



Planet Depos®
We Make It *Happen™*

Transcript of Ivan Peter Zatkovich

Date: July 7, 2020

Case: Resideo Technologies, Inc. -v- Ubiquitous Connectivity, LP

Planet Depos

Phone: 888.433.3767

Email: transcripts@planetdepos.com

www.planetdepos.com

Resideo Technologies, Inc. v. Ubiquitous Connectivity, LP

IPR2019-01335

Patent # 8,064,935

Exhibit # 1040

WORLDWIDE COURT REPORTING & LITIGATION TECHNOLOGY

1 UNITED STATES PATENT AND TRADEMARK OFFICE

2
3 BEFORE THE PATENT TRIAL AND APPEAL BOARD

4
5 RESIDEO TECHNOLOGIES, INC. and
6 CENTRAL SECURITY GROUP - NATIONWIDE, INC.,
7 Petitioners

8 v.

9 UBIQUITOUS CONNECTIVITY, LP,
10 Patent Owner.

11
12 Case: IPR2019-01335 & IPR2019-01609

13 U.S. Patent No. 8,064,935

14
15 DEPOSITION OF IVAN PETER ZATKOVICH

16 Tuesday, July 7, 2020

17 Conducted Virtually

18 9:09 a.m. - 3:49 p.m.

19 Job #305277

20 Pages: 1 - 226

21
22 April Reid, Stenographer & Notary Public

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

Deposition of IVAN PETER ZATKOVICH,
taken by and before April Reid, Notary Public in
and for the State of North Carolina, pursuant to
Notice of Deposition, commencing at 9:09 a.m.,
Tuesday, July 7, 2020, via Video Conference -
Zoom. All parties appearing remotely.

1 APPEARANCES:

2 RESIDEO TECHNOLOGIES, INC.

3 S. BENJAMIN PLEUNE, ESQ.

4 ADAM DOANE, ESQ.

5 CHRISTOPHER DOUGLAS, ESQ.

6 ALSTON & BIRD, LLP

7 101 South Tryon Street, Suite 4000

8 Charlotte, N C 28280

9 (704) 444-1098

10
11 UBIQUITOUS CONNECTIVITY, LP

12 CORTNEY S. ALEXANDER, ESQ.

13 KENT & RISLEY, LLC

14 5755 N. Point Parkway, Suite 57

15 Alpharetta, GA 30022

16 (404) 855-3867

17
18 ALSO PRESENT:

19 CHARLES G. SHAMOON

20 PETER FLYNN

1	INDEX	
2	IVAN PETER ZATKOVICH	
3	Examination by Mr. Pleune	6
4	* * *	
5	EXHIBITS	
6	Exhibit 2003 Curriculum Vitae	21
7	Ivan Zatkovich	
8	Exhibit 1101 LinkedIn page	54
9	Ivan Zatkovich	
10	Exhibit 2004 Declaration	78
11	'935 patent	
12	Exhibit 1010 '372 patent app	91
13	Exhibit 1025 SMS standard	147
14	Exhibit 1102 Dictionary of Electrical	161
15	and Computer Engineering	
16	Exhibit 1022 Ellers prior art	171
17	Exhibit 1021 Antilla prior art	184
18	Exhibit 1019 Sears prior art	200
19	Exhibit 1020 Menard prior art	213
20	Exhibit 2009 microcontroller picture	221
21	* * *	
22		

1 (THEREUPON, the following proceedings
2 were had:)

3 THE VIDEO CONFERENCE TECHNICIAN: Thank
4 you to everyone for attending this proceeding
5 remotely, which we anticipate will run
6 smoothly.

7 Please, be aware that we are recording
8 this proceeding for backup purposes. Any
9 off-the-record discussion should be had away
10 from the computer. Please remember to mute
11 your mic for those conversations.

12 Please have your video enabled to help
13 the reporter identify who is speaking. If
14 you're unable to connect with the video and
15 are attending via phone, please identify
16 yourself each time before speaking.

17 We will provide a complimentary,
18 unedited recording of this deposition with
19 the purchase of the transcript, if you are
20 interested.

21 I apologize in advance for any
22 technical-related obstructions.

1 Thank you.

2 THEREUPON:

3 IVAN PETER ZATKOVICH

4 was called as a witness by the Petitioner and,
5 after having been first duly sworn, was examined
6 and testified upon his oath as follows:

7 EXAMINATION

8 BY MR. PLEUNE:

9 Q. Good morning, Mr. Zatkovich. My name is
10 Ben Pleune. I work for a law firm called Alston
11 Bird. And I'm going to be asking you some
12 questions today.

13 How's your audio-video connection? Can
14 you hear and see me okay?

15 A. You're a little broken, but I can -- for
16 the most part, I can understand you.

17 Q. Okay. I'm going to move the mic a
18 little bit closer.

19 Is that better?

20 A. Yeah, it's a little bit better.

21 Q. Okay.

22 MR. PLEUNE: And so before we get

1 started, as a matter of housekeeping, I want
2 to note on the record that the parties have
3 agreed to take this deposition remotely, over
4 a -- video deposition software.

5 So all the parties have agreed and
6 attempted to be in physically different
7 locations, including the court reporter.

8 And today's deposition is the first in a
9 series of two deposition related to IPR
10 numbers IPR2019-01335 and IPR2019-01336.

11 And the parties have agreed that the
12 transcripts from these two deposition of Mr.
13 Zatkovich can be used in both IPR proceedings
14 which I enumerated a moment ago.

15 Did that all sound correct, counsel?

16 THE STENOGRAPHER: Counsel, you are
17 muted.

18 MR. ALEXANDER: Yes, it does.

19 THE STENOGRAPHER: Oh.

20 BY MR. PLEUNE:

21 Q. Mr. Zatkovich, can you, please, state
22 your full name and address, for the record/

1 A. Yes. Ivan Peter Zatkovich. My business
2 address is 301 West Platt Street, Tampa, Florida
3 33606.

4 Q. And Mr. Zatkovich, have you ever been
5 deposed before?

6 A. I have.

7 Q. And roughly, how many times?

8 A. Approximately, 40 to 45 times.

9 Q. And were any of those patent cases?

10 A. Yes. The majority were.

11 Q. Okay. And how many, would you say,
12 roughly were patent cases of the 40 to 45?

13 A. I'd say 70, 75 percent.

14 Q. Okay. And what was the most recent
15 patent case that you were deposed in?

16 A. Wow. Short memory.

17 I was deposed earlier this year in an
18 ITC case, Dynamics vs. Samsung.

19 Q. And -- and who did you represent in that
20 case?

21 A. The plaintiff, Dynamics.

22 Q. Was that the patent owner?

1 A. That's correct.

2 Q. What were the patents about in that
3 case?

4 A. Those patents were about the processing
5 of payment transactions using technology within
6 cell phones, primarily magnetic secure
7 transmission technology.

8 Q. Do you know the outcome of that case?

9 A. It is still pending.

10 Q. Have you ever had any interaction with
11 Resideo or Honeywell before this case, Mr.
12 Zatkovich?

13 A. I have not.

14 Q. Have you ever heard of Resideo before
15 this case?

16 A. The name did sound familiar, yes.

17 Q. Okay. Do you recall from what it
18 sounded familiar or just generally sounded
19 familiar?

20 A. I -- I had done some remote monitoring
21 cases in the past and remote location detection
22 and I believe Resideo was mentioned as one of the

1 actors in that -- in that industry.

2 Q. Now, was this for a litigation matter?

3 A. Yes.

4 Q. And was Resideo named as a party in that
5 case?

6 A. No.

7 Q. What -- what about Honeywell, have you
8 ever had any interaction with Honeywell in the
9 past?

10 A. I -- I interviewed with Honey --
11 Honeywell right after I got out of college. But
12 aside from that, no.

13 Q. Where did you interview?

14 A. I don't recall which office it was. I
15 think it was in California.

16 Q. Okay. They got a lot of spots, that's
17 for sure.

18 A. Yeah.

19 MR. ALEXANDER: Ben, could -- Ben, I'm
20 sorry, before you go further, can I ask one
21 housekeeping detail that -- I'm sorry -- I
22 should have asked when you ran through kind

1 of why we're here.

2 You mentioned the 1335 and 1336
3 petitions, but I -- I think we're also here
4 for the 1609 and 1610 petitions. Correct?

5 MR. PLEUNE: I'm glad that you made that
6 point. That is correct. And so also the --
7 the 1609 and 1610 IPRs.

8 And I believe also with us on the line
9 is a representative of CSG. And I'll let him
10 introduce himself, if that is in fact the
11 case.

12 Or at least -- I understand that he's
13 joining now so we can -- we can keep an eye
14 on that and maybe address it at another
15 break.

16 MR. ALEXANDER: Sorry to interrupt.

17 MR. PLEUNE: No, no. I appreciate it.

18 BY MR. PLEUNE:

19 Q. Mr. Zatkovich, have you ever heard of
20 the Honeywell Total Connect Comfort app before
21 this case?

22 A. I have not.

1 Q. Okay. What about Resideo thermostats,
2 were you specifically aware of Resideo thermostats
3 in that -- that previous case that you mentioned?

4 A. No, I was not.

5 Q. And do you -- do you have any knowledge
6 of Resideo, its line of thermostat products, as
7 you sit here today?

8 A. I do not.

9 Q. Outside your work for this IPR, have you
10 ever done any other work for Ubiquitous?

11 A. No. Aside from these two IPRs, no.

12 Q. Okay. And what about outside of your
13 work for this IPR, have you ever collaborated with
14 Ubiquitous in any way?

15 A. No, I have not.

16 Q. Do you know who Charles Shamoon is?

17 A. I -- I have met Charles on the phone on
18 two occasions. Aside from that, no, I do not know
19 Charles.

20 Q. So you say you met him on two occasions.
21 When were those occasions?

22 A. Let's see. July. I would say the first

1 time was early June and the -- no. Actually, the
2 first time was probably end of May and the second
3 time was probably end of June.

4 Q. So end of May 2020?

5 A. Yes. No. Actually, I don't -- I'm
6 trying to recall exactly when those conversation
7 took place. They may have both occurred in May, I
8 believe.

9 Q. Well, why don't we refer to those as
10 the -- the first conversation and second
11 conversation. Is that okay?

12 A. Sure.

13 Q. And that -- we understand that generally
14 happened in the May 2020 time frame; is that
15 right?

16 A. That's correct.

17 Q. Okay. Now, referring to the first
18 conversation, you indicated that was a telephone
19 conversation; is that right?

20 A. That's correct.

21 Q. Was -- was counsel on the line?

22 A. Yes.

1 Q. Did Mr. Shamon tell you anything that
2 you used in forming your opinions in this case?

3 A. I don't recall anything specifically.

4 Charles was participating in discussions
5 with counsel. I don't recall any specific piece
6 of information that I -- that I -- that I used
7 within my -- my Declaration.

8 Q. Okay. And then in the second
9 conversation, did that conversation also include
10 counsel?

11 A. Yes.

12 Q. And did Mr. Shamon tell you anything
13 that you used in formulating your opinions in this
14 case?

15 A. I don't believe.

16 I was discussing the -- how they
17 practiced claims. Again, I was curious to know
18 how they were interpreting some of the claim
19 limitations. But, again, they were consistent
20 with my understanding. I don't recall using any
21 of that information as part of my opinions.

22 Q. And you said you were curious about how

1 they practiced the claims. Who is the "they" in
2 that sentence?

3 A. Charles, Charles' company.

4 Q. And when you say Charles and his
5 company, you're referring to Ubiquitous?

6 A. Correct.

7 Q. And does Ubiquitous manufacture
8 products?

9 A. I don't know what their status is at the
10 moment. I know that they had implemented the
11 technology and they had developed products. I
12 don't know what their current status is, though.

13 Q. When you say they "implemented
14 products," what do you mean?

15 A. They designed and developed products.

16 Q. What's the name of the products that
17 Ubiquitous has designed and developed?

18 A. I don't recall, off the top of my head.

19 Q. Are you aware of any products that have
20 been sold by Ubiquitous?

21 A. I am not.

22 Q. When you were speaking with Mr. Shamoon

1 about how they practiced the claims, did you
2 understand that he was talking about a particular
3 product?

4 A. Yes, that was my understanding.

5 Q. And did this particular product have a
6 name?

7 A. Well, about -- I don't know if he was
8 talking about a particular product. I know he was
9 talking about his development effort in developing
10 a product. I don't know if that actually resulted
11 in a -- in a specific product.

12 Q. Okay. And -- and did that product have
13 a particular name?

14 A. I don't recall.

15 Q. Did you -- did you ask Mr. Shamon any
16 questions about the '935 or '655 patents to aid in
17 your understanding of those patents?

18 A. Any specific questions about language
19 within the patent? No, I don't believe so.

20 Q. Okay. Any questions at all about --
21 about the patent?

22 A. Again, I was mostly interested in -- on

1 what -- how he developed his technology and how he
2 related that to the technology as a whole.

3 Q. What did he say about how he developed
4 the technology?

5 A. I -- I don't recall specifically.

6 It was a very short conversation. Maybe
7 ten minutes.

8 Q. And that -- that's -- the first
9 conversation was ten minutes?

10 A. No.

11 The first conversation, Charles was just
12 sitting in on a call that I was having with
13 counsel regarding --

14 Q. Okay.

15 A. -- my development of the declaration.

16 And the second call was the same topic.
17 But, again, I believe I paused and for about ten
18 minutes chatted with Charles.

19 Q. Okay. And so he talked about his
20 development of the technology, but you don't --
21 you don't recall what he said about that?

22 A. Nothing specific.

1 We discussed recently four APIs that --
2 that they utilized within their -- their software
3 products.

4 That's all -- that's all I recall at the
5 moment.

6 Q. So you said specific APIs that they
7 utilized in their software products; is that
8 right?

9 A. That's correct.

10 Q. Okay. Did he say anything in particular
11 about those APIs?

12 A. That they're related to program control
13 of SMS messaging.

14 Q. And how'd that work?

15 A. In order for a -- a third-party to
16 utilize SMS messaging capability. In the
17 program -- programmatic control, it's necessary to
18 have the cell phone manufacturer provide an API.

19 And prior to 2004, in my experience,
20 those were lacking from cell phone manufacturers.
21 In general, cell phone manufacturers did not allow
22 third-party application developers any APIs to

1 access SMS programmatic control.

2 Q. Okay. Just another housekeeping matter.

3 When I say the "'935 patent," Mr.
4 Zatkovich, do you understand that I'm referring to
5 U.S. Patent No. 8,064,935?

6 A. Yes.

7 Q. And when I say "'655 patent," do you
8 understand that I'm referring to U.S. Patent No.
9 9,602,655?

10 A. Yes.

11 Q. Okay. And just one -- one point of
12 clarification. Was it Mr. Shamon that told you
13 that APA -- APIs are not available in mobile
14 phones prior to 2004 or is that something that --
15 that you also believe, Mr. Zatkovich?

16 A. No.

17 I -- I was in the telecom industry for
18 some period. And it was my experience that cell
19 phone manufacturers did not expose their SMS
20 interface to third-party developers, at least not
21 prior to 2004.

22 Q. Okay. So it sounds like, Mr. Zatkovich,

1 your experienced in the deposition process, but I
2 just want to remind you of some of the ground
3 rules.

4 So I'm going to ask you some questions
5 today and you're under oath to answer them
6 truthfully and to the best of your ability.

7 Do you understand that?

8 A. I do.

9 Q. We have a court reporter today.
10 Although, the reporter is not physically in the
11 room with any of us. But please, make sure you
12 respond verbally. I think you've already done a
13 good job of that. So no head shakes or uh-huhs.
14 So that the court reporter can accurately
15 transcribe your answers. Okay?

16 A. Okay.

17 Q. Also, for the sake of the court
18 reporter, let's try not to talk at the same time.
19 I know that's going to be somewhat difficult over
20 video. But I'll make sure that -- or try to make
21 sure that you're completely finished talking
22 before I start talking and I will ask that you

1 wait until I complete my question before you start
2 answering.

3 Is that understood?

4 A. Yes.

5 Q. Okay. If you do not understand one of
6 my questions, please let me know. But if you give
7 me an answer I'm going to assume you understood
8 the question.

9 Is that fair?

10 A. Yes.

11 Q. And feel -- and finally, feel free to
12 request a break at any time. I only ask that if
13 there's a question pending, that you answer that
14 question before we take the break.

15 Fair enough?

16 A. Sure.

17 Q. Okay. So I think I indicated at the
18 outset, I want to start with your CV which should
19 be Exhibit 2003.

20 (THEREUPON, Exhibit 2003 was marked for
21 identification).

22 THE WITNESS: Just to note, the file --

1 the file interface times out about -- after a
2 minute or two, so I have to log back in each
3 time. So if it's okay, I'm going to use my
4 CV from my own storage.

5 MR. ALEXANDER: Ben, I think you're on
6 mute.

7 THE WITNESS: All right. I have my CV.

8 Q. Okay. So looking at -- at the first
9 page of your CV, it says you received your
10 Bachelor of Science in computer science in 1980
11 from the University of Pittsburgh, right?

12 A. That's correct.

13 Q. And you graduated with a minor in
14 electrical engineering; is that correct?

15 A. That's correct.

16 Q. And your CV says, "Master study and
17 thesis in computer networks. Results published in
18 Byte Magazine."

19 Do you see that?

20 A. I do.

21 Q. Was this study at the University of
22 Pittsburgh?

1 A. That's correct.

2 Q. Okay. And was that study done after you
3 received your BS degree?

4 A. Yes.

5 I actually began the project that I did
6 for my thesis while I was in undergraduate and
7 then I completed it while I was beginning my
8 master studies.

9 Q. And -- and how long was that study?

10 A. I did that for about a year and a half.

11 I was hired by Digital Equipment in the
12 middle of that process; intending to finish my
13 master's degree while I was working at Digital,
14 but I did not complete that.

15 Q. And what was the name of the article in
16 Byte Magazine?

17 A. I believe it was 1981. It was actually
18 a series of projects that the University of
19 Pittsburgh was working on at the time with -- with
20 my sponsor, Dr. Dwyer (phonetic).

21 I don't remember the name of the overall
22 article, but I think my subarticle within that was

1 called Heterogenous Computer Networks. Something
2 like that.

3 Q. Heterogenous Computer Networks, is that
4 what you said?

5 A. I believe so.

6 Q. And what was the subject matter of the
7 article?

8 A. It was -- at -- at the time there was
9 many different manufacturers of microcomputers and
10 none of them spoke with each other. So I
11 developed an interface so that I could connect
12 multiple types of microcomputers together to -- to
13 communicate.

14 And one of the products that I did to
15 demonstrate that was to create a computer game.
16 It was called Matrix Wars. But Dr. Dwyer thought
17 it would be a little less -- a little more
18 academic if I called it Matrix Search instead of
19 Matrix Wars.

20 Q. Do you recall when the article was
21 published?

22 A. End of -- end -- I -- I think it was

1 some time in 1981. September of 1981. Byte
2 Magazine, I believe.

3 Q. Okay. So I want to start with Digital
4 Equipment Corp which you just mentioned and I
5 believe appears at page 5 of your CV.

6 What is Digital Equipment Corp?

7 A. Digital Equipment Corp. At the time, it
8 was the second largest manufacturer of computers.
9 They specialized in designing and developing mini
10 computers.

11 Q. What do you mean when you say mini
12 computers?

13 A. Well, if -- if a microcomputer fit on a
14 desktop and a mainframe filled a room, mini
15 computer probably was the equivalent of a book
16 shelf or two book shelves.

17 Q. And what did you do at Digital Equipment
18 Corp?

19 A. I was software developer, working on
20 device drivers and device interfaces.

21 Q. Then we go next to GTE Data Services.

22 Am I correct that you left Digital

1 Equipment Corp -- Corp to start at GTE Data
2 Services in 1987?

3 A. That's correct.

4 Q. Okay. What is GTE Data Services?

5 A. GTE Data Services was the data branch,
6 the IT branch of GTE telephone, which then merged
7 with Verizon.

8 Q. When did they merge with Verizon?

9 A. I think it was -- well, we had -- began
10 partnership projects with Bell -- was it
11 BellSouth? Yeah. In the mid '90s. So the merger
12 process probably started around 1995 and proceeded
13 through to 1998.

14 Q. Okay. Did you actually ever work for
15 Verizon?

16 A. No. But I worked with BellSouth
17 engineers as -- as part of the merger process.

18 Q. And you said that you worked in the data
19 branch; is that right?

20 A. That's correct.

21 Q. Okay. What exactly did you do at GTE
22 Data Services?

1 A. Well, I implemented software primarily
2 for provisioning of telephone equipment. I also
3 implemented monitoring software for a monitoring
4 telephone facility such as central offices.

5 Q. Okay. And when -- when you say
6 "telephone equipment," what are you referring to
7 there?

8 A. Again, a central office which -- which
9 are these large massive switches used to switch
10 telephone calls for a region, a geographic region.

11 Q. And you're referring to landline
12 telephone equipment?

13 A. Correct. That was for monitoring the
14 facility -- well, both landline facilities and
15 gateways to wireless cellular networks.

16 For example, one of the projects that I
17 worked on was provisioning of cell phones,
18 provisioning of cell phone accounts and -- and
19 channels for new devices. So that required the
20 interfacing between landline communications and
21 cell network towers.

22 Q. Yeah.

1 And when were you working on that?

2 A. That was in 1995 and 1996.

3 Q. Okay. Any other roles or
4 responsibilities at GTE Data Services?

5 A. Yes.

6 One of the earlier projects that I
7 worked on was the development of automated geo
8 location. So that we could identify the location,
9 for example, of underground facilities by using
10 GPS and geo location methods as well as automated
11 geographic dispatch of field service personnel.

12 In other words, an early version of
13 something like Google Maps that directed you on a
14 particular route. But these were specifically for
15 field service personnel so that they could
16 determine the most efficient route to go from one
17 service -- from one customer service call to
18 another customer service call.

19 Q. Okay. So a -- an electronic mapping
20 system?

21 A. Yes.

22 Q. And so based on your CV, it appears that

1 you next worked at Utility Partners; is that
2 right?

3 A. That's correct.

4 Q. And -- and you were there from 1996 to
5 1999; is that right?

6 A. Correct.

7 Q. And what is Utility Partners?

8 A. Utility Partners develops different
9 types of automation software for gas and electric
10 utilities.

11 Q. And what do you -- what do you mean when
12 you say "automation software"?

13 A. For example, one of the projects we
14 developed was wireless monitoring of electric
15 meters.

16 Another project we worked on was doing
17 automated dispatch of field work orders, to assign
18 the correct work orders to the field service
19 person with the correct skills at -- that were
20 located in the correct region.

21 Q. What do you mean when you say "wireless
22 monitoring of electric meters"?

1 A. One of the prototype projects that we
2 worked on was to be able to first attach devices
3 to the meters, electric meters so that the field
4 service person would only basically cruise through
5 the neighborhood and read the meters via USB.

6 We then upgraded that to an internet
7 device so that they could wire -- wirelessly read
8 meters over the internet from any location.

9 Q. And what was the -- the mechanism for
10 communication between the meter and the meter
11 reader?

12 A. Well, in the -- in the first phase, it
13 was blue tooth. In the second phase, we used a
14 combination of Zigbee protocol and TC/PIP.

15 Q. And what was the time frame for that?

16 A. That was -- that probably began in '97
17 and continued through '98.

18 Q. Was there a name of that product?

19 A. Well, it -- it wasn't a commercial
20 product.

21 We were developing for utility -- for
22 utility companies. So I don't think they gave it

1 a name. I'm sure we had names for the projects,
2 but I don't recall what they were at this
3 particular time.

4 Q. Was that made commercially available in
5 the '97 or '98 time frame?

6 A. Well, again, we -- we -- we sold it
7 commercially to utility companies.

8 Did we sell that or did utility
9 companies sell that to the general public? Not
10 that I'm aware of.

11 Q. So you're not aware of any
12 commercialization of that project; is that what
13 you're saying?

14 A. I know that some of the components we
15 used were commercial products, but the software
16 that we developed to drive those components I
17 don't believe we commercialized for general
18 user-ship.

19 Q. But the -- the software would have been
20 used by the utility company, right?

21 A. That's correct.

22 Q. Okay. And -- and those were installed

1 in the field; it was just available for the
2 utility companies to use, right?

3 A. Correct. They contracted us to develop
4 that software. It was -- it was owned by the
5 utility companies.

6 Q. Right.

7 Was there a -- a server that sat between
8 the -- the -- the meter device and the meter
9 reader?

10 A. You mean, the "meter reader" being the
11 person reading the meters?

12 Q. Right.

13 A. Yes.

14 And in the --

15 Q. So the meter reader --

16 A. I'm sorry.

17 In the second implementation where we
18 connected the meters to -- to the internet.

19 Q. Okay. So the meters were connected to
20 the internet and then the meter reader could
21 access the server on the internet and -- and then
22 interact with the meter in that fashion, right?

1 A. Correct.

2 Q. And -- and you say that second
3 implementation was in the 1998 time frame?

4 A. Yes.

5 Q. So next I want to talk about Tanning
6 Technology and IMRglobal.

7 What is Tanning Technology and
8 IMRglobal?

9 A. They are consulting companies. They
10 are -- they either do contract projects or provide
11 contract resources for various companies.

12 In the case of Tanning Technologies, I
13 worked primarily with financial-based companies
14 such as Hartford insurance and CitiCorp.
15 IMRglobal, I was work -- they -- they partnered on
16 different projects. At any -- at any particular
17 time, I was either reporting to Tanning or
18 IMRglobal.

19 We worked on projects, for example, such
20 as the -- developing the first -- the first
21 version of E-Trade online.

22 Q. So let me -- let me back up.

1 So am I right, it sounds like Tanning
2 Technology and IMRglobal are two separate
3 companies? Right?

4 A. Correct.

5 One company provided infrastructure,
6 network and data -- data warehousing-type
7 infrastructure and IMRglobal did application
8 development.

9 Q. And did you work for both companies at
10 the same time or -- or -- or were these, you know,
11 one-off consulting engagements?

12 I mean, how did that work?

13 A. These -- well, each -- each one were
14 one-off consulting engagements, but at any
15 particular time I would either be working on the
16 infrastructure or the application development.
17 And accordingly, I would either be working with or
18 for Tanning or with or for IMRglobal.

19 Q. Okay. And -- and what were the types of
20 products that you were working on at that time?

21 A. So, for example, for GEICO, I developed
22 -- designed and developed a policyholder services

1 website so that GEICO policyholders can go online,
2 review their policies, make changes to their
3 policies.

4 Another example, as I mentioned, was
5 developing the E-Trade online stock and
6 commodities trading software.

7 Q. So is it fair to say that during --
8 during this time period you were working on
9 website development?

10 A. Yes. I would say, most of the projects
11 we were developing were for website projects.

12 Q. Were there any projects that weren't
13 website development projects?

14 A. Medwerks used a local client interface
15 so that was not a web-based product.

16 Q. So you're saying that was more of an
17 internet development?

18 A. Yes. And -- well, it was -- it was an
19 internal -- internal network. There was no web
20 user interface involved.

21 And, for example, Smith Barney, we were
22 developing remote access to trading systems using

1 PDA, so that was not internet or web-based.

2 Q. What do you mean when you say "PDA"?

3 A. Personal digital assistant, which was
4 the term of the art at that particular time. That
5 would either be a Palm Pilot -- I'm trying to
6 decide if we used anything other than the Palm at
7 that particular time.

8 I know that there's two or three
9 different what I would consider PDA products that
10 were popular in the market at the time. But I
11 think we were dealing almost exclusively --
12 exclusively with the Palm PDAs.

13 Q. So let's talk about the Palm Pilot in
14 particular.

15 Did the Palm Pilot have a screen during
16 this time period, in the 1999 to 2003 time period?

17 A. It did. One of those black-and-white
18 liquid crystal displays.

19 Q. Right.

20 And did it have the ability to select
21 applications by using a stylus to point to a
22 particular icon on the screen?

1 A. Yes. You had -- there was navigation
2 buttons on the Palm, but, yes, there was also a
3 stylus that you could use.

4 Q. And you could select one application or
5 a different application, right?

6 A. Correct. You did application selection
7 through that interface, yes.

8 Q. And at Smith Barney you were developing
9 an application that could be accessed on, for
10 example, a Palm Pilot, right?

11 A. That's correct.

12 Q. And so the user would select that
13 application and then it would be able to interact
14 with their Smith Barney account, right?

15 A. Yes. Basically, using a -- a text form
16 on a screen.

17 Q. And Palm had an API that was used so
18 that that software could be added to the device,
19 right?

20 A. That's correct.

21 Q. So I would like to now move on to
22 Eva-Tone.

1 What is Eva-Tone, Inc.?

2 A. It's -- it's pronounced Eva-Tone.

3 Eva-Tone is -- I would call Eva-Tone a
4 multi-media company. They started out, for
5 example, very early on doing vinyl records and
6 then moved into tapes and then CDs and then moved
7 into e-commerce.

8 I was their -- their director of
9 e-commerce operations.

10 Q. And -- and what did you do as the
11 director of e-commerce applications?

12 A. I mainly oversaw projects for our
13 clients. For example, McGraw-Hill. I oversaw,
14 managed development of online content publishing
15 and management system.

16 Q. Okay. What is McGraw-Hill?

17 A. McGraw-Hill, primarily known for their
18 -- their textbooks that they develop for schools,
19 but that's actually only a small portion of their
20 business.

21 Their primary business is doing
22 publications for various industry verticals;

1 aerospace, construction, things like that.

2 Q. Is that a well-known publishing company?

3 A. Yes.

4 Q. Would you characterize it as a respected
5 publishing company?

6 A. I'm sorry. Could you say that again?
7 You cut out.

8 Q. Would you characterize it as a respected
9 publishing company?

10 A. Yes.

11 MR. ALEXANDER: Object to form.

12 THE WITNESS: I would, yes.

13 Q. And what -- what exactly did you do for
14 McGraw-Hill?

15 A. Again, we designed and developed
16 electronic content management and automated
17 publishing system for different industry
18 verticals. The primary one that we developed was
19 for their construction vertical.

20 Q. Now, is that a web-based product?

21 A. Yes, it was.

22 Q. And is that the same for the others that

1 you have listed here, ProMarine, Resource Rabbit
2 and AAA Travel, were those web-based products that
3 you developed for those companies?

4 A. Yes, those are all web-based products.

5 Q. So then in 2007 you moved to Smith &
6 Nephew; is that right?

7 A. That's correct.

8 Q. And -- and what did you do for -- well,
9 let me back up.

10 What is Smith & Nephew?

11 A. Smith -- Smith & Nephew is an
12 international medical supply company.

13 Q. And what did you do for Smith & Nephew?

14 A. I managed their -- their global
15 websites.

16 They had, I think, roughly 50 to a
17 hundred different websites internationally
18 available to the general public.

19 Q. So primar -- primarily web development
20 that you did for Smith & Nephew?

21 A. Web development. But again, utilizing
22 that for e-commerce and manufacturing supply

1 chain.

2 Q. Okay. So, I guess, e-commerce for a
3 public facing aspect and then supply chain for
4 internal to Smith & Nephew; is that right?

5 A. Yes. Correct.

6 Q. And both of those being web-based
7 products?

8 A. Yes.

9 Q. So from 2000 to present your CV says
10 that you are a principal consultant at eComp
11 Consultants.

12 What is eComp Consultants?

13 A. EComp Consultants does project
14 management, consults on technology development and
15 a portion of my staff also participates in
16 litigation support.

17 Q. Okay. Is this -- is this your company?

18 A. Yes.

19 Q. How many consultants are employed by
20 eComp Consultants?

21 A. Part time and full time, roughly a
22 dozen.

1 Q. And based on your CV, you were not full
2 time at eComp from 2002 to 2007, right? That's
3 when you were also at Eva-Tone?

4 A. That's correct.

5 Q. And same for 2007 to 2008, that was when
6 you were also at Smith & Nephew, right?

7 A. That's correct.

8 Q. And so has your employ -- has your
9 employment at eComp been full time since 2008?

10 A. Yes.

11 Q. Have you been employed anywhere other
12 than eComp since 2008?

13 A. No.

14 I do have a -- I do co-own another
15 company, though.

16 Q. What's the name of that company?

17 A. AmericanConcierge.com.

18 Q. Okay. So you have several bullets
19 listed under your work for eComp Consultants. The
20 first says, "Cyber security, audit methodology and
21 security incursion testing."

22 Was that a specific consulting

1 engagement?

2 A. No.

3 That's a general service that we provide
4 to our clients. We've done it for several
5 clients.

6 Q. Okay. And is that true for -- well,
7 then, I guess -- okay. Understood.

8 Now, the second one is -- the second
9 bullet under eComp Consultants is, "Independent
10 consulting for Alcatel-Lucent (AT&T Bell Labs) to
11 review, recommend and write Alcatel's extensive
12 patent portfolio, specifically in the area of
13 telecommunications and web-based e-commerce."

14 And so what -- what was this engagement
15 exactly?

16 A. Well, as you probably know,
17 Alcatel-Lucent has a very large patent portfolio.
18 And they would systematically go through that and
19 carve out about 50 patents at a time and send me
20 those 50 patents. And then we -- based on a
21 particular methodology, we would identify what we
22 thought are the most promising patents in

1 different areas based on certain criterias.

2 Q. And what do you mean when you say "most
3 promising"?

4 A. Most commercially valuable, least likely
5 to be invalidated and most likely -- easiest to
6 identify if someone's infringing it or not.

7 Q. What do you mean when you say
8 "valuable"?

9 A. Again, we -- it was a criteria; seven --
10 seven factors that we would rate. And the -- the
11 merge of those rated factors determined the value
12 of a patent. But then some -- some would be
13 higher in terms of potential infringement; some
14 would be, you know, lower in terms of validity,
15 things like that.

16 Q. Okay. And you're not a patent attorney,
17 are you, Mr. Zatkovich?

18 A. I am not.

19 Q. But it sounds like you have some
20 experience analyzing patents; is that fair to say?

21 A. Yes.

22 Q. Do you have any patents yourself?

1 A. I do not.

2 Q. If you look at the fourth bullet there
3 below your work at eComp Consultants, it says,
4 "Provide mobile geo location for forensics
5 analysis and event location."

6 Is this just another offering of eComp?

7 A. Correct.

8 Q. And then is that the same with the fifth
9 and sixth bullets, these are just the -- the
10 general offerings of eComp?

11 A. Yes.

12 Q. Okay. I just want to clarify a few
13 things about -- about your CV. If you can indulge
14 me for a moment.

15 So you state at page 1 of your CV that
16 you have nine years of experience acting as an
17 expert witness; is that right?

18 A. Well, I probably have not updated that
19 in some time.

20 But that's probably closer to nine years
21 since I left Smith Nephew.

22 Q. Okay.

1 A. It's --

2 Q. Okay.

3 A. -- kind of overall.

4 I've been working on -- I've been
5 retained on cases since 2000.

6 Q. Yeah. Okay.

7 Because I saw in your CV some cases
8 going back to at least 2007.

9 A. Right.

10 Q. But understood.

11 And then if we -- on page 1 of your CV
12 there's a section titled Sample Case Experience.
13 And why did you select these particular cases?

14 A. For attorneys that wanted my CV but did
15 not ask for my entire testimony history.

16 Q. And is there any reason why you -- you
17 choose these particular cases in particular?

18 A. As I sit here now, I don't recall.

19 These probably have not changed on my CV
20 for some time even though some -- most of these
21 are old cases.

22 Q. Okay. And on page 6 of your CV you --

1 you have Court Testimony Experience.

2 Do you see that?

3 A. I do.

4 Q. And are these the cases that you
5 actually testified in at trial?

6 A. At trial, I believe one is an ITC
7 hearing and one is a Markman hearing.

8 Q. Okay. And it looks like there's about
9 seven cases here starting on page 6 and going to
10 page 7.

11 A. One, two, three, four, five, six --
12 seven, yes.

13 The acc -- the more accurate number is
14 eight. I did a -- I testified in court at the
15 beginning of this year on another matter.

16 Q. What was that matter?

17 A. That was Fintech vs. iControl.

18 Q. And where was -- where was that case
19 pending?

20 A. That was in central Florida. Florida,
21 Tampa.

22 Q. And who did you represent in that case?

1 A. Fintech, the plaintiff.

2 It was a trade secrets case.

3 Q. Starting with page 7 of your CV, you
4 list additional cases in the section titled Case
5 History; is that right?

6 A. That's correct.

7 Q. Now, are these all the cases that --
8 that you have worked on or does it just go back to
9 a certain period of time?

10 A. I -- they contain at least all of the
11 cases that I've worked on in the past five years
12 minus maybe some cases that I've worked on in the
13 last four to six months. And there might be some
14 older cases on there, more than five years old.

15 Q. Okay. And it looks, to me, like there's
16 about 70 cases listed starting on page 7. And
17 then going back to the front of your CV, it says,
18 "Testifying witness in over 24 cases."

19 What's -- what's the disconnect there?

20 A. Mostly because I probably have not
21 updated that number.

22 And in some of these cases I have given

1 testimony either in the form of a written
2 declaration or report and in some cases I have
3 not.

4 Q. Okay. When you say "testifying expert,"
5 that would include cases where you submitted a
6 report?

7 A. Correct.

8 Q. So in the last five years, Mr.
9 Zatkovich, what percentage of your working time do
10 you spend as an expert witness in litigation?

11 A. Oh. It varies. Generally, between 70
12 percent litigation support, 30 percent project
13 management and consulting anywhere to mostly
14 project management and technology consulting and
15 very little litigation support.

16 Q. And in the past -- past five years, what
17 would you say that that percentage breakdown is
18 overall?

19 A. I would say, in the past five years
20 probably 60 percent litigation support and 40
21 percent project work.

22 Q. So at the top of page 6 of your CV, it

1 says Companies Consulted for in the Past Five
2 Years.

3 Do you see that?

4 A. I do.

5 Q. Was your consulting for any of these
6 companies not related to patent analysis or
7 litigation?

8 A. Let me flip it the other way around.

9 The -- the companies that were involved
10 in patents would be Alcatel-Lucent, Verisign,
11 Network-1 -- yeah. The rest of the projects would
12 be network projects.

13 Q. What work did you do for Capital One?

14 A. Capital One we consulted on user portal
15 for their banking system, primarily providing
16 documents for their products and in some cases
17 personalized documents. We would automatically
18 generate personalized documents for -- for
19 example, their account contracts for product
20 offerings that they were providing for their
21 clients.

22 Q. Would it be fair to characterize that as

1 website development?

2 A. No.

3 Content management. The web interface
4 would be incidental to the document generation and
5 management.

6 Q. Okay. So software for content
7 management; is that right?

8 A. Correct.

9 Q. Okay. And -- and what exactly was the
10 content again?

11 A. The content would be product
12 descriptions, product contracts and product
13 specifications.

14 Q. And this was software to make it easy to
15 retrieve this information?

16 A. Correct.

17 So, for example, I'm a business customer
18 of Capital One. I want to brand my -- my own card
19 offering through Capital One. You know, I want to
20 offer Acme-branded Visa cards through Capital One.
21 They issue it. Capital One would call up
22 particular contracts associated with creating

1 payment gateways and credit card offerings and
2 then they would be personalized either through the
3 software or manually and then distributed to -- to
4 the client.

5 Q. What about -- what about Wachovia, what
6 was the nature of your work for Wachovia?

7 A. That was a front-end user portal. That
8 was primarily web -- website development, to allow
9 customers access to their -- their accounts
10 through the web.

11 Q. And when was the project for Wachovia?

12 A. It was probably more than five years
13 ago. It was before they merged with Bank of
14 America, so. That's how I know it was more than
15 five years ago. But I don't know exactly when.

16 Q. Got it.

17 And then what about -- so ProMarine, AAA
18 Travel, McGraw-Hill, that -- those were all
19 projects while you were at Eva-Tone; is that
20 right?

21 A. That's correct.

22 Q. Okay. And then we've already talked

1 about the Smith & Nephew, right?

2 A. Correct.

3 Q. What about United Illuminating, what was
4 the project that you did for United Illuminating?

5 A. United Illuminating we did a project
6 through eComp Consultants to -- to analyze their
7 infrastructure for smart grid; also to provide
8 consulting and project management for implementing
9 enterprise management resource system.

10 Q. Okay.

11 MR. PLEUNE: Why don't we go ahead
12 and -- and take a ten-minute break.

13 THE WITNESS: Okay.

14 MR. ALEXANDER: Sounds great.

15 (A recess was taken).

16 MR. PLEUNE: I will note for the record
17 that Peter Flynn has joined us on behalf of
18 CSG.

19 BY MR. PLEUNE:

20 Q. So, Mr. Zatkovich, we've added an
21 exhibit to the share file location. It should be
22 marked Exhibit 1101.

1 (THEREUPON, Exhibit 1101 was marked for
2 identification.)

3 THE WITNESS: Okay.

4 Q. Just let me know when you have that
5 open.

6 A. Yeah. I am re-logging in.

7 Q. Okay.

8 A. And that's under the '935 patent?

9 Q. No. That was --

10 A. Which folder?

11 Q. It should just be in the group folder,
12 the main folder that also has --

13 A. Ah.

14 Q. -- the folders for '935 and '655.

15 A. I see it. It's downloading now.

16 Q. Okay.

17 A. Yes, I see that.

18 Q. Okay. Can you tell me what this is?

19 A. It looks like my LinkedIn page.

20 Q. Okay. And there's -- there's one
21 position here, really two -- one of which we've
22 already spoken about briefly, but a couple

1 positions that weren't identified on your CV.

2 And one of them, it says from 2013 to
3 2015 that you were the fund leader for Social
4 Media Technology Fund, Vaud Advisor Technology
5 Fund.

6 Do you see that?

7 A. Yes.

8 Q. What is Vaud Advisors?

9 A. Vaud Advisors was the name of the
10 company used to house several funds that we were
11 developing.

12 Q. And you said "we were developing."
13 This was your company?

14 A. No. I'm sorry.

15 Vaud Advisors had several fund leaders
16 and headed by Vaud Massarsky. So he was
17 developing several funds and I was the leader of
18 the social media and technology fund.

19 Q. Okay. And what was your responsibility
20 as the fund leader for the social media,
21 technology fund?

22 A. To define the methodology we would use

1 to identify investments, to analyze particular
2 startup investments and to make recommendations
3 for the fund.

