:14 listen 87:8 listening 87:9 lists 89:22, 90:4 little 22:15, 36:3 llc 1:9, 117:15 llp 3:14 lmr 19:19, 21:5 locality 68:9, 68:14, 68:17, 68:19, 69:8 located 31:14 location 31:9, 31:19, 69:5, 99:19 logic 63:22	long 14:12, 20:15, 43:2, 50:21, 98:15, 99:4, 99:13, 100:1, 100:13, 100:19, 101:9 look 11:8, 43:22, 48:5, 70:19, 92:13, 93:10, 100:1, 103:12, 114:4, 114:19 looking 30:7, 46:1, 83:15, 89:13, 93:3, 99:12 lot 28:16, 46:14, 47:5, 53:9, 101:13 lunch 103:14, 103:19 M madam 50:6 made 82:17 madison 3:15 main 22:11, 23:5, 53:20 maintains 89:15 make 61:11, 66:2, 82:4, 94:13, 97:15, 98:7, 115:6 makes 11:5, 92:19, 94:11, 94:13 making 33:8, 59:19, 92:20, 92:22, 98:4	manager 87:18, 95:8 manages 89:20 managing 90:11, 90:15 many 15:18, 27:22 map 54:22 mapped 104:15 marked 4:9, 10:2, 21:20, 42:12, 62:13, 66:14, 80:12 market 28:5, 28:9 marketing 26:10, 27:12 markets 28:8 markings 10:19 marriage 118:3 materials 11:22, 12:11 math 37:11, 37:12 matter 6:11, 6:12, 8:3, 9:21, 13:14, 13:18, 15:5, 118:6 maybe 17:3, 35:18, 37:6, 37:17 mean 8:11, 22:21, 23:4, 23:14, 24:10, 24:22, 30:1, 30:8, 74:1, 78:7, 78:13, 78:22, 79:21, 99:11, 99:22, 109:20,	110:9, 113:8 meaning 24:13, 38:22, 39:1, 39:2, 39:7, 39:12, 39:16, 39:20, 40:7 means 8:7, 8:18, 9:1, 44:2, 44:5, 44:11, 70:8, 88:10, 94:12, 95:10, 97:13 meant 22:19, 22:20 media 64:1, 64:5 medical 20:9 meet 20:15 meets 74:9 megahertz 20:9 member 88:15, 89:6, 90:5, 94:16 membership 89:21, 90:3 memory 53:10, 57:11, 81:17, 82:5 mention 35:2 mentions 70:1 mere 34:9, 37:3 message 79:10 metadata 77:19, 78:15, 78:18, 79:2 method 44:11, 48:8 might 74:5, 116:2
---	---	---	--

mind 19:12, 113:21 minute 50:20, 63:9, 67:8, 69:12, 70:21, 77:5 minutes 115:18, 116:3 mischaracterized 36:22, 47:16 mischaracterizing 8:20, 9:9, 56:13, 59:18, 60:2, 101:2 missed 17:3 missing 83:16 mobile 18:17, 18:22, 19:6, 19:16, 20:3, 20:21, 21:6, 21:9, 21:14, 21:17, 22:6, 25:22, 26:19, 27:2, 27:10, 27:15, 27:21, 28:2, 28:19, 29:1, 29:10, 29:19, 30:13, 31:22, 32:3, 32:6, 32:16, 48:11, 51:8, 52:7, 63:19, 64:19, 65:1, 65:7, 65:11, 65:14, 65:20, 66:7, 84:19, 93:13 module 55:11, 55:13, 56:3, 56:10, 57:8, 57:17, 58:5, 58:15 moment 55:5, 110:16 monitor 63:18, 92:18,	94:3 monitored 95:8 monitoring 83:8, 88:11, 88:13, 89:11, 90:17, 91:12, 91:17, 92:10, 93:8, 93:18, 95:11, 95:15, 95:17, 95:20, 95:22, 96:3, 96:10, 96:12 monitors 69:19 more 6:13, 20:18, 23:3, 28:10, 29:10, 33:6, 34:10, 37:4, 37:8, 40:8, 44:15, 47:19, 55:14, 57:17, 70:9, 90:14, 102:17, 105:6, 106:19, 111:3 morning 5:7, 5:8 motion 58:1, 58:16, 58:18, 58:20, 59:6, 62:7, 69:18 motivated 35:21 motivation 34:11, 107:7, 107:12 motorola 1:6, 4:16, 4:17, 4:18, 4:19 move 28:12, 102:18 moves 76:8 much 7:10, 7:17 multiple 22:11, 22:12,	53:6, 54:2, 70:3, 70:12, 70:13, 88:20 municipalities 22:22 must 33:7, 44:20, 45:7, 45:15, 47:12, 47:21 myself 102:6 N name 5:9, 18:8 narrow 44:15, 113:2 necessarily 47:3 necessary 35:19, 36:5, 36:18, 37:7, 37:9, 45:21 need 20:19, 35:20, 46:2, 47:3, 50:21, 97:15, 109:6, 116:12 needed 61:11 needing 20:14 neighborhood 67:17 neighboring 110:17, 111:10, 112:2 network 19:18, 48:11, 49:19, 50:1, 50:4, 64:2, 68:5, 68:7, 71:9, 71:14, 75:16, 76:4, 109:14, 109:19, 110:4, 110:5, 111:2, 111:4, 111:6, 111:22,	114:4, 114:14, 115:2 networks 20:2, 31:22, 32:6, 32:17, 110:6, 110:20, 111:12, 111:18, 111:21, 112:4, 112:11, 112:19, 112:20, 113:5, 114:16, 115:9, 115:14 never 30:16, 113:21 nevertheless 92:10 new 3:7, 91:5, 106:6 next 31:7, 68:19, 98:8, 98:22 night 13:19, 15:19 nine 92:14 nod 17:2 none 4:9 nonresponsive 28:13 normally 80:2, 106:4 north 22:4, 25:18 notably 104:12 notary 2:6, 117:1, 117:3, 118:13 note 106:11 notes 10:19, 11:11 nothing 103:3 notice 2:5, 102:14,
--	--	--	--