4 Q. Did you consult or opine on any
5 intellectual property owned by Vaud Advisors?

6 A. No, but we did look at -- any startups
7 that we looked at, we did determine if they had
8 intellectual properties as -- as an asset.

9 Q. And do you have experience in finance?

10 A. I wouldn't call myself a financial
11 expert. I am very well-versed in financial
12 systems, software systems related to finance. But
13 I would not consider myself an expert in -- in
14 high finance.

15 Q. And why did you leave Vaud Advisors?

16 A. We could not get the fund fully funded.
17 I think we raised approximately 5 million. We
18 wanted to get to at least 12 million before we
19 started investing in startups.

20 Q. Is there -- is there a reason why that's
21 not included on your CV?

22 A. It's some -- something that I

1 participated in for a couple years.

2 Q. But I just want to know, is there a
3 reason why you didn't include it in -- in your CV?

4 A. Oh. It's listed in companies that I
5 consulted for on my case listing.

6 I don't see it as a professional
7 employment. I see it as an activity that I -- I
8 performed. I don't -- I'm not -- I can't think of
9 a specific reason why I didn't.

10 Q. Okay. And then you mentioned before
11 AmericanConcierge.com and -- and I see that on
12 your LinkedIn profile, as well.

13 What is a AmericanConcierge.com?

14 A. It's a company that provides tour
15 itineraries for customers coming to Paris.

16 Q. And that -- that's something that you've
17 been involved with from 2015 to present?

18 A. Yes. Primarily, in the back office. My
19 partner, Sharon Carr, runs most of the front-end
20 operations on that.

21 Q. Okay. And -- and then what are your
22 responsibilities as the person that -- that runs

1 the back office?

2 A. Make sure we stay financed and make sure
3 we provide the necessary automation, the processes
4 for, you know, delivering itineraries, things like
5 that.

6 Q. And is there a reason why American
7 Concierge is not listed on your CV?

8 A. I -- as I sit here, no, I can't think of
9 that.

10 It -- I don't consider it as part of my
11 technical -- like -- like Vaud Advisors fund
12 leader, I don't consider that a technology portion
13 of my CV.

14 Q. Okay. Mr. Zatkovich, do you understand
15 why you are here today?

16 A. I do.

17 Q. Why is that?

18 A. To provide you the opportunity to depose
19 me regarding my declarations that I provided for
20 Ubiquitous.

21 Q. Okay. Why did you provide those
22 declarations on behalf of Ubiquitous?

1 A. I was requested by counsel to do so.

2 Q. What -- what exactly did counsel request
3 you to do?

4 A. Counsel asked me to review the materials
5 of -- of these matters, to review the patents, to
6 review the petitions and prior art submitted by
7 the petitioner and to provide my opinions
8 regarding that analysis.

9 Q. And is that what did you?

10 A. I did.

11 Q. How are you being compensated for the
12 work that you have done in these IPRs?

13 A. My company is paid for my hourly rate,
14 but I receive a -- a standard salary from my
15 company.

16 Q. What is the hourly rate paid to your
17 company?

18 A. For this matter, I don't recall
19 specifically, but it's generally around 500 or
20 525. I may have listed it in my Declaration.

21 Q. So your customary rate is 500 to \$525 an
22 hour?

1 A. Correct.

2 Q. And you expect that your company was
3 paid your customary rate in this case?

4 A. Correct.

5 Q. And then you are, in turn, compensated
6 by the salary that you receive from your company;
7 is that right?

8 A. That's correct.

9 Q. Okay. Normally I would not ask this,
10 and -- and I guess I apologize in advance, but
11 just given the nature of your testimony, what --
12 what are you paid by your -- your company?

13 A. I believe, my last -- last year's salary
14 was approximately [REDACTED].

15 Q. Okay. And do you expect that to be the
16 same this year?

17 A. Yes; pretty close to that.

18 Q. Again, I apologize. That's not
19 something that I would typically ask.

20 And how many hours would you estimate
21 that you have spent working on these two IPRs?

22 A. Overall, definitely more than 100 hours

1 but probably less than 200 hours.

2 Q. Around 150?

3 A. Yeah, I'd say that's a good estimate.

4 Excluding my preparation for deposition.

5 Q. Okay. And how much time would you say
6 that you have spent preparing for your deposition?

7 A. I'd say, roughly 30 to 40 hours.

8 Q. Mr. Zatkovich, what is a thermostat?

9 A. A thermostat is a device for measuring
10 temperature.

11 Q. Okay. What components would you find in
12 a modern thermostat?

13 A. Well, a modern thermostat could be
14 mechanical, which would be just a metal coil that
15 expands and contracts with -- with the
16 temperature.

17 You can also have -- there are
18 temperature sensors that could be in an integrated
19 circuit, for example. I think they consist of
20 what's called micro bladders that can expand --
21 expand and contract with temperatures.

22 And I'm sure there's other devices like

1 that, but...

2 It would have that thing that would
3 actually sense the actual temperature or be able
4 to measure the temperature and then surrounding
5 circuitry to relay that information either to a
6 gauge or to another device for reading.

7 Q. With respect to the metal coil example,
8 the mechanical example that you identified, how is
9 a thermostat like that controlled?

10 A. The simplest method, of course, would be
11 just turning the dial so that it's limited to --
12 as to when the actuator engages when the coil
13 expands to a certain temperature.

14 If that makes sense.

15 Q. Sure.

16 And -- and what about in the integrated
17 circuit example, how is a thermostat like that
18 controlled?

19 A. A thermostat like that is generally
20 controlled by receiving digital, perhaps analog,
21 input at particular times to the circuitry to set
22 temperature points or temperature ranges and then,

1 of course, to measure actual temperatures.

2 Q. And what about the -- the user interface
3 of a thermostat, what are those -- what are those
4 typically like?

5 A. In general, you have a -- a readout to
6 show what the current temperature is and in some
7 cases either a temperature limit, a high
8 temperature or low temperature that you're setting
9 the device to, or a temperature range which would
10 include a high and low.

11 Q. What about in the -- the 2004 time frame
12 in particular, what would you expect to see on a
13 user interface of a thermostat?

14 A. On a digital thermostat? Similar to
15 what I just described.

16 Q. What about the ability to -- to set
17 scheduling?

18 A. In 2004 time frame, yes. I believe
19 there was the ability to schedule, for example,
20 on-off times for air conditioners or heating
21 units.

22 I don't recall -- well, you could -- I

1 think you had the ability to have like nighttime
2 and daytime temperature ranges that you could set.

3 Q. And -- and what about demand response,
4 was that available in 2004?

5 A. By "demand response," you mean what?

6 Q. Do you understand the term demand
7 response?

8 A. It can mean different things for -- for
9 different applications.

10 Q. Sure.

11 Do you understand the term demand
12 response in the context of utilities controlling
13 energy use?

14 A. Yes.

15 Q. And -- and what is your understanding of
16 demand response in that context?

17 A. The -- well, it depends on what your
18 objective is.

19 If -- if your objective is to limit
20 overall power usage, then demand response would be
21 to set -- generally set a cap on the wattage used
22 at a particular time of day and then limit usage

1 of power to that wattage.

2 Q. So it would be the utility company
3 setting the cap, correct?

4 A. In general, yes.

5 Q. And --

6 A. For -- for -- for -- for the devices
7 that the utility's monitoring provide.

8 Q. Okay. And one way that they could
9 conserve energy is by turning off the devices of
10 their customers, right?

11 MR. ALEXANDER: Object to form.

12 THE WITNESS: I don't think utility
13 companies have the ability to -- at least not
14 in 2004, to control individual appliances
15 from turning on and turning off or turning
16 them off as the case may be.

17 Q. Could the user of an individual
18 appliance set that appliance so that it may
19 participate in a demand response from the utility
20 company?

21 A. If you did it on a per circuit basis,
22 yes. That appliance would be measured as -- as

1 part of the overall cap of wattage.

2 Q. And would you agree that the purpose of
3 that would be to conserve energy?

4 A. Yes.

5 Q. What is SMS?

6 A. SMS is a protocol developed for sending
7 and receiving text messages.

8 Q. Is that -- is that widely developed, to
9 send and receive text messages?

10 A. That's one primary use of that.

11 It also has the ability to send binary
12 information, as well.

13 Q. When you say "binary information," do
14 you mean data?

15 A. Correct.

16 Q. What does SMS stand for?

17 A. Short message service.

18 Q. And then specifically in 2004, would you
19 agree that SMS could be used for both sending text
20 messages and for sending data?

21 A. It depends by whom. But, yes, the
22 telephone company and cell phone manufacturers had

1 that capability.

2 Q. They had the -- strike that.

3 The telephone company and the cell phone
4 manufacturers had the capability to use SMS to
5 send data; is that right?

6 A. Correct.

7 Q. Is it your opinion that that ability was
8 limited to telephone companies and cell phone
9 manufacturers?

10 A. I'm sure there's exceptions to that,
11 partners working with telephone companies and cell
12 phone manufacturers, but by and large text
13 messaging, at least prior to 2002, was limiting --
14 limited to one user texting another user in a
15 predefined or preloaded application within a --
16 within a cell phone or mobile communication
17 device.

18 Q. You would agree that SMS is a standard
19 protocol, right?

20 A. Yes.

21 Q. So any developer could use that to send
22 data, right?

1 A. Assuming they had the access for APIs
2 necessary to actually implement it.

3 Q. What about two computers, could SMS data
4 be sent between two computers?

5 A. In 2004 or prior to 2004, I'm not aware
6 of any such systems that did that.

7 Q. But it would have been possible in 2004,
8 right?

9 A. I don't know.

10 Again, I'm not aware of any API that
11 existed or equipment that existed that allowed,
12 you know, third-party or private individuals to
13 develop a system like that.

14 Q. And is your testimony the same as
15 between a cellular mobile device and a computer?

16 MR. ALEXANDER: Object to form.

17 THE WITNESS: Again, depending on what
18 we're talking about.

19 If we're -- if the cell phone is
20 sending, again, text messages from a
21 preloaded application on the cell phone,
22 could that be sent to a computer? You would

1 have to direct that to a particular
2 application on the computer. And I'm not
3 aware of any API on a cell phone that was
4 available to third parties that would allow
5 that. So I'm -- I'm not aware of that
6 capability.

7 Q. So you're not aware of that capability,
8 but in -- in 2004 it would be possible to send an
9 SMS message containing data from a cellular phone
10 to a computer, right?

11 A. Again, the -- the SMS standard
12 identifies mechanism to do that.

13 I'm not aware of any API implemented
14 either in a cell phone or in equipment that could
15 be utilized within a computer to actually bring
16 that to fruition. Again, unless you're a
17 telephone company or a cell phone manufacturer.

18 Q. So the SMS standard tells you what you
19 need to know to send an SMS with data from a cell
20 phone to a computer, right?

21 A. Yes, I'd say that's a fair
22 characterization.

1 Q. And the SMS standard also tells you what
2 you need to know to send an SMS from one computer
3 to another computer, right?

4 A. Again, the -- the -- the standard does
5 not differentiate computer from a cell phone.
6 It's just communication protocol.

7 Yeah, the -- the devices that
8 implemented that would -- would have to allow a
9 third-party API in order to implement that.

10 So, again, a -- a SMS standard is just a
11 protocol specification. It's just a piece of
12 paper. It can't do anything unless you enable
13 that on a device.

14 Q. Right.

15 So as of 2004, the -- the known SMS
16 standards indicated how you would do that, how you
17 would send SMS data between a phone and a computer
18 or a computer and a computer, right?

19 MR. ALEXANDER: Object to form.

20 THE WITNESS: Again, in the abstract.
21 Not for any practical device at that
22 particular time.

1 Q. But yes, it would, in the abstract, in
2 your opinion, right?

3 A. Yes.

4 Q. What is X10?

5 A. X10 is a protocol for controlling
6 devices over a 60 hertz power line.

7 Q. And how does that work? How does it
8 control it?

9 A. Basically, you modulate commands on the
10 60 hertz frequency and the devices that are
11 plugged into that same electrical circuit will
12 read the modulated information on that 60 hertz
13 frequency and communicate data back and forth or
14 communicate -- communicate demands to devices on
15 the power line.

16 Q. And is this primarily for devices that
17 would be located within a single structure?

18 A. Yes.

19 It -- it would almost have to be within
20 the same structure because they have to be on the
21 same electrical circuit.

22 Q. And how would X10 function to control a

1 thermostat, for example?

2 A. A thermostat would have to be plugged
3 into the 110-volt power supply and be fitted with
4 an interface to both receive modulated information
5 and send modulated information on the power line.

6 So there -- there are standards for X10
7 to communicate that type of information. All you
8 would need to determine is what functions you
9 wanted to offer on your thermostat and then that
10 thermostat could, for example, send data regarding
11 the temperature that it's reading on the device,
12 receive commands as to what temperature limits it
13 wanted to set for the heating or cooling unit that
14 it was attached to.

15 Q. And so if I was going to communicate
16 with a thermostat and -- and say I was going to
17 communicate to that thermostat to turn on, what
18 would that communication look like?

19 A. Well, generally, a thermostat -- well, I
20 guess, it does have a -- an actuator for turn on.

21 You would format a command from a remote
22 unit, a remote control unit of some type that

1 would send a command that addresses that
2 particular device on the X10 because every device
3 would have an address. And it would send a -- for
4 example, an appliance on command to turn on
5 whatever appliance was being controlled by that
6 thermostat.

7 Q. And what if I wanted to change the
8 setpoint for the heat, what would that
9 communication look like?

10 A. There'd probably be a high setpoint and
11 a low setpoint. You would just formulate a
12 command that would identify that you're setting a
13 high point or a low point and the value associated
14 with that, which would most likely be a
15 temperature.

16 Q. Is it fair to say that the details of
17 that command would -- would reside in software?

18 A. Yes.

19 Q. So how exactly the thermostat would be
20 instructed to turn on or to change a set point,
21 that would be -- that would be software based,
22 right?

1 A. Yes.

2 And generally, it's some -- some --
3 sometimes it would be automated via software and
4 sometimes it would be directly controlled by a
5 user.

6 Q. When you mean "directly controlled by a
7 user," you're talking about maybe a user would
8 have some type of remote device and they would,
9 say, make it colder or make it hotter; is that
10 right?

11 A. Yes.

12 Q. And -- and when the user used a remote
13 device, say make it hot or make it colder, they
14 would essentially be sending a command to that
15 thermostat, right?

16 A. That's correct.

17 Q. And again, the details of that command
18 would be in software, right?

19 A. Yes, for the most part.

20 Q. So, Mr. Zatkovich, what did you do to
21 prepare for today's deposition?

22 A. I read both of my declarations. I

1 reviewed the petitions and the declarations and
2 deposition testimony of Dr. Jeffay. I reviewed
3 the prior art cited in the petitions. And I spoke
4 with counsel for several hours on Friday and
5 yesterday, Monday.

6 Q. Did you review any documents that were
7 not already exhibits to these proceedings?

8 A. I don't believe so.

9 Q. Are there any facts or analysis that
10 your lawyers told you to assume or to rely on?

11 A. I'm not sure I understand the question.

12 Q. Did your -- did your lawyers provide you
13 some specific information that said, you know,
14 this is -- this is some information about a
15 product or -- or literature or something that --
16 that then you would rely on in your report?

17 A. Aside from what's identified in my
18 Declaration and other petition materials, not that
19 I'm aware of, no.

20 Q. Now, you indicated your conversations
21 with Mr. Shamoon. You indicated your
22 conversations with your counsel or Ubiquitous'

1 counsel.

2 Have you spoken with anyone else about
3 these proceedings?

4 A. No. Not in preparation for the
5 deposition, no.

6 Q. What about separate from preparation for
7 the deposition?

8 A. Well, there were other counsels at Kent
9 Risley that I spoke to from time to time during
10 the preparation of my Declaration.

11 Q. And when you say Kent Risley in
12 preparation for your deposition, do you mean with
13 respect to the district court action?

14 A. The one-on-one motion, that's correct.

15 Q. Did you speak with any attorneys at Kent
16 Risley about the IPR proceedings?

17 A. Mr. Cortney Alexander and Mr. Jim
18 Pinnacle.

19 Q. Those were the attorneys that you spoke
20 with in preparation for your -- your deposition?

21 A. Yes.

22 Q. You said that you met with counsel on

1 Monday of this week; is that correct?

2 A. Correct.

3 Q. Who did you meet with on Monday?

4 A. Courtney Alexander.

5 Q. Okay. How long was that meeting?

6 A. On Monday, this Monday? Approximately
7 -- it was two sessions. Approximately, an hour to
8 an hour-and-a-half each.

9 Q. Did review any documents during those
10 sessions?

11 A. Yes.

12 Q. Okay. And what documents did you
13 review?

14 A. My Declaration, the petition.
15 Basically, the materials referenced in this
16 matter.

17 Q. And then you also said that there was a
18 meeting on Friday; is that correct?

19 A. Correct.

20 Q. Who did you meet with on Friday?

21 A. Courtney Alexander.

22 Q. How long did you meet with Mr. Alexander

1 on Friday?

2 A. That was approximately three-and-a-half,
3 four hours.

4 Q. Did you review any documents during that
5 meeting with Mr. Alexander?

6 A. Yes.

7 Q. And what documents did you review?

8 A. The same, same material; declaration,
9 petitions and other material cited in this matter.

10 Q. Okay. Is there anything else that you
11 did to prepare for your deposition today?

12 A. Not that I recall.

13 Q. So next I'd like to take a look at your
14 Declaration for the '935 patent. I believe that
15 should be Exhibit 2004.

16 (THEREUPON, Exhibit 2004 was marked for
17 identification).

18 THE WITNESS: I have that.

19 Q. I think that I would like to refer to
20 this as -- refer to this as your Declaration for
21 the '935 patent. And if I refer to this as your
22 Declaration for the '935, will you understand me

1 to be referring to your Declaration case
2 IPR2019-01335 which is marked as Exhibit 2004 in
3 that proceeding?

4 A. Yes.

5 Q. And so what is the purpose of this
6 Declaration?

7 A. It is to provide my opinions regarding
8 my analysis of the validity of the '935 patent.

9 Q. Did you write this Declaration yourself?

10 A. I did.

11 Q. And how long was the first draft?

12 A. How -- how long? How many pages?

13 Q. Uh-huh.

14 A. Oh. Good question.

15 I don't recall. I would imagine, it
16 would be approximately half this size. Maybe 40,
17 50 pages.

18 Q. And did you -- you wrote every section
19 of this Declaration?

20 A. Did I type all the words into the
21 document? No. I had assistance from one of my
22 colleagues.

1 Q. Who was the colleague that provided you
2 assistance?

3 A. David Martens.

4 Q. How do you spell that last name?

5 A. M-A-R-T-E-N-S.

6 Q. What was David Martens' contribution to
7 your Declaration for the '935 patent?

8 A. I would basically outline the arguments
9 based on -- on my review of the materials. I
10 would ask him to, in some cases, write up that
11 analysis in more detail in order to provide
12 appropriate references to either the petition or
13 to Jeffay's Declaration. In some cases, I would
14 have him fill in the boilerplate information for
15 materials considered, background of the
16 qualifications, things like that.

17 Q. Did any of the opinions in your
18 Declaration originate with Mr. Martens?

19 A. No.

20 Q. Was Mr. Martens compensated for his work
21 on your Declaration?

22 A. He was.

1 Q. How was Mr. Martens compensated?

2 A. On an hourly basis.

3 Q. Did Ubiquitous pay Mr. Martens' hourly
4 rate?

5 A. Yes.

6 Q. What is Mr. Martens' hourly rate?

7 A. As I sit here, I do not recall. I can
8 look it up. I think it's around 400 an hour.

9 Q. Does Mr. Martens have a technical
10 background?

11 A. Yes.

12 Q. What is Mr. Martens' technical
13 background?

14 A. His primary background is in software
15 development and automation systems. He also has
16 done a lot of analysis -- patent analysis, as
17 well.

18 Q. Is Mr. Martens a employee of eComp
19 Consultants?

20 A. He is -- he is a contractor for eComp
21 Consultants.

22 Q. Is he compensated by eComp Consultants

1 other than his -- the payments that he received
2 from Ubiquitous?

3 A. I'm -- I'm sorry. Could you ask that
4 again?

5 Q. Does Mr. Martens receive compensation
6 from eComp beyond the \$400 an hour that he
7 received from Ubiquitous?

8 A. Yes. He's -- he has been working on
9 other matters with us, so he's compensated for --
10 for working on those matters as well.

11 Q. The \$400 an hour for Mr. Martens, was
12 that paid directly to Mr. Martens or was that paid
13 to eComp?

14 A. That is paid to eComp.

15 Q. Okay. And then, with respect to this
16 particular matter, how is Mr. Martens compensated?

17 A. He is paid an agreed rate that we have
18 established in advance.

19 Q. And what is that agreed rate?

20 A. I don't know. I could ask my office
21 manager.

22 Q. So just -- just to make sure that I'm

1 clear, Ubiquitous pays eComp an hourly rate which
2 you understand to be approximately \$400 an hour
3 and then eComp, in turn, pays Mr. Martens a rate
4 for that time that is less than \$400 an hour,
5 right?

6 A. Correct.

7 Well, I -- I'm assuming it's less than
8 \$400 -- \$400 an hour, but I don't -- I'd have to
9 check.

10 Q. Do you identify anywhere in your
11 Declaration the work that Mr. Martens did on your
12 Declaration?

13 A. You mean which words he typed in? No, I
14 don't believe so.

15 Q. And -- and there is no indication in
16 your Declaration that Mr. Martens participated in
17 the preparation of your Declaration, right?

18 A. I don't believe I've stated that
19 anywhere.

20 Q. Did you work with counsel in preparation
21 of your Declaration or did you just provide them a
22 -- a final draft?

1 A. No. I provided drafts to counsel. We
2 reviewed them. We discussed what -- the content.

3 Q. And so, would you say, it was a
4 collaborative process with counsel for Ubiquitous?

5 A. I would say, we had collaborative
6 discussions on how to read claim elements and
7 particularly disclosures in prior art, for
8 example. But in terms of the work product,
9 everything in this report is purely my -- my
10 opinions.

11 Q. If you could turn to romanette 5 of the
12 Declaration for the '935 patent. There's a table
13 titled Patent Owner's Current Index of Exhibits.

14 Do you see that?

15 A. Wait. This is part of the Declaration?

16 Q. It is a part of the Declaration. It is
17 the table that immediately follows the Table of
18 Contents.

19 A. Gotcha.

20 I see that.

21 Q. Is -- is this a list of the documents
22 that you considered in drafting your Declaration

1 for the '935 patent?

2 A. It is.

3 Q. Is that a complete list?

4 A. Yeah. This is a complete list of
5 materials that I considered in formulating my
6 opinions, yes.

7 Q. Is there anything that's missing from
8 this list?

9 A. I'm sure I've looked at other documents
10 in the process of working on this case, but if
11 they didn't contribute to forming my opinion I
12 didn't -- I didn't list them.

13 Q. Okay. So you may have looked at other
14 documents, but these are the documents that you
15 reviewed in formulating your opinions in this
16 case; is that right?

17 A. Right.

18 For example, the -- the patent itself,
19 '935 and '655, have other documents associated
20 with them; disclosures. And I am sure I've
21 reviewed some of those documents, as well.

22 Q. What do you mean when you say that the

1 965 -- the '935 and the '655 have other documents
2 associated with them?

3 A. For example, they cite references, they
4 identify related U.S. patent documents that they
5 consider prior art to this and they identify other
6 publications.

7 Q. If you could turn to paragraph 29 of
8 your report.

9 A. I have that.

10 Q. Okay. And this is where you provide the
11 level of ordinary skill in the art, right?

12 A. That's correct.

13 Q. And you state that a POSITA, a person of
14 ordinary skill in the art, would have had at least
15 two years of industry experience in the field of
16 computers and communications.

17 Do you see that?

18 A. I do.

19 Q. And what do you mean by "computers and
20 communications"?

21 A. I would say, that meant either --
22 included both the design and software development

1 on computers and the communications supported --
2 general communications supported by computer.

3 Q. Are there -- are any specific things
4 that -- that would or would not qualify in the
5 field of computers and communications?

6 A. Could you ask that question again?

7 Q. Sure.

8 Looking at this, I think that computers
9 and communications seems very broad and so --
10 that's certainly fine. I'm -- I'm just trying to
11 get a sense of if -- if you believe there is an
12 area subset of that or if it is just as broad as
13 it appears as I read it in your Declaration?

14 A. I would say, it's equivalent to the
15 scope of studies that one would find in an
16 electrical engineering or computer science
17 coursework in the area of computer design and
18 communications. So, for --

19 Q. In the 2004 time frame?

20 A. In the 2004 time frame.

21 Q. So just as -- as broad as that, right?

22 A. Yes.

1 For example, in 2004 time frame I would
2 expect that a computer science class would teach
3 at least one form of wired communication protocol
4 and at least one form of wireless communication
5 protocol. So I would say that would be a minimum
6 for what I would consider needing an industry
7 experience in.

8 Q. I want to -- I want to talk briefly
9 about the definition proposed by Dr. Jeffay. And
10 I can certainly point you to a document that
11 includes that, but -- but maybe we can start and
12 I'll just read it. I think it's relatively
13 concise. And if that's not clear, then we can --
14 we can look towards a document.

15 But his definition is, a person who has
16 at least a bachelor's degree in electrical
17 engineering or computer science and at least two
18 years of industry experience in the field of
19 embedded systems and/or process control.

20 And -- and my question is: Do you
21 disagree with Dr. Jeffay's definition of a person
22 of ordinary skill in the art?

1 A. I would say that there's substantial
2 overlap between the two.

3 I would say, Dr. Jeffay's definition is
4 much more highly specialized.

5 I'm not sure it's necessary for someone
6 to have specific expertise in embedded systems and
7 process control to understand and be able to
8 implement the claims of the patent based on
9 information available to a POSITA at that time.
10 So I think that that overstates the requirement
11 necessary to understand and implement the -- the
12 claims of the patents.

13 Q. Okay. Is there anything that you
14 particularly disagree with or do you just think
15 that it's narrower than necessary?

16 A. Well, in order to have two years of
17 experience in embedded systems and process
18 control, you would almost have to have specific
19 experience of process control with embedded
20 systems. In other words, that particular industry
21 which is highly specialized.

22 Again, that's a very narrow subset of

1 expertise and I think that rules out a large
2 portion of technologists out there who could also
3 implement the claims of the patents based on my
4 definition of ordinary skill in the art.

5 Q. Okay. Would you agree that in the 2004
6 time frame a student of electrical engineering or
7 computer science would be aware of embedded
8 systems?

9 A. Yes.

10 Q. And what about process control?

11 A. Yes.

12 Process control. Not necessarily for
13 device control, but process control in terms of
14 that's the basis for doing any algorithms for any
15 business applications or automating any type of
16 process, whether it be a business process or an
17 equipment automation process.

18 Q. Certainly, there was process control for
19 devices as of 2004, right?

20 A. Yes. But I'm not -- I'm not that -- I'm
21 not identifying that as the only type of process
22 control that was available in 2004.

1 Q. Okay. So there would be certainly
2 process control for devices in 2004 as well as
3 process control for other applications; is that
4 right?

5 A. Correct.

6 Q. If the PTAB were to adopt Dr. Jeffay's
7 definition of a person of ordinary skill in the
8 art, would that change any of your opinions?

9 A. No, I don't believe so.

10 Q. Mr. Zatkovich, I'd like to turn now to
11 another exhibit. This is Exhibit 1010 from the
12 IPR for the '935 patent.

13 A. Okay.

14 (THEREUPON, Exhibit 1010 was marked for
15 identification.)

16 THE WITNESS: I don't -- which document
17 is that?

18 Q. Exhibit 1010.

19 A. And the title of the document?

20 Q. It should be Exhibit 1010.

21 It should be in the -- the folder for
22 the '935.

1 A. All right.

2 Again, every time I go in I have to
3 log-in, so.

4 Q. Sure.

5 A. I have that.

6 Q. Okay. Can you tell me what this
7 document is?

8 A. It looks like a patent application. The
9 '372 patent application submitted by Ubiquitous.

10 Q. And is this a document that you reviewed
11 in preparation and drafting of your Declaration?

12 A. Yes, I did.

13 Q. And is this a patent application for a
14 particular patent?

15 A. I believe it's the -- the application
16 that finally resulted in the '935 patent. I'm not
17 positive, though.

18 Q. That -- that's right.

19 So I'll represent to you that these are
20 the prosecution history materials for the '935
21 patent.

22 And -- and am I correct that you

1 reviewed the prosecution history for the '935
2 patent in your analysis of this case?

3 A. I did.

4 Q. And I want to turn to, in particular,
5 page 140 of Exhibit 1010. And you'll see those
6 page numbers at the bottom right-hand corner of
7 each page to the right of the exhibit number.

8 A. 1-4-0.

9 I have that.

10 Q. Okay. And take a quick step back.

11 Did you review the prosecution history
12 for the '655 patent?

13 A. Yes. To some extent. I'm sure I didn't
14 look at every single page, but, yes, I reviewed
15 portions of it.

16 Q. And did you read the prosecution
17 histories for the patents related to the '935 and
18 '655 patent?

19 A. I don't recall.

20 I did cite -- for example, I did cite an
21 office action material for one of the patent
22 applications that may not be associated with

1 either of these two patents.

2 Q. Well, that's a good segue way because
3 what I directed you to at page 140 is a office
4 action response; is that right?

5 A. Yes.

6 Q. And -- and it says, "Responsive to the
7 office action mailed February 7th, 2010."

8 Do you see that?

9 A. I do.

10 Q. And so what is an -- an office action
11 response?

12 A. An office action response is a response
13 by the patent office identifying potential
14 deficiencies or problems with the application or,
15 in some cases, identifying that -- that all claims
16 are accepted.

17 Q. And -- and so that's close. We may be
18 having a -- a nomenclature issue here that we can
19 -- we can work out together. So certainly that is
20 what an office action is.

21 And then you understand that the
22 response to the office action is when the patent

1 owner, the applicant comes back and explains to
2 the patent office why their invention is
3 patentable over the prior art?

4 A. Yes. Correct. I -- you're right. I
5 was describing the office action and not the
6 response to the office action.

7 Q. And so would you agree -- and certainly,
8 take a look at starting around 140 -- that this is
9 a response by the patent owner to an office action
10 from the patent office?

11 A. Sure.

12 Yes, that is correct.

13 Q. I want to direct you to the top of page
14 144.

15 A. Okay.

16 Q. So at the top of page 144, the applicant
17 states, "The present invention advantageously uses
18 SMS messaging which does not require the internet.
19 The coverage of SMS messaging may be broader and
20 more available than internet coverage."

21 What does that mean, "SMS messaging
22 which does not require the internet"?

1 A. The first sentence specifically speaks
2 to a form of messaging protocol called SMS which
3 is not required to operate on the internet.

4 Q. So this -- would this be an instance
5 where it is a direct computer-to-computer
6 connection that the SMS message is passed between?

7 A. No.

8 When it says it "does not require the
9 internet" -- SMS messages is used on, for example,
10 private cellular and telephone communication
11 networks which may not include internet -- so it
12 would refer to any type of SMS messaging that
13 occurs outside of the internet, meaning most
14 likely on -- within a telephone network.

15 Q. And the next sentence says, "The
16 coverage of SMS messaging may be broader and more
17 available than internet coverage."

18 And what does that mean?

19 A. That use of SMS messages, primarily
20 through telephone networks, may be more available
21 than -- at least in 2004, than would be access to
22 internet.

1 Q. And why is that?

2 A. In 2004, the writer of this document
3 considered public telephone communication network
4 -- I'm sorry, telephone communication networks to
5 be more accessible or more available than internet
6 access.

7 Q. And if you could go to the previous
8 page, page 143. The last paragraph at the bottom
9 of page 143 states, "The Kim system requires the
10 internet to operate his remote control system.
11 There is many places and times where the internet
12 is not simply available. Typically, internet
13 access may not be available while traveling in a
14 vehicle."

15 Is that what you were referring to, this
16 idea where there is some places where the internet
17 is not available?

18 A. I -- I'm merely commenting on what I
19 believe the author of this document was trying to
20 convey.

21 But I would say that that would be one
22 example of that.

1 Q. And here the author of the document is
2 distinguishing the Kim system because that system
3 requires the internet, right?

4 A. Yes, it sounds like a reasonable
5 interpretation.

6 Q. And that's different from the invention
7 of the '935 patent. The invention of the '935
8 patent is an SMS message, for example, as you
9 stated, using the telephony network, right?

10 MR. ALEXANDER: Object to form.

11 THE WITNESS: I think the '935 patent
12 includes -- identifies many types of
13 communication, including SMS. So I wouldn't
14 limit it, the scope of the '935 patent, to
15 just SMS.

16 Q. Let's turn to the bottom of page 144.
17 At the bottom of page 144 -- I'm looking at the
18 last two paragraphs. It says, "There's nothing in
19 Lugin to suggest SMS messaging. The Lugin
20 system requires the internet to operate his remote
21 control system."

22 Do you see that?

1 A. I do.

2 Q. Okay. And so, again, the author of this
3 document is distinguishing the Lugin system
4 because it -- it relies on the internet, right?

5 A. It's -- it's indicating that, among
6 other forms of communication, the '935 allows the
7 ability to communicate via non -- a non-internet
8 communication path. And, therefore, that -- that
9 was one method of distinguishing from this other
10 piece of prior art.

11 Q. The only distinguishing communication
12 mechanism that we see at the bottom of page 144 is
13 the internet, though, right?

14 A. Yes. The author is comparing SMS
15 messages -- messaging with the internet.

16 Q. Have you read the Lugin reference?

17 A. I don't believe so, no.

18 Q. Have you read the Kim reference?

19 A. I may have. I don't recall.

20 Q. Do you recall if you reviewed the Kim
21 reference in preparation for your analysis and
22 declaration in this case?

1 A. I don't recall.

2 Q. And if you could turn to the top of page
3 145.

4 A. I see that.

5 Q. The first paragraph at the top of page
6 145 states, "The present invention advantageously
7 uses SMS messaging which does not require the
8 internet."

9 Do you see that?

10 A. I do.

11 Q. And -- and that's referring to the
12 invention of the '935 patent, right?

13 MR. ALEXANDER: Object to form.

14 THE WITNESS: Well, it's addressing the
15 application for the '935 patent.

16 But, yes, that's my understanding.

17 MR. PLEUNE: Why don't we take a
18 ten-minute break.

19 THE WITNESS: Okay.

20 (A recess was taken).

21 BY MR. PLEUNE:

22 Q. All right. Mr. Zatkovich, I want to

1 turn to paragraph 48 of your Declaration in -- for
2 the '935 patent.

3 A. I have that.

4 Q. And this is where you provide your
5 opinion regarding the construction for the term
6 microcontroller, right?

7 A. That's correct.

8 Q. And it's your opinion that this
9 construction is consistent with the plain and
10 ordinary meaning of microcontroller, right?

11 A. Yes, I do.

12 Q. And turn to paragraph 45 of your report.

13 A. I see that.

14 Q. And actually, let's go to 46.

15 A. Okay.

16 Q. And at paragraph 46 you cite to Fig. 4
17 of the specification of the '935 patent, right?

18 A. Correct.

19 Q. And you also cite to column 3, lines 44
20 to 45 of the specification of the '935 patent,
21 correct?

22 A. I do.

1 Q. And if you could look at that particular
2 citation in column 3, lines 44 to 45, that is the
3 description of Fig. 4, right?

4 A. Correct.

5 Q. And then if you turn to paragraph 47 --

6 A. I see that.

7 Q. Paragraph -- in paragraph 47 you cite to
8 the specification of the '935 patent at column 4,
9 lines 62 to 66, right?

10 A. Correct.

11 Q. And this section describing the
12 definition of microcontroller, that doesn't cite
13 any other section of the specification of the '935
14 patent in support of your construction, right?

15 A. The figures and the two locations in the
16 specifications, those are the only two that I --
17 that I chose to cite to.

18 Q. Okay. And let's look at column 4, at
19 line 62. And that states, "The base control unit,
20 16, includes a plurality of communication
21 interfaces, 72, 74, 76, 78, 80, 82, 84, 86, and
22 88, for providing the means for remote control and

1 remote monitoring of the various subsystems within
2 the residential environment."

3 Right?

4 A. That's correct.

5 Q. There's no mention of a microcontroller
6 in that passage, is there?

7 A. Well, it's referring to Fig. 4. Fig. 4,
8 of course, has a microcontroller in it. And it's
9 referring to the communication interfaces that the
10 microcontroller is providing.

11 Q. But at least in this package, it's
12 specifically talking about the base unit, right?

13 A. Right. The base unit includes the
14 microcontroller, which provides the I/O
15 interfaces.

16 Q. Does a base unit always include a
17 microcontroller?

18 A. According to this invention or in
19 general?

20 Q. Does the base unit of this invention
21 always include a microcontroller?

22 A. Let me check.

1 There are some claims of the '935 that
2 do not require the base unit to have the
3 microcontroller.

4 Q. So let's -- let's start with claim 1 of
5 the '935 patent.

6 That claim does not recite a
7 microcontroller, right?

8 A. Well, the only embodiment identified in
9 the '935 of a base unit contains a
10 microcontroller. But I do not see the words
11 within the claim language that require a
12 microcontroller for claim 1.

13 Q. Would you agree that the base unit of
14 claim 1 is capable of the remote control and
15 remote monitoring that is described in column 4,
16 lines 62 to 66?

17 A. I'm sorry. Could you say that again?

18 Q. Would you agree that the base unit of
19 claim 1 is capable of the remote control and
20 remote monitoring that is described in column 4 at
21 lines 62 to 66?

22 MR. ALEXANDER: Object to form.

1 THE WITNESS: Give me that one more
2 time.

3 Q. Would you agree that the base unit of
4 claim 1 is capable of the remote control and
5 remote monitoring that is described in column 4 at
6 lines 62 to 66?

7 MR. ALEXANDER: Object to form.

8 THE WITNESS: Well, I believe the base
9 unit, in order to perform the functions
10 described in lines 64 to 66, would require
11 something equivalent to a microcontroller in
12 order to be able to achieve the objectives of
13 the specification and adhere to the
14 limitations of the claim. So from that
15 perspective, I believe that a microcontroller
16 would be necessary.

17 Q. Okay. And -- and that's not exactly the
18 -- the question that I asked.

19 So you see that there is a recitation of
20 a base unit in claim 1, right?

21 A. I do.

22 Q. Okay. And now my question is: Is that

1 base unit that's recited in claim 1, is that
2 capable of the remote control and remote
3 monitoring that is described in column 4 at lines
4 62 to 66?

5 MR. ALEXANDER: Object to form.

6 THE WITNESS: I do.

7 Q. And if you could also turn to claim 19
8 of the '935 patent.

9 A. Okay.

10 Q. Can you confirm for me that claim 19
11 does not recite a microcontroller?

12 A. Again, 19 -- claim 19 does not recite
13 the language, the word "microcontroller," but I
14 believe the base unit, in order to conform to --
15 to the only embodiment and to meet the objectives
16 of the patent would require a microcontroller.
17 But I do not see the words in claim 19.

18 Q. Would you agree that the base unit of
19 claim 19 is capable of the remote control and
20 remote monitoring that is described in column 4,
21 lines 62 to 66?

22 A. I do.

1 Q. Okay. And I note that claim 11, 20 and
2 22 also do not recite a microcontroller. Would
3 your answer be the same for those claims?

4 A. I believe -- yes. I believe all those
5 claims refer to the same embodiment of the base
6 unit described in Fig. 4 and would require
7 something equivalent to a microcontroller.

8 Q. And you believe that for each of those
9 claims that are cited, a base unit is capable of
10 the remote control and remote monitoring that is
11 described in column 4, lines 62 to 66, right?

12 A. Yes, I agree.

13 Q. Let's turn back to your construction,
14 which is at paragraph 48.

15 And what do you mean by timing circuits?

16 A. In general, any CPU or -- or processor
17 requires a clock, one or more clocks, which are
18 very difficult to implement within silicane. For
19 example, crystal is a type of clock that cannot be
20 implemented in silicane, so. That -- the clocking
21 circuit generally needs to be external to a
22 microprocessor or in this case a microcontroller.

1 There are buffer circuits or pull down
2 or pull up resistors, for example, that allow the
3 microcontroller to interface with external
4 components. Those aren't functional components in
5 and of themselves, but they are needed to support
6 the microcontroller.

7 So there are other chips needed to
8 support the microcontroller that do not
9 necessarily provide any functional component other
10 than to support that particular chip.

11 Q. And this type of electronic device is
12 always going to include a clock or a timing
13 circuit, right?

14 A. Yes.

15 As far as I'm aware, any -- any
16 processor, microprocessor, microcontroller needs a
17 timing circuit to support it.

18 Q. Let's go back to claim 1 of the '935
19 patent.

20 Claim 1 does not recite a main memory,
21 does it?

22 A. No, I don't believe it does.

1 Q. And it doesn't recite timing circuits,
2 does it?

3 A. No.

4 Q. And that's true for all the independent
5 claims, right?

6 A. Yes, that's correct.

7 Q. And -- and none of the independent
8 claims recite I/O circuitry, do they?

9 A. Well, any reference to connectivity,
10 especially from a base unit, would necessarily
11 refer to I/O circuitry.

12 Q. But it would refer to I/O circuitry in
13 the same way that any connected device that had a
14 processor would have I/O circuitry, right?

15 MR. ALEXANDER: Object to form.

16 THE WITNESS: Yes. I/O circuitry would
17 be required for any type of connectivity,
18 whether it be contained within a
19 microcontroller or not.

20 Q. And a processor would also be required,
21 correct?

22 A. Well, a processor would be a required

1 component of a microcontroller.

2 Q. Right.

3 And it would be a required component of
4 this type of system regardless of whether it
5 included a microcontroller, right?

6 A. I'm sorry. Could you ask that question
7 again?

8 Q. Sure.

9 I think my question was: That a
10 processor would be required of this type of claim
11 system regardless of if it included a
12 microcontroller?

13 A. Well, in this particular case it -- it
14 requires a microcontroller and a micro -- a
15 microcontroller contains a process -- a processor.
16 So a processor is required for these claims.

17 Q. Is -- is a processor specifically
18 recited in any of the independent claims?

19 A. No.

20 Q. So I think we established that claim 1
21 does not recite a microcontroller, right?

22 A. It doesn't have the words

1 "microcontroller." But, again, the -- the
2 embodiment of base unit specifically as it's laid
3 out in Fig. 4 would require a micro -- a
4 microcontroller.

5 Q. Okay. Let's turn to -- to Claim 3.

6 Claim 3 introduces a microcontroller
7 base processing unit, right?

8 A. Yes.

9 Q. And Claim 3 is narrower than claim 1?

10 A. That's generally the purpose of the
11 dependent claims, yes.

12 Q. So would this addition of the
13 microcontroller base processing unit that we see
14 in claim 3 -- is there a recitation of any
15 additional processing that is done by the
16 microcontroller?

17 A. Well, the -- it has the additional
18 limitation of customizable application-specific
19 software.

20 For example, it is possible to have a
21 microcontroller-based processing unit that
22 contains -- that already contains programmed

1 app -- application software. In other words, it's
2 not -- it's not customizable; it's burned at the
3 factory and you can't do anything with it other
4 than what it's designed to do.

5 This is identifying that you would want
6 a microcontroller-based processing unit that has
7 customizable application-specific software, which
8 is what we consider the more common form of a
9 microcontroller-based processing unit.

10 Q. So Claim 3 recites a microcontroller,
11 right?

12 A. Yes.

13 Q. And it has customizable
14 application-specific software, right?

15 A. Correct.

16 Q. And your point was that it also could
17 have software that is not customizable, right?

18 A. Right.

19 In other words, claim 1 -- in my
20 opinion, claim 1 describes a base unit which
21 requires a microcontroller, an equivalent of that.

22 Claim 3 specifically says it should be a

1 microcontroller with customizable
2 applications-specific software as opposed to
3 software burned at the factory.

4 Q. Okay. Now, does Claim 3 attribute any
5 additional processing to the microcontroller?

6 A. Other than customizable-type processing,
7 yes.

8 Q. It says it has customizable
9 application-specific software. There's no
10 additional processing described in Claim 3, is
11 there?

12 A. When we're talking about processing
13 capability, we're talking about -- to mean we're
14 talking about software and hardware, correct?

15 Q. I'm talking about the -- the
16 microcontroller that's disclosed in Claim 3.

17 A. All right.

18 Q. So I'm asking whether any additional
19 processing is described in Claim 3?

20 I'm not talking about capability. I'm
21 asking you whether Claim 3 describes any
22 additional processing that's carried out by the

1 microcontroller?

2 A. And I -- I believe it identifies a
3 specific type of processing that can be performed
4 in Claim 3 as opposed to in claim 1.

5 Q. So you say that there's additional type
6 of -- of processing. And my understanding is that
7 you're referring to customizable
8 application-specific software.

9 But my question is: Is there any
10 additional processing that is described?

11 Is the microcontroller being attributed
12 with any additional processing capability in Claim
13 3?

14 A. In other words, would -- would the
15 customizable application-specific software have
16 any other functions other than what's describe --
17 need to have any other functions other than what's
18 described in claim 1? No. Other than it -- it
19 gives the ability of the user of that
20 microprocessor base processing unit to customize
21 that software itself as opposed to having it
22 preburned on the unit in the factory.

1 Q. Okay. And I think that answers my
2 question, but let me -- let me just come at it
3 another way to make sure that I -- I understand.

4 So if we look at the last limitation of
5 claim 1, it says, "Wherein the base unit is
6 configured to receive the second SMS message,
7 including the command, and to send the command to
8 the environmental device to control the operation
9 of the environmental device."

10 So we see that the base unit is
11 receiving the second SMS message and sending a
12 command to the environmental device. And my
13 question is: Is the base unit as described in
14 Claim 3 doing anything else?

15 A. No.

16 The only difference would be that the
17 function that's performed in that claim element in
18 claim 1 could be performed by a software that's
19 burned on the microcontroller at the factory as
20 opposed to allowing it to be customized by a user
21 after shipping.

22 Q. If you'll look at claim 11 of the '935

1 patent. And basically, 11 and 14 are set up in a
2 similar manner as to claims 1 and 3. So claim 11
3 does not recite a microcontroller and claim 14
4 further specifies the base unit further
5 compromises and makes microcontroller base
6 processing unit having customizable
7 applications-specific software, right?

8 A. Correct.

9 Q. And then if we look at claim 11, the
10 base unit is configured to receive environmental
11 information, transmit a SMS message to the remote
12 unit and then receive the second SMS unit from the
13 remote unit and send the command to the
14 environmental device.

15 Do you see that?

16 A. I do.

17 Q. That's what the base unit does in claim
18 11, right?

19 A. Correct.

20 Q. And then we move to claim 14. There are
21 not any additional actions that are attributable
22 to the base unit, right?

1 A. No additional actions. The only -- the
2 way in which those actions can be programmed into
3 the microcontroller.

4 Q. And then if we look at claim 18, claim
5 18 recites a microcontroller, correct?

6 A. Yes.

7 Q. And claim 18 recites that, "The
8 microcontroller is configured to process the
9 second message, including the command, and to send
10 the command through the communication interface to
11 the environmental device."

12 Right?

13 A. That's correct.

14 Q. Okay. So the microcontroller, it sends
15 the command to the environmental device, right?

16 A. Correct.

17 In this particular case, there's no
18 stipulation as to whether the micro --
19 microcontroller program needs to be burned at the
20 factory or it could be customizable.

21 Q. And in claim 19, this does not recite a
22 microcontroller, it recites a controller; is that

1 correct?

2 A. It's -- yes. It states, "A controller
3 operatively associated with the base unit."

4 Q. And it's also, "Operatively connected
5 with the environmental device and it's configured
6 to send the command to the environmental device."

7 Right?

8 A. That's correct.

9 Q. And so it's the controller here in claim
10 19 that sends the command to the environmental
11 device, right?

12 A. That's correct.

13 Q. Okay. And then if we look at claim 21,
14 we see a microcontroller again, right?

15 A. That's correct.

16 Q. And it's the microcontroller that's
17 sending the command to the environmental device?

18 A. That's correct.

19 Q. And then in claim 22 we go back and we
20 have a controller again, and this time it's the
21 controller that communicates with the
22 environmental device, right?

1 A. That's correct.

2 Q. In each of these claims the -- we have a
3 base unit or a microcontroller or a controller and
4 in each of these circumstances they are described
5 as having the ability to communicate and to send a
6 command to the environmental device, right?

7 A. That's my understanding, yes.

8 Q. There isn't a disclosure of timing
9 circuits in this specification of the '935 patent,
10 is there?

11 A. No.

12 I think one of skill in the art would
13 understand that any type of processor needs a
14 timing circuit. But there is no explicit
15 disclosure of that.

16 Q. And I think that we -- we discussed that
17 these types of systems would -- would always have
18 timing circuits, right?

19 A. Yes.

20 Q. And the same thing for I/O circuitry,
21 that's something that would be common for the
22 types of systems that are disclosed in the '935

1 patent?

2 A. Yes.

3 In the case of the '935, though,
4 however, it describes the I/O circuitry -- it --
5 it identifies the I/O circuitry as being part of
6 the microcontroller.

7 Q. And where do you see that?

8 A. If we look at Fig. 4, Fig. 4 identifies
9 the I/O interfaces that the microcontroller
10 provides. And that's boxes 74 through 79 on the
11 right of Fig. 4.

12 Q. Do you mean 74 through 89?

13 A. Yes.

14 Q. So when you refer to I/O circuitry, are
15 you referring to the controller at the boxes at 74
16 through 89?

17 A. Correct.

18 This is -- this is a standard conclusion
19 in microcontrollers, is to include I/O circuitry
20 and I/O interfaces.

21 Q. Would these type of systems always
22 include memory?

1 A. A microcontroller, in my experience,
2 always includes some form of memory.

3 Q. What about a microprocessor-based
4 embedded system, would that always include memory?

5 A. Yes. Not as part of the microprocessing
6 chip, of course. It's an external chip. But,
7 yes, it would require some type of memory.

8 Q. Would that also be true for I/O
9 circuitry?

10 MR. ALEXANDER: Object to form.

11 THE WITNESS: Any system, any computing
12 device that needs to interface with an
13 external component would need some sort of
14 I/O circuitry, either within -- for example,
15 in a microcontroller or external to a
16 microprocessor.

17 Q. And that would be the same thing for
18 timing circuits, right?

19 A. Could you ask it as a complete sentence?

20 Q. Sure.

21 Would you agree that a
22 microprocessor-based embedded system would always

1 include timing circuits?

2 A. Yes.

3 Q. Your definition of microcontroller also
4 says that it's designed for a minimum quantity of
5 chips. Where did that come from?

6 A. Well, that comes from one of the
7 industry definitions. But it comes from my
8 experience of designing embedded systems. A
9 microcontroller which generally resides on a
10 single chip still requires support chips to
11 operate, as I mentioned. So such timing chips,
12 line conditioning chips to support that
13 microcontroller.

14 Q. Does that mean that the microcontroller
15 does not need to necessarily be contained within a
16 single chip?

17 A. The -- in my experience, the
18 microcontroller function, all the primary
19 functions of the microcontroller are contained
20 within a single chip. Any external to the
21 microcontroller are primarily support chips that
22 don't perform necessarily a function of their own.

1 Q. What do you mean when you say
2 "microcontroller function"?

3 A. Executing instruction, store
4 information, transmit information; those types of
5 functions.

6 Q. Could the memory be on a separate chip
7 from the microcontroller?

8 A. There are micro -- in my experience, all
9 microcontrollers contain some form of memory,
10 either ROM or RAM or both.

11 Many microcontrollers, like many
12 embedded systems, will add additional external
13 memory if needed, especially when you're talking
14 about multi-function devices which require
15 independent access to memory aside from the
16 microcontroller.

17 Q. So, look, I -- I just want to make sure
18 I understand what we're talking about here.

19 So you have a construction of
20 microcontroller and it says that it has some
21 specific things; at least a CPU, a main memory,
22 timing circuits and I/O circuitry. Then you go on

1 to say that it's designed for a minimal quantity
2 of chips.

3 So what I'm trying to understand is: Do
4 each of these specific things that you've
5 enumerated have to be on the same microcontroller
6 chip?

7 A. The -- the microcontroller -- design of
8 a microcontroller is designed so that the embedded
9 system in which it is placed requires a minimum of
10 chips. Okay?

11 In my opinion, the microcontroller
12 itself, the primary functions of the
13 microcontroller, are contained on a single chip.

14 Q. So the minimum quantity of chips does
15 not describe the microcontroller, right?

16 A. The -- the minimum quantity of chips
17 describes the design objectives in mind when
18 designing a microcontroller.

19 In other words, you can't say I designed
20 a microcontroller that requires only one single
21 chip and all functions are on that chip. Okay?
22 Because, as we discussed, there are external

1 components that need to support that.

2 So you can say that you are going to
3 design a microcontroller, parenthesis, in a single
4 chip, that requires the embedded system to need
5 only a minimum number of chips.

6 Q. So the minimum number of chips is
7 referring to the embedded system, it's not
8 referring specifically to the microcontroller?

9 A. I can't speak to the -- the -- the
10 writer of the dictionary.

11 I feel that the -- the definition that I
12 chose is accurate. It could also be referring to
13 the fact that a microcontroller in and of itself
14 needs an extra crystal and -- and perhaps external
15 line conditioning chips. That might be considered
16 part of a microcontroller operation and,
17 therefore, potentially part of the microcontroller
18 or the microcontroller system.

19 But, again, the entire objective of a
20 microcontroller is to pro -- to -- to design the
21 embedded system with the minimum quantity of
22 chips.

1 In my -- in my experience -- in other
2 words, I'm not aware of any manufacturer that
3 produces what they call a microcontroller and it's
4 presented -- the package is presented in multiple
5 chips. It's presented as a single chip.

6 Q. Okay. So am I correct that you're
7 saying that your definition of microcontroller
8 could include a microcontroller on a chip as well
9 as other chips that provide functionality that
10 supports the microcontroller?

11 Is that right?

12 A. Yes, I'll accept that.

13 Q. Okay. So my question is: Is it
14 possible that some of these
15 specifically-enumerated elements could be on that
16 other chip, including the CPU, the main memory,
17 the timing circuits and the I/O circuitry?

18 A. I'm sorry. Could you ask that question
19 again?

20 Q. Sure.

21 So in this situation where we have
22 multiple chips that are the microcontroller, could

1 the CPU, main memory, timing circuits and/or I/O
2 circuitry be on separate chips?

3 MR. ALEXANDER: Object to form.

4 THE WITNESS: All right. I'm going to
5 ask you to ask that question one more time.

6 Q. So in this situation where we have
7 multiple chips that are the microcontroller, could
8 the CPU, main memory, timing circuits or I/O
9 circuitry be on separate chips?

10 MR. ALEXANDER: Object to form.

11 THE WITNESS: If -- if the main memory,
12 timing circuits and I/O circuitry were
13 required to support the microcontroller or
14 the embedded system, I would not consider
15 those circuits to be part of the
16 microcontroller.

17 Q. Can you -- can you say that again? I'm
18 sorry.

19 A. If an embedded system had a
20 microcontroller chip --

21 Q. Okay.

22 A. -- but also had chips for memory, timing

1 circuits or I/O circuitry, I would not consider
2 that/them, the memory chips, the timing circuit
3 chips or the I/O circuitry chips to be part of the
4 microcontroller.

5 Q. Okay. And I think that's -- that's a
6 little bit different. It's helpful, but it's a
7 little bit different.

8 I'm focusing on the situation of your
9 definition where there's a microcontroller on a
10 minimal number of chips, so more than one chips.
11 Do you understand that?

12 A. Let's -- let's go to the exact wording
13 that I used.

14 All right. So in paragraph 45 it says,
15 "Comprehensive Dictionary of Electric Engineering
16 also clarifies that while microcontrollers are
17 often single chip solutions" -- in other words, an
18 embedded system with a single chip -- "they are
19 not necessarily combined to single chip solutions.
20 Instead, they are designed to complete a
21 particular task for which they are designed with
22 minimal quantity of chips."

1 In other words, in addition to the
2 microcontroller chip, you may need other chips for
3 your solution. But the goal forces to have a
4 minimum quantity of chips.

5 Q. And -- and I think that that's helpful.
6 So let's -- let's look at that.

7 So paragraph 45, "The Comprehensive
8 Dictionary of Electrical Engineering also
9 clarifies that while microcontrollers are often
10 single chip solutions, they are not necessarily
11 confined to a single chip."

12 So this is telling us that
13 microcontrollers are not necessarily confined to a
14 single chip, correct?

15 A. No.

16 It says, "Microcontroller solutions are
17 not often -- are not necessarily confined to a
18 single chip."

19 Q. No, that's actually not what it says,
20 Mr. Zatkovich.

21 A. Where -- where are we looking at, then?

22 Q. Paragraph 45.

1 A. "While" --

2 Q. It says, "Microcontroller --

3 A. Go ahead.

4 Q. Microcontrollers are often single chip
5 solutions. They are not necessarily confined to a
6 single chip.

7 And so it says, "Microcontrollers are
8 often single chip solutions. Microcontrollers are
9 not necessarily confined to a single chip."

10 Right?

11 A. Well, I'm reading that as the solution
12 that the microcontrollers provide are not confined
13 to a single chip.

14 In this particular case, they may --

15 Q. Let me ask --

16 A. -- they may also be assuming that, for
17 example, a crystal providing the timing is
18 necessary and may be considered part of the
19 microcontroller.

20 But, again, I'm not aware of any
21 manufacturers that produce what they consider a
22 microcontroller that's more than one chip.

1 Q. So your -- it's your opinion that
2 microcontrollers are always on a single chip?

3 A. In my experience, I am only aware of
4 microcontrollers that exist within a single chip.

5 The embedded controllers in which they
6 are used often have more than one chip.

7 Q. So the microcontrollers are always on a
8 single chip. And that single chip always includes
9 CPU, main memory, timing circuits and I/O
10 circuitry, right?

11 A. I'm not sure I would use the word
12 always.

13 But in my experience, they would always
14 include memory, they would include some type of
15 timing circuitry and they would always include
16 some form of I/O circuitry.

17 Q. And could there be timing circuitry that
18 is on a separate chip from the main
19 microcontroller?

20 A. Yes.

21 But, again, that would interface with
22 timing circuitry on the microcontroller. Again,

1 such as an external crystal and an ex -- and an
2 internal crystal controller.

3 Q. So if there was a system and it had a
4 CPU and main memory on different chips, then that
5 wouldn't be a microcontroller according to the
6 claims of the '935 patent, right?

7 A. If one chip only contained a CPU, such
8 as a microprocessor, and everything else --
9 memory, I/O timing, I/O interfaces -- were on
10 separate chips, I would not consider that a
11 microcontroller.

12 Q. So with respect to minimal quantity of
13 chips, can you give me an example of something
14 that would be on a different chip within your
15 construction of microcontroller?

16 A. Sure.

17 As I mentioned, conditioning circuitry.
18 So if -- the simplest version of that would be a
19 pull up or pull down resistor. And in many cases
20 they are provided on -- multiple resistors are
21 provided on the chip.

22 You might want to condition some of the

1 I/O interfaces to have a different voltage range
2 or to be modulated in some fashion or to interface
3 with an antenna. All those require certain
4 conditioning circuits to perform. Those would be
5 example chips.

6 As I mentioned before, some systems,
7 especially multi-function systems that are doing
8 more than one focused application, require
9 additional external memory so that the additional
10 functions that are performed outside the
11 microcontroller, for example, can access the
12 memory as well as the microcontroller.

13 Q. And you also said some -- some timing
14 circuitry. That could also be something --

15 A. Correct.

16 Q. -- outside of a microcontroller?

17 A. Correct.

18 Q. How could a person of ordinary skill in
19 the art based on objective criteria determine what
20 a minimal quantity of chips is?

21 A. Well, that's -- that's more of a design
22 objective. So you identify what functions you

1 want the embedded system to perform. You identify
2 a microcontroller. I mean, again, there's
3 thousands on the market. You identify the
4 microcontroller that has the right amount of
5 memory, the right -- the right type of interface.

6 So, for example, if you want WiFi, you
7 would find a microcontroller with a WiFi circuitry
8 embedded on the microcontroller; anything else.

9 Naturally -- so, for example, in Fig. 4,
10 it's conceivable that you can't -- could not find
11 a microcontroller that has USB circuitry, ethernet
12 circuitry, Bluetooth circuitry. So you may wish
13 -- you -- you will get as close as possible to a
14 microcontroller that contains all of that and then
15 may have to implement blue chip, for example, on a
16 single -- on a separate chip.

17 But, again, that Bluetooth circuitry
18 would not be considered part of the
19 microcontroller.

20 Q. Your definition for microcontroller also
21 includes "program to handle a particular task."

22 Were did that come from?

1 A. The idea of using a microcontroller is
2 that you're not going to use it for general
3 purpose computing. Not -- would not -- you would
4 not use a microcontroller for a desktop computer,
5 for example.

6 You would, again, define -- identify the
7 microcontroller chips specific for your purpose,
8 then add ethernet but not digital to analog
9 converter, okay, because you didn't need
10 additional analog converter but you did need WiFi.
11 And then you write your application specifically
12 for that embedded system.

13 And then on a micro -- and then
14 microcontroller operated embedded system is only
15 good for that application. And couldn't run a
16 spreadsheet on it. You couldn't display, you
17 know, necessarily different types of computer
18 graphics with it. It would only be suitable for
19 that one application.

20 Q. Okay. Thank you, Mr. Zatkovich.

21 Can you return now to the '935 patent.

22 A bit of a housekeeping matter.

1 Although, more on the substantive side.

2 But you would agree, would you, Mr.
3 Zatkovich, that the specification of the '935 and
4 the '655 patents are the same? Right?

5 A. Yes. They share the same specification.

6 Q. And can you, please, go to column 11,
7 lines 42 to 63 of the '935 patent.

8 A. 42 to 63?

9 Q. Uh-huh.

10 A. If I could review that briefly.

11 Q. Sure.

12 MR. ALEXANDER: You said column 11; is
13 that correct?

14 MR. PLEUNE: Correct.

15 Q. And Mr. Zatkovich, this -- this portion
16 references a plurality of sensors and devices.

17 Do you see that?

18 A. Yes.

19 Q. And these are the environmental devices,
20 right?

21 A. Yes.

22 A sensor can be considered an

1 environmental device, but not necessarily all
2 sensors are environmental devices.

3 Q. Right. Fair enough.

4 But here, in this portion of the '935
5 patent, that's what we're talking about, correct?

6 A. Yes.

7 Q. And -- and this is describing multiple
8 environmental devices in -- in a single building,
9 right?

10 A. Yes.

11 Q. And they can communicate wirelessly and
12 through wired connections, correct?

13 A. Yes.

14 Q. And the '935 patent provides many
15 examples of what an environmental device can be;
16 is that correct?

17 A. Yes, I would agree with that.

18 Q. And that includes alarm systems?

19 A. Yes.

20 Q. And electronic locks?

21 A. Let's say that the '935 patent considers
22 an automated electronic lock to be an

1 environmental device, yes.

2 Q. And also gate controls?

3 A. I'm sorry. Can you say that again?

4 Q. Also gate controls?

5 A. Gate controls?

6 Q. Sure.

7 A. Yes, I would take that.

8 Q. HVAC system?

9 A. Yes.

10 Q. And also, a freezer can be an
11 environmental device, right?

12 A. Yes.

13 Q. Okay. Now, let's go back to claim 1 of
14 the '935 patent.

15 Could you look -- I guess it's the,
16 maybe, fifth limitation of claim 1. It recites,
17 "Wherein the base unit is configured to send a
18 first SMS message, including current environmental
19 information to the remote unit through the
20 wireless module."

21 Do you see that?

22 A. I do.

1 Q. And it also -- claim 1 also recites that
2 the base unit receives SMS messages, right?

3 A. Correct.

4 Q. Claim 1 does not recite how the base
5 unit sends and receives those messages, does it?

6 A. The claims in and of themselves?

7 Q. That's right.

8 A. No.

9 Q. Does the specification describe how
10 those SMS messages are sent and received?

11 A. The claims -- the specification
12 identifies different features of SMS capability.

13 Q. But does it describe -- does the
14 specification of the '935 patent describe how a
15 SMS message is created, how it's sent and how it's
16 received?

17 A. It describes different aspects of that.

18 Q. And -- and does it describe from a
19 technical standpoint how that is accomplished?

20 A. Yes, to a certain degree.

21 Q. Where?

22 A. So the '935 spec primarily focuses on

1 program control of SMS message and provides --
2 describes different aspects of doing SMS messages
3 under programmatic control as opposed to one user
4 texting another user.

5 So starting on column 7, row 8, "The
6 implemented port addressing scheme allows a short
7 -- allows short messages to the remote control
8 unit to bypass standard cellular phone telephone
9 functions and to operate the features of the unit
10 independently."

11 In other words, it's stating that -- you
12 know, prior to this SMS messages to cellular
13 phones would have to occur through standard
14 telephone function, such as a text message
15 utility. This is describing how you can bypass
16 that so that, for example, third-party application
17 developers can customize or programmatically
18 control sending SMS messages.

19 Further on, on paragraph 7 --

20 Q. Could you -- could you -- I'm confused.
21 Did you say column 7, line 8?

22 A. I'm sorry. Column 7, line -- yes.

1 Beginning with line 8, down through line 14.

2 Q. It is your opinion that this is
3 describing how a SMS is created and then sent and
4 received?

5 A. No.

6 Q. Okay. Got it.

7 So that's what I'm looking for, in the
8 specification description of that.

9 A. This is describing -- this is describing
10 how you would send SMS messages under programmatic
11 control as opposed to just sending text messages
12 from one user to another.

13 Q. And is it your understanding that this
14 patent invented port addressing?

15 A. No.

16 It's stating that you -- minimally, you
17 need to implement port addressing and find a
18 device enabled to do port addressing in order to
19 bypass standard methods of doing SMS messages
20 through -- through the telephone functions and
21 being able to control them independently.

22 Q. Okay. We're talking about the standard

1 concept of port addressing. And my question is:
2 Where in the '935 patent does it describe the
3 creation of an SMS message carrying data and then
4 sending and receiving that?

5 A. That -- again, port -- as I described,
6 portion of that is described between lines 8 and
7 14 of column 7. That's one aspect of it.

8 Q. Okay.

9 A. You see.

10 This is -- this is minimally what's
11 required in order to do this under application
12 control instead of using standard tele --
13 telephone functions.

14 Then if we look at -- further down on
15 column 7, we see that on line 46 it begins with,
16 "When Java software application is operationally
17 accessed by microcontroller, 45, and it started
18 within the remote control unit, 12, it attaches
19 itself to a specific port for the reception of SMS
20 messages."

21 In other words, if you're going to do
22 SMS messaging under program control, you have to

1 have the microcontroller in the base unit -- let
2 me verify that. Oh. I'm sorry. The
3 microcontroller in the cell phone be programmed to
4 use a specific channel. Again, identifying --
5 identified by a specific port for the reception of
6 SMS messages. Otherwise, they'll simply get
7 redirected to the standard cell phone text
8 utility; you will not be able to receive those
9 messages under application control at the remote
10 control unit.

11 So that's another example of how you
12 would program remote -- the remote control side of
13 the system.

14 Further -- and --

15 Q. And -- and while you're looking --

16 A. Sure.

17 Q. -- let me ask you: Is the -- is the
18 Java software application described at all in the
19 '935 specification?

20 A. The type -- type of Java software?

21 Q. Or the specifics of the Java software
22 that would be required.

1 A. Yes.

2 In fact, I believe the remainder of that
3 column describes what that Java software would
4 have to do.

5 For example, on line -- on line 50, all
6 mobile-terminated SMS messages must -- would
7 con -- that contain a user to data header would
8 indicate the port address. And I -- and it gives
9 an example of that.

10 In the next paragraph it describes a set
11 of AT command sequences that would be used within
12 the Java software in order to initiate serial
13 communications over the serial interface in
14 support of that using the Java software.

15 Now, I -- I would say those are examples
16 of specific things the Java software has to do.

17 Again, the assumption is that you have a
18 device and able -- enabled to support that. Which
19 again, in my opinion, did not exist prior to 2004.

20 Then if we look at column 8, it
21 specifically says that -- starting with line 45,
22 "Getting captured by the remote control -- control

1 unit are processed by its application software.

2 In my mind, I'm -- I'm reading that as
3 third-party customized application software.

4 "And the results are -- are transmitted
5 by port address, port address SMS, to the base
6 control unit for proximity detection."

7 So that's an example of how you would
8 program the software, the Java software that
9 performs proximity detection so that it can send
10 and receive messages. Again, using the port
11 addressing scheme in the custom application.
12 Again, assuming the device was enabled cell phone
13 or the base unit was enabled to do so.

14 I can continue looking for other
15 examples, but I think those are three pertinent
16 examples.

17 Q. Okay. No other examples at this moment?

18 A. Again, I -- that's -- again, I only went
19 to column 8. I didn't look further than that.
20 I'm sure there is other examples.

21 Q. I'm going to gather another exhibit. So
22 certainly, take a moment to look through 9, 10,

1 11, 12, 13.

2 A. Okay.

3 I see another interesting example in
4 column 11, between lines 4 and lines 14. And it
5 actually discusses sending SMS messages between
6 the base unit and remote unit. I wouldn't
7 consider this a SMS message, though. It would be
8 a SMS-like message.

9 Basically, they're saying if you -- you
10 don't have -- if you can't rely on port
11 addressing, then you would send the same type of
12 messages that you would send an SMS via a serial
13 application.

14 They're -- they're calling them SMS
15 messages, but technically they're not using SMS
16 protocol, so. That's an example of how you could
17 program both the base unit and the remote unit to
18 still communicate SMS-type messages without using
19 the port addressing scheme and without using the
20 SMS protocol.

21 Those are the only examples that stood
22 out to me.

1 Q. Thank you for that.

2 And if you could pull Exhibit 1025.

3 (THEREUPON, Exhibit 1025 was marked for
4 identification).

5 Q. Let me know when you have that, Mr.
6 Zatkovich.

7 A. Okay. Yes, I have that.

8 Q. Okay. Can you tell me what that
9 document is?

10 A. It's -- well, it's entitled Universal
11 Mobile Telecommunications System, Technical
12 Realization of the Short Message Service.

13 Q. And are you familiar with that document?

14 A. It looks like a version of the SMS
15 standard.

16 Q. And have you --

17 A. Well --

18 Q. -- reviewed the SMS -- I'm sorry.

19 Go ahead.

20 A. Well, actually -- Technical Realization.
21 It may be an implementation tutorial document, but
22 I'm assuming it's discussing the SMS standards or

1 the SMS protocol.

2 Q. Are -- are you familiar with the SMS
3 standard?

4 A. Yes. Maybe not this particular version,
5 but, yes, I have reviewed SMS standards.

6 Q. And -- and what are they used for?

7 A. It's used for sending two-way messages
8 between components which do not necessarily
9 require acknowledgment from the receiving end.

10 Q. But this is the standards for basically
11 creating an SMS message, correct?

12 A. Different types of mess -- different
13 types of SMS messages, yes.

14 Q. Right.

15 Now, what is the date of this document?

16 A. I see the date at the bottom of the
17 first page of copyright 2000. I'm assuming that
18 2000 is the -- is the copyright date and not part
19 of the name of the institution.

20 Q. Can you -- and you certainly recognize
21 that the SMS standards predate 2004?

22 A. Yes.

1 And I believe the SMS standards goes
2 back to -- I think the first release SMS standard
3 was '94.

4 Q. Have you been aware of the SMS standard
5 since 1994?

6 A. Yes, I have been.

7 Q. Can you turn to page 66 of page 1025.
8 I'm referring to the page numbers that were added
9 to the right of the exhibit designation.

10 A. Okay. And which page number?

11 Q. Sixty-six.

12 A. Okay. I have that.

13 Q. And this is describing port addressing,
14 right?

15 A. Section title is Specialized SMS Message
16 Indication.

17 Is that the one you were referring to?
18 You said page 66, right?

19 Q. So I think I misspoke.

20 So it is actually page 66 of the
21 internal document, which is page 67 that has been
22 added with the "exhibit" watermark.

1 A. Got it.

2 Q. So it's 9 -- "9.2.3.24.3 application
3 port addressing 8-bit address."

4 Do you see that?

5 A. I do.

6 Q. And then on the next page you'll see,
7 "Application port addressing 16-bit address."

8 Right?

9 A. I do.

10 Q. And this is the same type of port
11 addressing that you were describing in connection
12 with the '935 patent, correct?

13 A. Yes, I believe it is.

14 Q. If you could turn to claim 1 of the '935
15 patent, Mr. Zatkovich.

16 A. Okay. I see that claim.

17 Q. Yes.

18 Claim 1 does not indicate where the base
19 unit is located, does it?

20 A. Well, they have to be located with the
21 ability to interface with environmental devices.
22 Again -- and it's -- the base -- base units are

1 referred to as local devices. So they're
2 generally local to where those environmental
3 devices are.

4 Q. Okay. And that's -- that's not exactly
5 the question I asked, but -- but maybe we'll get
6 to that in a moment.

7 But my question is: Does -- does claim
8 1 specify where the base unit is located?

9 A. Well, again, the term "base unit" is
10 used within the spec and in the industry as a
11 local device.

12 So when claim 1 says base unit
13 operatively interfaced with environmental device,
14 one of ordinary skill would understand that to be
15 a local -- a base unit to be a local device.

16 Q. So it's your opinion that the base unit
17 must be located within a -- a home, right?

18 A. I -- I don't think it needs to be
19 located in a home. I think it needs to be
20 located, again, using the word locally to the
21 environmental devices that it's interfacing to.

22 So, for example, if you're monitoring a

1 property and it's a multi-acre property and one of
2 the things that you're monitoring is an external
3 gate that's, you know, potentially a half a mile
4 away, you may have a base unit that's located
5 outside the home that's used to monitor that
6 particular gate. And that would be different than
7 a base unit that would be located in the house
8 monitoring doors and windows, for example.

9 Q. Okay. So that's helpful.

10 So the base unit must be proximate to
11 the environmental devices although it does not
12 necessarily need to be inside the same structure;
13 is that right?

14 A. Yes. I think that's a -- that's a good
15 description. It needs to be proximate to the
16 devices it's monitoring.

17 Q. Do the claims of the '935 -- why don't
18 we stay on claim 1 of the '935 for a moment.

19 Do those recite a hardware interface on
20 the base unit?

21 A. A specific type of hardware interface?

22 I think the assumption is there is a

1 hardware interface between the base unit and the
2 device, but I don't believe it defines a specific
3 type other than -- hang on. Let me -- let me
4 verify that.

5 Well, minimally, it would be a --
6 require at least a wireless hardware module.

7 Q. You're saying that claim 1 would require
8 a hardware interface because of the requirement of
9 a wireless module; is that right?

10 A. No.

11 It requires -- it requires a hardware
12 interface merely because it's -- must interface
13 with an environmental device, which is presumably
14 a piece of hardware. And in particular, it's
15 specifying that a base unit also needs a hardware
16 interface for wireless communications with the
17 remote unit.

18 Q. So you're saying that there is a
19 requirement of a hardware interface, but we don't
20 necessarily see it explicitly described in claim
21 1; is that right?

22 A. Correct.

1 We see the requirements of that
2 interface. We don't see a particular piece of
3 hardware, a particular interface identified.

4 Q. And would that be the same for software
5 for communicating through a hardware interface,
6 that you also believe that software of that nature
7 would be required but it's not explicitly
8 disclosed for claim in claim 1?

9 A. Well, I think the assumption is because
10 the base unit requires a microcontroller, there
11 will be software.

12 But you're right, that it's not
13 specifically disclosed that software is required.

14 Q. And what about a hardware interface on
15 the remote unit, is that explicitly disclosed in
16 the claims of the '935 patent?

17 A. Well, similarly, the remote unit would
18 require hardware interface with the wireless
19 module.

20 Q. The wireless module on the remote unit?

21 A. Correct.

22 Q. So it's your opinion that that's

1 required.

2 And my question: Is that explicitly
3 described in the claims of the '935 patent?

4 A. The -- the specific type of hardware --
5 hardware interface is not described in claim 1.

6 Q. Is it -- and is it described in any of
7 the claims of the '935 patent?

8 A. Thirteen. Claim 13 gets a little more
9 specific.

10 You would need -- for example, the base
11 unit would need a specific type of hardware
12 interface that would communicate with an
13 electrical mechanical switch, for example. So
14 that's identifying a specific type of hardware
15 interface.

16 Q. Claim 13 is a dependent claim that
17 further describes the environmental device, right?

18 A. Correct.

19 Q. So my question was: A hardware
20 interface on the remote unit, whether there is any
21 limitation to -- specifically directed to a
22 hardware interface on the remote unit?

1 A. Oh. We're just talking about the remote
2 unit.

3 Q. Uh-huh.

4 A. No, other than they would have to -- it
5 would be required to communicate through or with a
6 wireless module.

7 Q. And then same question for software for
8 communicating through a hardware interface on the
9 remote unit.

10 There isn't any specific limitation in
11 the claims of the '935 patent directed to software
12 for communicating through a hardware interface on
13 a remote unit, is there?

14 A. Actually, yes.

15 If we look at claims 4, 5 and 6, we see
16 that the -- the type of software on the cellular
17 telephone handset must be custom programmability
18 meaning it must be customizable by independent
19 third-party.

20 Claim 5 stating that -- that custom
21 programmability be performed in the Java
22 programming level.

1 And Claim 6 ascribed that that custom
2 programmability occurred through J2ME, the
3 programming currently.

4 Q. Okay. You've identified 4, 5 and 6.
5 Anything else?

6 A. Well, claim 10 talks about the -- the
7 interface which, I guess, could be done in some
8 software or hardware, but minimally with some form
9 of software noted to disable transmission of SMS
10 messages.

11 Q. Okay. Any other claims?

12 A. Claim 16.

13 Q. Okay.

14 A. I think that covers it.

15 Q. Okay. It's your opinion that claims 4,
16 5, 6, 10 and 16 include specific recitations of
17 software for communicating through a hardware
18 interface on the remote unit, right?

19 A. Explicit references.

20 I could look through the specifications
21 to see if there's other implicit references.

22 Q. Okay. But those are the explicit

1 reference that you see in the claims?

2 A. That's correct.

3 MR. ALEXANDER: Counsel, I don't want to
4 interrupt your train of thought, but I think
5 we've been going more than an hour-and-a-half
6 now.

7 MR. PLEUNE: Sure. You want to take a
8 break for lunch?

9 THE WITNESS: Yeah, this is a good lunch
10 break time.

11 MR. ALEXANDER: Okay.

12 MR. PLEUNE: Get back together at 2:00?

13 THE WITNESS: 2:00 is good with me.

14 MR. ALEXANDER: That's fine with me.

15 MR. PLEUNE: All right. See you then.

16 MR. ALEXANDER: All right.

17 THE WITNESS: Great.

18 (Luncheon Recess).

19 MR. ALEXANDER: So, Ben, before you
20 asked Mr. Zatkovich about his income earlier.
21 And so I'm not sure that should really be
22 filed on the public record. So, you know, we

1 would want that information confidential, but
2 I'm happy to discuss with you offline how to
3 handle that.

4 MR. PLEUNE: Yeah, that should be --
5 actually, I just did it in another IPR, where
6 they redacted the home address of the expert.
7 And so you just file a notice. And
8 absolutely, we can just -- we can pull that
9 off the record. Agreed.

10 MR. ALEXANDER: Thanks. Sure.

11 MR. PLEUNE: Or redact it.

12 BY MR. PLEUNE:

13 Q. Mr. Zatkovich, microcontrollers were
14 known in 2004, right?

15 A. Yes.

16 Q. And they'd been known for some time in
17 2004?

18 A. Yes, I would say so.

19 Q. And the '935 and '655 patents did not
20 invent microcontrollers, did they?

21 A. No.

22 Q. And your opinion is that your

1 construction for microcontroller is the plain and
2 ordinary meaning of that term, right?

3 A. Yes, that's correct.

4 Q. You cite two dictionary definitions in
5 support of your construction for that term,
6 correct?

7 A. I do.

8 Q. Do you believe that definitions are
9 helpful for determining the meaning -- for
10 determining the meaning of a term in a patent?

11 A. Yes. When -- when interpreted within
12 the context of the patent, yes.

13 Q. Are technical dictionaries more helpful
14 than standard English language dictionaries?

15 A. When dealing with technical terms, yes.

16 Q. Would you consider microcontroller to be
17 a technical term?

18 A. Yes.

19 Q. We've added a new exhibit. If we can
20 refresh and grab that. That's going to be Exhibit
21 1102.

22 (THEREUPON, Exhibit 1102 was marked for

1 identification).

2 Q. Just let me know when you have it.

3 A. I'm loading.

4 I have it.

5 Q. So starting on the first page of Exhibit
6 1102, we see that this is the Dictionary of
7 Electrical and Computer Engineering.

8 Do you see that?

9 A. I do.

10 Q. Are you familiar with the Dictionary of
11 Electrical and Computer Engineering?

12 A. I -- I'm aware of its presence.

13 Q. You've used it before?

14 A. I'm sure I've used either this or
15 something similar to it for other cases for
16 definitions.

17 Q. And if you could turn to the third page
18 of Exhibit 1101, we see that the Dictionary of
19 Electrical and Computer Engineering is published
20 by McGraw-Hill, right?

21 A. That's correct.

22 Q. And you're familiar with McGraw-Hill, as

1 you previously testified, correct?

2 A. That's correct.

3 Q. And on that same page we see that the
4 Dictionary of Electrical and Computer Engineering
5 was published in 2004, right?

6 A. Let's see. I see a 2003 and 2004 date,
7 both.

8 Q. And if you look, you can see that the
9 2003 date is for another technical dictionary that
10 -- that says includes the same definitions.

11 Do you see that?

12 A. Correct.

13 Q. And then there's a 2004 date for this
14 particular dictionary, correct?

15 A. Correct.

16 Q. Now, as we discussed previously today,
17 your Declaration states that a person of ordinary
18 skill in the art at the time of the priority date
19 of the '935 patent in November of 2004 would have
20 at least a bachelor's degree in electrical
21 engineering or science, right?

22 A. Correct.

1 Q. And so the date of this dictionary
2 generally coincides with the date of the person of
3 skill in the art that you identify in your
4 Declaration, correct?

5 A. Yes.

6 Q. And also the subject matter, right?

7 So this is the Dictionary of Electrical
8 and Computer Engineering. And your person of
9 ordinary skill in the art would have a degree in
10 electrical engineering or computer sciences,
11 right?

12 A. Correct.

13 Q. So if we could turn to page, I believe,
14 7 of the exhibit and find the definition of
15 microcontroller in the right-hand column.
16 Actually, page 14. Page 14 of Exhibit 1102.

17 A. I see it.

18 Q. Can you read that definition for me?

19 A. "Microcontroller: A microcomputer,
20 microprocessor or other equipment used for precise
21 control in data handling communication and
22 manufacturing."

1 Q. So the definition for microcontroller
2 here indicates that a microcontroller can be a
3 microcomputer, microprocessor or other equipment,
4 right?

5 A. I see that.

6 Q. Do you have any basis to disagree with
7 this definition?

8 A. I think it's accurate for as far as it
9 goes. It does contain a microprocessor and it
10 does contain other equipment and it is used for
11 precise control in data handling communication and
12 manufacturing.

13 I don't think it's -- it's a complete
14 definition. It doesn't -- for example, it doesn't
15 distinguish between a microcontroller and a
16 microprocessor at all.

17 It calls itself a microcomputer, which
18 is accurate, but a microcomputer, of course, is
19 more than just a microprocessor.

20 Q. Do you believe that the definition of a
21 microcontroller as being synonymous with a
22 microprocessor could ever be an appropriate

1 definition for microcontroller?

2 MR. ALEXANDER: Object to form.

3 THE WITNESS: I don't believe that
4 treating microcontroller synonymously with
5 microprocessor is going to be very useful for
6 persons designing embedded systems.

7 Q. You think that it could ever be useful?

8 A. No, not -- again, not for anybody
9 designing embedded systems.

10 The whole point of a microcontroller is
11 to be more than a microprocessor. If you attempt
12 to substitute one for the other, you're going to
13 be very surprised.

14 Q. And what about just those terms in and
15 of themselves, do you believe that there could
16 ever be a circumstance where a microcontroller
17 would be synonymous with a microprocessor?