103:2 notification 67:16 notifications 68:7, 68:12, 76:14 nowhere 107:18 number 7:14, 103:19 numbers 23:11, 100:17 numeral 12:4, 12:5, 38:8 ny 3:7	23:19, 24:6, 24:17, 25:10, 25:15, 26:13, 27:3, 28:20, 30:3, 30:10, 30:15, 30:21, 31:16, 32:7, 32:18, 33:16, 34:1, 34:17, 35:11, 36:6, 36:21, 39:18, 40:3, 40:11, 40:19, 41:1, 41:11, 42:1, 43:13, 43:19, 45:1, 45:9, 45:18, 46:4, 46:12, 47:1, 47:15, 48:1, 51:17, 52:3, 52:11, 52:20, 53:7, 53:14, 54:3, 54:14, 54:21, 55:12, 56:4, 56:12, 56:20, 57:10, 58:2, 58:9, 58:17, 59:9, 59:17, 60:12, 60:18, 61:3, 61:10, 61:18, 62:9, 63:15, 64:10, 64:15, 64:21, 65:12, 65:16, 65:22, 66:9, 68:1, 68:15, 69:6, 70:4, 71:21, 72:7, 73:10, 73:16, 76:10, 77:17, 77:22, 79:7, 79:20, 80:8, 81:15, 84:14, 86:7, 86:14, 87:5, 88:4, 90:7, 92:2, 92:12, 93:21, 94:1,	96:2, 99:16, 101:1, 102:5, 102:19, 103:7, 104:6, 105:2, 108:11, 109:15, 109:17, 110:22, 111:14, 112:6, 112:12, 113:7, 114:10 obvious 33:7, 33:15, 33:22, 112:5 obviousness 34:16, 35:10, 36:18 occurred 117:19 occurs 75:18, 76:3 odonohue@bakerbo- tts 3:9 offer 39:15, 39:22, 40:9, 112:18 offered 113:3 office 1:1, 3:4, 31:3 officers 31:18 oh 41:6, 68:6 one 23:5, 29:4, 33:20, 37:20, 42:20, 43:3, 43:4, 47:19, 52:21, 55:1, 55:13, 57:17, 57:22, 61:13, 62:10, 66:3, 70:9, 77:6, 77:21, 86:8, 87:10, 99:19, 100:5, 102:17, 105:5 only 10:16, 10:22,	55:17, 87:9, 102:9, 110:10, 113:1 open-ended 106:8, 106:12 opened 21:22, 62:19 opening 91:5 operation 90:11 operations 76:14 opining 94:20 opinion 16:9, 43:14, 43:21, 45:3, 47:4, 47:8, 49:13, 52:4, 52:12, 53:1, 53:3, 54:15, 58:11, 59:10, 62:10, 65:8, 65:13, 65:17, 72:17, 74:8, 80:9, 81:18, 82:17, 83:19, 86:8, 86:10, 88:6, 90:14, 92:17, 93:11, 97:11, 98:13, 100:9, 101:8, 102:2, 102:22, 103:2, 109:4, 109:7, 109:8, 114:12, 114:22, 115:4, 115:15 opinions 5:22, 6:3, 6:12, 11:22, 12:12, 13:1, 13:7, 13:9, 14:7, 16:2, 34:3, 34:19, 36:10, 39:9, 39:16, 39:22, 40:5, 40:9,
O o'donohue 3:3, 4:3, 5:6, 10:4, 26:14, 28:12, 37:19, 38:2, 42:14, 50:6, 62:15, 66:12, 66:16, 74:15, 74:17, 80:10, 80:16, 103:15, 103:17, 109:16, 109:21, 110:1, 115:16, 115:22, 116:7 o-p-i-t-z 107:10 object 15:15, 28:13 objection 6:9, 6:17, 7:1, 7:7, 7:13, 8:15, 8:19, 9:2, 9:8, 9:12, 13:3, 15:3, 16:4, 17:1, 17:10, 17:18, 18:11, 19:1, 19:7, 19:17, 20:5, 21:2, 21:7, 22:8, 23:13,			

41:3, 41:5, 41:7, 41:15, 41:20, 44:18, 45:13, 45:22, 46:22, 47:6, 47:14, 49:15, 52:21, 53:11, 53:12, 53:16, 53:17, 53:18, 54:4, 54:11, 54:18, 58:19, 60:9, 60:15, 60:22, 61:7, 61:12, 61:14, 62:20, 65:18, 66:1, 66:4, 66:5, 67:1, 71:19, 72:4, 73:6, 81:2, 81:22, 82:7, 82:15, 83:7, 83:16, 87:20, 89:10, 91:11, 91:15, 91:18, 92:3, 102:15, 105:9, 105:11, 106:6, 107:11, 107:19, 110:14, 112:18, 113:4 opitz 107:8, 107:10, 107:12, 109:10 opitz's 107:20, 108:8, 108:18, 109:2 opportunity 102:17 opposite 41:7 optimized 28:10 oral 1:17, 2:3 order 76:17 orders 116:10 ordinary 16:10, 16:13,	16:15, 38:22, 39:1, 39:6, 39:16, 39:20, 40:7, 62:2 original 85:5 other 6:5, 6:6, 9:13, 12:18, 12:22, 15:21, 20:17, 41:12, 44:7, 52:22, 55:1, 61:13, 62:11, 63:20, 64:1, 64:4, 64:5, 66:3, 69:20, 72:22, 73:12, 76:14, 76:19, 86:9, 88:8, 88:15, 88:17, 89:6, 90:5, 91:4, 91:19, 102:18, 110:20, 111:12, 111:13, 112:4 others 69:20 otherwise 64:2, 118:5 out 19:4, 115:7 outcome 118:6 over 22:16, 23:14, 23:20, 24:2, 25:19, 27:7, 67:6, 81:13, 82:22, 83:18, 84:11, 91:4 overview 18:6, 46:15 own 56:2, 56:10, 57:7, 114:18 owner 1:10, 3:12, 104:1, 116:6	owner's 5:17, 16:14 P packets 64:1 page 4:2, 4:8, 4:15, 16:7, 16:8, 16:9, 22:1, 31:2, 31:7, 82:13, 108:5, 113:22, 114:2 pages 1:26, 10:11, 10:17, 10:20, 11:1, 16:10, 82:12 paper 10:9, 10:12, 10:15, 11:1, 42:8 paragraph 11:18, 11:21, 16:11, 33:1, 34:6, 34:7, 34:22, 36:9, 37:14, 38:4, 38:6, 38:16, 50:14, 50:21, 55:6, 56:1, 58:21, 59:11, 63:7, 63:10, 64:7, 67:5, 67:9, 67:14, 68:4, 69:11, 69:12, 70:19, 77:3, 83:1, 83:2, 84:18, 85:2, 85:8, 89:2, 89:8, 89:14, 89:19, 93:10, 93:16, 93:22, 94:6, 94:10, 94:19, 95:1, 95:16, 96:14, 96:18, 98:7, 98:9,	98:10, 99:1, 99:4, 99:6, 99:7, 99:9, 99:11, 100:15, 100:16, 100:21, 104:8, 104:12, 105:21, 107:5, 107:6, 108:4, 108:15, 110:13, 115:4 paragraphs 12:7, 12:10, 12:15, 12:17, 16:19, 38:11, 38:13, 72:9, 82:3, 83:6, 88:5, 92:4, 92:6, 92:14, 92:16, 100:18, 105:15, 107:13, 107:18, 108:7, 108:22 paraphrase 57:12 paraphrasing 58:10, 58:11 part 8:9, 14:21, 15:9, 27:18, 31:17, 43:11, 43:17, 46:16, 59:14, 59:21, 60:6, 78:3, 83:14, 90:13, 94:4, 94:5, 105:5, 114:21, 115:5 particular 43:17, 67:5, 77:2 parties 118:2, 118:4 parts 69:2, 83:13, 89:9 party 117:14 pass 115:22
--	---	--	--