18 A. No, I do not.

19 Because, again, you -- they could not
20 accomplish the same things. If you're expecting a
21 microprocessor and you order a microcontroller, it
22 would not fit within the design that you need and

1 vice versa. If you need a microcontroller and you
2 receive a microprocessor, it would not fit the
3 design criteria that you need for your project.

4 Q. But this definition specifies that "the
5 microcontroller is a microprocessor used for
6 precise process control and data handling
7 communication and manufacturing."

8 Do you agree with that portion of the
9 definition?

10 A. I agree with the fact that a
11 microcontroller contains a microprocessor and it
12 can be used for precise process control in data
13 handling communications and manufacturing.

14 Q. We can -- we can put that exhibit aside
15 for the moment, Mr. Zatkovich.

16 What is Java?

17 A. Java is a programming language.

18 Q. And what is Java used for?

19 A. Java's used for a variety of
20 applications. It's considered a high-level
21 language. So it's a compiled language that could
22 be used for business applications as well as

1 process control applications.

2 Q. Can it be used to create customized
3 software?

4 A. Yes.

5 Q. Have you used Java to create customized
6 software?

7 A. Yes, I have.

8 Q. When?

9 A. Probably -- the last time I actually did
10 my own programming was probably at Eva-Tone, where
11 I was designing and developing some software
12 applications.

13 Q. And what was the time frame of your work
14 at Eva-Tone?

15 A. That was between 2002 and 2007.

16 Q. Was Java available for creating
17 customized software before 2002?

18 A. Yes, I believe so.

19 Q. And what software did you create using
20 Java?

21 A. A lot of the software that we wrote for
22 McGraw-Hill was writ -- written in Java.

1 Q. Okay. So this was the project for
2 McGraw-Hill?

3 A. Correct.

4 Q. Okay. And what was the time frame of
5 that project?

6 A. That was 2002 to 2004 or '5.

7 Q. What about J2ME, what is J2ME?

8 A. J2ME, it's called the second version of
9 the Java platform. Primarily for smaller
10 applications, including embedded systems.

11 Q. And can J2ME be used to create
12 customized software?

13 A. Yes.

14 Q. Have you ever used J2ME to create
15 customized software?

16 A. I think -- well, I personally did not
17 write software on J2ME platforms, but I supervised
18 some application developed for -- development for
19 J2ME when we were doing our mesh network
20 development at eComp.

21 Q. And the '935 and the '655 patents did
22 not invent Java, right?

1 A. True.

2 Q. They did not invent J2ME, right?

3 A. Correct.

4 Q. J2ME was also available before 2004?

5 A. Yes.

6 Q. What is a MIDlet?

7 A. Pardon? What is a?

8 Q. What is a MIDlet?

9 A. MIDlet as opposed to an applet or a
10 serverlet? What's the context?

11 Q. Can -- can you tell me what a MIDlet is
12 without any additional context?

13 A. Well, it generally has two meanings.

14 And -- for example, there's an applet
15 which is an application that's downloaded
16 generally at run time to the client.

17 So, for example, Java has applets that
18 they can run on your -- on your browser platform
19 that execute small applications that are
20 downloaded to the -- by the browser.

21 MIDlet can be used to -- to describe a
22 small middle ware component. Java uses it -- Java

1 uses it in the context of a type of applet that
2 runs -- that's kind of like pre-installed on a
3 device. And it's a library program that can be
4 activated.

5 Q. Have you ever created a MIDlet?

6 A. No.

7 They're generally for specific context.
8 If you want to have like pre-compiled or loosely
9 compiled components that could be assembled at run
10 time or close to run time.

11 But I'm -- I'm aware of them. I have
12 not programmed them, anything specifically, no.

13 I'm sure we've had some projects that
14 might have used MIDlets.

15 Q. Okay. Okay. Mr. Zatkovich, I would
16 like you to turn to the Ellers reference which is
17 -- one second.

18 I grabbed the Ellers reference which is
19 Exhibit 1022 to the IPR for the '935 patent.

20

21 (THEREUPON, Exhibit 1022 was marked for
22 identification).

1 Q. Okay?

2 A. All right. I have that.

3 Q. All right. First, I'd like to look at
4 -- if you could take a look at Figs. 4A through 4R
5 of the Ellers reference, Exhibit 1022.

6 And what is depicted in those figures?

7 A. This is showing the user interface for
8 environmental control systems.

9 Q. And if we turn to paragraph 311 of
10 Ellers' Exhibit 1022 which I believe --

11 A. What paragraph?

12 Q. Paragraph 3-1-1.

13 A. Okay.

14 I have that.

15 Q. And we see that at paragraph 311 Ellers
16 is referring to Figs. 4A through 4R, right?

17 A. Correct.

18 Q. And it says that, "The user interface
19 1.14 may be implemented as a web page or graphical
20 user interface (GUI) 4.02."

21 Do you see that?

22 A. I do.

1 Q. Do you agree with that characterization
2 of the Ellers reference?

3 A. Yes.

4 Q. Okay. Now, further down in that same
5 paragraph, 311, it says, "In another embodiment,
6 the customer may access the GUI 4.02 through a
7 remote device, such as a mobile phone and/or
8 personal digital assistant."

9 Do you see that?

10 A. I do.

11 Q. Do you agree with that characterization
12 of the Ellers' reference?

13 A. I believe that certain aspects of the
14 user interface could be downloaded.

15 Let me see. What would be the date of
16 this one?

17 I'm not aware of any remote device, such
18 as a mobile phone, in 2004 which could display the
19 details and the graphics listed in all the
20 figures.

21 Q. But there's no question that Ellers
22 discloses that that graphical user interface can

1 be displayed on a remote device, such as a mobile
2 phone and/or personal digital assistant, right?

3 A. I'm sure it's possible to display
4 minimally the text and in some cases minimal
5 graphics.

6 I think it would be very difficult to --
7 if not feasible, to display things like Fig. 4M or
8 L. And Fig. 4A. That would be difficult, too.
9 It would be impractical to try to implement on a
10 cell phone in the time of 2004.

11 Again, this is prior to iPhones or any
12 type of smart phones that had a graphic display.
13 I don't see how they would be able to implement
14 that.

15 Q. Patent Kim in the 2000 -- early 2000
16 time frame were able to display graphics, right?

17 A. Yes, with minimal resolution. They
18 certainly wouldn't have been able to display the
19 resolution needed for, for example, Fig. 4M.

20 Q. Why do you believe that Fig. 4M would
21 require some particular resolution?

22 A. There's a lot of detail. You have to

1 show the entirety of the graph with certain
2 resolution to convey the information; otherwise,
3 you're conveying nothing.

4 Q. So I just want to make sure I understand
5 your -- your opinion here.

6 So there were PDAs and mobile phones in
7 the 2003 time frame that could disclose graphical
8 images, it would just depend on how much
9 resolution a particular graphic image may require;
10 is that right?

11 A. No.

12 Again, even for a PDA -- which, again,
13 is not a mobile phone -- I don't think it would be
14 feasible to display many of the screens or user
15 interfaces depicted in Fig. -- in the Figs. 4.

16 As specifically pertaining to mobile
17 phones, I would find it even less practical to be
18 able to do that on a mobile phone versus a PDA.

19 Q. So it's your opinion that certain of
20 these images could not be displayed, but you're
21 not saying that none of the images could be
22 displayed, right?

1 A. Some aspects -- aspects of this user
2 interface could be modified to convey similar
3 information on a slightly different type of user
4 interface.

5 Q. So we agree that a PDA could display
6 graphical icons in the 2003 time frame, right?

7 A. PDAs had limited graphic capability,
8 yes.

9 Q. Are you saying that there were no mobile
10 phones that existed in the 2003 time frame that
11 could provide graphical icons?

12 A. They would have been even smaller than a
13 PDA, then. Like a Palm Pilot. Probably less than
14 half the size of the display of a Palm Pilot.

15 Q. So the -- the display would be smaller,
16 but it could still -- it would still have the same
17 abilities to turn pixels on and off to display a
18 graphic, right?

19 A. Right. But you would -- you would even
20 have less resolution in order to display, you
21 know, any number of figures in Fig. 4.

22 Q. So smaller screen size, less resolution,

1 but both as between a PDA and a mobile phone
2 available in the 2003 time frame, the tech --
3 technology would be essentially the same, right?

4 A. No.

5 I'm just picking up a screen at round.
6 Fig. 4E. You might be able to display the left --
7 one-third of the left-hand side of Fig. 4E on a
8 cell phone display at that particular time.
9 Maybe. You'd have to redesign the user interface
10 altogether and probably leave out some information
11 if you wanted to convey something similar to 4E.
12 Again, that's one of the simpler screens. Again,
13 it's not --

14 Q. It's not --

15 A. It would not be practical to do so.

16 Q. I just want to make sure that I
17 understand your testimony.

18 So you're not saying that you couldn't
19 display the graphics, you're just merely saying
20 that the size of the screen on the phone would be
21 small and so you would be limited to the number of
22 graphics that you could display, right?

1 MR. ALEXANDER: Object to form.

2 THE WITNESS: You would not be able to
3 reproduce either the format or the
4 information from these figures on a cell
5 phone. You would be able to modify it and
6 produce something less than that.

7 And, again, a person of ordinary skill
8 in the art would certainly not be motivated
9 to try to implement the use -- the user
10 interface depicted here on a cell phone.

11 Q. Well, what if you had a device with a --
12 a wide screen?

13 A. Again, it still --

14 MR. ALEXANDER: Object to form.

15 THE WITNESS: It would still depend on
16 the resolution of the screen.

17 Q. But the resolution just limits what
18 exactly the graphics look like. It doesn't limit
19 the ability to have graphics, does it, Dr. -- Mr.
20 Zatkovich?

21 A. It limits the ability of the amount of
22 information you can put on the screen. If you

1 have low resolution, then all you can do is fit a
2 -- a single icon, you do not have user interface.
3 It's not practical user interface.

4 Q. Okay. I understand that you mean that
5 there is less information on the screen, but that
6 doesn't mean that there is a situation where there
7 can be no information on the screen, right?

8 A. Correct.

9 But -- and, again, in Figs. 4, looking
10 at a large amount of information, even in the
11 simpler screens that would not be practical to be
12 implemented on a cell phone screen.

13 Q. What about implemented on the -- the
14 screen for a PDA, would that be practical?

15 A. You would -- you would still not be
16 motivated. You would have to do a lot of work to
17 redesign all -- the entire user interface for
18 this.

19 Could it be done? With a lot of work
20 and foregoing some information, especially
21 graphical information such as charts and graphs,
22 complex icons -- if you left all that out and you

1 wanted to spend the time and effort to do that,
2 perhaps.

3 But again, one of skill in the art would
4 not be motivated to do so; it would not be
5 practical.

6 Q. Mr. Zatkovich, can you turn to Fig. 2 of
7 the '935 patent.

8 A. I see that.

9 Q. What is Fig. 2 of the '935 patent?

10 A. It's a -- I believe, that's a mobile
11 phone with a graphical screen.

12 Q. Did -- did Ubiquitous invent the mobile
13 phone that we see in Fig. 2 of the '935 patent?

14 A. No.

15 Q. And so this was a pre-existing mobile
16 phone that was used as an image in Fig. 2, right?

17 A. Correct.

18 Q. And it's a picture of an actual device,
19 right?

20 A. Yes.

21 Q. And it has a rather large screen, right?

22 A. Yes.

1 Larger than an average cell phone would
2 have, but I do believe it's an accurate
3 description of the device that existed at that
4 time.

5 Q. That's probably more consistent with the
6 screen size of a PDA, you would agree?

7 A. Almost. Not quite. But yes, it would
8 be more consistent with a PDA screen.

9 Q. And you see graphics on that screen,
10 right?

11 A. I do.

12 Q. And -- and the resolution of those
13 graphics based on this image is -- is quite good,
14 right?

15 A. Let's see. You can -- one, two, three,
16 four -- you can get eight -- eight or ten icons on
17 there. Not much text after you have the icons,
18 but, yes, you can get icons on here.

19 Q. Uh-huh.

20 And if you selected an icon, you could
21 probably get a -- a significant amount of
22 information on that screen, as well, right?

1 A. You could probably get, just based on
2 the text here, if you were just displaying
3 straight text, maybe three or four sentences,
4 short sentences. And if you were displaying a
5 form, maybe a half a dozen fields with prompts and
6 data entry fields.

7 Q. You could get, for example, a table on
8 that screen with some additional information,
9 right?

10 A. Probably get something equivalent to
11 Fig. 4P from Ellers. Fig. 4Q. That would be
12 about it.

13 Q. If you looked at, for example, Fig. 4A
14 -- do you see that?

15 Actually, I'm looking at 4B.

16 A. I see that.

17 Q. There's some -- there's a fair amount of
18 text, but ultimately there's two selections,
19 heating/AC or whole house meter.

20 Do you see that?

21 A. I do.

22 Q. We could certainly get those two

1 selectable icons on to the -- the device that we
2 see in Fig. 2 of the '935 patent, right?

3 A. But that wouldn't be implementing the
4 user interface. The user interface requires
5 context and it requires structure organization.
6 Just throwing out a couple of icons from one of
7 the screens is not reproducing user interface.

8 Q. But we could have on the screen most of
9 this, so we could -- homeowner direct access, you
10 could have certainly heating, AC and icon
11 associated with that, whole house meter and icon
12 associated with that. That would easily fit on
13 this device that we see in Fig. 2, wouldn't it?

14 A. I would imagine that you could redesign
15 Fig. 4B with the icons slightly smaller and
16 simpler and some of the context on the rest of the
17 screen that would fit on display in Fig. 2.

18 Q. Okay. Now I'd like to turn to paragraph
19 69 of Ellers.

20 A. Paragraph 69?

21 Q. Yes.

22 A. I have that.

1 Q. So, 69, again, we see that "customer may
2 access and -- and control the system, 102, through
3 user interface, 1.14."

4 Do you see that?

5 A. I do.

6 Q. And that "the user interface, 114, may
7 be incorporated into another device, such as a
8 thermostat."

9 Do you see that?

10 A. I do.

11 Q. Okay. And so this is disclosing that
12 the thermostat of the Ellers device could have the
13 user interface, correct?

14 A. Correct.

15 The thermostat, they give an example of
16 one of those controllers, it would be a
17 wall-mounted like LCD or LED display.

18 Q. And then we also see that "the customer
19 may be given access to the system, 1.02, through
20 external devices, such as mobile phone, personal
21 digital assistant, laptop computers, desktop
22 computers or other suitable device."

1 Do you see that?

2 A. I do.

3 Q. And so that is describing how a user can
4 get access to the system, right?

5 A. Certain features of the system, yes.

6 Q. Okay. Let's turn for a moment to
7 Exhibit 1021.

8 (THEREUPON, Exhibit 1021 was marked for
9 identification.)

10 Q. And don't lose Ellers because we'll come
11 back to that one.

12 A. I have that.

13 Q. And do you recognize this Exhibit 1021?

14 A. I do.

15 Q. Can you tell me what it is?

16 A. It's -- it's labeled Antilla. The
17 Antilla prior art that we cited in the petition.

18 Q. And what is depicted in Fig. 5B of
19 Exhibit 1021?

20 A. The telecommunication device.

21 Q. Do you recognize that as the Nokia 9000
22 Communicator?

1 A. I believe it is.

2 Q. Are you familiar with the Nokia 9000
3 Communicator?

4 A. I am.

5 Q. And -- and have you operated a Nokia
6 9000 Communicator?

7 A. I have.

8 Q. Okay. What is number 150 in Fig. 5B?

9 A. 150 is -- well, there's two screens.
10 There's an external screen, which is 110, when the
11 device is closed, and when the device is open
12 there's a screen, 150.

13 Q. And this is the -- the screen 150 is
14 quite large, right?

15 A. Large.

16 As I recall, it was a very
17 low-resolution screen.

18 Q. So again, on a screen like this, low
19 resolution might limit the amount of information
20 that you can have, but you could still have
21 graphical information on a low-resolution screen,
22 right?

1 A. Yes. Again, very limited graphical
2 information, but it would be possible.

3 Q. And certainly, the additional space
4 afforded by the Nokia 9000 Communicator would --
5 would provide more space for graphics, right?

6 A. I'm not aware of any application that
7 actually used both screens simultaneously. Yeah.
8 One is on the opposite side of the device as the
9 other, so.

10 Q. Right.

11 A. I don't think --

12 Q. And --

13 A. -- you would -- I don't think you can
14 implement them both in the same user interface.

15 Q. Right.

16 And I'm really just talking about the
17 screen, 150. The larger screen, 150.

18 The fact that it's larger would give you
19 the ability to put more information on it, right?

20 A. Right.

21 MR. ALEXANDER: Object to form.

22 THE WITNESS: The amount of resolution

1 would determine the amount of information.

2 Q. Screen, 150, in the Nokia 9000
3 Communicator could be used for calendar and
4 e-mail, right?

5 A. I do believe there was a limited
6 calendar and limited e-mail application. You
7 know, similar to typing into a -- a large pager.

8 Q. Let's look at paragraph 349 of the
9 Ellers reference.

10 A. I have that.

11 Q. And this paragraph is referencing Fig.
12 5F, right?

13 A. Correct.

14 Q. And that is the activation of the
15 program definition button 5.0 AC.

16 And if we turn to Fig. 5F, we see the
17 existing programs that are available in the Ellers
18 system, right?

19 A. Correct.

20 Q. So on the left side of Fig. 5F we see
21 the program name and on the right side we see the
22 description of the program, right?

1 A. Correct.

2 Q. Then if you turn to Fig. 350, this
3 describes how to create a new program, right?

4 A. I'm sorry. What -- what paragraph?
5 Paragraph 350?

6 Q. Look at paragraph 350, right.

7 That shows how to program or how to
8 create a new program?

9 A. Yes, that's correct.

10 Q. And we see a description of that in
11 paragraph 351, it's referring back to Fig. 5G and
12 talks about inputting the definition in the
13 definition screen and then the description in the
14 description entry box.

15 Do you see that?

16 A. I think paragraph 351 refers to 5G.

17 Q. Right.

18 A. Right.

19 And identifies some -- some aspect --
20 some components of that screen.

21 Q. Right.

22 You can enter a program name at 558 and

1 a description at 5.60, right?

2 A. Correct.

3 Q. And looking at 5G, there's some
4 additional information that can be selected,
5 right?

6 On demand or scheduled, there's the
7 ability to put in time and date information and
8 then some additional boxes for optional override
9 and then ultimately a device type down at the
10 bottom, right?

11 A. That's correct.

12 Q. And the devices are the HVAC/STAT, water
13 heater, pool pump and hot tub and spa, right?

14 A. That's correct.

15 Q. If you go back to paragraph 355 of
16 Ellers, it's talking about those features. In the
17 second sentence it says, "In the illustrated
18 embodiment, a system, 308, includes HVAC systems,
19 water heaters, pool pump and hot tub spa." And
20 then it says, "The program may be defined to
21 include all devices or one or more types of
22 devices."

1 Do you see that?

2 A. I do.

3 Q. So with this feature you could include
4 some devices or you could include a subset of
5 devices; is that correct?

6 A. I believe that's correct.

7 Q. And you could do that for each new
8 program, right?

9 You could have one program that's for
10 the HVAC and then you could start over and do
11 another program and perhaps include the HVAC and
12 the water heater?

13 A. That would be the logical deduction from
14 that, yes.

15 Q. Okay. If we could go back now to the
16 '935 patent, Mr. Zatkovich. In particular, claim
17 12.

18 A. Okay. I see that.

19 Q. Okay. Claim 12 depends from claim 11,
20 right?

21 A. That's correct.

22 Q. Does the term "wireless connectivity

1 connection" appear in claim 11?

2 A. The term "wireless connectivity" is
3 identified in claim 11.

4 Q. Right.

5 We see a remote unit having wireless
6 connectivity, right?

7 A. Yes.

8 Q. But it does not say in claim 1 wireless
9 connectivity connection, does it?

10 A. Well, I'm assuming it refers to one of
11 the several types of wireless connectivities
12 that's defined in claim 11.

13 Q. What other wireless connectivities are
14 described in claim 11?

15 A. One would be a connection involving
16 receiving a -- a very short message service.
17 Another one would be connection involving the
18 notification of a user of the remote unit
19 receiving their first SMS message. And another
20 type of connectivity connection would be sending a
21 second SMS, wherein the second SMS message
22 includes a command.

1 Q. Okay. I think that you pointed to four
2 things. And I just want to make sure that we're
3 clear about that.

4 And so you pointed to the remote unit
5 having wireless activity, you pointed to the
6 receipt of a first short message, the notification
7 to the user and then a second SMS message; is that
8 right?

9 A. Correct, for the -- for the remote unit.
10 I see some other types of connections I
11 can make from the base unit.

12 Q. Okay. So those were examples of the
13 wireless connectivity of the remote unit and you
14 believe that there's also wireless connectivity
15 associated with the base unit; is that fair?

16 A. Yes.

17 Q. Okay. Can you tell me which of those is
18 the wireless connectivity connection in claim 12
19 referring to?

20 A. So we see that the first wireless
21 connection interfaces with the base unit which
22 theoretically could be any of those three. But

1 when you look at the next limitation, that the
2 second wireless connection is interfacing with the
3 remote unit, so -- I mean, unless they could be
4 the same, which I don't think was the intent.

5 The first wireless connection
6 interfacing with the base unit would most likely
7 be associated with receiving the environmental
8 information from the environmental device.

9 Q. So I just want to be clear.

10 You said the first wired -- wireless
11 connection interfacing with the base unit, you
12 believe that that is the wireless connection
13 receiving information from the environmental unit,
14 right?

15 A. At least that, yes.

16 Q. Okay. What else could it mean?

17 A. Well, I guess, theoretically, it could
18 be any of the other messages from the base unit to
19 the remote unit. That would be different than the
20 second wireless connection.

21 Q. Okay. So it sounds like we agree that
22 the first wireless connection interfacing with the

1 base unit, you -- you believe -- strike that.

2 Now, let's just -- let's just maybe take
3 a step back for a minute because I think we -- we
4 morphed in some respects from the wireless
5 connectivity connection to the first wireless
6 connection interfacing with the base unit.

7 So let's -- let me just go back and ask
8 you: What -- what is the wireless connectivity
9 connection? What is that? In terms of the '935
10 patent.

11 A. The wireless communication interface
12 between different components of the system.

13 Q. And does it require it to be any
14 specific component?

15 A. Well, since it depends from claim 11, it
16 would have to include either the remote units or
17 the base unit.

18 Q. Okay. Now, is that connection between
19 the remote unit and the base unit?

20 A. Not necessarily.

21 Q. Okay. So it is just generally involving
22 the connections that are capable -- strike that.

1 So it -- so they -- the wireless
2 connectivity connection just simply refers to the
3 fact that the remote unit and the base unit have
4 wireless connectivity; is that right?

5 A. I'm sorry. Could you say that again?

6 Q. Sure.

7 I understand that it's your opinion that
8 the term wireless connectivity connection is just
9 referring to the fact that the base unit and the
10 remote unit are capable of wireless connectivity;
11 is that right?

12 MR. ALEXANDER: Object to form.

13 THE WITNESS: And potentially the
14 environmental device.

15 Q. Okay. So it's your opinion that the
16 term wireless connectivity connection is just
17 generally referring to the notion that the remote
18 unit, the base unit and the environmental device
19 have the capability for wireless communication?

20 A. Yes, within the scope of claim 11.

21 Q. So what is the -- the first wireless
22 connection?

1 A. It's a wireless connection that
2 interfaces with the base unit.

3 Q. And what does that mean, it "interfaces
4 with the base unit"?

5 Is it part of the base unit or is it
6 merely interfacing with the base unit?

7 A. It connects to and communicates with the
8 base unit.

9 Q. So what -- what does that mean?

10 Is that -- is that hardware on the base
11 unit?

12 A. I would say, there's a hardware
13 component needed to do that and then some sort of
14 communication protocol.

15 Q. And is that on the base unit?

16 A. The base unit has the capability of
17 having a wireless hardware interface and
18 communication protocol to communicate.

19 Q. So let's just start with the first
20 wireless connection. Is that hardware or
21 software?

22 A. I would say, both.

1 Q. Okay. And so where is that hardware
2 component reside?

3 A. A portion would have to be in the base
4 unit and a portion would have to be in whatever
5 the base unit is communicating with.

6 Q. Okay. Got it.

7 So this first wireless connection
8 interfacing with the base unit basically describes
9 that the base unit is wirelessly communicating
10 with something; is that right?

11 A. Correct.

12 Q. Okay. Now let's look at the second
13 wireless connection interfacing with the remote
14 unit. So would you interpret that term the same,
15 so this has a hardware component associated with
16 the remote unit and that basically gives it the
17 capability to wirelessly communicate with some
18 other item in the system?

19 A. Correct.

20 Q. Okay. Now, the final limitation is a
21 non-wireless connection interfacing between the
22 first wireless connection and the second wireless

1 connection. What is a non-wireless connection?

2 A. It would be a wired connection or a
3 physical device connecting the two.

4 Q. And when you say "connecting the two,"
5 do you mean connecting the remote unit and the
6 base unit?

7 A. No. Connecting the first wireless
8 connection and the second wireless connection.

9 Q. So could that be a wired connection?
10 Strike that.

11 So could that be a wired connection
12 between the base unit and the remote unit?

13 A. Yes. Or as I mentioned, in a physical
14 device.

15 Q. What do you mean when you say "physical
16 device"?

17 A. A physical device, again, it would -- a
18 physical device itself would have a wired
19 connection internally.

20 So let's say the first wireless
21 connection represented a USB bus going from the
22 base unit to an environmental device. Okay. And

1 the second wireless connection indicated -- was a
2 USB connection going from the remote unit -- from
3 the remote unit to the base unit.

4 Q. Uh-huh.

5 A. The base unit itself has wires that
6 would potentially connect the first USB bus with
7 the second USB bus. Unfortunately -- well,
8 let's -- let's -- this -- instead of saying USB
9 bus, we'll say a Bluetooth network.

10 We have two Bluetooth networks, one
11 connected from the remote unit, one connected from
12 the device. And they are -- come together. They
13 both communicate with the base unit. And the base
14 unit can connect those two Bluetooth networks
15 within itself as a wired connection.

16 Q. Okay. Understood. So I think I
17 understand your description of physical device.

18 If we -- and then you also said that it
19 could be a wired connection, right? So that there
20 could be a wired communication pathway between the
21 base unit and the remote unit; is that correct?

22 MR. ALEXANDER: Object to form.

1 THE WITNESS: Right.

2 I mean, hypothetically speaking, we
3 could have a -- two wireless networks
4 connected by a wired repeater where the
5 repeater's is basically just relaying
6 information from the first wireless network
7 to the second wireless network to a physical
8 cable.

9 That would still be a device that you
10 would need something like an electrical
11 repeater to do that.

12 Q. Okay. Let's go to the Sears reference
13 which is Exhibit 1019.

14 (THEREUPON, Exhibit 1019 was marked for
15 identification).

16 A. I have that.

17 Q. Can you identify this document for me?

18 A. Yes. That is the prior art that we're
19 calling Sears.

20 Q. I would like to go to paragraph 004 of
21 the Sears reference.

22 A. Okay.

1 Q. I want to go to basically the last four
2 lines of that paragraph. And it says, "Java
3 technology provides a single open platform that
4 allows developers to create dynamic, personal and
5 functionality-rich applications which content
6 providers can provide and deliver to mobile
7 devices."

8 Do you agree with that characterization
9 of Java?

10 A. I -- I'm sorry. I was not caught up
11 with you. Which paragraph are we talking about?

12 Q. Yeah. Sorry. I got ahead of you.
13 So this is paragraph 4, 0004.

14 A. All right. So let's -- let me read
15 that.

16 I agree with the contents of paragraph
17 4.

18 Q. Okay. And now next let's turn to
19 paragraph 8. And paragraph 8 says that, "While
20 Java platforms may be open and allow developers to
21 create applications that are portable, dynamic and
22 personal, these key features are not the only

1 reason a Java solution is best suited for use with
2 mobile devices. Java technology also offers the
3 ability to ensure data security and to provide
4 disconnected, access-critical differentiators. A
5 Java platform is inherently secure."

6 Do you -- do you agree with that
7 characterization?

8 A. Yes. From a relative perspective, yes.

9 Q. And do -- do you agree that that would
10 apply equally to J2ME?

11 A. Yes.

12 Q. Okay. Now, if we can turn to paragraph
13 12. And this is a rather long one.

14 A. Okay.

15 Q. I'm focusing on about 13 lines in to
16 this paragraph.

17 A. Okay.

18 Q. And this one states -- so about 13 lines
19 down -- "In one embodiment the content and
20 information may be Java information; in one
21 embodiment the content and information may be
22 Java-like information; in one embodiment the

1 present invention comprises a location where the
2 contents and information may be optimized for use
3 by specific users or for use on specific mobile
4 device platforms."

5 Do you see that?

6 A. I do.

7 Q. And -- and is that disclosure consistent
8 with your understanding of the capabilities of
9 Java?

10 A. Well, it's not really describing Java
11 capability. It's describing the capability of
12 this invention, the platform of this invention.

13 Q. Right.

14 But -- and my question, I guess, then
15 really is: Is that use consistent with your
16 understanding of the capabilities of Java?

17 A. Yes. The use of Java applications on
18 this platform could be used to implement this
19 functionality.

20 Q. Okay. And that would be equally true
21 for J2ME?

22 A. Well, again, this is a public

1 distribution platform so within certain limits for
2 both Java -- limits on the types of programs for
3 Java and J2ME, yes.

4 For example, you would not -- Verizon
5 would not distribute certain software for cell
6 phones on this platform.

7 Q. Not all software, but certainly this
8 discloses that it's used on mobile platforms,
9 right?

10 A. Right, for what I would call
11 general-purpose applications.

12 Q. Let's turn to paragraph 31. And here's
13 where we see that term MIDlet.

14 A. Yes.

15 Q. Okay. And -- and we see that the J2ME
16 mobile information device profile is designed as
17 MIDP and then MIDlet says, "Applications written
18 using the MIDP framework."

19 Do you see that?

20 A. I do.

21 Q. And do you agree with the
22 characterization of paragraph 31 in Exhibit 1019?

1 A. It's describing one method of delivering
2 software. For example, using MIDlet for specific
3 types of devices. In other words, devices that
4 conform to the mobile information device profile
5 protocol.

6 Again, this would relate to
7 general-purpose applications, not necessarily
8 specific embedded applications.

9 Q. Okay.

10 MR. PLEUNE: Thank you.

11 Why don't we take a ten-minute break.

12 THE WITNESS: Okay.

13 (A recess was taken.)

14 BY MR. PLEUNE:

15 Q. I want to go back to claim 12 for a
16 minute. I want to just make sure I understand
17 your interpretation. So certainly, grab claim 12
18 of the '935 patent.

19 A. Okay.

20 Q. And I want to understand your -- the --
21 the repeater example that you gave me. And -- and
22 let me maybe try to characterize it and see if I

1 do it correctly; if not, certainly correct me.

2 My understanding was that, what you said
3 was that this could potentially be a connection
4 between the remote unit and the base unit with a
5 wired repeater in between. Is that right?

6 So you would have the wireless remote
7 unit communicating with the repeater, the wired
8 connection to another repeater and then a wireless
9 connection to the base unit; is that correct?

10 A. No.

11 Q. Okay. Why don't you -- why don't you
12 try and explain that to me again.

13 A. So the first wireless connection has to
14 have the base unit on at least one end of it.

15 Q. Uh-huh.

16 A. The second wireless connection has to
17 have the remote unit on one end of it. The
18 non-wireless connection has to connect those two.

19 So one example of the first wireless
20 connection would be from an environmental device
21 to the base unit. An example of the second
22 wireless connection would be between the remote

1 unit and the base unit. Okay. But that would not
2 allow the remote unit -- for example, the remote
3 unit is not on the same wireless connection as the
4 environmental device. You would have to place
5 something in between in order to place them in
6 some sort of connectivity. That could be done by
7 creating a repeater between the connection between
8 the base unit and the remote -- remote unit and
9 the environmental device and the base unit.

10 They would both be connected to the base
11 unit, but they would not be connected to each
12 other. So you could have the cable repeater
13 between the two.

14 Q. And in the case of the connection
15 between the remote unit and the base unit, could
16 that be, for example, the -- the cellular network,
17 the wired connection that exists in cellular
18 network?

19 A. I'm sorry. What was -- the example for
20 what?

21 Q. So, you know, you might have a base unit
22 connected wirelessly to a router in the home and

1 you have a remote unit connected to a cell phone
2 tower, but then in between those two connections,
3 if you will, there would certainly be the -- the
4 mobile telephone network that would have wires.
5 And it sounds like that would apply to your
6 example.

7 MR. ALEXANDER: Object to form.

8 THE WITNESS: I'm trying to figure out
9 how that would work.

10 All right. So let's walk through this.

11 So -- so do we -- we have a base unit or
12 -- are you using my same example but instead
13 of the repeater we're -- we're doing
14 something else, right?

15 Q. Yeah, essentially.

16 A. Okay.

17 Q. Essentially. So I'm using your --

18 A. Okay.

19 Q. -- your same example that we have; the
20 base unit connected to the environmental unit and
21 then we're on the side of the base unit and the
22 remote unit.

1 A. Right.

2 So the base unit and the environmental
3 device, for example, could be connected via WiFi.

4 Q. Sure.

5 A. The remote unit and the base unit could
6 be connected via cellular network.

7 Q. Uh-huh.

8 A. Okay. So what are you proposing as
9 the -- the non-wireless connection?

10 Q. So the base unit would be connected to,
11 for example, a router in the home and the remote
12 unit would be connected to the mobile telephone
13 network.

14 A. Okay.

15 And how would wireless --

16 Q. Therefore --

17 A. -- and how would the wireless --

18 Q. Go ahead.

19 A. -- router be connected to the cellular
20 net work?

21 Q. Well, it would be connected to the
22 internet. And then the remote unit from -- from

1 the tower to the internet connection in the home.

2 A. Okay.

3 MS. LEWIS: Objection, form, scope.

4 THE WITNESS: Let me -- let me think
5 through that a second.

6 In that case, the base unit and the
7 environmental device would be connected to
8 the same WiFi wireless network. So there
9 would not --

10 Q. Potentially.

11 A. -- be two wireless -- there would not be
12 two different wireless connections.

13 Q. So essentially -- well, what if it was
14 the case where the base unit was connected to the
15 environmental device via Bluetooth --

16 A. Uh-huh.

17 Q. -- and then the base unit was connected
18 to the router via wireless and then from there
19 there are wired connections that ultimately go to
20 the remote unit that's a wireless connection to a
21 cellular phone.

22 MR. ALEXANDER: Objection, scope.

1 THE WITNESS: You are saying because
2 there are incidental wires in some of the
3 wireless connections, that that would be the
4 non-wireless connection. And I -- I don't
5 believe that's correct. I don't believe
6 that's the way that claim would be
7 interpreted.

8 They're -- they're talking about a type
9 of -- a type of connection, a type of
10 communication. So, for example, a -- a
11 router creating a -- a WiFi network, because
12 the router has wires in it doesn't mean it's
13 a non-wireless connection.

14 Q. But those -- that communication would
15 travel via wires at some point, right?

16 MR. ALEXANDER: Object to form.

17 THE WITNESS: That's what I'm saying,
18 having incidental wires within a -- within a
19 point-to-point communication does not make it
20 a non-wireless connection.

21 Again, when -- when I -- when I
22 communicated with my cell phone through the

1 wireless -- through the cellular network,
2 that gets relayed, okay, from the wired -- a
3 cell phone wire and that goes to wires and it
4 ends up in a central office switch. Okay.
5 Those are wires. That is still a wireless
6 connection. It is a wireless network
7 interface.

8 Q. And those wires are incidental but,
9 nevertheless, that is the communication traveling
10 via the wire, right?

11 MR. ALEXANDER: Objection, scope.

12 THE WITNESS: Well, in that case then
13 there is no such thing as a wireless
14 connection. Every wireless connection that
15 exists on the planet would have incidental
16 wires associated with it.

17 Q. Okay. Let's turn to the Menard
18 reference which is Exhibit 1020.

19
20 (THEREUPON, Exhibit 1020 was marked for
21 identification).

22 THE WITNESS: I have that.

1 Q. Can you identify Exhibit 1020 for me?

2 A. 1020 is what this matter's referring to
3 as the Menard prior art.

4 Q. And Menard discloses an alarm system; is
5 that correct?

6 A. Menard discloses a -- a system which
7 contains alarms, yes.

8 Q. Okay. And the alarm system is in a
9 home, right?

10 A. Well, it describes a central monitoring
11 system which is not in the homes. The home itself
12 contains, you know, Menard alarm sensors.

13 Q. So I want to turn to paragraph 18 that
14 discusses embodiments of the Menard patent.

15 A. Which paragraph?

16 Q. Paragraph 18, 0018.

17 A. Okay.

18 Q. And --

19 A. Okay.

20 Q. -- at 18 we see that the Menard
21 reference states that "in some cases the alarm
22 signal is monitored by a central station. For

1 example, a fire alarm signal may be communicated
2 to a central station for further dispatch to a
3 fire department or other emergency personnel. In
4 one embodiment, the alarm signal communicated to a
5 central monitoring station or location via wire or
6 wireless technology."

7 Do you see that?

8 A. I do.

9 Q. And it goes on to say, "One embodiment
10 the alarm signal is communicated directly or
11 indirectly from the alarm system to a responsible
12 party."

13 Do you see that?

14 A. I do.

15 Q. So the alarm system is communicated to a
16 responsible party. And that is abbreviated RP in
17 the Menard reference, Exhibit 1020, right?

18 A. Correct.

19 Q. And a responsible party could be, for
20 example, a person that lives in the home that is
21 being monitored by the security system, right?

22 A. Yes.

1 Q. And an RP could also be a neighbor or a
2 relative; is that correct?

3 A. That's correct.

4 Q. So we saw that it says "directly or
5 indirectly." What does it mean that the alarm
6 system is communicated directly to a responsible
7 party?

8 A. I don't know.

9 Q. Okay. And -- and is that the same for
10 indirectly, do you not have any knowledge of what
11 it means for the alarm signal to be communicated
12 indirectly to a responsible party?

13 A. Again, directly and indirectly can have
14 many different meanings.

15 They don't -- they're not very clear
16 exactly what they mean by directly or indirectly.

17 Q. Could directly mean that the alarm
18 system is communicating directly with the
19 responsible party without any other intervening
20 devices?

21 A. Yes, that would be one interpretation.

22 Q. Okay. And could indirectly mean that

1 there are intervening devices?

2 A. Intervening devices or intervening
3 persons.

4 Q. Now I'd like to turn to paragraph 19.
5 Paragraph 19 states, "In one embodiment an RP is
6 notified of an alarm event or condition for the
7 purpose of seeking verification of the alarm or
8 cancellation of the planned response to the
9 alarm."

10 Right?

11 A. Correct.

12 Q. So here we see that the alarm system can
13 notify the responsible party about the alarm,
14 event or condition, right?

15 A. Correct.

16 It would be a notification as opposed
17 to, for example, a command.

18 Q. And -- and then the responsible person
19 can respond by verifying or canceling the alarm,
20 right?

21 A. I'm sorry. Could you say that again?

22 Q. So the responsible party can respond by

1 verifying or canceling the alarm, right?

2 A. I'm -- can you -- can you hear me all
3 right?

4 Q. Yeah.

5 A. I lost the monitor. Let me -- I'm
6 getting notifications on my computer. I adjusted
7 the volume, but I think I adjusted it too low.
8 Hang on -- hang on one second. Let me just turn
9 off my e-mail.

10 All right. Can you say something?

11 Q. Yes. Can you hear me?

12 A. Yes, I can.

13 Could you repeat the last question
14 again?

15 Q. So the last question was the responsible
16 party can respond by verifying or canceling the
17 alarm?

18 A. Correct.

19 Q. Okay. If you turn to paragraph 24, you
20 see two embodiments disclosed in 24. And the
21 first says, "In one embodiment the notification to
22 the responsible party is a one-way message with no

1 expectation ever applied."

2 Do you see that?

3 A. I do.

4 Q. Okay. And then it says, "In one
5 embodiment the notification is forwarded to the
6 responsible party as a two-way message and
7 includes a request for a response from the -- the
8 responsible party. Their presence is determined
9 if a reply or a response is requested and
10 presented to a dispatcher as needed."

11 Do you see that?

12 A. I do.

13 Q. So here the responsible party is
14 notified of an alarm condition and requests a
15 response, right?

16 A. That's correct.

17 Q. And then a system determines, a reply
18 response is requested by the responsible party and
19 then the system presents it to a dispatcher; is
20 that right?

21 A. That's correct.

22 Q. Now, Mr. Zatkovich, I'd like to go to

1 paragraph 39 of your Declaration.

2 A. The one with the top of
3 Microcontrollers?

4 Q. That's correct.

5 A. Okay.

6 Q. In paragraph 39, you refer to an Intel
7 8042 microcontroller, right?

8 A. I do.

9 Q. And then at the bottom of page 17 you
10 state that, "A microcontroller with similar
11 function is shown below."

12 Right?

13 A. I do.

14 Q. And then you include a photograph in
15 your Declaration; is that right?

16 A. Yes.

17 Q. Where did the photograph come from?

18 A. Are -- are you asking me what -- what
19 was the source of that photograph?

20 Q. Right.

21 A. I'm assuming it came from the
22 publication listed in the footnote, the Logitech

1 review.

2 Q. Okay. Understood.

3 And so let's start -- we'll -- I'll go
4 to that next. Let's look at the photograph for a
5 minute because I do want to connect the dots.

6 A. Uh-huh.

7 Q. In the photograph we do see, in the
8 middle of the image it says RMSTM32L100RATG,
9 right?

10 A. Right.

11 Q. And is that identification of the
12 microcontroller in the photograph?

13 A. Correct.

14 Q. Okay.

15 A. I'm sorry. What -- what was the
16 question again?

17 Q. So I read from the photograph in your
18 Declaration, RMSTM32L100RATG. And my question
19 was: Is that the identification of the
20 microcontroller in that photograph?

21 A. I believe it is.

22 And I believe that had similar function

1 to an Intel 8042.

2 Q. Okay. And so let's go to Exhibit 2009
3 which, as you pointed out, is identified in
4 footnote 3 of your report.

5 A. Okay.

6 (THEREUPON, Exhibit 2009 was marked for
7 identification).

8 Q. I think you can open up Exhibit 2009.

9 A. I have that opened. I don't see a
10 picture of the chip.

11 Q. I don't see a picture of the chip, but I
12 do see a description of 32-bit RMSTM32L100RATG
13 MCU.

14 Do you see that?

15 A. Where is that? Is that on the first --
16 there's three pages.

17 Q. I think it might be in the middle of the
18 second page.

19 A. Okay.

20 Actually, I think I can search on this.

21 Q. Yeah, the middle of the second page of
22 Exhibit 2009.

1 A. Yes, I see it.

2 Q. Okay. And so you -- and -- and is that
3 the same microcontroller that you were referring
4 to in the photograph that appears in paragraph 39
5 of your Declaration for the '935 patent?

6 A. Let me do a quick check.

7 Yes.

8 Q. Okay. And in Exhibit 2009 MCU stands
9 for microcontroller?

10 A. I think it's just a designation, a part
11 designation.

12 Q. MCU stands for microcontroller, right,
13 Mr. Zatkovich?

14 A. I guess, it could.

15 Right here it's being used as a part
16 designation.

17 Q. Okay. But you understand that MCU is
18 sometimes a -- an acronym for microcontroller
19 unit?

20 A. I don't specifically. I -- I have not
21 used that acronym myself.

22 MR. PLEUNE: Why don't we take a

1 ten-minute break.

2 THE WITNESS: Okay.

3 (A recess was taken).

4 MR. PLEUNE: All right. Sorry; that
5 break took a little bit longer than we
6 expected, but we just wanted to look and see
7 if there was anything else.

8 So I think we're done for today and
9 we'll plan to start back tomorrow.

10 MR. ALEXANDER: Okay. So just to make
11 sure I understand, you're completing on the
12 '935 is what you're saying?

13 MR. PLEUNE: That's right.

14 MR. ALEXANDER: Okay. Well, so --

15 MR. PLEUNE: Of course, subject to --
16 subject to our agreement that we can use
17 anything today in the '655, anything tomorrow
18 in the '935.

19 MR. ALEXANDER: Correct, to the extent
20 there's an overlap, right, just like we did
21 with Dr. Jeffay.

22 I guess what I mean is, you won't be

1 revisiting -- I'm just asking, you're done
2 with Dr. -- I mean Mr. Zatkovich '935
3 deposition, correct?

4 MR. PLEUNE: That's right.

5 MR. ALEXANDER: Okay. And really what I
6 was asking you is -- I guess I didn't know
7 you were finishing, so I guess I would like
8 -- even though we just had a break, I would
9 like a short break to make sure there is
10 nothing I would like to follow up on. So if
11 you can give me, you know, five or ten
12 minutes just for that.

13 MR. PLEUNE: Yep. That sounds good.

14 MR. ALEXANDER: Okay. Thanks.

15 (A recess was taken).

16 MR. ALEXANDER: Nothing from me. So I
17 guess we're completed for the day.

18 MR. PLEUNE: Okay. That sounds good.

19 AND FURTHER THIS DEPONENT SAITH NOT.

20 SIGNATURE RIGHTS RESERVED.

21 (Deposition concluded)

22 * * * * *

1 C E R T I F I C A T E

2 I, April Reid, Court Reporter and Notary
3 Public in and for the State of North Carolina,
4 do hereby certify:

5 That IVAN PETER ZATKOVICH, the witness whose
6 deposition is hereinbefore set forth, was
7 duly sworn by me before the commencement of such
8 deposition and that such deposition was taken
9 before me and is a true record of the testimony
10 of such witness.

11 I further certify that the adverse party,
12 UBIQUITOUS CONNECTIVITY, LP, was represented by
13 counsel at the deposition.

14 I further certify that the deposition of IVAN
15 PETER ZATKOVICH, occurred virtually via mobile
16 videoconference on Tuesday, July 7, 2020,
17 commencing at 9:09 a.m. to 3:49 p.m.

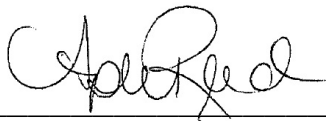
18 I further certify the inspection, reading
19 and signing of said deposition were not waived by
20 counsel for the respective parties and by the
21 witness.

22

1 I further certify that I am not related to
2 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 way
5 interested, financially or otherwise, in the outcome
6 of this matter.

7
8 IN WITNESS WHEREOF, I have hereunto set my
9 hand this 17th day of July, 2020.

10
11 My commission expires:
12 March 4, 2025

13
14 
15 _____

16 NOTARY PUBLIC IN AND FOR THE
17 STATE OF NORTH CAROLINA
18 Notary Registration No. 20012210079
19
20
21
22

A			
aaa	75:14, 76:2,	accomplished	actually
40:2, 52:17	76:6, 76:16,	139:19	13:1, 13:5,
abbreviated	88:9, 90:10,	according	16:10, 23:5,
214:16	103:12, 113:12,	103:18, 132:5	23:17, 26:14,
abilities	113:13, 113:14,	accordingly	38:19, 47:5,
175:17	113:15, 113:20,	34:17	62:3, 68:2,
ability	121:3, 123:14,	account	69:15, 101:14,
20:6, 36:20,	123:18, 137:5,	37:14, 50:19	129:19, 146:5,
63:16, 63:19,	141:22, 154:14,	accounts	147:20, 149:20,
64:1, 65:13,	156:1, 157:6,	27:18, 52:9	156:14, 159:5,
66:11, 67:7,	158:20, 165:14,	accurate	163:16, 167:9,
99:7, 114:19,	168:7, 178:13,	47:13, 125:12,	181:15, 186:7,
119:5, 150:21,	181:12, 186:16,	164:8, 164:18,	221:20
177:19, 177:21,	188:12, 189:16,	180:2	actuator
186:19, 189:7,	192:3, 201:11,	accurately	62:12, 72:20
202:3	202:15, 202:18,	20:14	adam
able	211:8, 216:13	achieve	3:4
30:2, 37:13,	absolutely	105:12	add
62:3, 89:7,	159:8	acknowledgment	123:12, 135:8
105:12, 141:21,	abstract	148:9	added
143:8, 144:18,	70:20, 71:1	acme-branded	37:18, 53:20,
173:13, 173:16,	ac	51:20	149:8, 149:22,
173:18, 174:18,	181:19, 182:10,	acronym	160:19
176:6, 177:2,	187:15	222:18, 222:21	addition
177:5	academic	acting	111:12, 129:1
about	24:18	45:16	additional
9:2, 9:4, 10:7,	acc	action	48:4, 111:15,
12:1, 12:12,	47:13	76:13, 93:21,	111:17, 113:5,
14:22, 16:1,	accept	94:4, 94:7,	113:10, 113:18,
16:2, 16:7,	126:12	94:10, 94:12,	113:22, 114:5,
16:8, 16:9,	accepted	94:20, 94:22,	114:10, 114:12,
16:16, 16:18,	94:16	95:5, 95:6,	116:21, 117:1,
16:20, 16:21,	access	95:9, 226:2,	123:12, 133:9,
17:3, 17:17,	19:1, 32:21,	226:4	135:10, 169:12,
17:19, 17:21,	35:22, 52:9,	actions	181:8, 186:3,
18:11, 22:1,	68:1, 96:21,	116:21, 117:1,	189:4, 189:8
23:10, 33:5,	97:6, 97:13,	117:2	address
36:13, 43:19,	123:15, 133:11,	activated	7:22, 8:2,
45:13, 47:8,	172:6, 182:9,	170:4	11:14, 73:3,
48:16, 52:5,	183:2, 183:19,	activation	144:8, 145:5,
52:17, 53:1,	184:4	187:14	150:3, 150:7,
53:3, 54:22,	access-critical	activity	159:6
62:16, 63:2,	202:4	57:7, 192:5	addresses
63:11, 63:16,	accessed	actors	73:1
64:3, 68:3,	37:9, 142:17	10:1	addressing
68:18, 74:7,	accessible	actual	100:14, 140:6,
	97:5	62:3, 63:1,	141:14, 141:17,
	accomplish	179:18	141:18, 142:1,
	165:20		

<p>145:11, 146:11, 146:19, 149:13, 150:3, 150:7, 150:11 adhere 105:13 adjusted 217:6, 217:7 adopt 91:6 advance 5:21, 60:10, 82:18 advantageously 95:17, 100:6 adverse 225:11 advisor 55:4 advisors 55:8, 55:9, 55:15, 56:5, 56:15, 58:11 aerospace 39:1 afforded 186:4 after 6:5, 10:11, 22:1, 23:2, 115:21, 180:17 again 14:17, 14:19, 16:22, 17:17, 27:8, 31:6, 39:6, 39:15, 40:21, 44:9, 51:10, 60:18, 68:10, 68:17, 68:20, 69:11, 69:16, 70:4, 70:10, 70:20, 74:17, 82:4, 87:6, 89:22, 92:2, 99:2, 104:17, 106:12, 110:7, 111:1, 118:14, 118:20,</p>	<p>125:19, 126:19, 127:17, 130:20, 131:21, 131:22, 134:2, 134:17, 135:6, 138:3, 142:5, 143:4, 144:17, 144:19, 145:10, 145:12, 145:18, 150:22, 151:9, 151:20, 165:8, 165:19, 173:11, 174:12, 176:12, 177:7, 177:13, 178:9, 179:3, 183:1, 185:18, 186:1, 195:5, 198:17, 203:22, 205:6, 206:12, 211:21, 215:13, 216:21, 217:14, 220:16 ago 7:14, 52:13, 52:15 agree 66:2, 66:19, 67:18, 90:5, 95:7, 104:13, 104:18, 105:3, 106:18, 107:12, 121:21, 136:2, 137:17, 166:8, 166:10, 172:1, 172:11, 175:5, 180:6, 193:21, 201:8, 201:16, 202:6, 202:9, 204:21 agreed 7:3, 7:5, 7:11, 82:17, 82:19, 159:9 agreement 223:16 ah 54:13 ahead 53:11, 130:3,</p>	<p>147:19, 201:12, 209:18 aid 16:16 air 63:20 alarm 137:18, 213:4, 213:8, 213:12, 213:21, 214:1, 214:4, 214:10, 214:11, 214:15, 215:5, 215:11, 215:17, 216:6, 216:7, 216:9, 216:12, 216:13, 216:19, 217:1, 217:17, 218:14 alarms 213:7 alcatel's 43:11 alcatel-lucent 43:10, 43:17, 50:10 alexander 3:12, 7:18, 10:19, 11:16, 22:5, 39:11, 53:14, 65:11, 68:16, 70:19, 76:17, 77:4, 77:21, 77:22, 78:5, 98:10, 100:13, 104:22, 105:7, 106:5, 109:15, 121:10, 127:3, 127:10, 136:12, 158:3, 158:11, 158:14, 158:16, 158:19, 159:10, 165:2, 177:1, 177:14, 186:21, 195:12, 199:22, 208:7, 210:22, 211:16, 212:11, 223:10, 223:14, 223:19,</p>	<p>224:5, 224:14, 224:16 algorithms 90:14 all 2:7, 7:5, 7:15, 16:20, 18:4, 22:7, 40:4, 48:7, 48:10, 52:18, 72:7, 79:20, 92:1, 94:15, 100:22, 107:4, 109:4, 113:17, 122:18, 123:8, 124:21, 127:4, 128:14, 133:3, 134:14, 137:1, 143:18, 144:5, 158:15, 158:16, 164:16, 171:2, 171:3, 172:19, 178:1, 178:17, 178:22, 189:21, 201:14, 204:7, 208:10, 217:2, 217:10, 223:4 allow 18:21, 52:8, 69:4, 70:8, 108:2, 201:20, 207:2 allowed 68:11 allowing 115:20 allows 99:6, 140:6, 140:7, 201:4 almost 36:11, 71:19, 89:18, 180:7 alpharetta 3:15 already 20:12, 52:22, 54:22, 75:7, 111:22</p>
--	---	--	--

<p>also 3:18, 11:3, 11:6, 11:8, 14:9, 19:15, 20:17, 27:2, 37:2, 41:15, 42:3, 42:6, 53:7, 54:12, 61:17, 66:11, 70:1, 77:17, 81:15, 90:2, 101:19, 106:7, 107:2, 109:20, 112:16, 118:4, 121:8, 122:3, 125:12, 127:22, 128:16, 129:8, 130:16, 133:13, 133:14, 134:20, 138:2, 138:4, 138:10, 139:1, 153:15, 154:6, 163:6, 169:4, 183:18, 192:14, 199:18, 202:2, 215:1 alston 3:6, 6:10 although 20:10, 136:1, 152:11 altogether 176:10 always 103:16, 103:21, 108:12, 119:17, 120:21, 121:2, 121:4, 121:22, 131:2, 131:7, 131:8, 131:12, 131:13, 131:15 america 52:14 american 58:6 americanconcierge 42:17, 57:11, 57:13</p>	<p>among 99:5 amount 134:4, 177:21, 178:10, 180:21, 181:17, 185:19, 186:22, 187:1 analog 62:20, 135:8, 135:10 analysis 45:5, 50:6, 59:8, 75:9, 79:8, 80:11, 81:16, 93:2, 99:21 analyze 53:6, 56:1 analyzing 44:20 another 11:14, 19:2, 28:18, 29:16, 35:4, 42:14, 45:6, 47:15, 62:6, 67:14, 70:3, 91:11, 115:3, 140:4, 141:12, 143:11, 145:21, 146:3, 159:5, 162:9, 172:5, 183:7, 190:11, 191:17, 191:19, 206:8 answer 20:5, 21:7, 21:13, 107:3 answering 21:2 answers 20:15, 115:1 antenna 133:3 anticipate 5:5 antilla 4:17, 184:16, 184:17</p>	<p>any 5:8, 5:21, 8:9, 9:10, 10:8, 12:5, 12:10, 12:14, 14:5, 14:20, 15:19, 16:15, 16:18, 16:20, 18:22, 20:11, 21:12, 28:3, 30:8, 31:11, 33:16, 34:14, 35:12, 44:22, 46:16, 50:5, 56:4, 56:6, 67:21, 68:6, 68:10, 69:3, 69:13, 70:21, 75:6, 75:9, 76:15, 77:9, 78:4, 80:17, 87:3, 90:14, 90:15, 91:8, 96:12, 102:13, 107:16, 108:9, 108:15, 109:9, 109:13, 109:17, 110:18, 111:14, 113:4, 113:18, 113:21, 114:9, 114:12, 114:16, 114:17, 116:21, 119:13, 121:11, 122:20, 126:2, 130:20, 155:6, 155:20, 156:10, 157:11, 164:6, 169:12, 172:17, 173:11, 175:21, 186:6, 192:22, 193:18, 194:13, 215:10, 215:19, 226:2, 226:3 anybody 165:8 anyone 76:2 anything 14:1, 14:3,</p>	<p>14:12, 18:10, 36:6, 70:12, 78:10, 85:7, 89:13, 112:3, 115:14, 134:8, 157:5, 170:12, 223:7, 223:17 anywhere 42:11, 49:13, 83:10, 83:19 apa 19:13 api 18:18, 37:17, 68:10, 69:3, 69:13, 70:9 apis 18:1, 18:6, 18:11, 18:22, 19:13, 68:1 apologize 5:21, 60:10, 60:18 app 4:12, 11:20, 112:1 appeal 1:3 appear 191:1 appearances 3:1 appearing 2:7 appears 25:5, 28:22, 87:13, 222:4 applet 169:9, 169:14, 170:1 applets 169:17 appliance 65:18, 65:22, 73:4, 73:5 appliances 65:14 applicant 95:1, 95:16</p>
--	--	---	---

<p>application 18:22, 34:7, 34:16, 37:4, 37:5, 37:6, 37:9, 37:13, 67:15, 68:21, 69:2, 92:8, 92:9, 92:13, 92:15, 94:14, 100:15, 112:1, 133:8, 135:11, 135:15, 135:19, 140:16, 142:11, 142:16, 143:9, 143:18, 145:1, 145:3, 145:11, 146:13, 150:2, 150:7, 168:18, 169:15, 186:6, 187:6</p> <p>application-specific 111:18, 112:7, 112:14, 113:9, 114:8, 114:15</p> <p>applications 36:21, 38:11, 64:9, 90:15, 91:3, 93:22, 166:20, 166:22, 167:1, 167:12, 168:10, 169:19, 201:5, 201:21, 203:17, 204:11, 204:17, 205:7, 205:8</p> <p>applications-specific 113:2, 116:7</p> <p>applied 218:1</p> <p>apply 202:10, 208:5</p> <p>appreciate 11:17</p> <p>appropriate 80:12, 164:22</p> <p>approximately 8:8, 56:17,</p>	<p>60:14, 77:6, 77:7, 78:2, 79:16, 83:2</p> <p>april 1:22, 2:3, 225:2</p> <p>area 43:12, 87:12, 87:17</p> <p>areas 44:1</p> <p>aren't 108:4</p> <p>arguments 80:8</p> <p>around 26:12, 50:8, 59:19, 61:2, 81:8, 95:8</p> <p>art 4:16, 4:17, 4:18, 4:19, 36:4, 59:6, 75:3, 84:7, 86:5, 86:11, 86:14, 88:22, 90:4, 91:8, 95:3, 99:10, 119:12, 133:19, 162:18, 163:3, 163:9, 177:8, 179:3, 184:17, 200:18, 213:3</p> <p>article 23:15, 23:22, 24:7, 24:20</p> <p>ascribed 157:1</p> <p>aside 10:12, 12:11, 12:18, 75:17, 123:15, 166:14</p> <p>asked 10:22, 59:4, 105:18, 151:5, 158:20</p> <p>asking 6:11, 113:18,</p>	<p>113:21, 219:18, 224:1, 224:6</p> <p>aspect 41:3, 142:7, 188:19</p> <p>aspects 139:17, 140:2, 172:13, 175:1</p> <p>assembled 170:9</p> <p>asset 56:8</p> <p>assign 29:17</p> <p>assistance 79:21, 80:2</p> <p>assistant 36:3, 172:8, 173:2, 183:21</p> <p>associated 51:22, 73:13, 85:19, 86:2, 93:22, 118:3, 182:11, 182:12, 192:15, 193:7, 197:15, 212:16</p> <p>assume 21:7, 75:10</p> <p>assuming 68:1, 83:7, 130:16, 145:12, 147:22, 148:17, 191:10, 219:21</p> <p>assumption 144:17, 152:22, 154:9</p> <p>at&t 43:10</p> <p>attach 30:2</p> <p>attached 72:14</p> <p>attaches 142:18</p> <p>attempt 165:11</p> <p>attempted 7:6</p>	<p>attending 5:4, 5:15</p> <p>attorney 44:16, 226:3</p> <p>attorneys 46:14, 76:15, 76:19</p> <p>attributable 116:21</p> <p>attribute 113:4</p> <p>attributed 114:11</p> <p>audio-video 6:13</p> <p>audit 42:20</p> <p>author 97:19, 98:1, 99:2, 99:14</p> <p>automated 28:7, 28:10, 29:17, 39:16, 74:3, 137:22</p> <p>automatically 50:17</p> <p>automating 90:15</p> <p>automation 29:9, 29:12, 58:3, 81:15, 90:17</p> <p>available 19:13, 31:4, 32:1, 40:18, 64:4, 69:4, 89:9, 90:22, 95:20, 96:17, 96:20, 97:5, 97:12, 97:13, 97:17, 167:16, 169:4, 176:2, 187:17</p> <p>average 180:1</p> <p>aware 5:7, 12:2, 15:19, 31:10,</p>
--	--	--	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

231

31:11, 68:5, 68:10, 69:3, 69:5, 69:7, 69:13, 75:19, 90:7, 108:15, 126:2, 130:20, 131:3, 149:4, 161:12, 170:11, 172:17, 186:6 away 5:9, 152:4	133:19, 180:13, 181:1 basically 30:4, 37:15, 71:9, 77:15, 80:8, 116:1, 146:9, 148:10, 197:8, 197:16, 200:5, 201:1 basis 65:21, 81:2, 90:14, 164:6 because 46:7, 48:20, 71:20, 73:2, 94:2, 98:2, 99:4, 124:22, 135:9, 153:8, 153:12, 154:9, 165:19, 184:10, 194:3, 211:1, 211:11, 220:5 been 6:5, 8:4, 15:20, 31:19, 42:9, 42:11, 46:4, 57:17, 68:7, 82:8, 149:4, 149:6, 149:21, 158:5, 159:16, 173:18, 175:12 before 1:3, 2:3, 5:16, 6:22, 8:5, 9:11, 9:14, 10:20, 11:20, 20:22, 21:1, 21:14, 52:13, 56:18, 57:10, 133:6, 158:19, 161:13, 167:17, 169:4, 225:7, 225:9 began 23:5, 26:9, 30:16 beginning 23:7, 47:15,	141:1 begins 142:15 behalf 53:17, 58:22 being 32:10, 41:6, 59:11, 73:5, 114:11, 120:5, 141:21, 164:21, 214:21, 222:15 believe 9:22, 11:8, 13:8, 14:15, 16:19, 17:17, 19:15, 23:17, 24:5, 25:2, 25:5, 31:17, 47:6, 60:13, 63:18, 75:8, 78:14, 83:14, 83:18, 87:11, 91:9, 92:15, 97:19, 99:17, 105:8, 105:15, 106:14, 107:4, 107:8, 108:22, 114:2, 144:2, 149:1, 150:13, 153:2, 154:6, 160:8, 163:13, 164:20, 165:3, 165:15, 167:18, 171:10, 172:13, 173:20, 179:10, 180:2, 185:1, 187:5, 190:6, 192:14, 193:12, 194:1, 211:5, 220:21, 220:22 bell 26:10, 43:10 bellsouth 26:11, 26:16 below 45:3, 219:11 ben 6:10, 10:19,	22:5, 158:19 benjamin 3:3 best 20:6, 202:1 better 6:19, 6:20 between 27:20, 30:10, 32:7, 49:11, 68:4, 68:15, 70:17, 89:2, 96:6, 142:6, 146:4, 146:5, 148:8, 153:1, 164:15, 167:15, 176:1, 194:12, 194:18, 197:21, 198:12, 199:20, 206:4, 206:5, 206:22, 207:5, 207:7, 207:13, 207:15, 208:2 beyond 82:6 binary 66:11, 66:13 bird 3:6, 6:11 bit 6:18, 6:20, 128:6, 128:7, 135:22, 150:7, 221:12, 223:5 black-and-white 36:17 bladders 61:20 blood 226:2 blue 30:13, 134:15 bluetooth 134:12, 134:17, 199:9, 199:10, 199:14, 210:15 board 1:3
---	--	---	--

boilerplate 80:14 book 25:15, 25:16 both 7:13, 13:7, 27:14, 34:9, 41:6, 66:19, 72:4, 74:22, 86:22, 123:10, 146:17, 162:7, 176:1, 186:7, 186:14, 196:22, 199:13, 204:2, 207:10 bottom 93:6, 97:8, 98:16, 98:17, 99:12, 148:16, 189:10, 219:9 box 188:14 boxes 120:10, 120:15, 189:8 branch 26:5, 26:6, 26:19 brand 51:18 break 11:15, 21:12, 21:14, 53:12, 100:18, 158:8, 158:10, 205:11, 223:1, 223:5, 224:8, 224:9 breakdown 49:17 briefly 54:22, 88:8, 136:10 bring 69:15 broad 87:9, 87:12, 87:21 broader 95:19, 96:16	broken 6:15 browser 169:18, 169:20 bs 23:3 buffer 108:1 building 137:8 bullet 43:9, 45:2 bullets 42:18, 45:9 burned 112:2, 113:3, 115:19, 117:19 bus 198:21, 199:6, 199:7, 199:9 business 8:1, 38:20, 38:21, 51:17, 90:15, 90:16, 166:22 button 187:15 buttons 37:2 bypass 140:8, 140:15, 141:19 byte 22:18, 23:16, 25:1	204:10 called 6:4, 6:10, 24:1, 24:16, 24:18, 61:20, 96:2, 168:8 calling 146:14, 200:19 calls 27:10, 164:17 came 219:21 can't 57:8, 58:8, 70:12, 112:3, 124:19, 125:9, 134:10, 146:10 canceled 216:19, 217:1, 217:16 cancellation 216:8 cannot 107:19 cap 64:21, 65:3, 66:1 capabilities 203:8, 203:16 capability 18:16, 67:1, 67:4, 69:6, 69:7, 113:13, 113:20, 114:12, 139:12, 175:7, 195:19, 196:16, 197:17, 203:11 capable 104:14, 104:19, 105:4, 106:2, 106:19, 107:9, 194:22, 195:10 capital 50:13, 50:14, 51:18, 51:19, 51:20, 51:21 captured 144:22	card 51:18, 52:1 cards 51:20 carolina 2:4, 225:3, 226:17 carr 57:19 carried 113:22 carrying 142:3 carve 43:19 case 1:12, 8:15, 8:18, 8:20, 9:3, 9:8, 9:11, 9:15, 10:5, 11:11, 11:21, 12:3, 14:2, 14:14, 33:12, 46:12, 47:18, 47:22, 48:2, 48:4, 57:5, 60:3, 65:16, 79:1, 85:10, 85:16, 93:2, 99:22, 107:22, 110:13, 117:17, 120:3, 130:14, 207:14, 210:6, 210:14, 212:12 cases 8:9, 8:12, 9:21, 46:5, 46:7, 46:13, 46:17, 46:21, 47:4, 47:9, 48:4, 48:7, 48:11, 48:12, 48:14, 48:16, 48:18, 48:22, 49:2, 49:5, 50:16, 63:7, 80:10, 80:13, 94:15, 132:19,
---	--	---	--

161:15, 173:4, 213:21 caught 201:10 cds 38:6 cell 9:6, 18:18, 18:20, 18:21, 19:18, 27:17, 27:18, 27:21, 66:22, 67:3, 67:8, 67:11, 67:16, 68:19, 68:21, 69:3, 69:14, 69:17, 69:19, 70:5, 143:3, 143:7, 145:12, 173:10, 176:8, 177:4, 177:10, 178:12, 180:1, 204:5, 208:1, 211:22, 212:3 cellular 27:15, 68:15, 69:9, 96:10, 140:8, 140:12, 156:16, 207:16, 207:17, 209:6, 209:19, 210:21, 212:1 central 1:6, 27:4, 27:8, 47:20, 212:4, 213:10, 213:22, 214:2, 214:5 certain 44:1, 48:9, 62:13, 133:3, 139:20, 172:13, 174:1, 174:19, 184:5, 204:1, 204:5 certainly 87:10, 88:10, 90:18, 91:1,	94:19, 95:7, 145:22, 148:20, 173:18, 177:8, 181:22, 182:10, 186:3, 204:7, 205:17, 206:1, 208:3 certify 225:4, 225:11, 225:14, 225:18, 226:1 chain 41:1, 41:3 change 73:7, 73:20, 91:8 changed 46:19 changes 35:2 channel 143:4 channels 27:19 characterization 69:22, 172:1, 172:11, 201:8, 202:7, 204:22 characterize 39:4, 39:8, 50:22, 205:22 charles 3:19, 12:16, 12:17, 12:19, 14:4, 15:3, 15:4, 17:11, 17:18 charlotte 3:8 charts 178:21 chatted 17:18 check 83:9, 103:22, 222:6 chip 108:10, 121:6,	122:10, 122:16, 122:20, 123:6, 124:6, 124:13, 124:21, 125:4, 126:5, 126:8, 126:16, 127:20, 128:17, 128:18, 128:19, 129:2, 129:10, 129:11, 129:14, 129:18, 130:4, 130:6, 130:8, 130:9, 130:13, 130:22, 131:2, 131:4, 131:6, 131:8, 131:18, 132:7, 132:14, 132:21, 134:15, 134:16, 221:10, 221:11 chips 108:7, 122:5, 122:10, 122:11, 122:12, 122:21, 124:2, 124:10, 124:14, 124:16, 125:5, 125:6, 125:15, 125:22, 126:5, 126:9, 126:22, 127:2, 127:7, 127:9, 127:22, 128:2, 128:3, 128:10, 128:22, 129:2, 129:4, 132:4, 132:10, 132:13, 133:5, 133:20, 135:7 choose 46:17 chose 102:17, 125:12 christopher 3:5 circuit 61:19, 62:17, 65:21, 71:11, 71:21, 107:21, 108:13, 108:17,	119:14, 128:2 circuitry 62:5, 62:21, 109:8, 109:11, 109:12, 109:14, 109:16, 119:20, 120:4, 120:5, 120:14, 120:19, 121:9, 121:14, 123:22, 126:17, 127:2, 127:9, 127:12, 128:1, 128:3, 131:10, 131:15, 131:16, 131:17, 131:22, 132:17, 133:14, 134:7, 134:11, 134:12, 134:17 circuits 107:15, 108:1, 109:1, 119:9, 119:18, 121:18, 122:1, 123:22, 126:17, 127:1, 127:8, 127:12, 127:15, 128:1, 131:9, 133:4 circumstance 165:16 circumstances 119:4 citation 102:2 cite 86:3, 93:20, 101:16, 101:19, 102:7, 102:12, 102:17, 160:4 cited 75:3, 78:9, 107:9, 184:17 citicorp 33:14 claim 14:18, 84:6, 104:4, 104:6, 104:11, 104:12, 104:14, 104:19,
--	--	--	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

234

<p>105:4, 105:14, 105:20, 106:1, 106:7, 106:10, 106:12, 106:17, 106:19, 107:1, 108:18, 108:20, 110:10, 110:20, 111:5, 111:6, 111:9, 111:14, 112:10, 112:19, 112:20, 112:22, 113:4, 113:10, 113:16, 113:19, 113:21, 114:4, 114:12, 114:18, 115:5, 115:14, 115:17, 115:18, 115:22, 116:2, 116:3, 116:9, 116:17, 116:20, 117:4, 117:7, 117:21, 118:9, 118:13, 118:19, 138:13, 138:16, 139:1, 139:4, 150:14, 150:16, 150:18, 151:7, 151:12, 152:18, 153:7, 153:20, 154:8, 155:5, 155:8, 155:16, 156:20, 157:1, 157:6, 157:12, 190:16, 190:19, 191:1, 191:3, 191:8, 191:12, 191:14, 192:18, 194:15, 195:20, 205:15, 205:17, 211:6 claims 14:17, 15:1, 16:1, 89:8, 89:12, 90:3, 94:15, 104:1, 107:3, 107:5, 107:9, 109:5, 109:8, 110:16,</p>	<p>110:18, 111:11, 116:2, 119:2, 132:6, 139:6, 139:11, 152:17, 154:16, 155:3, 155:7, 156:11, 156:15, 157:11, 157:15, 158:1 clarification 19:12 clarifies 128:16, 129:9 clarify 45:12 class 88:2 clear 83:1, 88:13, 192:3, 193:9, 215:15 client 35:14, 52:4, 169:16 clients 38:13, 43:4, 43:5, 50:21 clock 107:17, 107:19, 108:12 clocking 107:20 clocks 107:17 close 60:17, 94:17, 134:13, 170:10 closed 185:11 closer 6:18, 45:20 co-own 42:14 coil 61:14, 62:7, 62:12 coincides 163:2 colder 74:9, 74:13</p>	<p>collaborated 12:13 collaborative 84:4, 84:5 colleague 80:1 colleagues 79:22 college 10:11 column 101:19, 102:2, 102:8, 102:18, 104:15, 104:20, 105:5, 106:3, 106:20, 107:11, 136:6, 136:12, 140:5, 140:21, 140:22, 142:7, 142:15, 144:3, 144:20, 145:19, 146:4, 163:15 com 42:17, 57:11, 57:13 combination 30:14 combined 128:19 come 115:2, 122:5, 134:22, 184:10, 199:12, 219:17 comes 95:1, 122:6, 122:7 comfort 11:20 coming 57:15 command 72:21, 73:1, 73:4, 73:12, 73:17, 74:14, 74:17, 115:7, 115:12, 116:13, 117:9, 117:10, 117:15, 118:6,</p>	<p>118:10, 118:17, 119:6, 144:11, 191:22, 216:17 commands 71:9, 72:12 commencement 225:7 commencing 2:5, 225:17 commenting 97:18 commercial 30:19, 31:15 commercialization 31:12 commercialized 31:17 commercially 31:4, 31:7, 44:4 commission 226:11 commodities 35:6 common 112:8, 119:21 communicate 24:13, 71:13, 71:14, 72:7, 72:15, 72:17, 99:7, 119:5, 137:11, 146:18, 155:12, 156:5, 196:18, 197:17, 199:13 communicated 211:22, 214:1, 214:4, 214:10, 214:15, 215:6, 215:11 communicates 118:21, 196:7 communicating 154:5, 156:8, 156:12, 157:17, 197:5, 197:9, 206:7, 215:18 communication 30:10, 67:16,</p>
---	---	---	---

70:6, 72:18, 73:9, 88:3, 88:4, 96:10, 97:3, 97:4, 98:13, 99:6, 99:8, 99:11, 102:20, 103:9, 117:10, 163:21, 164:11, 166:7, 194:11, 195:19, 196:14, 196:18, 199:20, 211:10, 211:14, 211:19, 212:9 communications 27:20, 86:16, 86:20, 87:1, 87:2, 87:5, 87:9, 87:18, 144:13, 153:16, 166:13 communicator 184:22, 185:3, 185:6, 186:4, 187:3 companies 30:22, 31:7, 31:9, 32:2, 32:5, 33:9, 33:11, 33:13, 34:3, 34:9, 40:3, 50:1, 50:6, 50:9, 57:4, 65:13, 67:8, 67:11 company 15:3, 15:5, 31:20, 34:5, 38:4, 39:2, 39:5, 39:9, 40:12, 41:17, 42:15, 42:16, 55:10, 55:13, 57:14, 59:13, 59:15, 59:17, 60:2, 60:6, 60:12, 65:2, 65:20, 66:22,	67:3, 69:17 comparing 99:14 compensated 59:11, 60:5, 80:20, 81:1, 81:22, 82:9, 82:16 compensation 82:5 compiled 166:21, 170:9 complete 21:1, 23:14, 85:3, 85:4, 121:19, 128:20, 164:13 completed 23:7, 224:17 completely 20:21 completing 223:11 complex 178:22 complimentary 5:17 component 108:9, 110:1, 110:3, 121:13, 169:22, 194:14, 196:13, 197:2, 197:15 components 31:14, 31:16, 61:11, 108:4, 125:1, 148:8, 170:9, 188:20, 194:12 comprehensive 128:15, 129:7 comprises 203:1 compromises 116:5 computer 4:15, 5:10, 22:10, 22:17,	24:1, 24:3, 24:15, 25:15, 68:15, 68:22, 69:2, 69:10, 69:15, 69:20, 70:2, 70:3, 70:5, 70:17, 70:18, 87:2, 87:16, 87:17, 88:2, 88:17, 90:7, 135:4, 135:17, 161:7, 161:11, 161:19, 162:4, 163:8, 163:10, 217:6 computer-to-comp- uter 96:5 computers 25:8, 25:10, 25:12, 68:3, 68:4, 86:16, 86:19, 87:1, 87:5, 87:8, 183:21, 183:22 computing 121:11, 135:3 con 144:7 conceivable 134:10 concept 142:1 concierge 58:7 concise 88:13 concluded 224:21 conclusion 120:18 condition 132:22, 216:6, 216:14, 218:14 conditioners 63:20 conditioning 122:12, 125:15,	132:17, 133:4 conducted 1:17 conference 2:6, 5:3 confidential 159:1 configured 115:6, 116:10, 117:8, 118:5, 138:17 confined 129:11, 129:13, 129:17, 130:5, 130:9, 130:12 confirm 106:10 conform 106:14, 205:4 confused 140:20 connect 5:14, 11:20, 24:11, 199:6, 199:14, 206:18, 220:5 connected 32:18, 32:19, 109:13, 118:4, 199:11, 200:4, 207:10, 207:11, 207:22, 208:1, 208:20, 209:3, 209:6, 209:10, 209:12, 209:19, 209:21, 210:7, 210:14, 210:17 connecting 198:3, 198:4, 198:5, 198:7 connection 6:13, 96:6, 150:11, 191:1, 191:9, 191:15, 191:17, 191:20, 192:18, 192:21, 193:2, 193:5, 193:11, 193:12,
--	--	--	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

236

193:20, 193:22, 194:5, 194:6, 194:9, 194:18, 195:2, 195:8, 195:16, 195:22, 196:1, 196:20, 197:7, 197:13, 197:21, 197:22, 198:1, 198:2, 198:8, 198:9, 198:11, 198:19, 198:21, 199:1, 199:2, 199:15, 199:19, 206:3, 206:8, 206:9, 206:13, 206:16, 206:18, 206:20, 206:22, 207:3, 207:7, 207:14, 207:17, 209:9, 210:1, 210:20, 211:4, 211:9, 211:13, 211:20, 212:6, 212:14 connections 137:12, 192:10, 194:22, 208:2, 210:12, 210:19, 211:3 connectivities 191:11, 191:13 connectivity 1:9, 3:11, 109:9, 109:17, 190:22, 191:2, 191:6, 191:9, 191:20, 192:13, 192:14, 192:18, 194:5, 194:8, 195:2, 195:4, 195:8, 195:10, 195:16, 207:6, 225:12 connects 196:7 conserve 65:9, 66:3 consider 36:9, 56:13,	58:10, 58:12, 86:5, 88:6, 112:8, 127:14, 128:1, 130:21, 132:10, 146:7, 160:16 considered 80:15, 84:22, 85:5, 97:3, 125:15, 130:18, 134:18, 136:22, 166:20 considers 137:21 consist 61:19 consistent 14:19, 101:9, 180:5, 180:8, 203:7, 203:15 construction 39:1, 39:19, 101:5, 101:9, 102:14, 107:13, 123:19, 132:15, 160:1, 160:5 consult 56:4 consultant 41:10 consultants 41:11, 41:12, 41:13, 41:19, 41:20, 42:19, 43:9, 45:3, 53:6, 81:19, 81:21, 81:22 consulted 50:1, 50:14, 57:5 consulting 33:9, 34:11, 34:14, 42:22, 43:10, 49:13, 49:14, 50:5, 53:8 consults 41:14	contain 48:10, 123:9, 144:7, 164:9, 164:10 contained 109:18, 122:15, 122:19, 124:13, 132:7 containing 69:9 contains 104:9, 110:15, 111:22, 134:14, 166:11, 213:7, 213:12 content 38:14, 39:16, 51:3, 51:6, 51:10, 51:11, 84:2, 201:5, 202:19, 202:21 contents 84:18, 201:16, 203:2 context 64:12, 64:16, 160:12, 169:10, 169:12, 170:1, 170:7, 182:5, 182:16 continue 145:14 continued 30:17 contract 33:10, 33:11, 61:21 contracted 32:3 contractor 81:20 contracts 50:19, 51:12, 51:22, 61:15 contribute 85:11 contribution 80:6	control 18:12, 18:17, 19:1, 65:14, 71:8, 71:22, 72:22, 88:19, 89:7, 89:18, 89:19, 90:10, 90:12, 90:13, 90:18, 90:22, 91:2, 91:3, 97:10, 98:21, 102:19, 102:22, 104:14, 104:19, 105:4, 106:2, 106:19, 107:10, 115:8, 140:1, 140:3, 140:7, 140:18, 141:11, 141:21, 142:12, 142:18, 142:22, 143:9, 143:10, 143:12, 144:22, 145:6, 163:21, 164:11, 166:6, 166:12, 167:1, 171:8, 183:2 controlled 62:9, 62:18, 62:20, 73:5, 74:4, 74:6 controller 117:22, 118:2, 118:9, 118:20, 118:21, 119:3, 120:15, 132:2 controllers 131:5, 183:16 controlling 64:12, 71:5 controls 138:2, 138:4, 138:5 conversation 13:6, 13:10, 13:11, 13:18, 13:19, 14:9, 17:6, 17:9, 17:11
--	---	--	---

<p>conversations 5:11, 75:20, 75:22 converter 135:9, 135:10 convey 97:20, 174:2, 175:2, 176:11 conveying 174:3 cooling 72:13 copyright 148:17, 148:18 corner 93:6 corp 25:4, 25:6, 25:7, 25:18, 26:1 correctly 206:1 cortney 3:12, 76:17, 77:4, 77:21 couldn't 135:15, 135:16, 176:18 counsel 7:15, 7:16, 13:21, 14:5, 14:10, 17:13, 59:1, 59:2, 59:4, 75:4, 75:22, 76:1, 76:22, 83:20, 84:1, 84:4, 158:3, 225:13, 225:20 counsels 76:8 couple 54:22, 57:1, 182:6 course 62:10, 63:1, 103:8, 121:6, 164:18, 223:15</p>	<p>coursework 87:17 court 7:7, 20:9, 20:14, 20:17, 47:1, 47:14, 76:13, 225:2 coverage 95:19, 95:20, 96:16, 96:17 covers 157:14 cpu 107:16, 123:21, 126:16, 127:1, 127:8, 131:9, 132:4, 132:7 create 24:15, 167:2, 167:5, 167:19, 168:11, 168:14, 188:3, 188:8, 201:4, 201:21 created 139:15, 141:3, 170:5 creating 51:22, 148:11, 167:16, 207:7, 211:11 creation 142:3 credit 52:1 criteria 44:9, 133:19, 166:3 criteria 44:1 cruise 30:4 crystal 36:18, 107:19, 125:14, 130:17, 132:1, 132:2 csg 11:9, 53:18 curious 14:17, 14:22</p>	<p>current 15:12, 63:6, 84:13, 138:18 currently 157:3 curriculum 4:6 custom 145:11, 156:17, 156:20, 157:1 customary 59:21, 60:3 customer 28:17, 28:18, 51:17, 172:6, 183:1, 183:18 customers 52:9, 57:15, 65:10 customizable 111:18, 112:2, 112:7, 112:13, 112:17, 113:1, 113:8, 114:7, 114:15, 116:6, 117:20, 156:18 customizable-type 113:6 customize 114:20, 140:17 customized 115:20, 145:3, 167:2, 167:5, 167:17, 168:12, 168:15 cut 39:7 cv 21:18, 22:4, 22:7, 22:9, 22:16, 25:5, 28:22, 41:9, 42:1, 45:13, 45:15, 46:7, 46:11, 46:14, 46:19, 46:22, 48:3, 48:17, 49:22, 55:1,</p>	<p>56:21, 57:3, 58:7, 58:13 cyber 42:20</p> <hr/> <p>D</p> <hr/> <p>data 25:21, 26:1, 26:4, 26:5, 26:18, 26:22, 28:4, 34:6, 66:14, 66:20, 67:5, 67:22, 68:3, 69:9, 69:19, 70:17, 71:13, 72:10, 142:3, 144:7, 163:21, 164:11, 166:6, 166:12, 181:6, 202:3 date 148:15, 148:16, 148:18, 162:6, 162:9, 162:13, 162:18, 163:1, 163:2, 172:15, 189:7 david 80:3, 80:6 day 64:22, 224:17, 226:9 daytime 64:2 dealing 36:11, 160:15 decide 36:6 declaration 4:10, 14:7, 17:15, 49:2, 59:20, 75:18, 76:10, 77:14, 78:8, 78:14, 78:20, 78:22, 79:1, 79:6, 79:9, 79:19, 80:7, 80:13,</p>
---	--	---	--