patent 1:1, 1:2, 1:10, 1:14, 3:12, 5:17, 6:1, 6:7, 6:11, 6:15, 6:18, 6:22, 7:11, 7:22, 8:3, 8:6, 9:4, 9:6, 9:22, 16:14, 17:12, 17:14, 18:19, 18:21, 19:4, 19:19, 21:3, 40:17, 41:10, 42:4, 42:7, 42:16, 48:6, 50:22, 52:8, 53:4, 53:22, 56:19, 73:8, 103:22, 112:11, 112:15, 112:18, 113:4, 116:5 patrol 28:18, 29:1, 29:10, 29:17, 29:18, 30:2, 30:8 patrolled 30:6 patrols 29:18, 29:20 pause 16:16, 100:10 pdf 10:13, 11:6, 11:10 pencils 13:21, 15:6, 15:18, 15:22 pending 50:8 perform 43:17 performs 43:11 permission 86:17, 86:18, 87:1, 87:4,	87:13, 87:14 person 16:13, 16:15, 31:20, 62:1, 87:10 personal 63:17, 63:19, 64:19, 65:1, 65:3, 68:8, 69:3 personally 21:15, 25:16, 25:20, 28:11 petition 13:5, 72:10, 84:10, 84:19, 85:6, 95:2, 105:10, 105:13, 105:20, 105:21, 115:12 petitioner 1:7, 3:2, 91:8, 96:8, 102:13 ph 1:18, 2:3, 4:2, 5:2, 117:7, 117:19 phillips 38:19 phone 32:2, 63:18, 63:19 phones 31:13 phrase 8:13, 9:1, 43:10, 44:14, 84:17 phrasing 47:10 place 92:15, 113:1 plain 39:19, 40:6 planning 50:16 plaza 3:6 please 5:9, 20:22,	26:17, 28:22, 38:3, 41:17, 42:15, 50:5, 50:7, 50:16, 59:7, 63:6, 70:19, 74:18, 77:1, 104:9, 106:9, 109:16 pleasure 116:7 plural 70:5, 70:6, 70:7, 70:8, 70:14 plurality 43:5 point 7:12, 40:5, 58:12, 82:14, 88:3, 88:18, 103:9, 114:17 points 53:20, 101:20 police 29:13, 29:14, 30:17, 31:18 policies 55:14, 57:18 policy 55:11, 55:13, 55:14, 55:15, 55:16, 55:17, 56:3, 56:10, 57:8, 57:16, 57:18, 58:1, 58:4, 58:15 polish 13:6, 72:10, 115:12 polish's 47:9, 105:10, 115:15 portion 46:18 posita 39:2, 39:8, 40:6, 40:13, 60:21, 97:19,	106:3, 107:1 power 20:15, 20:18 practicing 33:9 premise 60:1 present 75:13 presented 42:12, 62:13, 66:14, 80:12 press 87:14 pressing 91:9, 92:8 pretty 11:14 prevent 88:22, 96:6 preventing 88:20 previous 69:2, 99:6, 105:21 previously 10:2, 21:20, 42:12, 49:6, 56:17, 56:18, 56:21, 62:13, 66:14, 80:12 principle 37:2, 37:13, 41:22, 45:21, 46:22, 61:5, 61:20, 61:22, 62:4 principles 14:9, 34:4, 34:21, 35:14, 46:6, 46:7, 46:9, 46:11, 46:14, 46:15, 46:16, 47:5, 47:7, 49:2 print 11:3 prior 33:6, 34:9,
---	--	--	--

34:15, 35:9, 36:4, 36:15, 36:17, 37:3, 53:17, 53:18, 106:2 privilege 88:10, 88:16, 89:7, 90:6 privileges 88:2, 88:17 problem 88:2 proceeding 5:18, 7:18, 8:1, 13:8, 14:14 proceedings 6:6, 12:18, 13:1 process 75:5, 75:8, 75:11, 76:9 products 28:4 professional 25:8, 25:12 professor 25:17, 25:19, 26:3, 27:7, 27:8, 27:20, 28:3, 32:8 profile 77:10 pronounced 22:3 proper 38:17 property 68:8, 69:2, 69:3 protocols 110:6 prove 37:8 provide 16:5, 16:9, 17:22, 26:12, 26:17, 26:22, 35:20, 41:20,	46:13, 46:15, 47:4, 52:8, 64:13, 71:19, 72:4, 73:6, 73:12, 81:22, 83:2, 83:19, 88:5, 93:12, 98:15, 98:19, 100:19, 104:20, 105:3, 105:15, 106:6, 107:19 provided 6:20, 13:9, 16:3, 51:10, 53:15, 53:16, 53:18, 68:18, 72:16, 75:12, 81:2, 115:11 provides 18:5, 101:8 providing 47:7, 47:8, 83:16, 92:17, 105:9 proximity 96:21, 97:3, 97:10, 97:13, 97:17, 98:1, 98:5 ptab 7:16, 7:19, 8:1, 14:14 ptt 48:10, 48:11, 85:10, 85:15 public 2:6, 117:1, 117:4, 118:13 pulling 40:14 purpose 64:9, 89:1 pursuant 2:5 push-to-talk 19:20, 27:10, 48:10, 49:18, 49:22, 50:1,	50:3, 50:4, 84:12, 84:22, 86:18, 87:14, 90:11, 91:9, 92:8, 93:2, 93:4, 93:6 pushing 85:15 put 62:16 putting 66:12, 80:10 Q qualifications 16:6, 16:7, 16:13, 16:19 questions 11:7, 45:12, 48:4, 49:4, 81:6, 81:17, 82:1, 83:11, 113:9, 113:15, 113:17, 116:3, 116:5 quick 116:1 quite 43:2 quote 33:5, 84:18, 95:2, 95:5 quotes 85:22 R radio 19:16, 19:18, 20:2, 21:6, 27:15, 28:19, 29:2, 29:10, 29:19, 30:14, 31:22, 32:3, 32:6, 32:16, 48:12, 63:19 radiofrequencies 107:21, 108:10, 109:3	radios 18:17, 18:22, 19:6, 19:20, 20:3, 20:21, 21:5, 21:9, 21:14, 21:17, 22:6, 22:12, 22:18, 23:7, 25:22, 26:6, 26:9, 26:19, 27:2, 27:10, 27:21, 28:2, 32:20, 52:7, 108:18 random 57:3, 57:5 range 97:12, 97:14, 114:16, 115:14 rather 26:10, 111:7 rdr 1:27, 2:6, 117:3 re-read 56:5, 101:12 reach 109:1 read 37:3, 43:1, 50:7, 50:8, 50:15, 50:16, 50:21, 51:1, 51:3, 54:19, 55:5, 56:1, 56:19, 57:3, 57:5, 60:20, 62:2, 63:10, 63:12, 67:8, 67:11, 69:12, 69:14, 70:22, 71:2, 77:5, 77:8, 82:9, 91:20 reading 16:18, 50:16, 55:20, 57:1, 57:7, 57:13,
--	---	--	--