80:18, 80:21, 83:11, 83:12, 83:16, 83:17, 83:21, 84:12, 84:15, 84:16, 84:22, 87:13, 92:11, 99:22, 101:1, 162:17, 163:4, 219:1, 219:15, 220:18, 222:5 declarations 58:19, 58:22, 74:22, 75:1 deduction 190:13 deficiencies 94:14 define 55:22, 135:6 defined 189:20, 191:12 defines 153:2 definitely 60:22 definition 88:9, 88:15, 88:21, 89:3, 90:4, 91:7, 102:12, 122:3, 125:11, 126:7, 128:9, 134:20, 163:14, 163:18, 164:1, 164:7, 164:14, 164:20, 165:1, 166:4, 166:9, 187:15, 188:12, 188:13 definitions 122:7, 160:4, 160:8, 161:16, 162:10 degree 23:3, 23:13, 88:16, 139:20, 162:20, 163:9 deliver 201:6	delivering 58:4, 205:1 demand 64:3, 64:5, 64:6, 64:11, 64:16, 64:20, 65:19, 189:6 demands 71:14 demonstrate 24:15 department 214:3 depend 174:8, 177:15 dependent 111:11, 155:16 depending 68:17 depends 64:17, 66:21, 190:19, 194:15 depicted 171:6, 174:15, 177:10, 184:18 deponent 224:19 depose 58:18 deposed 8:5, 8:15, 8:17 deposition 1:15, 2:2, 2:5, 5:18, 7:3, 7:4, 7:8, 7:9, 7:12, 20:1, 61:4, 61:6, 74:21, 75:2, 76:5, 76:7, 76:12, 76:20, 78:11, 224:3, 224:21, 225:6, 225:8, 225:13, 225:14, 225:19 describe 114:16, 124:15, 139:9, 139:13, 139:14, 139:18,	142:2, 169:21 described 63:15, 104:15, 104:20, 105:5, 105:10, 106:3, 106:20, 107:6, 107:11, 113:10, 113:19, 114:10, 114:18, 115:13, 119:4, 142:5, 142:6, 143:18, 153:20, 155:3, 155:5, 155:6, 191:14 describes 112:20, 113:21, 120:4, 124:17, 139:17, 140:2, 144:3, 144:10, 155:17, 188:3, 197:8, 213:10 describing 95:5, 102:11, 137:7, 140:15, 141:3, 141:9, 149:13, 150:11, 184:3, 203:10, 203:11, 205:1 description 102:3, 141:8, 152:15, 180:3, 187:22, 188:10, 188:13, 188:14, 189:1, 199:17, 221:12 descriptions 51:12 design 86:22, 87:17, 124:7, 124:17, 125:3, 125:20, 133:21, 165:22, 166:3 designation 149:9, 222:10, 222:11, 222:16 designed 15:15, 15:17,	34:22, 39:15, 112:4, 122:4, 124:1, 124:8, 124:19, 128:20, 128:21, 204:16 designing 25:9, 122:8, 124:18, 165:6, 165:9, 167:11 desktop 25:14, 135:4, 183:21 detail 10:21, 80:11, 173:22 details 73:16, 74:17, 172:19 detection 9:21, 145:6, 145:9 determine 28:16, 56:7, 72:8, 133:19, 187:1 determined 44:11, 218:8 determines 218:17 determining 160:9, 160:10 develop 32:3, 38:18, 68:13 developed 15:11, 15:15, 15:17, 17:1, 17:3, 24:11, 29:14, 31:16, 34:21, 34:22, 39:15, 39:18, 40:3, 66:6, 66:8, 168:18 developer 25:19, 67:21 developers 18:22, 19:20, 140:17, 201:4,
---	--	--	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

239

<p>201:20 developing 16:9, 25:9, 30:21, 33:20, 35:5, 35:11, 35:22, 37:8, 55:11, 55:12, 55:17, 167:11 development 16:9, 17:15, 17:20, 28:7, 34:8, 34:16, 35:9, 35:13, 35:17, 38:14, 40:19, 40:21, 41:14, 51:1, 52:8, 81:15, 86:22, 168:18, 168:20 develops 29:8 device 25:20, 30:7, 32:8, 37:18, 61:9, 62:6, 63:9, 67:17, 68:15, 70:13, 70:21, 72:11, 73:2, 74:8, 74:13, 90:13, 108:11, 109:13, 115:8, 115:9, 115:12, 116:14, 117:11, 117:15, 118:5, 118:6, 118:11, 118:17, 118:22, 119:6, 121:12, 137:1, 137:15, 138:1, 138:11, 141:18, 144:18, 145:12, 151:11, 151:13, 151:15, 153:2, 153:13, 155:17, 170:3, 172:7, 172:17, 173:1, 177:11, 179:18, 180:3, 182:1,</p>	<p>182:13, 183:7, 183:12, 183:22, 184:20, 185:11, 186:8, 189:9, 193:8, 195:14, 195:18, 198:3, 198:14, 198:16, 198:17, 198:18, 198:22, 199:12, 199:17, 200:9, 203:4, 204:16, 205:4, 206:20, 207:4, 207:9, 209:3, 210:7, 210:15 devices 27:19, 30:2, 61:22, 65:6, 65:9, 70:7, 71:6, 71:10, 71:14, 71:16, 90:19, 91:2, 123:14, 136:16, 136:19, 137:2, 137:8, 150:21, 151:1, 151:3, 151:21, 152:11, 152:16, 183:20, 189:12, 189:21, 189:22, 190:4, 190:5, 201:7, 202:2, 205:3, 215:20, 216:1, 216:2 dial 62:11 dictionaries 160:13, 160:14 dictionary 4:14, 125:10, 128:15, 129:8, 160:4, 161:6, 161:10, 161:18, 162:4, 162:9, 162:14, 163:1, 163:7 difference 115:16</p>	<p>different 7:6, 24:9, 29:8, 33:16, 36:9, 37:5, 39:17, 40:17, 44:1, 64:8, 64:9, 98:6, 128:6, 128:7, 132:4, 132:14, 133:1, 135:17, 139:12, 139:17, 140:2, 148:12, 152:6, 175:3, 193:19, 194:12, 210:12, 215:14 differentiate 70:5 differentiators 202:4 difficult 20:19, 107:18, 173:6, 173:8 digital 23:11, 23:13, 25:3, 25:6, 25:7, 25:17, 25:22, 36:3, 62:20, 63:14, 135:8, 172:8, 173:2, 183:21 direct 69:1, 95:13, 96:5, 182:9 directed 28:13, 94:3, 155:21, 156:11 directly 74:4, 74:6, 82:12, 214:10, 215:4, 215:6, 215:13, 215:16, 215:17, 215:18 director 38:8, 38:11 disable 157:9 disagree 88:21, 89:14,</p>	<p>164:6 disclose 174:7 disclosed 113:16, 119:22, 154:8, 154:13, 154:15, 217:20 discloses 172:22, 204:8, 213:4, 213:6 disclosing 183:11 disclosure 119:8, 119:15, 203:7 disclosures 84:7, 85:20 disconnect 48:19 disconnected 202:4 discuss 159:2 discussed 18:1, 84:2, 119:16, 124:22, 162:16 discusses 146:5, 213:14 discussing 14:16, 147:22 discussion 5:9 discussions 14:4, 84:6 dispatch 28:11, 29:17, 214:2 dispatcher 218:10, 218:19 display 135:16, 172:18, 173:3, 173:7, 173:12, 173:16, 173:18, 174:14, 175:5, 175:14, 175:15, 175:17, 175:20, 176:6,</p>
---	--	--	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

240

176:8, 176:19, 176:22, 182:17, 183:17 displayed 173:1, 174:20, 174:22 displaying 181:2, 181:4 displays 36:18 distinguish 164:15 distinguishing 98:2, 99:3, 99:9, 99:11 distribute 204:5 distributed 52:3 distribution 204:1 district 76:13 doane 3:4 document 51:4, 79:21, 88:10, 88:14, 91:16, 91:19, 92:7, 92:10, 97:2, 97:19, 98:1, 99:3, 147:9, 147:13, 147:21, 148:15, 149:21, 200:17 documents 50:16, 50:17, 50:18, 75:6, 77:9, 77:12, 78:4, 78:7, 84:21, 85:9, 85:14, 85:19, 85:21, 86:1, 86:4 doing 29:16, 38:5, 38:21, 90:14, 115:14, 133:7,	140:2, 141:19, 168:19, 208:13 done 9:20, 12:10, 20:12, 23:2, 43:4, 59:12, 81:16, 111:15, 157:7, 178:19, 207:6, 223:8, 224:1 doors 152:8 dots 220:5 douglas 3:5 down 108:1, 132:19, 141:1, 142:14, 172:4, 189:9, 202:19 downloaded 169:15, 169:20, 172:14 downloading 54:15 dozen 41:22, 181:5 dr 23:20, 24:16, 75:2, 88:9, 88:21, 89:3, 91:6, 177:19, 223:21, 224:2 draft 79:11, 83:22 drafting 84:22, 92:11 drafts 84:1 drive 31:16 drivers 25:20 duly 6:5, 225:7 during 35:7, 35:8,	36:15, 76:9, 77:9, 78:4 dwyer 23:20, 24:16 dynamic 201:4, 201:21 dynamics 8:18, 8:21 <hr/> E <hr/> e-commerce 38:7, 38:9, 38:11, 40:22, 41:2, 43:13 e-mail 187:4, 187:6, 217:9 e-trade 33:21, 35:5 each 5:16, 22:2, 24:10, 34:13, 77:8, 93:7, 107:8, 119:2, 119:4, 124:4, 190:7, 207:11 earlier 8:17, 28:6, 158:20 early 13:1, 28:12, 38:5, 173:15 easiest 44:5 easily 182:12 easy 51:14 ecomp 41:10, 41:12, 41:13, 41:20, 42:2, 42:9, 42:12, 42:19, 43:9, 45:3, 45:6, 45:10, 53:6, 81:18, 81:20, 81:22, 82:6, 82:13,	82:14, 83:1, 83:3, 168:20 efficient 28:16 effort 16:9, 179:1 eight 47:14, 180:16 either 33:10, 33:17, 34:15, 34:17, 36:5, 49:1, 52:2, 62:5, 63:7, 69:14, 80:12, 86:21, 94:1, 121:14, 123:10, 161:14, 177:3, 194:16 electric 29:9, 29:14, 29:22, 30:3, 128:15 electrical 4:14, 22:14, 71:11, 71:21, 87:16, 88:16, 90:6, 129:8, 155:13, 161:7, 161:11, 161:19, 162:4, 162:20, 163:7, 163:10, 200:10 electronic 28:19, 39:16, 108:11, 137:20, 137:22 element 115:17 elements 84:6, 126:15 ellers 4:16, 170:16, 170:18, 171:5, 171:10, 171:15, 172:2, 172:12, 172:21, 181:11, 182:19, 183:12, 184:10, 187:9,
---	--	--	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

241

187:17, 189:16 else 76:2, 78:10, 115:14, 132:8, 134:8, 157:5, 193:16, 208:14, 223:7 embedded 88:19, 89:6, 89:17, 89:19, 90:7, 121:4, 121:22, 122:8, 123:12, 124:8, 125:4, 125:7, 125:21, 127:14, 127:19, 128:18, 131:5, 134:1, 134:8, 135:12, 135:14, 165:6, 165:9, 168:10, 205:8 embodiment 104:8, 106:15, 107:5, 111:2, 172:5, 189:18, 202:19, 202:21, 202:22, 214:4, 214:9, 216:5, 217:21, 218:5 embodiments 213:14, 217:20 emergency 214:3 employ 42:8 employed 41:19, 42:11, 226:3 employee 81:18 employment 42:9, 57:7 enable 70:12 enabled 5:12, 141:18, 144:18, 145:12, 145:13	end 13:2, 13:3, 13:4, 24:22, 148:9, 206:14, 206:17 ends 212:4 energy 64:13, 65:9, 66:3 engagement 43:1, 43:14 engagements 34:11, 34:14 engages 62:12 engineering 4:15, 22:14, 87:16, 88:17, 90:6, 128:15, 129:8, 161:7, 161:11, 161:19, 162:4, 162:21, 163:8, 163:10 engineers 26:17 english 160:14 enough 21:15, 137:3 ensure 202:3 enter 188:22 enterprise 53:9 entire 46:15, 125:19, 178:17 entirety 174:1 entitled 147:10 entry 181:6, 188:14 enumerated 7:14, 124:5 environment 103:2	environmental 115:8, 115:9, 115:12, 116:10, 116:14, 117:11, 117:15, 118:5, 118:6, 118:10, 118:17, 118:22, 119:6, 136:19, 137:1, 137:2, 137:8, 137:15, 138:1, 138:11, 138:18, 150:21, 151:2, 151:13, 151:21, 152:11, 153:13, 155:17, 171:8, 193:7, 193:8, 193:13, 195:14, 195:18, 198:22, 206:20, 207:4, 207:9, 208:20, 209:2, 210:7, 210:15 equally 202:10, 203:20 equipment 23:11, 25:4, 25:6, 25:7, 25:17, 26:1, 27:2, 27:6, 27:12, 68:11, 69:14, 90:17, 163:20, 164:3, 164:10 equivalent 25:15, 87:14, 105:11, 107:7, 112:21, 181:10 especially 109:10, 123:13, 133:7, 178:20 esq 3:3, 3:4, 3:5, 3:12 essentially 74:14, 176:3, 208:15, 208:17, 210:13 established 82:18, 110:20	estimate 60:20, 61:3 ethernet 134:11, 135:8 eva-tone 37:22, 38:1, 38:2, 38:3, 42:3, 52:19, 167:10, 167:14 even 46:20, 174:12, 174:17, 175:12, 175:19, 178:10, 224:8 event 45:5, 216:6, 216:14 ever 8:4, 9:10, 9:14, 10:8, 11:19, 12:10, 12:13, 26:14, 164:22, 165:7, 165:16, 168:14, 170:5, 218:1 every 73:2, 79:18, 92:2, 93:14, 212:14 everyone 5:4 everything 84:9, 132:8 ex 132:1 exact 128:12 exactly 13:6, 26:21, 39:13, 43:15, 51:9, 52:15, 59:2, 73:19, 105:17, 151:4, 177:18, 215:16 examination 4:3, 6:7 examined 6:5
--	---	---	--

example 27:16, 28:9, 29:13, 33:19, 34:21, 35:4, 35:21, 37:10, 38:5, 38:13, 50:19, 51:17, 61:19, 62:7, 62:8, 62:17, 63:19, 72:1, 72:10, 73:4, 84:8, 85:18, 86:3, 88:1, 93:20, 96:9, 97:22, 98:8, 107:19, 108:2, 111:20, 121:14, 130:17, 132:13, 133:5, 133:11, 134:6, 134:9, 134:15, 135:5, 140:16, 143:11, 144:5, 144:9, 145:7, 146:3, 146:16, 151:22, 152:8, 155:10, 155:13, 164:14, 169:14, 169:17, 173:19, 181:7, 181:13, 183:15, 204:4, 205:2, 205:21, 206:19, 206:21, 207:2, 207:16, 207:19, 208:6, 208:12, 208:19, 209:3, 209:11, 211:10, 214:1, 214:20, 216:17 examples 137:15, 144:15, 145:15, 145:16, 145:17, 145:20, 146:21, 192:12 exceptions 67:10 excluding 61:4	exclusively 36:11, 36:12 execute 169:19 executing 123:3 exhibit 4:6, 4:8, 4:10, 4:12, 4:13, 4:14, 4:16, 4:17, 4:18, 4:19, 4:20, 21:19, 21:20, 53:21, 53:22, 54:1, 78:15, 78:16, 79:2, 91:11, 91:14, 91:18, 91:20, 93:5, 93:7, 145:21, 147:2, 147:3, 149:9, 149:22, 160:19, 160:20, 160:22, 161:5, 161:18, 163:14, 163:16, 166:14, 170:19, 170:21, 171:5, 171:10, 184:7, 184:8, 184:13, 184:19, 200:13, 200:14, 204:22, 212:18, 212:20, 213:1, 214:17, 221:2, 221:6, 221:8, 221:22, 222:8 exhibits 4:5, 75:7, 84:13 exist 131:4, 144:19 existed 68:11, 175:10, 180:3 existing 187:17 exists 207:17, 212:15	expand 61:20, 61:21 expands 61:15, 62:13 expect 60:2, 60:15, 63:12, 88:2 expectation 218:1 expected 223:6 expecting 165:20 experience 18:19, 19:18, 44:20, 45:16, 46:12, 47:1, 56:9, 86:15, 88:7, 88:18, 89:17, 89:19, 121:1, 122:8, 122:17, 123:8, 126:1, 131:3, 131:13 experienced 20:1 expert 45:17, 49:4, 49:10, 56:11, 56:13, 159:6 expertise 89:6, 90:1 expires 226:11 explain 206:12 explains 95:1 explicit 119:14, 157:19, 157:22 explicitly 153:20, 154:7, 154:15, 155:2 expose 19:19 extensive 43:11	extent 93:13, 223:19 external 107:21, 108:3, 121:6, 121:13, 121:15, 122:20, 123:12, 124:22, 125:14, 132:1, 133:9, 152:2, 183:20, 185:10 extra 125:14 eye 11:13 <hr/> <p style="text-align: center;">F</p> <hr/> facilities 27:14, 28:9 facility 27:4, 27:14 facing 41:3 fact 11:10, 125:13, 144:2, 166:10, 186:18, 195:3, 195:9 factors 44:10, 44:11 factory 112:3, 113:3, 114:22, 115:19, 117:20 facts 75:9 fair 21:9, 21:15, 35:7, 44:20, 50:22, 69:21, 73:16, 137:3, 181:17, 192:15 familiar 9:16, 9:18, 9:19, 147:13, 148:2, 161:10, 161:22, 185:2 far 108:15, 164:8
--	---	--	--

fashion 32:22, 133:2 feasible 173:7, 174:14 feature 190:3 features 139:12, 140:9, 184:5, 189:16, 201:22 february 94:7 feel 21:11, 125:11 few 45:12 field 28:11, 28:15, 29:17, 29:18, 30:3, 32:1, 86:15, 87:5, 88:18 fields 181:5, 181:6 fifth 45:8, 138:16 fig 101:16, 102:3, 103:7, 107:6, 111:3, 120:8, 120:11, 134:9, 173:7, 173:8, 173:19, 173:20, 174:15, 175:21, 176:6, 176:7, 179:6, 179:9, 179:13, 179:16, 181:11, 181:13, 182:2, 182:13, 182:15, 182:17, 184:18, 185:8, 187:11, 187:16, 187:20, 188:2, 188:11 figs 171:4, 171:16, 174:15, 178:9 figure 208:8	figures 102:15, 171:6, 172:20, 175:21, 177:4 file 21:22, 22:1, 53:21, 159:7 filed 158:22 fill 80:14 filled 25:14 final 83:22, 197:20 finally 21:11, 92:16 finance 56:9, 56:12, 56:14 financed 58:2 financial 56:10, 56:11 financial-based 33:13 financially 226:5 find 61:11, 87:15, 134:7, 134:10, 141:17, 163:14, 174:17 fine 87:10, 158:14 finish 23:12 finished 20:21 finishing 224:7 fintech 47:17, 48:1 fire 214:1, 214:3 firm 6:10 first 6:5, 7:8,	12:22, 13:2, 13:10, 13:17, 17:8, 17:11, 22:8, 30:2, 30:12, 33:20, 42:20, 79:11, 96:1, 100:5, 138:18, 148:17, 149:2, 161:5, 171:3, 191:19, 192:6, 192:20, 193:5, 193:10, 193:22, 194:5, 195:21, 196:19, 197:7, 197:22, 198:7, 198:20, 199:6, 200:6, 206:13, 206:19, 217:21, 221:15 fit 25:13, 165:22, 166:2, 178:1, 182:12, 182:17 fitted 72:3 five 47:11, 48:11, 48:14, 49:8, 49:16, 49:19, 50:1, 52:12, 52:15, 224:11 flip 50:8 florida 8:2, 47:20 flynn 3:20, 53:17 focused 133:8 focuses 139:22 focusing 128:8, 202:15 folder 54:10, 54:11, 54:12, 91:21 folders 54:14	follow 224:10 following 5:1 follows 6:6, 84:17 footnote 219:22, 221:4 forces 129:3 foregoing 178:20 forensics 45:4 form 37:15, 39:11, 49:1, 65:11, 68:16, 70:19, 88:3, 88:4, 96:2, 98:10, 100:13, 104:22, 105:7, 106:5, 109:15, 112:8, 121:2, 121:10, 123:9, 127:3, 127:10, 131:16, 157:8, 165:2, 177:1, 177:14, 181:5, 186:21, 195:12, 199:22, 208:7, 210:3, 211:16 format 72:21, 177:3 forming 14:2, 85:11 forms 99:6 formulate 73:11 formulating 14:13, 85:5, 85:15 forth 71:13, 225:6 forwarded 218:5 four 18:1, 47:11,
--	--	---	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

244

48:13, 78:3, 180:16, 181:3, 192:1, 201:1 fourth 45:2 frame 13:14, 30:15, 31:5, 33:3, 63:11, 63:18, 87:19, 87:20, 88:1, 90:6, 167:13, 168:4, 173:16, 174:7, 175:6, 175:10, 176:2 framework 204:18 free 21:11 freezer 138:10 frequency 71:10, 71:13 friday 75:4, 77:18, 77:20, 78:1 front 48:17 front-end 52:7, 57:19 fruition 69:16 full 7:22, 41:21, 42:1, 42:9 fully 56:16 function 71:22, 115:17, 122:18, 122:22, 123:2, 140:14, 219:11, 220:22 functional 108:4, 108:9 functionality 126:9, 203:19 functionality-ri- ch 201:5	functions 72:8, 105:9, 114:16, 114:17, 122:19, 123:5, 124:12, 124:21, 133:10, 133:22, 140:9, 141:20, 142:13 fund 55:3, 55:4, 55:5, 55:15, 55:18, 55:20, 55:21, 56:3, 56:16, 58:11 funded 56:16 funds 55:10, 55:17 further 10:20, 116:4, 140:19, 142:14, 143:14, 145:19, 155:17, 172:4, 214:2, 224:19, 225:11, 225:14, 225:18, 226:1 <hr/> G <hr/> ga 3:15 game 24:15 gas 29:9 gate 138:2, 138:4, 138:5, 152:3, 152:6 gateways 27:15, 52:1 gather 145:21 gauge 62:6 gave 30:22, 205:21 geico 34:21, 35:1	general 18:21, 31:9, 31:17, 40:18, 43:3, 45:10, 63:5, 65:4, 87:2, 103:19, 107:16, 135:2 general-purpose 204:11, 205:7 generally 9:18, 13:13, 49:11, 59:19, 62:19, 64:21, 72:19, 74:2, 107:21, 111:10, 122:9, 151:2, 163:2, 169:13, 169:16, 170:7, 194:21, 195:17 generate 50:18 generation 51:4 geo 28:7, 28:10, 45:4 geographic 27:10, 28:11 getting 144:22, 217:6 give 21:6, 105:1, 132:13, 183:15, 186:18, 224:11 given 48:22, 60:11, 183:19 gives 114:19, 144:8, 197:16 glad 11:5 global 40:14 go 10:20, 25:21, 28:16, 35:1, 43:18, 48:8,	53:11, 92:2, 97:7, 101:14, 108:18, 118:19, 123:22, 128:12, 130:3, 136:6, 138:13, 147:19, 189:15, 190:15, 194:7, 200:12, 200:20, 201:1, 205:15, 209:18, 210:19, 218:22, 220:3, 221:2 goal 129:3 goes 149:1, 164:9, 212:3, 214:9 going 6:11, 6:17, 20:4, 20:19, 21:7, 22:3, 46:8, 47:9, 48:17, 72:15, 72:16, 108:12, 125:2, 127:4, 135:2, 142:21, 145:21, 158:5, 160:20, 165:5, 165:12, 198:21, 199:2 good 6:9, 20:13, 61:3, 79:14, 94:2, 135:15, 152:14, 158:9, 158:13, 180:13, 224:13, 224:18 google 28:13 gotcha 84:19 gps 28:10 grab 160:20, 205:17 grabbed 170:18 graduated 22:13
---	---	--	--

graph 174:1 graphic 173:12, 174:9, 175:7, 175:18 graphical 171:19, 172:22, 174:7, 175:6, 175:11, 178:21, 179:11, 185:21, 186:1 graphics 135:18, 172:19, 173:5, 173:16, 176:19, 176:22, 177:18, 177:19, 180:9, 180:13, 186:5 graphs 178:21 great 53:14, 158:17 grid 53:7 ground 20:2 group 1:6, 54:11 gte 25:21, 26:1, 26:4, 26:5, 26:6, 26:21, 28:4 guess 41:2, 43:7, 60:10, 72:20, 138:15, 157:7, 193:17, 203:14, 222:14, 223:22, 224:6, 224:7, 224:17 gui 171:20, 172:6	152:3, 175:14, 181:5 hand 226:9 handle 134:21, 159:3 handling 163:21, 164:11, 166:6, 166:13 handset 156:17 hang 153:3, 217:8 happened 13:14 happy 159:2 hardware 113:14, 152:19, 152:21, 153:1, 153:6, 153:8, 153:11, 153:14, 153:15, 153:19, 154:3, 154:5, 154:14, 154:18, 155:4, 155:5, 155:11, 155:14, 155:19, 155:22, 156:8, 156:12, 157:8, 157:17, 196:10, 196:12, 196:17, 196:20, 197:1, 197:15 hartford 33:14 head 15:18, 20:13 headed 55:16 header 144:7 hear 6:14, 217:2, 217:11 heard 9:14, 11:19 hearing 47:7	heat 73:8 heater 189:13, 190:12 heaters 189:19 heating 63:20, 72:13, 181:19, 182:10 help 5:12 helpful 128:6, 129:5, 152:9, 160:9, 160:13 here 11:1, 11:3, 12:7, 40:1, 46:18, 47:9, 54:21, 58:8, 58:15, 81:7, 94:18, 98:1, 118:9, 123:18, 137:4, 164:2, 174:5, 177:10, 180:18, 181:2, 216:12, 218:13, 222:15 here's 204:12 hereby 225:4 hereinbefore 225:6 hereunto 226:8 hertz 71:6, 71:10, 71:12 heterogenous 24:1, 24:3 high 56:14, 63:7, 63:10, 73:10, 73:13 high-level 166:20 higher 44:13	highly 89:4, 89:21 himself 11:10 hired 23:11 histories 93:17 history 46:15, 48:5, 92:20, 93:1, 93:11 home 151:17, 151:19, 152:5, 159:6, 207:22, 209:11, 210:1, 213:9, 213:11, 214:20 homeowner 182:9 homes 213:11 honey 10:10 honeywell 9:11, 10:7, 10:8, 10:11, 11:20 hot 74:13, 189:13, 189:19 hotter 74:9 hour 59:22, 77:7, 81:8, 82:6, 82:11, 83:2, 83:4, 83:8 hour-and-a-half 77:8, 158:5 hourly 59:13, 59:16, 81:2, 81:3, 81:6, 83:1 hours 60:20, 60:22, 61:1, 61:7, 75:4, 78:3
---	--	--	--

<p>house 55:10, 152:7, 181:19, 182:11 housekeeping 7:1, 10:21, 19:2, 135:22 how'd 18:14 how's 6:13 however 120:4 hundred 40:17 hvac 138:8, 189:12, 189:18, 190:10, 190:11 hypothetically 200:2</p>	<p>157:4, 191:3, 221:3 identifies 69:12, 98:12, 114:2, 120:5, 120:8, 139:12, 188:19 identify 5:13, 5:15, 28:8, 43:21, 44:6, 56:1, 73:12, 83:10, 86:4, 86:5, 133:22, 134:1, 134:3, 135:6, 163:3, 200:17, 213:1 identifying 90:21, 94:13, 94:15, 112:5, 143:4, 155:14 illuminating 53:3, 53:4, 53:5 illustrated 189:17 image 174:9, 179:16, 180:13, 220:8 images 174:8, 174:20, 174:21 imagine 79:15, 182:14 immediately 84:17 implement 68:2, 70:9, 89:8, 89:11, 90:3, 107:18, 134:15, 141:17, 173:9, 173:13, 177:9, 186:14, 203:18 implementation 32:17, 33:3, 147:21 implemented 15:10, 15:13,</p>	<p>27:1, 27:3, 69:13, 70:8, 107:20, 140:6, 171:19, 178:12, 178:13 implementing 53:8, 182:3 implicit 157:21 impractical 173:9 imrglobal 33:6, 33:8, 33:15, 33:18, 34:2, 34:7, 34:18 inc 1:5, 1:6, 3:2, 38:1 incidental 51:4, 211:2, 211:18, 212:8, 212:15 include 14:9, 49:5, 57:3, 63:10, 96:11, 103:16, 103:21, 108:12, 120:19, 120:22, 121:4, 122:1, 126:8, 131:14, 131:15, 157:16, 189:21, 190:3, 190:4, 190:11, 194:16, 219:14 included 56:21, 86:22, 110:5, 110:11 includes 88:11, 98:12, 102:20, 103:13, 121:2, 131:8, 134:21, 137:18, 162:10, 189:18, 191:22, 218:7 including 7:7, 98:13, 115:7, 117:9,</p>	<p>126:16, 138:18, 168:10 income 158:20 incorporated 183:7 incursion 42:21 independent 43:9, 109:4, 109:7, 110:18, 123:15, 156:18 independently 140:10, 141:21 index 4:1, 84:13 indicate 144:8, 150:18 indicated 13:18, 21:17, 70:16, 75:20, 75:21, 199:1 indicates 164:2 indicating 99:5 indication 83:15, 149:16 indirectly 214:11, 215:5, 215:10, 215:12, 215:13, 215:16, 215:22 individual 65:14, 65:17 individuals 68:12 indulge 45:13 industry 10:1, 19:17, 38:22, 39:17, 86:15, 88:6, 88:18, 89:20, 122:7, 151:10 information 14:6, 14:21, 51:15, 62:5,</p>
I			
<p>icon 36:22, 178:2, 180:20, 182:10, 182:11 icons 175:6, 175:11, 178:22, 180:16, 180:17, 180:18, 182:1, 182:6, 182:15 icontrol 47:17 idea 97:16, 135:1 identification 21:21, 54:2, 78:17, 91:15, 147:4, 161:1, 170:22, 184:9, 200:15, 212:21, 220:11, 220:19, 221:7 identified 55:1, 62:8, 75:17, 104:8, 143:5, 154:3,</p>			

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

247

66:12, 66:13, 71:12, 72:4, 72:5, 72:7, 75:13, 75:14, 80:14, 89:9, 116:11, 123:4, 138:19, 159:1, 174:2, 175:3, 176:10, 177:4, 177:22, 178:5, 178:7, 178:10, 178:20, 178:21, 180:22, 181:8, 185:19, 185:21, 186:2, 186:19, 187:1, 189:4, 189:7, 193:8, 193:13, 200:6, 202:20, 202:21, 202:22, 203:2, 204:16, 205:4 infrastructure 34:5, 34:7, 34:16, 53:7 infringement 44:13 infringing 44:6 inherently 202:5 initiate 144:12 input 62:21 inputting 188:12 inside 152:12 inspection 225:18 installed 31:22 instance 96:4 instead 24:18, 128:20, 142:12, 199:8, 208:12	institution 148:19 instructed 73:20 instruction 123:3 insurance 33:14 integrated 61:18, 62:16 intel 219:6, 221:1 intellectual 56:5, 56:8 intending 23:12 intent 193:4 interact 32:22, 37:13 interaction 9:10, 10:8 interested 5:20, 16:22, 226:5 interesting 146:3 interface 19:20, 22:1, 24:11, 35:14, 35:20, 37:7, 51:3, 63:2, 63:13, 72:4, 108:3, 117:10, 121:12, 131:21, 133:2, 134:5, 144:13, 150:21, 152:19, 152:21, 153:1, 153:8, 153:12, 153:16, 153:19, 154:2, 154:3, 154:5, 154:14, 154:18, 155:5, 155:12, 155:15, 155:20, 155:22, 156:8, 156:12, 157:7, 157:18, 171:7,	171:18, 171:20, 172:14, 172:22, 175:2, 175:4, 176:9, 177:10, 178:2, 178:3, 178:17, 182:4, 182:7, 183:3, 183:6, 183:13, 186:14, 194:11, 196:17, 212:7 interfaced 151:13 interfaces 25:20, 102:21, 103:9, 103:15, 120:9, 120:20, 132:9, 133:1, 174:15, 192:21, 196:2, 196:3 interfacing 27:20, 151:21, 193:2, 193:6, 193:11, 193:22, 194:6, 196:6, 197:8, 197:13, 197:21 internal 35:19, 41:4, 132:2, 149:21 internally 198:19 international 40:12 internationally 40:17 internet 30:6, 30:8, 32:18, 32:20, 32:21, 35:17, 36:1, 95:18, 95:20, 95:22, 96:3, 96:9, 96:11, 96:13, 96:17, 96:22, 97:5, 97:10, 97:11, 97:12, 97:16, 98:3, 98:20, 99:4,	99:13, 99:15, 100:8, 209:22, 210:1 interpret 197:14 interpretation 98:5, 205:17, 215:21 interpreted 160:11, 211:7 interpreting 14:18 interrupt 11:16, 158:4 intervening 215:19, 216:1, 216:2 interview 10:13 interviewed 10:10 introduce 11:10 introduces 111:6 invalidated 44:5 invent 159:20, 168:22, 169:2, 179:12 invented 141:14 invention 95:2, 95:17, 98:6, 98:7, 100:6, 100:12, 103:18, 103:20, 203:1, 203:12 investing 56:19 investments 56:1, 56:2 involved 35:20, 50:9, 57:17 involving 191:15, 191:17, 194:21
--	--	--	--

<p>iphones 173:11</p> <p>ipr 1:12, 7:9, 7:10, 7:13, 12:9, 12:13, 76:16, 79:2, 91:12, 159:5, 170:19</p> <p>iprs 11:7, 12:11, 59:12, 60:21</p> <p>issue 51:21, 94:18</p> <p>itc 8:18, 47:6</p> <p>item 197:18</p> <p>itineraries 57:15, 58:4</p> <p>itself 85:18, 114:21, 124:12, 125:13, 142:19, 164:17, 198:18, 199:5, 199:15, 213:11</p> <p>ivan 1:15, 2:2, 4:2, 4:7, 4:9, 6:3, 8:1, 225:5, 225:14</p> <hr/> <p style="text-align: center;">J</p> <hr/> <p>j2me 157:2, 168:7, 168:8, 168:11, 168:14, 168:17, 168:19, 169:2, 169:4, 202:10, 203:21, 204:3, 204:15</p> <p>java 142:16, 143:18, 143:20, 143:21, 144:3, 144:12, 144:14, 144:16, 145:8, 156:21, 166:16, 166:17,</p>	<p>166:18, 167:5, 167:16, 167:20, 167:22, 168:9, 168:22, 169:17, 169:22, 201:2, 201:9, 201:20, 202:1, 202:2, 202:5, 202:20, 203:9, 203:10, 203:16, 203:17, 204:2, 204:3</p> <p>java's 166:19</p> <p>java-like 202:22</p> <p>jeffay 75:2, 88:9, 223:21</p> <p>jeffay's 80:13, 88:21, 89:3, 91:6</p> <p>jim 76:17</p> <p>job 1:19, 20:13</p> <p>joined 53:17</p> <p>joining 11:13</p> <p>july 1:16, 2:6, 12:22, 225:16, 226:9</p> <p>june 13:1, 13:3</p> <hr/> <p style="text-align: center;">K</p> <hr/> <p>keep 11:13</p> <p>kent 3:13, 76:8, 76:11, 76:15</p> <p>key 201:22</p> <p>kim 97:9, 98:2, 99:18, 99:20, 173:15</p>	<p>kind 10:22, 46:3, 170:2</p> <p>know 9:8, 12:16, 12:18, 14:17, 15:9, 15:10, 15:12, 16:7, 16:8, 16:10, 20:19, 21:6, 31:14, 34:10, 36:8, 43:16, 44:14, 51:19, 52:14, 52:15, 54:4, 57:2, 58:4, 68:9, 68:12, 69:19, 70:2, 75:13, 82:20, 135:17, 140:12, 147:5, 152:3, 158:22, 161:2, 175:21, 187:7, 207:21, 213:12, 215:8, 224:6, 224:11</p> <p>knowledge 12:5, 215:10</p> <p>known 38:17, 70:15, 159:14, 159:16</p> <hr/> <p style="text-align: center;">L</p> <hr/> <p>labeled 184:16</p> <p>labs 43:10</p> <p>lacking 18:20</p> <p>laid 111:2</p> <p>landline 27:11, 27:14, 27:20</p> <p>language 16:18, 104:11, 106:13, 160:14, 166:17, 166:21</p> <p>laptop 183:21</p>	<p>large 27:9, 43:17, 67:12, 90:1, 178:10, 179:21, 185:14, 185:15, 187:7</p> <p>larger 180:1, 186:17, 186:18</p> <p>largest 25:8</p> <p>last 48:13, 49:8, 60:13, 80:4, 97:8, 98:18, 115:4, 167:9, 201:1, 217:13, 217:15</p> <p>law 6:10</p> <p>lawyers 75:10, 75:12</p> <p>lcd 183:17</p> <p>leader 55:3, 55:17, 55:20, 58:12</p> <p>leaders 55:15</p> <p>least 11:12, 19:20, 44:4, 46:8, 48:10, 56:18, 65:13, 67:13, 86:14, 88:3, 88:4, 88:16, 88:17, 96:21, 103:11, 123:21, 153:6, 162:20, 193:15, 206:14</p> <p>leave 56:15, 176:10</p> <p>led 183:17</p> <p>left 25:22, 45:21, 176:6, 178:22, 187:20</p>
---	---	---	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

249

<p>left-hand 176:7 less 24:17, 61:1, 83:4, 83:7, 174:17, 175:13, 175:20, 175:22, 177:6, 178:5 let's 12:22, 20:18, 36:13, 98:16, 101:14, 102:18, 104:4, 107:13, 108:18, 111:5, 128:12, 129:6, 137:21, 138:13, 162:6, 180:15, 184:6, 187:8, 194:2, 194:7, 196:19, 197:12, 198:20, 199:8, 200:12, 201:14, 201:18, 204:12, 208:10, 212:17, 220:3, 220:4, 221:2 level 86:11, 156:22 lewis 210:3 library 170:3 likely 44:4, 44:5, 73:14, 96:14, 193:6 limit 63:7, 64:19, 64:22, 98:14, 177:18, 185:19 limitation 111:18, 115:4, 138:16, 155:21, 156:10, 193:1, 197:20 limitations 14:19, 105:14 limited 62:11, 67:8,</p>	<p>67:14, 175:7, 176:21, 186:1, 187:5, 187:6 limiting 67:13 limits 72:12, 177:17, 177:21, 204:1, 204:2 line 11:8, 12:6, 13:21, 71:6, 71:15, 72:5, 102:19, 122:12, 125:15, 140:21, 140:22, 141:1, 142:15, 144:5, 144:21 lines 101:19, 102:2, 102:9, 104:16, 104:21, 105:6, 105:10, 106:3, 106:21, 107:11, 136:7, 142:6, 146:4, 201:2, 202:15, 202:18 linkedin 4:8, 54:19, 57:12 liquid 36:18 list 48:4, 84:21, 85:3, 85:4, 85:8, 85:12 listed 40:1, 42:19, 48:16, 57:4, 58:7, 59:20, 172:19, 219:22 listing 57:5 literature 75:15 litigation 10:2, 41:16, 49:10, 49:12,</p>	<p>49:15, 49:20, 50:7 little 6:15, 6:18, 6:20, 24:17, 49:15, 128:6, 128:7, 155:8, 223:5 lives 214:20 llc 3:13 llp 3:6 loading 161:3 local 35:14, 151:1, 151:2, 151:11, 151:15 locally 151:20 located 29:20, 71:17, 150:19, 150:20, 151:8, 151:17, 151:19, 151:20, 152:4, 152:7 location 9:21, 28:8, 28:10, 30:8, 45:4, 45:5, 53:21, 203:1, 214:5 locations 7:7, 102:15 lock 137:22 locks 137:20 log 22:2 log-in 92:3 logical 190:13 logitech 219:22</p>	<p>long 23:9, 77:5, 77:22, 79:11, 79:12, 202:13 longer 223:5 look 45:2, 56:6, 72:18, 73:9, 78:13, 81:8, 88:14, 93:14, 95:8, 102:1, 102:18, 115:4, 115:22, 116:9, 117:4, 118:13, 120:8, 123:17, 129:6, 138:15, 142:14, 144:20, 145:19, 145:22, 156:15, 157:20, 162:8, 171:3, 171:4, 177:18, 187:8, 188:6, 193:1, 197:12, 220:4, 223:6 looked 56:7, 85:9, 85:13, 181:13 looking 22:8, 87:8, 98:17, 129:21, 141:7, 143:15, 145:14, 178:9, 181:15, 189:3 looks 47:8, 48:15, 54:19, 92:8, 147:14 loosely 170:8 lose 184:10 lost 217:5 lot 10:16, 81:16, 167:21, 173:22, 178:16, 178:19</p>
---	---	---	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