64:6, 81:11, 104:19, 115:5 reads 54:7 ready 82:10 really 83:12, 90:13, 110:10, 111:4, 111:6, 114:18, 115:15 reason 15:9, 15:21, 52:15, 58:14, 62:6, 73:13, 73:18, 114:4, 114:18, 115:8 reasonable 33:8, 33:14, 33:17, 33:19 reasons 15:18, 35:20, 72:12, 72:22, 73:12, 73:13 rebuttal 7:8, 13:5, 47:6, 47:8, 53:18, 66:1, 72:17, 105:9 rebutting 105:11 recall 6:18, 6:20, 7:6, 23:15, 23:20, 23:22, 24:2, 66:2, 81:18 receive 67:15, 68:5, 96:19 receivers 22:11 receives 88:7 recess 38:1, 74:16, 103:16, 115:21, 116:4	recipient 79:13, 79:18 recited 48:22 record 5:10, 31:8, 31:19, 50:9, 106:12, 116:13, 117:11 recorded 71:5 redirect 106:18 reduce 71:6 refer 9:4, 63:2, 66:19, 80:17, 80:19, 99:6 reference 44:7, 62:17, 62:22, 63:3, 63:16, 66:17, 66:20, 80:11, 80:20, 87:19, 89:9, 99:10, 101:16, 101:20, 109:10, 109:20, 110:10, 112:22 referenced 4:14, 10:3, 21:21 references 33:6, 34:9, 34:15, 35:9, 36:5, 36:16, 36:17 referencing 49:7, 49:10 referred 19:21 referring 48:21, 78:16, 79:16, 84:22, 105:12 refers 104:13 refusing 9:10	regarding 6:6, 6:14, 6:21, 7:5, 7:21, 93:17, 107:11 registration 89:21, 90:4 regularly 21:12 regulated 20:19 regulates 20:6 related 27:22, 49:2, 108:5, 110:14, 118:1 relates 16:2, 17:12, 18:19, 109:9 relation 93:2 relationship 46:19 relative 31:14 relevant 33:14, 33:18, 34:15, 35:10, 35:15, 41:13, 41:15, 41:17, 47:6, 58:6, 58:22, 59:8, 61:16, 89:10, 90:14 relied 11:22, 12:11 rely 12:22, 47:3 relying 105:22 remotely 2:4, 117:19 render 33:6, 34:3, 34:19, 41:3, 44:18, 45:3, 109:4 rendered 49:12, 54:15	rendering 36:10, 109:9 repeat 26:21, 50:5, 82:11 rephrase 15:8, 36:11, 37:6, 72:2, 100:16 rephrased 56:6 rephrasing 56:15 report 7:4, 7:9, 89:2 reported 1:27 reporter 18:16, 50:6, 50:8, 50:18, 116:11, 117:1 reports 6:6, 12:18, 12:22, 14:5, 14:15, 15:11 represented 117:15 request 67:15, 68:5, 86:19, 88:7, 88:13, 90:12, 90:13, 90:15, 95:15, 95:17, 96:9, 96:12 requesting 85:21, 86:2 requests 96:3 requires 43:17, 85:19, 90:16 respect 18:22, 30:19, 32:5, 32:16, 84:5 responder 24:8, 25:5, 25:6, 25:13,
---	---	--	---

Transcript of Robert Akl, Ph.D.
Conducted on September 10, 2024

139

25:17, 25:21, 26:1, 110:18, 111:11, 112:3 responders 24:5, 24:15, 24:16, 25:1, 25:9, 26:7, 26:18, 27:1, 27:16 responds 24:9 response 5:17, 9:9, 66:10, 73:19 results 29:7 retained 5:12, 5:14, 6:10 review 63:9 reviewed 62:21, 67:2 right 11:16, 12:8, 19:10, 38:11, 40:18, 48:16, 49:11, 67:22, 70:9, 72:21, 73:3, 76:20, 85:1, 85:3, 89:14, 91:1, 94:5, 96:7, 97:6, 98:20, 99:8, 101:11, 102:13, 102:14, 103:1, 103:3, 103:11, 103:12, 104:8, 111:20, 113:2 rise 91:21 robert 1:18, 2:3, 4:2, 5:2, 5:11, 80:4, 116:2, 117:7, 117:19 rockefeller 3:6	rode 29:5 roman 12:3, 12:5, 38:7 room 11:15 s s 3:1 s-a-y-l-o-r 66:22 s-h-a-f-f-e-r 63:5 said 8:20, 10:16, 36:4, 36:15, 37:1, 56:13, 60:3, 101:3 sales 23:4, 27:12 same 32:19, 66:10, 84:6, 88:21, 90:16, 94:1, 113:12 saw 17:2, 42:9 say 7:10, 8:2, 12:21, 13:12, 17:3, 17:4, 17:21, 18:2, 22:21, 25:22, 30:8, 35:18, 37:9, 46:21, 51:20, 53:3, 71:18, 81:8, 84:4, 85:4, 85:9, 92:7, 94:21, 95:10, 95:16, 104:12, 110:8, 111:6, 114:7 saying 9:7, 15:17, 15:20, 37:13,	43:3, 44:11, 47:11, 81:5, 95:14, 100:12, 100:18, 102:9, 114:15 saylor 66:17, 66:20, 66:22, 67:2, 67:4, 67:20, 68:13, 69:5, 69:10, 70:11, 70:16, 70:20, 71:12, 73:7, 74:9, 74:19, 77:2, 114:4, 114:19 says 31:8, 48:8, 51:7, 53:8, 57:18, 68:5, 69:16, 70:5, 75:15, 89:15, 89:19, 90:12, 92:15, 93:11, 96:18, 98:13, 107:7, 114:3 scene 24:9 scope 6:9, 6:17, 7:7, 17:18, 18:11, 19:1, 19:7, 19:17, 20:5, 21:7, 28:20, 30:15, 30:21, 41:11, 44:21, 45:7, 45:15, 46:20, 47:12, 47:21, 62:7, 72:5, 73:8, 73:16, 77:22, 79:20, 80:8, 112:14, 113:14 screwed 100:17 se 93:5, 111:2 second 67:13, 98:12	section 12:3, 12:5, 12:7, 16:5, 16:19, 38:7, 38:10, 39:11, 46:13, 74:11, 82:13, 82:19, 83:6, 107:15, 107:22, 108:2, 108:5, 108:12, 109:12 sections 45:19, 100:10, 101:15 sector 28:10, 28:11 sectors 26:11 security 29:22, 30:4, 71:9, 71:13, 75:12, 75:16, 76:4 see 11:16, 12:1, 22:2, 31:6, 31:10, 33:11, 34:12, 42:21, 43:7, 45:20, 48:13, 49:20, 51:12, 51:18, 57:20, 58:18, 67:12, 67:18, 67:19, 68:10, 69:10, 69:21, 70:18, 71:4, 71:10, 75:14, 77:13, 80:14, 89:14, 89:17, 90:1, 90:2, 90:10, 92:15, 94:17, 95:1, 96:22, 97:4, 98:12, 98:17, 100:10, 101:11, 104:17, 107:9, 108:20, 114:5 seems 44:18, 45:10,
---	--	--	---