250

<p>low 63:8, 63:10, 73:11, 73:13, 178:1, 185:18, 217:7 low-resolution 185:17, 185:21 lower 44:14 lp 1:9, 3:11, 225:12 lugrin 98:19, 99:3, 99:16 lunch 158:8, 158:9 luncheon 158:18</p>	<p>74:9, 74:13, 82:22, 115:3, 123:17, 174:4, 176:16, 192:2, 192:11, 205:16, 211:19, 223:10, 224:9 makes 62:14, 116:5 managed 38:14, 40:14 management 38:15, 39:16, 41:14, 49:13, 49:14, 51:3, 51:5, 51:7, 53:8, 53:9 manager 82:21 manner 116:2 manually 52:3 manufacture 15:7 manufacturer 18:18, 25:8, 69:17, 126:2 manufacturers 18:20, 18:21, 19:19, 24:9, 66:22, 67:4, 67:9, 67:12, 130:21 manufacturing 40:22, 163:22, 164:12, 166:7, 166:13 many 8:7, 8:11, 24:9, 41:19, 60:20, 79:12, 97:11, 98:12, 123:11, 132:19, 137:14, 174:14, 215:14 mapping 28:19</p>	<p>maps 28:13 march 226:12 marked 21:20, 53:22, 54:1, 78:16, 79:2, 91:14, 147:3, 160:22, 170:21, 184:8, 200:14, 212:20, 221:6 market 36:10, 134:3 markman 47:7 marriage 226:3 martens 80:3, 80:6, 80:18, 80:20, 81:1, 81:3, 81:6, 81:9, 81:12, 81:18, 82:5, 82:11, 82:12, 82:16, 83:3, 83:11, 83:16 massarsky 55:16 massive 27:9 master 22:16, 23:8 master's 23:13 material 78:8, 78:9, 93:21 materials 59:4, 75:18, 77:15, 80:9, 80:15, 85:5, 92:20 matrix 24:16, 24:18, 24:19 matter 7:1, 10:2,</p>	<p>19:2, 24:6, 47:15, 47:16, 59:18, 77:16, 78:9, 82:16, 135:22, 163:6, 226:6 matter's 213:2 matters 59:5, 82:9, 82:10 maybe 11:14, 17:6, 48:12, 74:7, 79:16, 88:11, 138:16, 148:4, 151:5, 176:9, 181:3, 181:5, 194:2, 205:22 mcgraw-hill 38:13, 38:16, 38:17, 39:14, 52:18, 161:20, 161:22, 167:22, 168:2 mcu 221:13, 222:8, 222:12, 222:17 mean 15:14, 25:11, 29:11, 29:21, 32:10, 34:12, 36:2, 44:2, 44:7, 64:5, 64:8, 66:14, 74:6, 76:12, 83:13, 85:22, 86:19, 95:21, 96:18, 107:15, 113:13, 120:12, 122:14, 123:1, 134:2, 178:4, 178:6, 193:3, 193:16, 196:3, 196:9, 198:5, 198:15, 200:2, 211:12, 215:5, 215:16, 215:17,</p>
<p>M</p>			
<p>m-a-r-t-e-n-s 80:5 made 11:5, 31:4 magazine 22:18, 23:16, 25:2 magnetic 9:6 mailed 94:7 main 54:12, 108:20, 123:21, 126:16, 127:1, 127:8, 127:11, 131:9, 131:18, 132:4 mainframe 25:14 mainly 38:12 majority 8:10 make 20:11, 20:20, 35:2, 51:14, 56:2, 58:2,</p>			

<p>215:22, 223:22, 224:2 meaning 96:13, 101:10, 156:18, 160:2, 160:9, 160:10 meanings 169:13, 215:14 means 102:22, 215:11 meant 86:21 measure 62:4, 63:1 measured 65:22 measuring 61:9 mechanical 61:14, 62:8, 155:13 mechanism 30:9, 69:12, 99:12 media 55:4, 55:18, 55:20 medical 40:12 medwerks 35:14 meet 77:3, 77:20, 77:22, 106:15 meeting 77:5, 77:18, 78:5 memory 8:16, 108:20, 120:22, 121:2, 121:4, 121:7, 123:6, 123:9, 123:13, 123:15, 123:21, 126:16, 127:1, 127:8, 127:11, 127:22, 128:2, 131:9, 131:14, 132:4,</p>	<p>132:9, 133:9, 133:12, 134:5 menard 4:19, 212:17, 213:3, 213:4, 213:6, 213:12, 213:14, 213:20, 214:17 mention 103:5 mentioned 9:22, 11:2, 12:3, 25:4, 35:4, 57:10, 122:11, 132:17, 133:6, 198:13 merely 97:18, 153:12, 176:19, 196:6 merge 26:8, 44:11 merged 26:6, 52:13 merger 26:11, 26:17 mesh 168:19 mess 148:12 message 66:17, 69:9, 96:6, 98:8, 115:6, 115:11, 116:11, 117:9, 138:18, 139:15, 140:1, 140:14, 142:3, 146:7, 146:8, 147:12, 148:11, 149:15, 191:16, 191:19, 191:21, 192:6, 192:7, 217:22, 218:6 messages 66:7, 66:9, 66:20, 68:20, 96:9, 96:19, 99:15, 139:2,</p>	<p>139:5, 139:10, 140:2, 140:7, 140:12, 140:18, 141:10, 141:11, 141:19, 142:20, 143:6, 143:9, 144:6, 145:10, 146:5, 146:12, 146:15, 146:18, 148:7, 148:13, 157:10, 193:18 messaging 18:13, 18:16, 67:13, 95:18, 95:19, 95:21, 96:2, 96:12, 96:16, 98:19, 99:15, 100:7, 142:22 met 12:17, 12:20, 76:22 metal 61:14, 62:7 meter 30:10, 32:8, 32:10, 32:15, 32:20, 32:22, 181:19, 182:11 meters 29:15, 29:22, 30:3, 30:5, 30:8, 32:11, 32:18, 32:19 method 62:10, 99:9, 205:1 methodology 42:20, 43:21, 55:22 methods 28:10, 141:19 mic 5:11, 6:17 micro 61:20, 110:14, 111:3, 117:18, 123:8, 135:13</p>	<p>microcomputer 25:13, 163:19, 164:3, 164:17, 164:18 microcomputers 24:9, 24:12 microcontroller-- based 111:21, 112:6, 112:9 microcontrollers 120:19, 123:9, 123:11, 128:16, 129:9, 129:13, 130:4, 130:7, 130:8, 130:12, 131:2, 131:4, 131:7, 159:13, 159:20, 219:3 microprocessing 121:5 microprocessor 107:22, 108:16, 114:20, 121:16, 132:8, 163:20, 164:3, 164:9, 164:16, 164:19, 164:22, 165:5, 165:11, 165:17, 165:21, 166:2, 166:5, 166:11 microprocessor-b- ased 121:3, 121:22 mid 26:11 middle 23:12, 169:22, 220:8, 221:17, 221:21 midlet 169:6, 169:8, 169:9, 169:11, 169:21, 170:5, 204:13, 204:17, 205:2 midlets 170:14</p>
--	---	---	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

252

<p>midp 204:17, 204:18 might 48:13, 125:15, 132:22, 170:14, 176:6, 185:19, 207:21, 221:17 mile 152:3 million 56:17, 56:18 mind 124:17, 145:2 mini 25:9, 25:11, 25:14 minimal 124:1, 128:10, 128:22, 132:12, 133:20, 173:4, 173:17 minimally 141:16, 142:10, 153:5, 157:8, 173:4 minimum 88:5, 122:4, 124:9, 124:14, 124:16, 125:5, 125:6, 125:21, 129:4 minor 22:13 minus 48:12 minute 22:2, 194:3, 205:16, 220:5 minutes 17:7, 17:9, 17:18, 224:12 missing 85:7 misspoke 149:19 mobile 19:13, 45:4, 67:16, 68:15,</p>	<p>147:11, 172:7, 172:18, 173:1, 174:6, 174:13, 174:16, 174:18, 175:9, 176:1, 179:10, 179:12, 179:15, 183:20, 201:6, 202:2, 203:3, 204:8, 204:16, 205:4, 208:4, 209:12, 225:15 mobile-terminated 144:6 modern 61:12, 61:13 modified 175:2 modify 177:5 modulate 71:9 modulated 71:12, 72:4, 72:5, 133:2 module 138:20, 153:6, 153:9, 154:19, 154:20, 156:6 moment 7:14, 15:10, 18:5, 45:14, 145:17, 145:22, 151:6, 152:18, 166:15, 184:6 monday 75:5, 77:1, 77:3, 77:6 monitor 152:5, 217:5 monitored 213:22, 214:21 monitoring 9:20, 27:3, 27:13, 29:14, 29:22, 65:7, 103:1, 104:15, 104:20, 105:5,</p>	<p>106:3, 106:20, 107:10, 151:22, 152:2, 152:8, 152:16, 213:10, 214:5 months 48:13 more 24:17, 35:16, 47:13, 48:14, 52:12, 52:14, 60:22, 80:11, 89:4, 95:20, 96:16, 96:20, 97:5, 105:1, 107:17, 112:8, 127:5, 128:10, 130:22, 131:6, 133:8, 133:21, 136:1, 155:8, 158:5, 160:13, 164:19, 165:11, 180:5, 180:8, 186:5, 186:19, 189:21 morning 6:9 morphed 194:4 most 6:16, 8:14, 28:16, 35:10, 43:22, 44:2, 44:4, 44:5, 46:20, 57:19, 73:14, 74:19, 96:13, 182:8, 193:6 mostly 16:22, 48:20, 49:13 motion 76:14 motivated 177:8, 178:16, 179:4 move 6:17, 37:21,</p>	<p>116:20 moved 38:6, 40:5 much 61:5, 89:4, 174:8, 180:17 multi-acre 152:1 multi-function 123:14, 133:7 multi-media 38:4 multiple 24:12, 126:4, 126:22, 127:7, 132:20, 137:7 must 144:6, 151:17, 152:10, 153:12, 156:17, 156:18 mute 5:10, 22:6 muted 7:17 myself 56:10, 56:13, 222:21</p> <hr/> <p style="text-align: center;">N</p> <hr/> <p>name 6:9, 7:22, 9:16, 15:16, 16:6, 16:13, 23:15, 23:21, 30:18, 31:1, 42:16, 55:9, 80:4, 148:19, 187:21, 188:22 named 10:4 names 31:1 narrow 89:22 narrower 89:15, 111:9 nationwide 1:6</p>
--	--	--	--

<p>naturally 134:9</p> <p>nature 52:6, 60:11, 154:6</p> <p>navigation 37:1</p> <p>necessarily 90:12, 108:9, 109:10, 122:15, 122:22, 128:19, 129:10, 129:13, 129:17, 130:5, 130:9, 135:17, 137:1, 148:8, 152:12, 153:20, 194:20, 205:7</p> <p>necessary 18:17, 58:3, 68:2, 89:5, 89:11, 89:15, 105:16, 130:18</p> <p>need 69:19, 70:2, 72:8, 114:17, 121:13, 122:15, 125:1, 125:4, 129:2, 135:9, 135:10, 141:17, 152:12, 155:10, 155:11, 165:22, 166:1, 166:3, 200:10</p> <p>needed 108:5, 108:7, 123:13, 173:19, 196:13, 218:10</p> <p>needing 88:6</p> <p>needs 107:21, 108:16, 117:19, 119:13, 121:12, 125:14, 151:18, 151:19, 152:15, 153:15</p> <p>neighbor 215:1</p> <p>neighborhood 30:5</p>	<p>nephew 40:6, 40:10, 40:11, 40:13, 40:20, 41:4, 42:6, 45:21, 53:1</p> <p>net 209:20</p> <p>network 27:21, 34:6, 35:19, 50:12, 96:14, 97:3, 98:9, 168:19, 199:9, 200:6, 200:7, 207:16, 207:18, 208:4, 209:6, 209:13, 210:8, 211:11, 212:1, 212:6</p> <p>network-1 50:11</p> <p>networks 22:17, 24:1, 24:3, 27:15, 96:11, 96:20, 97:4, 199:10, 199:14, 200:3</p> <p>nevertheless 212:9</p> <p>new 27:19, 160:19, 188:3, 188:8, 190:7</p> <p>next 25:21, 29:1, 33:5, 78:13, 96:15, 144:10, 150:6, 193:1, 201:18, 220:4</p> <p>nighttime 64:1</p> <p>nine 45:16, 45:20</p> <p>nokia 184:21, 185:2, 185:5, 186:4, 187:2</p> <p>nomenclature 94:18</p>	<p>non 99:7</p> <p>non-internet 99:7</p> <p>non-wireless 197:21, 198:1, 206:18, 209:9, 211:4, 211:13, 211:20</p> <p>none 24:10, 109:7, 174:21</p> <p>normally 60:9</p> <p>north 2:4, 225:3, 226:17</p> <p>notary 1:22, 2:3, 225:2, 226:16, 226:18</p> <p>note 7:2, 21:22, 53:16, 107:1</p> <p>noted 157:9</p> <p>nothing 17:22, 98:18, 174:3, 224:10, 224:16</p> <p>notice 2:5, 159:7</p> <p>notification 191:18, 192:6, 216:16, 217:21, 218:5</p> <p>notifications 217:6</p> <p>notified 216:6, 218:14</p> <p>notify 216:13</p> <p>notion 195:17</p> <p>november 162:19</p> <p>number 47:13, 48:21,</p>	<p>93:7, 125:5, 125:6, 128:10, 149:10, 175:21, 176:21, 185:8</p> <p>numbers 7:10, 93:6, 149:8</p> <hr/> <p style="text-align: center;">O</p> <hr/> <p>oath 6:6, 20:5</p> <p>object 39:11, 65:11, 68:16, 70:19, 98:10, 100:13, 104:22, 105:7, 106:5, 109:15, 121:10, 127:3, 127:10, 165:2, 177:1, 177:14, 186:21, 195:12, 199:22, 208:7, 211:16</p> <p>objection 210:3, 210:22, 212:11</p> <p>objective 64:18, 64:19, 125:19, 133:19, 133:22</p> <p>objectives 105:12, 106:15, 124:17</p> <p>obstructions 5:22</p> <p>occasions 12:18, 12:20, 12:21</p> <p>occur 140:13</p> <p>occurred 13:7, 157:2, 225:15</p> <p>occurs 96:13</p> <p>off-the-record 5:9</p> <p>offer 51:20, 72:9</p>
---	--	--	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

254

<p>offering 45:6, 51:19 offerings 45:10, 50:20, 52:1 offers 202:2 office 1:1, 10:14, 27:8, 57:18, 58:1, 82:20, 93:21, 94:3, 94:7, 94:10, 94:12, 94:13, 94:20, 94:22, 95:2, 95:5, 95:6, 95:9, 95:10, 212:4 offices 27:4 offline 159:2 often 128:17, 129:9, 129:17, 130:4, 130:8, 131:6 oh 7:19, 49:11, 57:4, 79:14, 143:2, 156:1 old 46:21, 48:14 older 48:14 on-off 63:20 one 9:22, 10:20, 19:11, 21:5, 24:14, 27:16, 28:6, 28:16, 28:17, 29:13, 30:1, 34:5, 34:13, 36:17, 37:4, 39:18, 43:8, 47:6, 47:7, 47:11, 50:13, 50:14,</p>	<p>51:18, 51:19, 51:20, 51:21, 54:20, 54:21, 55:2, 65:8, 66:10, 67:14, 70:2, 79:21, 87:15, 88:3, 88:4, 93:21, 97:21, 99:9, 105:1, 107:17, 119:12, 122:6, 124:20, 127:5, 128:10, 130:22, 131:6, 132:7, 133:8, 135:19, 140:3, 141:12, 142:7, 149:17, 151:14, 152:1, 165:12, 170:17, 172:16, 176:12, 179:3, 180:15, 182:6, 183:16, 184:11, 186:8, 189:21, 190:9, 191:10, 191:15, 191:17, 199:10, 199:11, 202:13, 202:18, 202:19, 202:20, 202:22, 205:1, 206:14, 206:17, 206:19, 214:4, 214:9, 215:21, 216:5, 217:8, 217:21, 218:4, 219:2 one-off 34:11, 34:14 one-on-one 76:14 one-third 176:7 one-way 217:22 online 33:21, 35:1, 35:5, 38:14 only 21:12, 30:4,</p>	<p>38:19, 90:21, 99:11, 102:16, 104:8, 106:15, 115:16, 117:1, 124:20, 125:5, 131:3, 132:7, 135:14, 135:18, 145:18, 146:21, 201:22 open 54:5, 185:11, 201:3, 201:20, 221:8 opened 221:9 operate 96:3, 97:10, 98:20, 122:11, 140:9 operated 135:14, 185:5 operation 115:8, 125:16 operationally 142:16 operations 38:9, 57:20 operatively 118:3, 118:4, 151:13 opine 56:4 opinion 67:7, 71:2, 85:11, 101:5, 101:8, 112:20, 124:11, 131:1, 141:2, 144:19, 151:16, 154:22, 157:15, 159:22, 174:5, 174:19, 195:7, 195:15 opinions 14:2, 14:13, 14:21, 59:7, 79:7, 80:17, 84:10, 85:6, 85:15, 91:8</p>	<p>opportunity 58:18 opposed 113:2, 114:4, 114:21, 115:20, 140:3, 141:11, 169:9, 216:16 opposite 186:8 optimized 203:2 optional 189:8 order 18:15, 70:9, 80:11, 89:16, 105:9, 105:12, 106:14, 141:18, 142:11, 144:12, 165:21, 175:20, 207:5 orders 29:17, 29:18 ordinary 86:11, 86:14, 88:22, 90:4, 91:7, 101:10, 133:18, 151:14, 160:2, 162:17, 163:9, 177:7 organization 182:5 originate 80:18 other 12:10, 24:10, 28:3, 28:12, 36:6, 42:11, 50:8, 61:22, 75:18, 76:8, 78:9, 82:1, 82:9, 85:9, 85:13, 85:19, 86:1, 86:5, 89:20, 91:3, 99:6, 99:9, 102:13, 108:7, 108:9, 112:1,</p>
--	--	---	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

255

<p>112:3, 112:19, 113:6, 114:14, 114:16, 114:17, 114:18, 124:19, 126:1, 126:9, 126:16, 128:17, 129:1, 129:2, 140:11, 142:21, 145:14, 145:17, 145:20, 153:3, 156:4, 157:11, 157:21, 161:15, 163:20, 164:3, 164:10, 165:12, 183:22, 186:9, 191:13, 192:10, 193:18, 197:18, 205:3, 207:12, 214:3, 215:19 others 39:22 otherwise 143:6, 174:2, 226:5 out 10:11, 22:1, 38:4, 39:7, 43:19, 90:1, 90:2, 94:19, 111:3, 113:22, 146:22, 176:10, 178:22, 182:6, 208:8, 221:3 outcome 9:8, 226:5 outline 80:8 outset 21:18 outside 12:9, 12:12, 96:13, 133:10, 133:16, 152:5 over 7:3, 20:19, 30:8, 48:18, 71:6, 95:3, 144:13, 190:10</p>	<p>overall 23:21, 46:3, 49:18, 60:22, 64:20, 66:1 overlap 89:2, 223:20 override 189:8 oversaw 38:12, 38:13 overstates 89:10 own 22:4, 51:18, 122:22, 167:10 owned 32:4, 56:5 owner 1:10, 8:22, 95:1, 95:9 owner's 84:13</p> <hr/> <p style="text-align: center;">P</p> <hr/> <p>package 103:11, 126:4 page 4:8, 22:9, 25:5, 45:15, 46:11, 46:22, 47:9, 47:10, 48:3, 48:16, 49:22, 54:19, 93:5, 93:6, 93:7, 93:14, 94:3, 95:13, 95:16, 97:8, 97:9, 98:16, 98:17, 99:12, 100:2, 100:5, 148:17, 149:7, 149:8, 149:10, 149:18, 149:20, 149:21, 150:6, 161:5, 161:17, 162:3, 163:13, 163:16, 171:19, 219:9, 221:18,</p>	<p>221:21 pager 187:7 pages 1:20, 79:12, 79:17, 221:16 paid 59:13, 59:16, 60:3, 60:12, 82:12, 82:14, 82:17 palm 36:5, 36:6, 36:12, 36:13, 36:15, 37:2, 37:10, 37:17, 175:13, 175:14 paper 70:12 paragraph 86:7, 97:8, 100:5, 101:1, 101:12, 101:16, 102:5, 102:7, 107:14, 128:14, 129:7, 129:22, 140:19, 144:10, 171:9, 171:11, 171:12, 171:15, 172:5, 182:18, 182:20, 187:8, 187:11, 188:4, 188:5, 188:6, 188:11, 188:16, 189:15, 200:20, 201:2, 201:11, 201:13, 201:16, 201:19, 202:12, 202:16, 204:12, 204:22, 213:13, 213:15, 213:16, 216:4, 216:5, 217:19, 219:1, 219:6, 222:4 paragraphs 98:18 pardon 169:7</p>	<p>parenthesis 125:3 paris 57:15 parkway 3:14 part 6:16, 14:21, 26:17, 41:21, 58:10, 66:1, 74:19, 84:15, 84:16, 120:5, 121:5, 125:16, 125:17, 127:15, 128:3, 130:18, 134:18, 148:18, 196:5, 222:10, 222:15 participate 65:19 participated 57:1, 83:16 participates 41:15 participating 14:4 particular 16:2, 16:5, 16:8, 16:13, 18:10, 28:14, 31:3, 33:16, 34:15, 36:4, 36:7, 36:14, 36:22, 43:21, 46:13, 46:17, 51:22, 56:1, 62:21, 63:12, 64:22, 69:1, 70:22, 73:2, 82:16, 89:20, 92:14, 93:4, 102:1, 108:10, 110:13, 117:17, 128:21, 130:14, 134:21, 148:4, 152:6, 153:14, 154:2, 154:3, 162:14, 173:21,</p>
--	--	---	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

256

<p>174:9, 176:8, 190:16 particularly 84:7, 89:14 parties 2:7, 7:2, 7:5, 7:11, 69:4, 225:20, 226:2, 226:4 partner 57:19 partnered 33:15 partners 29:1, 29:7, 29:8, 67:11 partnership 26:10 party 10:4, 214:12, 214:16, 214:19, 215:7, 215:12, 215:19, 216:13, 216:22, 217:16, 217:22, 218:6, 218:8, 218:13, 218:18, 225:11 passage 103:6 passed 96:6 past 9:21, 10:9, 48:11, 49:16, 49:19, 50:1 patent 1:1, 1:3, 1:10, 1:13, 4:11, 4:12, 8:9, 8:12, 8:15, 8:22, 16:19, 16:21, 19:3, 19:5, 19:7, 19:8, 43:12, 43:17, 44:12, 44:16, 50:6, 54:8, 78:14, 78:21, 79:8, 80:7,</p>	<p>81:16, 84:12, 84:13, 85:1, 85:18, 86:4, 89:8, 91:12, 92:8, 92:9, 92:13, 92:14, 92:16, 92:21, 93:2, 93:12, 93:18, 93:21, 94:13, 94:22, 95:2, 95:9, 95:10, 98:7, 98:8, 98:11, 98:14, 100:12, 100:15, 101:2, 101:17, 101:20, 102:8, 102:14, 104:5, 106:8, 106:16, 108:19, 116:1, 119:9, 120:1, 132:6, 135:21, 136:7, 137:5, 137:14, 137:21, 138:14, 139:14, 141:14, 142:2, 150:12, 150:15, 154:16, 155:3, 155:7, 156:11, 160:10, 160:12, 162:19, 170:19, 173:15, 179:7, 179:9, 179:13, 182:2, 190:16, 194:10, 205:18, 213:14, 222:5 patentable 95:3 patents 9:2, 9:4, 16:16, 16:17, 43:19, 43:20, 43:22, 44:20, 44:22, 50:10, 59:5, 89:12, 90:3, 93:17, 94:1, 136:4, 159:19, 168:21</p>	<p>path 99:8 pathway 199:20 paused 17:17 pay 81:3 payment 9:5, 52:1 payments 82:1 pays 83:1, 83:3 pda 36:1, 36:2, 36:9, 174:12, 174:18, 175:5, 175:13, 176:1, 178:14, 180:6, 180:8 pdas 36:12, 174:6, 175:7 pending 9:9, 21:13, 47:19 percent 8:13, 49:12, 49:20, 49:21 percentage 49:9, 49:17 perform 105:9, 122:22, 133:4, 134:1 performed 57:8, 114:3, 115:17, 115:18, 133:10, 156:21 performs 145:9 perhaps 62:20, 125:14, 179:2, 190:11 period 19:18, 35:8, 36:16, 48:9 person 29:19, 30:4,</p>	<p>32:11, 57:22, 86:13, 88:15, 88:21, 91:7, 133:18, 162:17, 163:2, 163:8, 177:7, 214:20, 216:18 personal 36:3, 172:8, 173:2, 183:20, 201:4, 201:22 personalized 50:17, 50:18, 52:2 personally 168:16 personnel 28:11, 28:15, 214:3 persons 165:6, 216:3 perspective 105:15, 202:8 pertaining 174:16 pertinent 145:15 peter 1:15, 2:2, 3:20, 4:2, 6:3, 8:1, 53:17, 225:5, 225:15 petition 75:18, 77:14, 80:12, 184:17 petitioner 6:4, 59:7 petitioners 1:7 petitions 11:3, 11:4, 59:6, 75:1, 75:3, 78:9 phase 30:12, 30:13 phone 5:15, 12:17, 18:18, 18:20,</p>
---	---	--	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

257

<p>18:21, 19:19, 27:18, 66:22, 67:3, 67:8, 67:12, 67:16, 68:19, 68:21, 69:3, 69:9, 69:14, 69:17, 69:20, 70:5, 70:17, 140:8, 143:3, 143:7, 145:12, 172:7, 172:18, 173:2, 173:10, 174:13, 174:18, 176:1, 176:8, 176:20, 177:5, 177:10, 178:12, 179:11, 179:13, 179:16, 180:1, 183:20, 208:1, 210:21, 211:22, 212:3 phones 9:6, 19:14, 27:17, 140:13, 173:12, 174:6, 174:17, 175:10, 204:6 phonetic 23:20 photograph 219:14, 219:17, 219:19, 220:4, 220:7, 220:12, 220:17, 220:20, 222:4 physical 198:3, 198:13, 198:15, 198:17, 198:18, 199:17, 200:7 physically 7:6, 20:10 picking 176:5 picture 4:20, 179:18, 221:10, 221:11 piece 14:5, 70:11,</p>	<p>99:10, 153:14, 154:2 pilot 36:5, 36:13, 36:15, 37:10, 175:13, 175:14 pinnacle 76:18 pip 30:14 pittsburgh 22:11, 22:22, 23:19 pixels 175:17 place 13:7, 207:4, 207:5 placed 124:9 places 97:11, 97:16 plain 101:9, 160:1 plaintiff 8:21, 48:1 plan 223:9 planet 212:15 planned 216:8 platform 168:9, 169:18, 201:3, 202:5, 203:12, 203:18, 204:1, 204:6 platforms 168:17, 201:20, 203:4, 204:8 platt 8:2 please 5:7, 5:10, 5:12, 5:15, 7:21, 20:11, 21:6, 136:6 pleune 3:3, 4:3, 6:8,</p>	<p>6:10, 6:22, 7:20, 11:5, 11:17, 11:18, 53:11, 53:16, 53:19, 100:17, 100:21, 136:14, 158:7, 158:12, 158:15, 159:4, 159:11, 159:12, 205:10, 205:14, 222:22, 223:4, 223:13, 223:15, 224:4, 224:13, 224:18 plugged 71:11, 72:2 plurality 102:20, 136:16 point 3:14, 11:6, 19:11, 36:21, 73:13, 73:20, 88:10, 112:16, 165:10, 211:15 point-to-point 211:19 pointed 192:1, 192:4, 192:5, 221:3 points 62:22 policies 35:2, 35:3 policyholder 34:22 policyholders 35:1 pool 189:13, 189:19 popular 36:10 port 140:6, 141:14, 141:17, 141:18, 142:1, 142:5, 142:19, 143:5, 144:8, 145:5, 145:10, 146:10,</p>	<p>146:19, 149:13, 150:3, 150:7, 150:10 portable 201:21 portal 50:14, 52:7 portfolio 43:12, 43:17 portion 38:19, 41:15, 58:12, 90:2, 136:15, 137:4, 142:6, 166:8, 197:3, 197:4 portions 93:15 posita 86:13, 89:9 position 54:21 positions 55:1 positive 92:17 possible 68:7, 69:8, 111:20, 126:14, 134:13, 173:3, 186:2 potential 44:13, 94:13 potentially 125:17, 152:3, 195:13, 199:6, 206:3, 210:10 power 64:20, 65:1, 71:6, 71:15, 72:3, 72:5 practical 70:21, 174:17, 176:15, 178:3, 178:11, 178:14, 179:5 practiced 14:17, 15:1, 16:1</p>
---	---	--	--

<p>pre-compiled 170:8</p> <p>pre-existing 179:15</p> <p>pre-installed 170:2</p> <p>preburned 114:22</p> <p>precise 163:20, 164:11, 166:6, 166:12</p> <p>predate 148:21</p> <p>predefined 67:15</p> <p>preloaded 67:15, 68:21</p> <p>preparation 61:4, 76:4, 76:6, 76:10, 76:12, 76:20, 83:17, 83:20, 92:11, 99:21</p> <p>prepare 74:21, 78:11</p> <p>preparing 61:6</p> <p>presence 161:12, 218:8</p> <p>present 3:18, 41:9, 57:17, 95:17, 100:6, 203:1</p> <p>presented 126:4, 126:5, 218:10</p> <p>presents 218:19</p> <p>presumably 153:13</p> <p>pretty 60:17</p> <p>previous 12:3, 97:7</p> <p>previously 162:1, 162:16</p> <p>primar 40:19</p>	<p>primarily 9:6, 27:1, 33:13, 38:17, 40:19, 50:15, 52:8, 57:18, 71:16, 96:19, 122:21, 139:22, 168:9</p> <p>primary 38:21, 39:18, 66:10, 81:14, 122:18, 124:12</p> <p>principal 41:10</p> <p>prior 4:16, 4:17, 4:18, 4:19, 18:19, 19:14, 19:21, 59:6, 67:13, 68:5, 75:3, 84:7, 86:5, 95:3, 99:10, 140:12, 144:19, 173:11, 184:17, 200:18, 213:3</p> <p>priority 162:18</p> <p>private 68:12, 96:10</p> <p>pro 125:20</p> <p>probably 13:2, 13:3, 25:15, 26:12, 30:16, 43:16, 45:18, 45:20, 46:19, 48:20, 49:20, 52:12, 61:1, 73:10, 167:9, 167:10, 175:13, 176:10, 180:5, 180:21, 181:1, 181:10</p> <p>problems 94:14</p> <p>proceeded 26:12</p>	<p>proceeding 5:4, 5:8, 79:3</p> <p>proceedings 5:1, 7:13, 75:7, 76:3, 76:16</p> <p>process 20:1, 23:12, 26:12, 26:17, 84:4, 85:10, 88:19, 89:7, 89:17, 89:19, 90:10, 90:12, 90:13, 90:16, 90:17, 90:18, 90:21, 91:2, 91:3, 110:15, 117:8, 166:6, 166:12, 167:1</p> <p>processed 145:1</p> <p>processes 58:3</p> <p>processing 9:4, 111:7, 111:13, 111:15, 111:21, 112:6, 112:9, 113:5, 113:6, 113:10, 113:12, 113:19, 113:22, 114:3, 114:6, 114:10, 114:12, 114:20, 116:6</p> <p>processor 107:16, 108:16, 109:14, 109:20, 109:22, 110:10, 110:15, 110:16, 110:17, 119:13</p> <p>produce 130:21, 177:6</p> <p>produces 126:3</p> <p>product 16:3, 16:5, 16:8, 16:10, 16:11, 16:12,</p>	<p>30:18, 30:20, 35:15, 39:20, 50:19, 51:11, 51:12, 75:15, 84:8</p> <p>products 12:6, 15:8, 15:11, 15:14, 15:15, 15:16, 15:19, 18:3, 18:7, 24:14, 31:15, 34:20, 36:9, 40:2, 40:4, 41:7, 50:16</p> <p>professional 57:6</p> <p>profile 57:12, 204:16, 205:4</p> <p>program 18:12, 18:17, 117:19, 134:21, 140:1, 142:22, 143:12, 145:8, 146:17, 170:3, 187:15, 187:21, 187:22, 188:3, 188:7, 188:8, 188:22, 189:20, 190:8, 190:9, 190:11</p> <p>programmability 156:17, 156:21, 157:2</p> <p>programmatic 18:17, 19:1, 140:3, 141:10</p> <p>programmatically 140:17</p> <p>programmed 111:22, 117:2, 143:3, 170:12</p> <p>programming 156:22, 157:3, 166:17, 167:10</p> <p>programs 187:17, 204:2</p>
--	--	---	---

project 23:5, 29:16, 31:12, 41:13, 49:12, 49:14, 49:21, 52:11, 53:4, 53:5, 53:8, 166:3, 168:1, 168:5 projects 23:18, 26:10, 27:16, 28:6, 29:13, 30:1, 31:1, 33:10, 33:16, 33:19, 35:10, 35:11, 35:12, 35:13, 38:12, 50:11, 50:12, 52:19, 170:13 promarine 40:1, 52:17 promising 43:22, 44:3 prompts 181:5 pronounced 38:2 properties 56:8 property 56:5, 152:1 proposed 88:9 proposing 209:8 prosecution 92:20, 93:1, 93:11, 93:16 protocol 30:14, 66:6, 67:19, 70:6, 70:11, 71:5, 88:3, 88:5, 96:2, 146:16, 146:20, 148:1, 196:14, 196:18, 205:5 prototype 30:1	provide 5:17, 18:18, 33:10, 43:3, 45:4, 53:7, 58:3, 58:18, 58:21, 59:7, 65:7, 75:12, 79:7, 80:11, 83:21, 86:10, 101:4, 108:9, 126:9, 130:12, 175:11, 186:5, 201:6, 202:3 provided 34:5, 58:19, 80:1, 84:1, 132:20, 132:21 providers 201:6 provides 57:14, 103:14, 120:10, 137:14, 140:1, 201:3 providing 50:15, 50:20, 102:22, 103:10, 130:17 provisioning 27:2, 27:17, 27:18 proximate 152:10, 152:15 proximity 145:6, 145:9 ptab 91:6 public 1:22, 2:3, 31:9, 40:18, 41:3, 97:3, 158:22, 203:22, 225:3, 226:16 publication 219:22 publications 38:22, 86:6 published 22:17, 24:21, 161:19, 162:5	publishing 38:14, 39:2, 39:5, 39:9, 39:17 pull 108:1, 108:2, 132:19, 147:2, 159:8 pump 189:13, 189:19 purchase 5:19 purely 84:9 purpose 66:2, 79:5, 111:10, 135:3, 135:7, 216:7 purposes 5:8 pursuant 2:4 put 166:14, 177:22, 186:19, 189:7 <hr/> Q qualifications 80:16 qualify 87:4 quantity 122:4, 124:1, 124:14, 124:16, 125:21, 128:22, 129:4, 132:12, 133:20 question 21:1, 21:8, 21:13, 21:14, 75:11, 79:14, 87:6, 88:20, 105:18, 105:22, 110:6, 110:9, 114:9, 115:2, 115:13, 126:13, 126:18, 127:5, 142:1, 151:5, 151:7, 155:2, 155:19, 156:7, 172:21, 203:14, 217:13, 217:15, 220:16, 220:18 questions 6:12, 16:16, 16:18, 16:20, 20:4, 21:6 quick 93:10, 222:6 quite 180:7, 180:13, 185:14 <hr/> R rabbit 40:1 raised 56:17 ram 123:10 ran 10:22 range 63:9, 133:1 ranges 62:22, 64:2 rate 44:10, 59:13, 59:16, 59:21, 60:3, 81:4, 81:6, 82:17, 82:19, 83:1, 83:3 rated 44:11 rather 179:21, 202:13 re-logging 54:6 read 30:5, 30:7, 71:12, 74:22, 84:6, 87:13, 88:12, 93:16, 99:16, 99:18,
---	---	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

260

<p>163:18, 201:14, 220:17 reader 30:11, 32:9, 32:10, 32:15, 32:20 reading 32:11, 62:6, 72:11, 130:11, 145:2, 225:18 readout 63:5 realization 147:12, 147:20 really 54:21, 158:21, 186:16, 203:10, 203:15, 224:5 reason 46:16, 56:20, 57:3, 57:9, 58:6, 202:1 reasonable 98:4 recall 9:17, 10:14, 13:6, 14:3, 14:5, 14:20, 15:18, 16:14, 17:5, 17:21, 18:4, 24:20, 31:2, 46:18, 59:18, 63:22, 78:12, 79:15, 81:7, 93:19, 99:19, 99:20, 100:1, 185:16 receipt 192:6 receive 59:14, 60:6, 66:9, 72:4, 72:12, 82:5, 115:6, 116:10, 116:12, 143:8, 145:10, 166:2 received 22:9, 23:3,</p>	<p>82:1, 82:7, 139:10, 139:16, 141:4 receives 139:2, 139:5 receiving 62:20, 66:7, 115:11, 142:4, 148:9, 191:16, 191:19, 193:7, 193:13 recent 8:14 recently 18:1 reception 142:19, 143:5 recess 53:15, 100:20, 158:18, 205:13, 223:3, 224:15 recitation 105:19, 111:14 recitations 157:16 recite 104:6, 106:11, 106:12, 107:2, 108:20, 109:1, 109:8, 110:21, 116:3, 117:21, 139:4, 152:19 recited 106:1, 110:18 recites 112:10, 117:5, 117:7, 117:22, 138:16, 139:1 recognize 148:20, 184:13, 184:21 recommend 43:11 recommendations 56:2 record 7:2, 7:22, 53:16, 158:22,</p>	<p>159:9, 225:9 recording 5:7, 5:18 records 38:5 redact 159:11 redacted 159:6 redesign 176:9, 178:17, 182:14 redirected 143:7 refer 13:9, 78:19, 78:20, 78:21, 96:12, 107:5, 109:11, 109:12, 120:14, 219:6 reference 99:16, 99:18, 99:21, 109:9, 158:1, 170:16, 170:18, 171:5, 172:2, 172:12, 187:9, 200:12, 200:21, 212:18, 213:21, 214:17 referenced 77:15 references 80:12, 86:3, 136:16, 157:19, 157:21 referencing 187:11 referred 151:1 referring 13:17, 15:5, 19:4, 19:8, 27:6, 27:11, 79:1, 97:15, 100:11, 103:7, 103:9, 114:7, 120:15, 125:7, 125:8, 125:12,</p>	<p>149:8, 149:17, 171:16, 188:11, 192:19, 195:9, 195:17, 213:2, 222:3 refers 188:16, 191:10, 195:2 refresh 160:20 regarding 17:13, 58:19, 59:8, 72:10, 79:7, 101:5 regardless 110:4, 110:11 region 27:10, 29:20 registration 226:18 reid 1:22, 2:3, 225:2 relate 205:6 related 7:9, 17:2, 18:12, 50:6, 56:12, 86:4, 93:17, 226:1 relative 202:8, 215:2 relatively 88:12 relay 62:5 relayed 212:2 relaying 200:5 release 149:2 relies 99:4 rely 75:10, 75:16, 146:10 remainder 144:2</p>
---	--	--	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

261

<p>remember 5:10, 23:21 remind 20:2 remote 9:20, 9:21, 35:22, 72:21, 72:22, 74:8, 74:12, 97:10, 98:20, 102:22, 103:1, 104:14, 104:15, 104:19, 104:20, 105:4, 105:5, 106:2, 106:19, 106:20, 107:10, 116:11, 116:13, 138:19, 140:7, 142:18, 143:9, 143:12, 144:22, 146:6, 146:17, 153:17, 154:15, 154:17, 154:20, 155:20, 155:22, 156:1, 156:9, 156:13, 157:18, 172:7, 172:17, 173:1, 191:5, 191:18, 192:4, 192:9, 192:13, 193:3, 193:19, 194:16, 194:19, 195:3, 195:10, 195:17, 197:13, 197:16, 198:5, 198:12, 199:2, 199:3, 199:11, 199:21, 206:4, 206:6, 206:17, 206:22, 207:2, 207:8, 207:15, 208:1, 208:22, 209:5, 209:11, 209:22, 210:20 remotely 2:7, 5:5, 7:3 repeat 217:13</p>	<p>repeater 200:4, 200:11, 205:21, 206:5, 206:7, 206:8, 207:7, 207:12, 208:13 repeater's 200:5 reply 218:9, 218:17 report 49:2, 49:6, 75:16, 84:9, 86:8, 101:12, 221:4 reporter 5:13, 7:7, 20:9, 20:10, 20:14, 20:18, 225:2 reporting 33:17 represent 8:19, 47:22, 92:19 representative 11:9 represented 198:21, 225:12 reproduce 177:3 reproducing 182:7 request 21:12, 59:2, 218:7 requested 59:1, 218:9, 218:18 requests 218:14 require 95:18, 95:22, 96:8, 100:7, 104:2, 104:11, 105:10, 106:16, 107:6, 111:3, 121:7, 123:14,</p>	<p>133:3, 133:8, 148:9, 153:6, 153:7, 154:18, 173:21, 174:9, 194:13 required 27:19, 96:3, 109:17, 109:20, 109:22, 110:3, 110:10, 110:16, 127:13, 142:11, 143:22, 154:7, 154:13, 155:1, 156:5 requirement 89:10, 153:8, 153:19 requirements 154:1 requires 97:9, 98:3, 98:20, 107:17, 110:14, 112:21, 122:10, 124:9, 124:20, 125:4, 153:11, 154:10, 182:4, 182:5 reserved 224:20 reside 73:17, 197:2 residential 103:2 resideo 1:5, 3:2, 9:11, 9:14, 9:22, 10:4, 12:1, 12:2, 12:6 resides 122:9 resistor 132:19 resistors 108:2, 132:20 resolution 173:17, 173:19, 173:21, 174:2, 174:9, 175:20,</p>	<p>175:22, 177:16, 177:17, 178:1, 180:12, 185:19, 186:22 resource 40:1, 53:9 resources 33:11 respect 62:7, 76:13, 82:15, 132:12 respected 39:4, 39:8 respective 225:20 respects 194:4 respond 20:12, 216:19, 216:22, 217:16 response 64:3, 64:5, 64:7, 64:12, 64:16, 64:20, 65:19, 94:4, 94:11, 94:12, 94:22, 95:6, 95:9, 216:8, 218:7, 218:9, 218:15, 218:18 responsibilities 28:4, 57:22 responsibility 55:19 responsible 214:11, 214:16, 214:19, 215:6, 215:12, 215:19, 216:13, 216:18, 216:22, 217:15, 217:22, 218:6, 218:8, 218:13, 218:18 responsive 94:6 rest 50:11, 182:16 resulted 16:10, 92:16</p>
--	--	---	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