49:1, 60:8, 92:22, 94:19, 112:13 segment 74:2 select 85:10, 93:13 selected 90:19 selecting 43:4, 43:10, 43:12, 43:18, 51:15, 52:1, 52:10, 52:18, 85:16, 85:19, 86:1, 91:9, 91:18, 92:9, 93:6, 93:17, 94:2, 94:4, 96:9, 107:21, 108:9, 109:3 selection 62:6, 83:7, 83:8, 88:11, 89:11, 90:17, 90:20, 91:12, 91:18, 92:11, 92:20, 92:22, 93:7, 93:8, 93:19, 94:7, 94:13, 94:20, 95:6, 95:7, 95:11 selects 51:9, 51:18, 52:6, 53:5, 54:1, 84:20, 85:2 selling 26:10 send 75:15 sender 79:13 sending 71:13, 76:3 senior 21:10, 22:16,	27:11, 27:17 sense 7:17, 70:5 sensor 58:1, 58:16, 58:18, 58:21, 59:6, 62:7 sensors 69:18, 69:20 sent 71:8 sentence 33:4, 34:8, 35:2, 36:1, 36:11, 37:2, 37:5, 37:6, 51:6, 57:15, 67:12, 67:13, 67:14, 68:3, 68:19, 69:2, 69:15, 71:4, 71:15, 77:6, 77:9, 85:1, 85:8, 93:11, 94:10, 95:2, 95:10, 96:17, 97:19, 98:12, 98:19, 98:21, 98:22, 99:8, 104:11, 105:12 sentences 68:6, 105:15 separate 91:10, 91:22 separated 79:22 september 1:21, 2:4, 117:20, 118:9 series 75:1 set 24:1, 55:15, 67:21, 84:20, 91:3, 117:8, 118:8 shaffer 62:17, 62:21,	63:2, 63:3, 63:7, 63:14, 64:7, 64:9, 64:14, 65:19, 66:6, 74:9, 110:11, 110:12, 110:15 shaffer's 114:3, 114:7, 114:13, 115:1, 115:10 sheriff's 31:3 short 77:3 short-circuit 86:21 shorthand 117:1 should 13:11, 13:12, 14:8, 38:21, 40:1 show 109:5, 109:6 showed 23:11, 23:22 shown 23:16, 23:18, 71:8, 71:9 signal 29:7 signals 96:20 signature-plkal 118:11 simulation 29:7 since 14:12, 25:20, 103:18, 104:4 single 22:12 sitting 53:21, 62:5, 65:9, 101:21 situation 28:22	skill 16:10, 16:14, 16:15, 62:2 skipping 89:20 slightly 51:21 slowly 50:16 smoke 69:18 smoother 28:16 software 63:21 solution 110:21, 111:2 solutions 1:6, 4:16, 4:17, 4:18, 4:19 some 19:12, 21:13, 23:10, 23:11, 23:17, 26:6, 27:14, 28:5, 28:8, 29:5, 36:11, 41:8, 47:5, 64:13, 73:20, 81:2, 81:6, 83:4, 91:22 somebody 24:9, 26:3, 32:9, 35:20, 111:7 someone 87:15 something 11:3, 14:18, 19:8, 23:1, 31:13, 37:9, 41:4, 43:14, 43:20, 45:21, 49:6, 49:7, 51:21, 59:11, 59:12, 60:5, 72:11, 72:19, 73:21, 81:19,
--	--	--	--

92:7, 92:15, 94:3, 95:20, 96:1, 109:5, 109:8, 111:7, 113:5 sometimes 19:21, 37:9, 73:19, 113:10, 113:15 sorry 17:2, 25:3, 26:14, 36:16, 48:19, 68:6, 83:1, 100:15, 100:16, 106:5, 108:4, 113:17 sort 23:11, 73:4, 81:4 sound 6:2 speaks 91:14, 103:8, 113:8, 113:20 specific 20:14, 28:10, 40:1, 55:17, 67:21, 68:13, 82:2, 92:3, 99:19, 100:10, 111:5 specifically 6:13, 18:21, 40:8, 49:12, 50:13, 72:16, 105:6 specification 21:5, 40:10, 40:14, 40:15, 41:21, 53:4, 53:8, 53:13, 53:16, 53:22, 54:9, 55:20, 56:7, 56:15, 57:1, 57:2, 57:8, 57:14, 59:13, 60:6, 60:11, 60:17,	60:20, 61:2, 61:9, 61:17, 62:3 specifies 49:21 specify 43:11 spelled 63:5, 66:22, 80:14, 107:10 spent 7:11, 7:18, 8:1 spirit 73:5, 81:4 spoken 104:3 sta 1:9, 4:20, 4:21, 5:13, 5:15, 117:15 stand 84:1, 114:22, 115:3, 115:4 stands 114:8 start 26:15, 78:22, 79:17, 93:11 started 104:5 starting 107:4, 108:4 starts 16:7, 44:11, 82:13 state 5:9, 16:12, 34:6, 34:21, 38:16, 88:7, 100:21, 115:12, 115:13 stated 36:11, 46:10, 47:17, 56:5, 57:1, 59:12, 59:19, 60:2, 60:5, 88:20, 90:21	statement 93:17, 102:20, 113:20, 114:21 states 1:1, 63:16, 84:19 stating 36:1, 37:2, 83:3 station 96:21, 97:3, 97:10, 97:15, 97:22, 98:4, 98:14, 101:17, 106:16 stations 96:20, 98:16, 99:5, 100:2, 100:14, 100:20, 101:9 stavinoha 3:4 stavinoha@bakerb- otts 3:10 step 71:6, 71:8, 71:9, 75:14, 75:18, 76:8 stephen 3:3, 3:9 steps 75:1 sticking 111:9 still 24:18, 25:11, 60:6, 91:11, 92:10 stop 35:22 stored 71:7, 74:3 streamed 51:8, 73:21, 73:22, 74:3 streaming 74:4	streamline 81:10 street 3:15 streets 30:6 strength 29:8 strike 28:13, 32:14, 35:4, 35:6, 48:19, 53:2, 71:17, 80:18, 95:21, 113:21 strikes 45:4 struggling 86:15 students 26:5, 27:20 studying 7:11 subfields 19:11, 19:13 subheading 108:17, 114:2 subject 8:2, 9:21, 79:14 submit 7:8 submitted 5:16, 6:5, 6:12, 6:13, 7:4, 12:22, 13:8, 14:16, 15:11 subset 51:9, 52:1, 52:19 substantive 52:9, 105:7, 105:16, 106:21 success 33:8, 33:14, 33:17, 33:20 sufficient 35:19, 36:18, 37:7, 37:10,
---	---	---	--

116:3 suggest 109:10 suggests 85:9 suite 3:16 summarized 56:6 support 5:17, 64:17, 101:8, 102:1 supporting 99:7, 100:8, 102:14 supports 63:22, 102:3, 103:2 suppose 105:5, 110:16 sure 11:14, 37:21, 50:17, 51:1, 73:17, 78:16, 78:19, 79:3, 79:17, 82:4, 83:5, 85:1, 100:1, 115:6 switch 85:10, 85:15, 103:13 switching 37:17, 105:20 sworn 5:3, 117:8 system 20:14, 22:14, 22:15, 43:11, 43:17, 55:18, 57:19, 75:12, 87:13, 114:8, 114:13, 115:1, 115:10 systems 16:22, 17:6, 17:9, 17:17, 18:9, 21:10, 22:16, 26:5,	27:11, 27:17, 30:20, 64:4, 108:19 T table 10:12, 11:4, 11:5, 11:9, 38:12 tables 38:14 take 19:4, 37:18, 50:20, 55:5, 63:9, 67:8, 69:12, 77:5, 92:13, 115:17, 116:1 taken 103:19, 115:6, 117:10 talk 87:10, 90:22, 91:4, 111:13, 112:3, 116:2 talking 63:4, 66:21, 70:2, 78:6, 79:9, 80:21, 84:5, 94:7, 97:21, 109:19, 114:8 talks 91:3, 99:8 taught 26:5, 27:22 teach 27:20, 28:4, 32:8, 32:20, 83:3, 109:10 teaches 83:17, 107:20, 108:8, 109:2, 109:5 team 27:18 technical 5:12	technology 17:11, 26:9, 27:19, 27:21, 28:1, 28:9, 28:10, 32:9, 32:20 telecommunication 16:22, 17:6, 17:9, 17:16, 18:9, 26:4 telecommunicatio- ns 18:7, 31:4 teleconference 1:20 telephone 63:17 tell 9:15, 22:5, 53:21, 55:10, 56:2, 57:7, 65:9, 82:16, 100:3 telling 56:9 temperature 69:19 ten 116:3 term 8:17, 24:15, 29:17, 39:1, 39:2, 40:18, 44:2, 58:20, 59:6, 69:7, 72:5, 73:8, 78:18, 86:16, 110:12, 110:15, 113:1 terms 39:7, 39:13, 39:17, 40:1, 40:6, 40:9, 40:15, 41:21, 72:1, 85:19, 105:20, 106:3, 106:14, 106:22, 107:1, 107:2,	112:14 test 29:5, 29:12, 29:19, 57:11, 81:17, 82:5 testified 5:4, 16:21, 33:4 testify 34:8, 99:14, 108:8 testimony 36:13, 85:14, 92:21, 104:21, 117:11 testing 29:4 texas 22:2, 25:18 text 101:7, 102:1, 103:5 texts 101:4, 101:15 th 118:9 thank 35:17, 50:12, 116:9, 116:11 thanks 51:2, 64:6, 116:6 theorem 37:8 theorems 37:12 thing 36:4, 43:2, 84:6 things 14:12, 29:4, 31:15, 109:6 think 8:16, 12:16, 23:2, 23:5, 23:9, 26:20, 27:5, 30:16, 35:22, 36:22,
---	---	--	--

Transcript of Robert Akl, Ph.D.
Conducted on September 10, 2024

143

41:3, 41:13, 43:20, 47:11, 47:16, 48:2, 49:12, 50:10, 58:10, 61:20, 69:1, 69:12, 81:6, 83:19, 84:17, 86:16, 99:7, 99:19, 101:2, 102:3, 103:6, 104:19, 107:22, 108:4, 110:2, 110:10, 110:11, 110:14, 111:2, 111:3, 112:15, 112:21, 113:17, 115:17, 115:19, 116:3 third 35:7 thought 13:21, 19:8 through 50:14, 50:22, 52:17, 54:12, 54:20, 55:6, 59:7, 62:7, 75:2, 77:3, 81:22, 82:2, 82:14, 83:6, 84:21, 91:15, 92:4, 92:6, 92:14, 99:17, 100:9, 107:13, 107:19, 108:7, 108:22 time 1:22, 7:10, 7:18, 37:18, 39:3, 39:8, 47:19, 74:14, 87:10, 88:3, 88:18, 88:21, 92:13, 97:6, 101:13, 116:6 time's 35:7 timeline 14:3	timely 11:7 times 99:9 title 108:17 titled 38:7 today 6:4, 53:21, 62:5, 65:9, 101:21, 103:19, 103:21, 104:4 together 91:21, 110:7, 110:8 told 9:17, 13:20, 15:6, 61:5, 61:22, 111:20 tomorrow 15:21 took 29:18, 37:5 top 6:18, 7:2, 87:21 totally 85:7 towards 28:6 towers 31:15 track 88:1, 88:16 trademark 1:1 transcript 4:7, 116:10 transmission 88:2, 88:9, 88:16, 88:17, 89:7, 90:6 transmit 20:18, 20:20, 86:6, 86:12, 86:20, 87:4, 87:16, 88:13,	95:15, 95:18, 96:4, 96:9, 96:13, 96:19 transmitted 77:15, 79:10 transmitter 22:11 transmitting 87:15, 88:21 trial 1:2 trucking 23:3 true 117:11 try 35:6, 50:17 trying 30:1, 35:3, 35:5, 36:7, 36:10, 37:1, 41:8, 57:6, 73:18, 78:21, 82:4, 88:22, 91:16, 92:1, 97:18, 102:2, 102:7, 112:1, 113:2 tuesday 1:21, 2:4, 117:19 turn 11:18, 38:3, 42:15, 55:2, 74:18 two 33:6, 38:11, 68:6, 74:13, 83:11, 83:13, 91:20, 110:16, 111:10, 111:18, 111:19 type 19:18, 23:5, 26:5 typed 80:2 types 17:8, 17:16,	18:8, 20:2 U ultra 21:4 unattended 64:3 uncommon 15:17 under 16:14, 31:7, 41:22 understand 8:10, 8:11, 8:21, 9:15, 9:16, 9:17, 9:20, 9:21, 24:7, 24:11, 24:18, 24:20, 24:21, 25:6, 25:11, 26:8, 27:14, 30:1, 33:5, 33:13, 33:19, 34:8, 35:1, 35:3, 35:5, 35:6, 35:14, 46:14, 48:20, 57:6, 58:3, 58:4, 58:12, 63:3, 66:21, 68:2, 70:8, 71:22, 72:3, 76:1, 78:4, 78:22, 80:6, 80:18, 80:20, 84:2, 84:9, 84:13, 85:14, 91:16, 94:5, 97:19, 102:12, 102:21, 108:6 understanding 8:22, 9:13, 14:22, 15:16, 24:14, 29:17, 34:4, 34:14, 34:20, 35:8, 35:13, 36:8,
--	---	---	--

36:19, 39:5, 40:12, 40:21, 41:9, 41:12, 44:1, 44:4, 44:6, 46:6, 47:20, 49:2, 54:6, 59:14, 60:19, 75:4, 75:8, 78:14, 78:17, 81:11, 83:5, 91:19, 109:5, 110:3 understands 107:1 understood 30:11, 40:13, 60:21, 62:1, 106:3 unfair 113:18 united 1:1 universe 102:3 university 25:18 unlicensed 20:7, 20:8 unpack 35:3, 36:3 unt 80:3 until 38:1, 74:16, 81:8, 87:14, 103:16, 115:21, 116:4 use 20:4, 20:21, 69:7, 70:13, 78:21, 101:13, 112:1 user 24:1, 31:9, 51:9, 51:15, 51:18, 52:1, 52:6, 52:9, 52:18, 53:5,	54:1, 55:15, 55:17, 67:15, 67:21, 68:5, 69:17, 75:19, 76:2, 76:8, 76:19, 77:10, 84:11, 84:19, 85:21, 86:5, 86:12, 87:3, 89:12, 93:12, 94:12, 106:16 user's 67:16 users 55:18, 57:19, 81:13, 82:21, 83:18, 88:21, 90:18, 96:6 uses 52:5, 70:14, 83:22, 90:3, 110:15, 112:22 using 9:4, 29:6, 37:11, 56:16, 56:22, 64:1, 64:2, 78:19, 79:3 usually 20:4, 49:5, 79:21 V vacuum 81:17, 83:20 vague 17:19, 19:15, 24:22, 25:7, 60:9, 77:18, 78:1, 78:4, 78:5, 86:9, 109:22, 111:1, 111:15, 111:17, 112:8 validity 7:5, 7:8 vehicle 29:5, 29:12,	29:20, 30:13, 108:18 verbatim 55:20 verify 29:7 version 11:10 vhf 20:22 via 1:20, 2:4 vibration 69:20 video 1:20, 11:16, 42:20, 43:3, 43:4, 43:5, 51:7, 51:9, 51:10, 51:15, 51:19, 52:1, 52:2, 52:10, 52:18, 52:19, 53:6, 54:1, 54:2, 58:5, 62:6, 63:18, 64:1, 64:18, 69:18, 70:1, 70:3, 70:6, 70:12, 70:14, 71:5, 71:13, 71:19, 71:20, 72:4, 72:5, 72:13, 72:17, 72:18, 73:2, 73:7, 73:8, 73:11, 73:12, 73:15, 74:2, 74:5, 74:6, 75:11, 108:19 view 40:6, 76:19 viewed 74:3 vii 38:8 vocabulary 83:22	vs 1:8 W walk 81:22, 82:13, 91:15 walkie-talkie 19:22, 20:13 walking 82:2 want 16:17, 36:15, 50:20, 74:13, 82:9, 87:10, 99:17, 100:11, 101:13, 103:20, 111:11, 112:3, 113:11, 113:13, 114:22, 115:6 wanted 110:19 wants 106:18 way 13:4, 16:8, 35:18, 37:6, 47:9, 52:21, 55:1, 61:13, 62:10, 66:3, 69:1, 76:2, 76:21, 86:8, 89:4, 93:12, 118:5 ways 98:16, 99:5, 100:2, 100:13, 100:19, 101:9, 101:16 we'll 17:13, 97:8, 102:4, 102:18, 115:19 we're 74:10, 87:11, 89:13, 90:21, 91:4, 91:5 we've 37:16, 74:12,
---	---	--	--

Transcript of Robert Akl, Ph.D.
Conducted on September 10, 2024

145

103:19 west 3:15 whatever 82:9, 103:9 whatsoever 53:4 wherein 48:9 whereof 118:8 whether 19:5, 23:22, 33:15, 33:21, 34:14, 35:3, 35:5, 35:8, 43:16, 45:6, 45:14, 47:12, 47:20, 53:22, 61:6, 61:16, 65:10, 65:20, 66:7, 72:15, 74:2, 77:14, 81:18, 83:8, 86:11, 88:8, 88:14, 89:5, 90:4, 91:17, 101:17, 109:7, 113:5, 114:22 whole 10:13, 43:1 wide 114:16, 115:14 window 69:17 windup 41:19 wireless 27:22 within 19:11, 44:21, 45:7, 45:15, 47:12, 47:21, 58:15, 62:7, 68:9, 68:16, 69:7, 69:16, 72:5, 73:7, 78:15, 79:6,	92:6 without 20:14, 34:10, 37:4, 57:7, 82:2, 97:14, 97:15, 101:12 witness 37:19, 37:21, 42:13, 62:14, 66:15, 80:13, 80:14, 115:22, 116:9, 117:7, 117:12, 118:8 word 29:14, 36:13, 36:14, 51:18, 57:7, 57:8, 58:18, 70:13, 72:18, 73:13, 78:18, 85:2, 86:15, 87:1, 112:14 words 24:19, 36:9, 49:20, 51:20, 52:5, 52:13, 55:11, 56:2, 56:10, 56:17, 56:19, 57:3, 57:6, 57:7, 67:19, 77:13, 83:4, 90:2, 91:19, 112:1 work 7:15, 7:21, 13:14, 13:20, 15:4, 15:12, 26:6, 27:12, 31:21, 32:2, 32:21, 86:22, 110:7, 110:8, 114:3, 114:13, 115:1, 115:10, 115:14 worked 14:1, 21:8, 22:15, 25:13, 25:16, 25:20,	26:4, 26:18, 27:1, 27:8, 27:19, 29:3, 30:18, 31:3, 32:4, 32:10, 32:13, 32:15, 32:21 working 7:11, 7:18, 8:5, 8:12, 8:18, 9:1, 9:5, 13:13, 13:15, 14:4, 14:13, 21:16, 21:18 wouldn't 18:2 wrapped 13:21, 15:1, 15:13 writing 46:8 written 14:6 wrong 78:4 wrongly 85:9 wrote 66:1 Y yeah 16:18, 24:12, 41:6, 78:6, 83:1, 99:12, 99:22, 100:1, 114:20 year 22:16 years 23:14, 23:20, 24:2, 25:19, 27:8 york 3:7 yourself 17:15 Z zone 43:6	zoom 2:4, 91:2, 91:5 zooming 113:19, 114:20 .2551 3:8 .4206 3:18 0 01 103:16 01295 1:13 03 1:22, 2:5, 117:20 05 38:1 09 74:16 1 1 103:16 10 1:21, 1:22, 2:4, 2:5, 4:20, 38:1, 67:4, 67:14, 68:4, 69:10, 69:16, 74:19, 74:21, 75:1, 75:5, 75:8, 75:10, 76:16, 76:21, 117:20 1001 4:16, 42:4, 42:12 1004 4:17, 62:13, 62:16, 63:2 1006 4:18, 80:11, 80:12, 80:18, 80:19
---	--	--	--

Transcript of Robert Akl, Ph.D.
Conducted on September 10, 2024

146

1010 75:2 1011 4:19, 66:12, 66:14, 66:19, 74:19 10112 3:7 1016 71:6 1018 71:8 102 96:19 1020 71:9, 75:14, 75:18, 76:6 1022 75:19, 76:5, 76:8, 76:11 1024 76:9, 76:11, 76:15 1026 76:13, 76:20 1028 75:2, 76:19 104 96:19 106 96:19 107 107:5, 107:6, 107:13, 107:19, 108:7 108 96:20 11 16:8, 38:1, 67:6, 74:19, 118:9 110 96:20, 98:10, 100:21 112 96:14, 96:18 113 98:7	118 1:26 119 107:13, 107:19, 108:7 12 74:16 120 83:2, 83:6, 92:4, 92:6 121 84:18, 85:2, 104:8, 104:12 122 85:9 124 92:16, 93:10, 93:16, 93:22, 94:7 125 92:16, 94:10, 94:20 126 88:5, 92:17, 95:1 127 88:5, 89:2, 95:16 128 83:6, 92:4, 92:6 139 108:15, 108:22 141 108:22 15 16:9, 16:10, 54:13, 54:18, 103:16, 112:10, 118:15 16 16:11, 70:15, 70:20, 71:4 17 55:7, 59:7, 70:20 18 11:18, 11:21,	12:7, 12:10, 12:15, 12:17 19 12:8, 12:10, 12:15, 12:17, 50:14, 50:22, 52:17, 54:12, 54:20 2 2 103:16, 115:21, 116:4, 116:13, 117:21 2.5 20:10 20 7:20, 8:1, 23:14, 23:20, 24:2, 25:19, 27:8, 74:16 2000 21:9, 21:16 2001 21:9, 21:17 2006 4:20, 10:2, 10:6, 10:17 2007 4:21, 17:22, 21:19, 21:20, 31:2, 31:6 2008 39:8 2023 1:13 2024 1:21, 2:4, 117:20, 118:9 2028 118:15 21 4:21 212.408 3:8 218 87:18, 88:1, 88:6, 88:7,	88:11, 88:14, 88:16, 89:1, 89:5, 89:11, 89:15, 89:20, 90:3, 95:11, 95:17, 95:22, 96:10 24 115:21 25 63:7, 63:10, 64:7 26 33:1, 34:6 27 34:7, 34:22, 36:9 29 51:6 3 30 3:6, 16:11, 52:5, 52:14 300 55:18, 57:19 31 52:5, 52:14, 113:22, 114:2 312 55:11, 55:13, 56:3, 56:10, 57:9, 58:5, 58:15 312.807 3:18 32 69:11, 69:16 3300 3:16 34 115:21, 116:4 35 31:2, 31:7, 37:14, 38:4, 38:6, 38:11, 38:13, 38:16 36 22:1, 38:11,
---	--	--	--

Transcript of Robert Akl, Ph.D.
Conducted on September 10, 2024

147

38:13 37 50:14, 50:22, 52:17, 54:12, 54:20 39 89:8, 89:19, 116:4	61 71:3 62 4:17, 67:5, 68:4 65 67:15, 110:13 66 4:19	
4	7	
40 89:8, 89:14 400 94:14 412 94:15 42 4:16, 116:13, 117:21 43 69:11 442 94:14 4498 3:7 47 82:13	70 3:15, 82:12 8 8,994,830 1:14 80 4:18 83 72:9 830 5:22, 6:6, 6:11, 6:14, 6:21, 7:5, 7:11, 7:22, 8:3, 8:6, 9:4, 9:6, 9:22, 17:12, 17:14, 18:19, 18:20, 19:4, 19:19, 42:4, 42:7, 42:16, 48:5, 50:22, 52:8, 53:4, 53:22, 73:8, 112:10, 112:18, 113:4 84 72:9	
5	9	
52 70:20 54 77:2, 77:6 552489 1:25 56 38:1 58 77:3, 77:7, 108:5	900 20:9	
6	@	
60 99:1, 99:4, 99:7, 99:9, 99:11, 100:15 60602 3:17	@ 79:22	

Return to: transcripts@planetdepos.com

[illegible]

September 25, 2024
(Date)

Robert F. L.

Re: Deposition of **Robert Akl, D.Sc.**

Date: 9/13/2024

Case: Motorola Solutions, Inc. -v- STA Group, LLC (PTAB)

Return to: transcripts@planetdepos.com

ACKNOWLEDGMENT OF DEPONENT

I, Robert Akl, D.Sc., do hereby acknowledge that I have read and examined the foregoing testimony, and the same is a true, correct and complete transcription of the testimony given by me and any corrections appear on the attached Errata sheet signed by me.

September 25, 2024

(Date)

Robert Akl.

(Signature)