262

results 22:17, 145:4 retained 46:5 retrieve 51:15 return 135:21 review 35:2, 43:11, 59:4, 59:5, 59:6, 75:6, 77:9, 77:13, 78:4, 78:7, 80:9, 93:11, 136:10, 220:1 reviewed 75:1, 75:2, 84:2, 85:15, 85:21, 92:10, 93:1, 93:14, 99:20, 147:18, 148:5 revisiting 224:1 right-hand 93:6, 163:15 rights 224:20 risley 3:13, 76:9, 76:11, 76:16 rmstmlratg 220:8, 220:18, 221:12 roles 28:3 rom 123:10 romanette 84:11 room 20:11, 25:14 roughly 8:7, 8:12, 40:16, 41:21, 61:7 round 176:5	route 28:14, 28:16 router 207:22, 209:11, 209:19, 210:18, 211:11, 211:12 row 140:5 rp 214:16, 215:1, 216:5 rules 20:3, 90:1 run 5:5, 135:15, 169:16, 169:18, 170:9, 170:10 runs 57:19, 57:22, 170:2 <hr/> S <hr/> s 26:11 said 14:22, 17:21, 18:6, 24:4, 26:18, 55:12, 75:13, 76:22, 77:17, 133:13, 136:12, 149:18, 193:10, 199:18, 206:2, 225:19 saith 224:19 sake 20:17 salary 59:14, 60:6, 60:13 same 17:16, 20:18, 34:10, 39:22, 42:5, 45:8, 60:16, 68:14, 71:11, 71:20, 71:21, 78:8, 107:3, 107:5,	109:13, 119:20, 121:17, 124:5, 136:4, 136:5, 146:11, 150:10, 152:12, 154:4, 156:7, 162:3, 162:10, 165:20, 172:4, 175:16, 176:3, 186:14, 193:4, 197:14, 207:3, 208:12, 208:19, 210:8, 215:9, 222:3 sample 46:12 samsung 8:18 sat 32:7 saw 46:7, 215:4 say 8:11, 8:13, 12:20, 12:22, 15:4, 15:13, 17:3, 18:10, 19:3, 19:7, 25:11, 27:5, 29:12, 29:21, 33:2, 35:7, 35:10, 36:2, 39:6, 44:2, 44:7, 44:20, 49:4, 49:17, 49:19, 61:3, 61:5, 61:7, 66:13, 69:21, 72:16, 73:16, 74:9, 74:13, 76:11, 84:3, 84:5, 85:22, 86:21, 87:14, 88:5, 89:1, 89:3, 97:21, 104:17, 114:5, 123:1, 124:1, 124:19, 125:2, 127:17, 137:21,	138:3, 140:21, 144:15, 159:18, 191:8, 195:5, 196:12, 196:22, 198:4, 198:15, 198:20, 199:9, 214:9, 216:21, 217:10 saying 31:13, 35:16, 126:7, 146:9, 153:7, 153:18, 174:21, 175:9, 176:18, 176:19, 199:8, 211:1, 211:17, 223:12 says 22:9, 22:16, 41:9, 42:20, 45:3, 48:17, 50:1, 55:2, 94:6, 96:8, 96:15, 98:18, 112:22, 113:8, 115:5, 122:4, 123:20, 128:14, 129:16, 129:19, 130:2, 130:7, 144:21, 151:12, 162:10, 171:18, 172:5, 189:17, 189:20, 201:2, 201:19, 204:17, 215:4, 217:21, 218:4, 220:8 schedule 63:19 scheduled 189:6 scheduling 63:17 scheme 140:6, 145:11, 146:19 schools 38:18 science 22:10, 87:16,
--	---	---	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

263

<p>88:2, 88:17, 90:7, 162:21 sciences 163:10 scope 87:15, 98:14, 195:20, 210:3, 210:22, 212:11 screen 36:15, 36:22, 37:16, 175:22, 176:5, 176:20, 177:12, 177:16, 177:22, 178:5, 178:7, 178:12, 178:14, 179:11, 179:21, 180:6, 180:8, 180:9, 180:22, 181:8, 182:8, 182:17, 185:10, 185:12, 185:13, 185:17, 185:18, 185:21, 186:17, 187:2, 188:13, 188:20 screens 174:14, 176:12, 178:11, 182:7, 185:9, 186:7 search 24:18, 221:20 sears 4:18, 200:12, 200:19, 200:21 second 13:2, 13:10, 14:8, 17:16, 25:8, 30:13, 32:17, 33:2, 43:8, 115:6, 115:11, 116:12, 117:9, 168:8, 170:17, 189:17, 191:21, 192:7, 193:2, 193:20, 197:12, 197:22, 198:8, 199:1, 199:7, 200:7,</p>	<p>206:16, 206:21, 210:5, 217:8, 221:18, 221:21 secrets 48:2 section 46:12, 48:4, 79:18, 102:11, 102:13, 149:15 secure 9:6, 202:5 security 1:6, 42:20, 42:21, 202:3, 214:21 seeking 216:7 seems 87:9 segue 94:2 select 36:20, 37:4, 37:12, 46:13 selectable 182:1 selected 180:20, 189:4 selection 37:6 selections 181:18 sell 31:8, 31:9 send 43:19, 66:9, 66:11, 67:5, 67:21, 69:8, 69:19, 70:2, 70:17, 72:5, 72:10, 73:1, 73:3, 115:7, 116:13, 117:9, 118:6, 119:5, 138:17, 141:10, 145:9, 146:11, 146:12 sending 66:6, 66:19,</p>	<p>66:20, 68:20, 74:14, 115:11, 118:17, 140:18, 141:11, 142:4, 146:5, 148:7, 191:20 sends 117:14, 118:10, 139:5 sense 62:3, 62:14, 87:11 sensor 136:22 sensors 61:18, 136:16, 137:2, 213:12 sent 68:4, 68:22, 139:10, 139:15, 141:3 sentence 15:2, 96:1, 96:15, 121:19, 189:17 sentences 181:3, 181:4 separate 34:2, 76:6, 123:6, 127:2, 127:9, 131:18, 132:10, 134:16 september 25:1 sequences 144:11 serial 144:12, 144:13, 146:12 series 7:9, 23:18 server 32:7, 32:21 serverlet 169:10 service 28:11, 28:15, 28:17, 28:18,</p>	<p>29:18, 30:4, 43:3, 66:17, 147:12, 191:16 services 25:21, 26:2, 26:4, 26:5, 26:22, 28:4, 34:22 sessions 77:7, 77:10 set 62:21, 63:16, 64:2, 64:21, 65:18, 72:13, 73:20, 116:1, 144:10, 225:6, 226:8 setpoint 73:8, 73:10, 73:11 setting 63:8, 65:3, 73:12 seven 44:9, 44:10, 47:9, 47:12 several 42:18, 43:4, 55:10, 55:15, 55:17, 75:4, 191:11 shakes 20:13 shamoon 3:19, 12:16, 14:1, 14:12, 15:22, 16:15, 19:12, 75:21 share 53:21, 136:5 sharon 57:19 shelf 25:16 shelves 25:16 shipping 115:21</p>
---	--	---	---

<p>short 8:16, 17:6, 66:17, 140:6, 140:7, 147:12, 181:4, 191:16, 192:6, 224:9 should 5:9, 10:22, 21:18, 53:21, 54:11, 78:15, 91:20, 91:21, 112:22, 158:21, 159:4 show 63:6, 174:1 showing 171:7 shown 219:11 shows 188:7 side 136:1, 143:12, 176:7, 186:8, 187:20, 187:21, 208:21 signal 213:22, 214:1, 214:4, 214:10, 215:11 signature 224:20 signature-b7fzp 226:14 significant 180:21 signing 225:19 silicane 107:18, 107:20 similar 63:14, 116:2, 161:15, 175:2, 176:11, 187:7, 219:10, 220:22 similarly 154:17 simpler 176:12, 178:11,</p>	<p>182:16 simplest 62:10 simplist 132:18 simply 97:12, 143:6, 195:2 simultaneously 186:7 since 42:9, 42:12, 45:21, 46:5, 149:5, 194:15 single 71:17, 93:14, 122:10, 122:16, 122:20, 124:13, 124:20, 125:3, 126:5, 128:17, 128:18, 128:19, 129:10, 129:11, 129:14, 129:18, 130:4, 130:6, 130:8, 130:9, 130:13, 131:2, 131:4, 131:8, 134:16, 137:8, 178:2, 201:3 sit 12:7, 46:18, 58:8, 81:7 sitting 17:12 situation 126:21, 127:6, 128:8, 178:6 six 47:11, 48:13 sixth 45:9 sixty-six 149:11 size 79:16, 175:14, 175:22, 176:20, 180:6 skill 86:11, 86:14,</p>	<p>88:22, 90:4, 91:7, 119:12, 133:18, 151:14, 162:18, 163:3, 163:9, 177:7, 179:3 skills 29:19 slightly 175:3, 182:15 small 38:19, 169:19, 169:22, 176:21 smaller 168:9, 175:12, 175:15, 175:22, 182:15 smart 53:7, 173:12 smith 35:21, 37:8, 37:14, 40:5, 40:10, 40:11, 40:13, 40:20, 41:4, 42:6, 45:21, 53:1 smoothly 5:6 sms 4:13, 18:13, 18:16, 19:1, 19:19, 66:5, 66:6, 66:16, 66:19, 67:4, 67:18, 68:3, 69:9, 69:11, 69:18, 69:19, 70:1, 70:2, 70:10, 70:15, 70:17, 95:18, 95:19, 95:21, 96:2, 96:6, 96:9, 96:12, 96:16, 96:19, 98:8, 98:13, 98:15, 98:19, 99:14, 100:7, 115:6, 115:11,</p>	<p>116:11, 116:12, 138:18, 139:2, 139:10, 139:12, 139:15, 140:1, 140:2, 140:12, 140:18, 141:3, 141:10, 141:19, 142:3, 142:19, 142:22, 143:6, 144:6, 145:5, 146:5, 146:7, 146:12, 146:14, 146:15, 146:20, 147:14, 147:18, 147:22, 148:1, 148:2, 148:5, 148:11, 148:13, 148:21, 149:1, 149:2, 149:4, 149:15, 157:9, 191:19, 191:21, 192:7 sms-like 146:8 sms-type 146:18 social 55:3, 55:18, 55:20 software 7:4, 18:2, 18:7, 25:19, 27:1, 27:3, 29:9, 29:12, 31:15, 31:19, 32:4, 35:6, 37:18, 51:6, 51:14, 52:3, 56:12, 73:17, 73:21, 74:3, 74:18, 81:14, 86:22, 111:19, 112:1, 112:7, 112:14, 112:17, 113:2, 113:3, 113:9, 113:14, 114:8, 114:15, 114:21, 115:18,</p>
---	---	--	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

265

<p>116:7, 142:16, 143:18, 143:20, 143:21, 144:3, 144:12, 144:14, 144:16, 145:1, 145:3, 145:8, 154:4, 154:6, 154:11, 154:13, 156:7, 156:11, 156:16, 157:8, 157:9, 157:17, 167:3, 167:6, 167:11, 167:17, 167:19, 167:21, 168:12, 168:15, 168:17, 196:21, 204:5, 204:7, 205:2 sold 15:20, 31:6 solution 129:3, 130:11, 202:1 solutions 128:17, 128:19, 129:10, 129:16, 130:5, 130:8 some 6:11, 9:20, 14:18, 19:18, 20:2, 20:4, 25:1, 31:14, 44:12, 44:13, 44:19, 45:19, 46:7, 46:20, 48:12, 48:13, 48:22, 49:2, 50:16, 56:22, 63:6, 72:22, 74:2, 74:8, 75:13, 75:14, 80:10, 80:13, 85:21, 93:13, 94:15, 97:16, 104:1, 121:2, 121:7, 121:13, 123:9, 123:20, 126:14, 131:14,</p>	<p>131:16, 132:22, 133:2, 133:6, 133:13, 157:7, 157:8, 159:16, 167:11, 168:18, 170:13, 173:4, 173:21, 175:1, 176:10, 178:20, 181:8, 181:17, 182:16, 188:19, 188:20, 189:3, 189:8, 190:4, 192:10, 194:4, 196:13, 197:17, 207:6, 211:2, 211:15, 213:21 someone 89:5 someone's 44:6 something 19:14, 24:1, 28:13, 56:22, 57:16, 60:19, 75:15, 105:11, 107:7, 119:21, 132:13, 133:14, 161:15, 176:11, 177:6, 181:10, 197:10, 200:10, 207:5, 208:14, 217:10 sometimes 74:3, 74:4, 222:18 somewhat 20:19 sorry 10:20, 10:21, 11:16, 32:16, 39:6, 55:14, 82:3, 97:4, 104:17, 110:6, 126:18, 127:18, 138:3, 140:22, 143:2, 147:18, 188:4, 195:5, 201:10, 201:12,</p>	<p>207:19, 216:21, 220:15, 223:4 sort 121:13, 196:13, 207:6 sound 7:15, 9:16 sounded 9:18 sounds 19:22, 34:1, 44:19, 53:14, 98:4, 193:21, 208:5, 224:13, 224:18 source 219:19 south 3:7 spa 189:13, 189:19 space 186:3, 186:5 speak 76:15, 125:9 speaking 5:13, 5:16, 15:22, 200:2 speaks 96:1 spec 139:22, 151:10 specialized 25:9, 89:4, 89:21, 149:15 specific 14:5, 16:11, 16:18, 17:22, 18:6, 42:22, 57:9, 75:13, 87:3, 89:6, 89:18, 114:3, 123:21, 124:4, 135:7, 142:19, 143:4, 143:5, 144:16, 152:21, 153:2, 155:4, 155:9, 155:11,</p>	<p>155:14, 156:10, 157:16, 170:7, 194:14, 203:3, 205:2, 205:8 specifically 12:2, 14:3, 17:5, 28:14, 43:12, 59:19, 66:18, 96:1, 103:12, 110:17, 111:2, 112:22, 125:8, 135:11, 144:21, 154:13, 155:21, 170:12, 174:16, 222:20 specifically-enu- merated 126:15 specification 70:11, 101:17, 101:20, 102:8, 102:13, 105:13, 119:9, 136:3, 136:5, 139:9, 139:11, 139:14, 141:8, 143:19 specifications 51:13, 102:16, 157:20 specifics 143:21 specifies 116:4, 166:4 specify 151:8 specifying 153:15 spell 80:4 spend 49:10, 179:1 spent 60:21, 61:6 spoke 24:10, 75:3, 76:9, 76:19 spoken 54:22, 76:2</p>
---	--	---	---

sponsor 23:20 spots 10:16 spreadsheet 135:16 staff 41:15 stand 66:16 standard 4:13, 59:14, 67:18, 69:11, 69:18, 70:1, 70:4, 70:10, 120:18, 140:8, 140:13, 141:19, 141:22, 142:12, 143:7, 147:15, 148:3, 149:2, 149:4, 160:14 standards 70:16, 72:6, 147:22, 148:5, 148:10, 148:21, 149:1 standpoint 139:19 stands 222:8, 222:12 start 20:22, 21:1, 21:18, 25:3, 26:1, 88:11, 104:4, 190:10, 196:19, 220:3, 223:9 started 7:1, 26:12, 38:4, 56:19, 142:17 starting 47:9, 48:3, 48:16, 95:8, 140:5, 144:21, 161:5 startup 56:2	startups 56:6, 56:19 stat 189:12 state 2:4, 7:21, 45:15, 86:13, 219:10, 225:3, 226:17 stated 83:18, 98:9 states 1:1, 95:17, 97:9, 100:6, 102:19, 118:2, 162:17, 202:18, 213:21, 216:5 stating 140:11, 141:16, 156:20 station 213:22, 214:2, 214:5 status 15:9, 15:12 stay 58:2, 152:18 stenographer 1:22, 7:16, 7:19 step 93:10, 194:3 still 9:9, 122:10, 146:18, 175:16, 177:13, 177:15, 178:15, 185:20, 200:9, 212:5 stipulation 117:18 stock 35:5 stood 146:21 storage 22:4 store 123:3	straight 181:3 street 3:7, 8:2 strike 67:2, 194:1, 194:22, 198:10 structure 71:17, 71:20, 152:12, 182:5 student 90:6 studies 23:8, 87:15 study 22:16, 22:21, 23:2, 23:9 stylus 36:21, 37:3 subarticle 23:22 subject 24:6, 163:6, 223:15, 223:16 submitted 49:5, 59:6, 92:9 subset 87:12, 89:22, 190:4 substantial 89:1 substantive 136:1 substitute 165:12 subsystems 103:1 suggest 98:19 suitable 135:18, 183:22 suite 3:7, 3:14 suited 202:1 supervised 168:17	supply 40:12, 40:22, 41:3, 72:3 support 41:16, 49:12, 49:15, 49:20, 102:14, 108:5, 108:8, 108:10, 108:17, 122:10, 122:12, 122:21, 125:1, 127:13, 144:14, 144:18, 160:5 supported 87:1, 87:2 supports 126:10 sure 10:17, 13:12, 20:11, 20:20, 20:21, 21:16, 31:1, 58:2, 61:22, 62:15, 64:10, 67:10, 75:11, 82:22, 85:9, 85:20, 87:7, 89:5, 92:4, 93:13, 95:11, 110:8, 115:3, 121:20, 123:17, 126:20, 131:11, 132:16, 136:11, 138:6, 143:16, 145:20, 158:7, 158:21, 159:10, 161:14, 170:13, 173:3, 174:4, 176:16, 192:2, 195:6, 205:16, 209:4, 223:11, 224:9 surprised 165:13 surrounding 62:4 switch 27:9, 155:13, 212:4
--	--	--	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

267

switches	171:8, 189:18	tc	67:11, 69:17,
27:9	T	30:14	96:10, 96:14,
sworn	table	teach	96:20, 97:3,
6:5, 225:7	84:12, 84:17,	88:2	97:4, 140:8,
synonymous	181:7	tech	140:14, 141:20,
164:21, 165:17	take	176:2	142:13, 156:17,
synonymously	7:3, 21:14,	technical	208:4, 209:12
165:4	53:12, 78:13,	58:11, 81:9,	telephony
system	93:10, 95:8,	81:12, 139:19,	98:9
28:20, 38:15,	100:17, 138:7,	147:11, 147:20,	tell
39:17, 50:15,	145:22, 158:7,	160:13, 160:15,	14:1, 14:12,
53:9, 68:13,	171:4, 194:2,	160:17, 162:9	54:18, 92:6,
97:9, 97:10,	205:11, 222:22	technical-related	147:8, 169:11,
98:2, 98:20,	taken	5:22	184:15, 192:17
98:21, 99:3,	2:3, 53:15,	technically	telling
110:4, 110:11,	100:20, 205:13,	146:15	129:12
121:4, 121:11,	223:3, 224:15,	technician	tells
121:22, 124:9,	225:8	5:3	69:18, 70:1
125:4, 125:7,	talk	technologies	temperature
125:18, 125:21,	20:18, 33:5,	1:5, 3:2, 33:12	61:10, 61:16,
127:14, 127:19,	36:13, 88:8	technologists	61:18, 62:3,
128:18, 132:3,	talked	90:2	62:4, 62:13,
134:1, 135:12,	17:19, 52:22	technology	62:22, 63:6,
135:14, 138:8,	talking	9:5, 9:7,	63:7, 63:8,
143:13, 147:11,	16:2, 16:8,	15:11, 17:1,	63:9, 64:2,
183:2, 183:19,	16:9, 20:21,	17:2, 17:4,	72:11, 72:12,
184:4, 184:5,	20:22, 68:18,	17:20, 33:6,	73:15
187:18, 189:18,	74:7, 103:12,	33:7, 34:2,	temperatures
194:12, 197:18,	113:12, 113:13,	41:14, 49:14,	61:21, 63:1
213:4, 213:6,	113:14, 113:15,	55:4, 55:18,	ten
213:8, 213:11,	113:20, 123:13,	55:21, 58:12,	17:7, 17:9,
214:11, 214:15,	123:18, 137:5,	176:3, 201:3,	17:17, 180:16,
214:21, 215:6,	141:22, 156:1,	202:2, 214:6	224:11
215:18, 216:12,	186:16, 189:16,	tele	ten-minute
218:17, 218:19	201:11, 211:8	142:12	53:12, 100:18,
systematically	talks	telecom	205:11, 223:1
43:18	157:6, 188:12	19:17	term
systems	tampa	telecommunication	36:4, 64:6,
35:22, 56:12,	8:2, 47:21	184:20	64:11, 101:5,
68:6, 81:15,	tanning	telecommunicatio-	151:9, 160:2,
88:19, 89:6,	33:5, 33:7,	ns	160:5, 160:10,
89:17, 89:20,	33:12, 33:17,	43:13, 147:11	160:17, 190:22,
90:8, 119:17,	34:1, 34:18	telephone	191:2, 195:8,
119:22, 120:21,	tapes	13:18, 26:6,	195:16, 197:14,
122:8, 123:12,	38:6	27:2, 27:4,	204:13
133:6, 133:7,	task	27:6, 27:10,	terms
137:18, 165:6,	128:21, 134:21	27:12, 66:22,	44:13, 44:14,
165:9, 168:10,		67:3, 67:8,	84:8, 90:13,

<p>160:15, 165:14, 194:9 testified 6:6, 47:5, 47:14, 162:1 testifying 48:18, 49:4 testimony 46:15, 47:1, 49:1, 60:11, 68:14, 75:2, 176:17, 225:9 testing 42:21 text 37:15, 66:7, 66:9, 66:19, 67:12, 68:20, 140:14, 141:11, 143:7, 173:4, 180:17, 181:2, 181:3, 181:18 textbooks 38:18 texting 67:14, 140:4 th 226:9 thank 5:3, 6:1, 135:20, 147:1, 205:10 thanks 159:10, 224:14 themselves 108:5, 139:6, 165:15 theoretically 192:22, 193:17 therefore 99:8, 125:17, 209:16 thereupon 5:1, 6:2, 21:20, 54:1, 78:16, 91:14, 147:3, 160:22, 170:21, 184:8,</p>	<p>200:14, 212:20, 221:6 thermostat 12:6, 61:8, 61:9, 61:12, 61:13, 62:9, 62:17, 62:19, 63:3, 63:13, 63:14, 72:1, 72:2, 72:9, 72:10, 72:16, 72:17, 72:19, 73:6, 73:19, 74:15, 183:8, 183:12, 183:15 thermostats 12:1, 12:2 thesis 22:17, 23:6 they'd 159:16 thing 62:2, 119:20, 121:17, 212:13 things 39:1, 44:15, 45:13, 58:4, 64:8, 80:16, 87:3, 123:21, 124:4, 144:16, 152:2, 165:20, 173:7, 192:2 think 10:15, 11:3, 20:12, 21:17, 22:5, 23:22, 24:22, 26:9, 30:22, 36:11, 40:16, 56:17, 57:8, 58:8, 61:19, 64:1, 65:12, 78:19, 81:8, 87:8, 88:12, 89:10, 89:14, 90:1, 98:11, 110:9, 110:20, 115:1, 119:12, 119:16,</p>	<p>128:5, 129:5, 145:15, 149:2, 149:19, 151:18, 151:19, 152:14, 152:22, 154:9, 157:14, 158:4, 164:8, 164:13, 165:7, 168:16, 173:6, 174:13, 186:11, 186:13, 188:16, 192:1, 193:4, 194:3, 199:16, 210:4, 217:7, 221:8, 221:17, 221:20, 222:10, 223:8 third 69:4, 161:17 third-party 18:15, 18:22, 19:20, 68:12, 70:9, 140:16, 145:3, 156:19 thirteen 155:8 thought 24:16, 43:22, 158:4 thousands 134:3 three 36:8, 47:11, 145:15, 180:15, 181:3, 192:22, 221:16 three-and-a-half 78:2 through 10:22, 26:13, 30:4, 30:17, 37:7, 43:18, 51:19, 51:20, 52:2, 52:10, 53:6, 96:20, 117:10, 120:10, 120:12, 120:16, 137:12, 138:19, 140:13, 141:1,</p>	<p>141:20, 145:22, 154:5, 156:5, 156:8, 156:12, 157:2, 157:17, 157:20, 171:4, 171:16, 172:6, 183:2, 183:19, 208:10, 210:5, 211:22, 212:1 throwing 182:6 time 5:16, 13:1, 13:2, 13:3, 13:14, 20:18, 21:12, 22:3, 23:19, 24:8, 25:1, 25:7, 30:15, 31:3, 31:5, 33:3, 33:17, 34:10, 34:15, 34:20, 35:8, 36:4, 36:7, 36:10, 36:16, 41:21, 42:2, 42:9, 43:19, 45:19, 46:20, 48:9, 49:9, 61:5, 63:11, 63:18, 64:22, 70:22, 76:9, 83:4, 87:19, 87:20, 88:1, 89:9, 90:6, 92:2, 105:2, 118:20, 127:5, 158:10, 159:16, 162:18, 167:9, 167:13, 168:4, 169:16, 170:10, 173:10, 173:16, 174:7, 175:6, 175:10, 176:2, 176:8, 179:1, 180:4, 189:7 times 8:7, 8:8, 22:1,</p>
---	--	--	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

269

62:21, 63:20, 97:11 timing 107:15, 108:12, 108:17, 109:1, 119:8, 119:14, 119:18, 121:18, 122:1, 122:11, 123:22, 126:17, 127:1, 127:8, 127:12, 127:22, 128:2, 130:17, 131:9, 131:15, 131:17, 131:22, 132:9, 133:13 title 91:19, 149:15 titled 46:12, 48:4, 84:13 today 6:12, 12:7, 20:5, 20:9, 58:15, 78:11, 162:16, 223:8, 223:17 today's 7:8, 74:21 together 24:12, 94:19, 158:12, 199:12 told 19:12, 75:10 tomorrow 223:9, 223:17 took 13:7, 223:5 tooth 30:13 top 15:18, 49:22, 95:13, 95:16, 100:2, 100:5, 219:2 topic 17:16 total 11:20	tour 57:14 towards 88:14 tower 208:2, 210:1 towers 27:21 trade 48:2 trademark 1:1 trading 35:6, 35:22 train 158:4 transactions 9:5 transcribe 20:15 transcript 5:19 transcripts 7:12 transmission 9:7, 157:9 transmit 116:11, 123:4 transmitted 145:4 travel 40:2, 52:18, 211:15 traveling 97:13, 212:9 treating 165:4 trial 1:3, 47:5, 47:6 true 43:6, 109:4, 121:8, 169:1, 203:20, 225:9 truthfully 20:6 try 20:18, 20:20, 173:9, 177:9,	205:22, 206:12 trying 13:6, 36:5, 87:10, 97:19, 124:3, 208:8 tryon 3:7 tub 189:13, 189:19 tuesday 1:16, 2:6, 225:16 turn 60:5, 72:17, 72:20, 73:4, 73:20, 83:3, 84:11, 86:7, 91:10, 93:4, 98:16, 100:2, 101:1, 101:12, 102:5, 106:7, 107:13, 111:5, 149:7, 150:14, 161:17, 163:13, 170:16, 171:9, 175:17, 179:6, 182:18, 184:6, 187:16, 188:2, 201:18, 202:12, 204:12, 212:17, 213:13, 216:4, 217:8, 217:19 turning 62:11, 65:9, 65:15 tutorial 147:21 two 7:9, 7:12, 12:11, 12:18, 12:20, 22:2, 25:16, 34:2, 36:8, 47:11, 54:21, 60:21, 68:3, 68:4, 77:7, 86:15, 88:17, 89:2, 89:16, 94:1,	98:18, 102:15, 102:16, 160:4, 169:13, 180:15, 181:18, 181:22, 185:9, 198:3, 198:4, 199:10, 199:14, 200:3, 206:18, 207:13, 208:2, 210:11, 210:12, 217:20 two-way 148:7, 218:6 type 72:7, 72:22, 74:8, 79:20, 90:15, 90:21, 96:12, 107:19, 108:11, 109:17, 110:4, 110:10, 114:3, 114:5, 119:13, 120:21, 121:7, 131:14, 134:5, 143:20, 146:11, 150:10, 152:21, 153:3, 155:4, 155:11, 155:14, 156:16, 170:1, 173:12, 175:3, 189:9, 191:20, 211:8, 211:9 typed 83:13 types 24:12, 29:9, 34:19, 98:12, 119:17, 119:22, 123:4, 135:17, 148:12, 148:13, 189:21, 191:11, 192:10, 204:2, 205:3 typically 60:19, 63:4, 97:12 typing 187:7 <hr/> U <hr/> ubiquitous 1:9, 3:11,
--	---	--	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

270

<p>12:10, 12:14, 15:5, 15:7, 15:17, 15:20, 58:20, 58:22, 75:22, 81:3, 82:2, 82:7, 83:1, 84:4, 92:9, 179:12, 225:12 uh-huh 79:13, 136:9, 156:3, 180:19, 199:4, 206:15, 209:7, 210:16, 220:6 uh-huhs 20:13 ultimately 181:18, 189:9, 210:19 unable 5:14 under 20:5, 42:19, 43:9, 54:8, 140:3, 141:10, 142:11, 142:22, 143:9 undergraduate 23:6 underground 28:9 understand 6:16, 11:12, 13:13, 16:2, 19:4, 19:8, 20:7, 21:5, 58:14, 64:6, 64:11, 75:11, 78:22, 83:2, 89:7, 89:11, 94:21, 115:3, 119:13, 123:18, 124:3, 128:11, 151:14, 174:4, 176:17, 178:4, 195:7, 199:17, 205:16, 205:20,</p>	<p>222:17, 223:11 understanding 14:20, 16:4, 16:17, 64:15, 100:16, 114:6, 119:7, 141:13, 203:8, 203:16, 206:2 understood 21:3, 21:7, 43:7, 46:10, 199:16, 220:2 unedited 5:18 unfortunately 199:7 united 1:1, 53:3, 53:4, 53:5 units 63:21, 150:22, 194:16 universal 147:10 university 22:11, 22:21, 23:18 unless 69:16, 70:12, 193:3 until 21:1 updated 45:18, 48:21 upgraded 30:6 usage 64:20, 64:22 usb 30:5, 134:11, 198:21, 199:2, 199:6, 199:7, 199:8 use 22:3, 32:2, 37:3, 55:22, 64:13, 66:10, 67:4, 67:21,</p>	<p>96:19, 131:11, 135:2, 135:4, 143:4, 177:9, 202:1, 203:2, 203:3, 203:15, 203:17, 223:16 useful 165:5, 165:7 user 35:20, 37:12, 50:14, 52:7, 63:2, 63:13, 65:17, 67:14, 74:5, 74:7, 74:12, 114:19, 115:20, 140:3, 140:4, 141:12, 144:7, 171:7, 171:18, 171:20, 172:14, 172:22, 174:14, 175:1, 175:3, 176:9, 177:9, 178:2, 178:3, 178:17, 182:4, 182:7, 183:3, 183:6, 183:13, 184:3, 186:14, 191:18, 192:7 user-ship 31:18 users 203:3 uses 95:17, 100:7, 169:22, 170:1 using 9:5, 14:20, 28:9, 35:22, 36:21, 37:15, 98:9, 135:1, 142:12, 144:14, 145:10, 146:15, 146:18, 146:19, 151:20, 167:19, 204:18, 205:2, 208:12, 208:17 utilities 29:10, 64:12</p>	<p>utility 29:1, 29:7, 29:8, 30:21, 30:22, 31:7, 31:8, 31:20, 32:2, 32:5, 65:2, 65:12, 65:19, 140:15, 143:8 utility's 65:7 utilize 18:16 utilized 18:2, 18:7, 69:15 utilizing 40:21</p> <hr/> <p>v</p> <hr/> <p>validity 44:14, 79:8 valuable 44:4, 44:8 value 44:11, 73:13 varies 49:11 variety 166:19 various 33:11, 38:22, 103:1 vaud 55:4, 55:8, 55:9, 55:15, 55:16, 56:5, 56:15, 58:11 vehicle 97:14 verbally 20:12 verification 216:7 verify 143:2, 153:4 verifying 216:19, 217:1,</p>
---	--	---	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

271

217:16 verisign 50:10 verizon 26:7, 26:8, 26:15, 204:4 versa 166:1 version 28:12, 33:21, 132:18, 147:14, 148:4, 168:8 versus 174:18 vertical 39:19 verticals 38:22, 39:18 via 2:6, 5:15, 30:5, 74:3, 99:7, 146:12, 209:3, 209:6, 210:15, 210:18, 211:15, 212:10, 214:5, 225:15 vice 166:1 video 2:6, 5:3, 5:12, 5:14, 7:4, 20:20 videoconference 225:16 vinyl 38:5 virtually 1:17, 225:15 visa 51:20 vitae 4:6 volt 72:3 voltage 133:1 volume 217:7 vs 8:18, 47:17	W wachovia 52:5, 52:6, 52:11 wait 21:1, 84:15 waived 225:19 walk 208:10 wall-mounted 183:17 want 7:1, 20:2, 21:18, 25:3, 33:5, 45:12, 51:18, 51:19, 57:2, 88:8, 93:4, 95:13, 100:22, 112:5, 123:17, 132:22, 134:1, 134:6, 158:3, 158:7, 159:1, 170:8, 174:4, 176:16, 192:2, 193:9, 201:1, 205:15, 205:16, 205:20, 213:13, 220:5 wanted 46:14, 56:18, 72:9, 72:13, 73:7, 176:11, 179:1, 223:6 ware 169:22 warehousing-type 34:6 wars 24:16, 24:19 water 189:12, 189:19, 190:12 watermark 149:22 wattage 64:21, 65:1,	66:1 way 12:14, 50:8, 65:8, 94:2, 109:13, 115:3, 117:2, 211:6, 226:4 we'll 151:5, 184:10, 199:9, 220:3, 223:9 we're 11:1, 11:3, 68:18, 68:19, 113:12, 113:13, 123:18, 137:5, 141:22, 156:1, 192:2, 200:18, 208:13, 208:21, 223:8, 224:17 we've 43:4, 52:22, 53:20, 54:21, 158:5, 160:19, 170:13 web 35:19, 40:19, 40:21, 51:3, 52:8, 52:10, 171:19 web-based 35:15, 36:1, 39:20, 40:2, 40:4, 41:6, 43:13 website 35:1, 35:9, 35:11, 35:13, 51:1, 52:8 websites 40:15, 40:17 week 77:1 well-known 39:2 well-versed 56:11 went 145:18	weren't 35:12, 55:1 west 8:2 whatever 73:5, 197:4 wherein 115:5, 138:17, 191:21 whereof 226:8 whether 90:16, 109:18, 110:4, 113:18, 113:21, 117:18, 155:20 whole 17:2, 165:10, 181:19, 182:11 wide 177:12 widely 66:8 wifi 134:6, 134:7, 135:10, 209:3, 210:8, 211:11 windows 152:8 wire 30:7, 212:3, 212:10, 214:5 wired 88:3, 137:12, 193:10, 198:2, 198:9, 198:11, 198:18, 199:15, 199:19, 199:20, 200:4, 206:5, 206:7, 207:17, 210:19, 212:2 wireless 27:15, 29:14, 29:21, 88:4, 138:20, 153:6, 153:9, 153:16, 154:18, 154:20, 156:6, 190:22,
---	---	---	--

191:2, 191:5, 191:8, 191:11, 191:13, 192:5, 192:13, 192:14, 192:18, 192:20, 193:2, 193:5, 193:10, 193:12, 193:20, 193:22, 194:4, 194:5, 194:8, 194:11, 195:1, 195:4, 195:8, 195:10, 195:16, 195:19, 195:21, 196:1, 196:17, 196:20, 197:7, 197:13, 197:22, 198:7, 198:8, 198:20, 199:1, 200:3, 200:6, 200:7, 206:6, 206:8, 206:13, 206:16, 206:19, 206:22, 207:3, 209:15, 209:17, 210:8, 210:11, 210:12, 210:18, 210:20, 211:3, 212:1, 212:5, 212:6, 212:13, 212:14, 214:6 wirelessly 30:7, 137:11, 197:9, 197:17, 207:22 wires 199:5, 208:4, 211:2, 211:12, 211:15, 211:18, 212:3, 212:5, 212:8, 212:16 wish 134:12 within 9:5, 14:7, 16:19, 18:2, 23:22, 67:15, 67:16, 69:15,	71:17, 71:19, 96:14, 103:1, 104:11, 107:18, 109:18, 121:14, 122:15, 122:20, 131:4, 132:14, 142:18, 144:11, 151:10, 151:17, 160:11, 165:22, 195:20, 199:15, 204:1, 211:18 without 146:18, 146:19, 169:12, 215:19 witness 6:4, 21:22, 22:7, 39:12, 45:17, 48:18, 49:10, 53:13, 54:3, 65:12, 68:17, 70:20, 78:18, 91:16, 98:11, 100:14, 100:19, 105:1, 105:8, 106:6, 109:16, 121:11, 127:4, 127:11, 158:9, 158:13, 158:17, 165:3, 177:2, 177:15, 186:22, 195:13, 200:1, 205:12, 208:8, 210:4, 211:1, 211:17, 212:12, 212:22, 223:2, 225:5, 225:10, 225:21, 226:8 word 106:13, 131:11, 151:20 wording 128:12 words 28:12, 79:20, 83:13, 89:20, 104:10, 106:17, 110:22, 112:1,	112:19, 114:14, 124:19, 126:2, 128:17, 129:1, 140:11, 142:21, 205:3 work 6:10, 12:9, 12:10, 12:13, 18:14, 26:14, 29:17, 29:18, 33:15, 34:9, 34:12, 42:19, 45:3, 49:21, 50:13, 52:6, 59:12, 71:7, 80:20, 83:11, 83:20, 84:8, 94:19, 167:13, 178:16, 178:19, 208:9, 209:20 worked 26:16, 26:18, 27:17, 28:7, 29:1, 29:16, 30:2, 33:13, 33:19, 48:8, 48:11, 48:12 working 23:13, 23:19, 25:19, 28:1, 34:15, 34:17, 34:20, 35:8, 46:4, 49:9, 60:21, 67:11, 82:8, 82:10, 85:10 wouldn't 56:10, 98:13, 132:5, 146:6, 173:18, 182:3, 182:13 wow 8:16 writ 167:22 write 43:11, 79:9, 80:10, 135:11,	168:17 writer 97:2, 125:10 written 49:1, 167:22, 204:17 wrote 79:18, 167:21 <hr/> Y <hr/> yeah 6:20, 10:18, 26:11, 27:22, 46:6, 50:11, 54:6, 61:3, 70:7, 85:4, 158:9, 159:4, 186:7, 201:12, 208:15, 217:4, 221:21 year 8:17, 23:10, 47:15, 60:16 year's 60:13 years 45:16, 45:20, 48:11, 48:14, 49:8, 49:16, 49:19, 50:2, 52:12, 52:15, 57:1, 86:15, 88:18, 89:16 yep 224:13 yesterday 75:5 yourself 5:16, 44:22, 79:9 <hr/> Z <hr/> zatkovich 1:15, 2:2, 4:2, 4:7, 4:9, 6:3, 6:9, 7:13, 7:21, 8:1, 8:4, 9:12, 11:19, 19:4,
---	---	---	---

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

273

19:15, 19:22, 44:17, 49:9, 53:20, 58:14, 61:8, 74:20, 91:10, 100:22, 129:20, 135:20, 136:3, 136:15, 147:6, 150:15, 158:20, 159:13, 166:15, 170:15, 177:20, 179:6, 190:16, 218:22, 222:13, 224:2, 225:5, 225:15 zigbee 30:14 zoom 2:7	01609 1:12 09 1:18, 2:5, 225:17 <hr/> 1 <hr/> 1 153:21 1-4-0 93:8 1.02 183:19 1.14 171:19, 183:3 10 71:4, 71:5, 71:22, 72:6, 73:2, 145:22, 157:6, 157:16 100 60:22, 220:8, 220:18, 221:12 101 3:7 1010 4:12, 91:11, 91:14, 91:18, 91:20, 93:5 1019 4:18, 200:13, 200:14, 204:22 102 183:2 1020 4:19, 212:18, 212:20, 213:1, 213:2, 214:17 1021 4:17, 184:7, 184:8, 184:13, 184:19 1022 4:16, 170:19, 170:21, 171:5, 171:10 1025 4:13, 147:2,	147:3, 149:7 1098 3:9 11 107:1, 115:22, 116:1, 116:2, 116:9, 116:18, 136:6, 136:12, 146:1, 146:4, 190:19, 191:1, 191:3, 191:12, 191:14, 194:15, 195:20 110 72:3, 185:10 1101 4:8, 53:22, 54:1, 161:18 1102 4:14, 160:21, 160:22, 161:6, 163:16 114 183:6 12 56:18, 142:18, 146:1, 190:17, 190:19, 192:18, 202:13, 205:15, 205:17 13 146:1, 155:8, 155:16, 202:15, 202:18 1335 11:2 1336 11:2 14 116:1, 116:3, 116:20, 141:1, 142:7, 146:4, 163:16 140 93:5, 94:3, 95:8 143 97:8, 97:9	144 95:14, 95:16, 98:16, 98:17, 99:12 145 100:3, 100:6 147 4:13 150 61:2, 185:8, 185:9, 185:12, 185:13, 186:17, 187:2 16 102:20, 150:7, 157:12, 157:16 1609 11:4, 11:7 161 4:14 1610 11:4, 11:7 17 219:9, 226:9 171 4:16 18 117:4, 117:5, 117:7, 213:13, 213:16, 213:20 184 4:17 19 106:7, 106:10, 106:12, 106:17, 106:19, 117:21, 118:10, 216:4, 216:5 1980 22:10 1981 23:17, 25:1 1987 26:2 1994 149:5 1995 26:12, 28:2
<hr/> \$ <hr/> \$200,000 60:14 \$400 82:6, 82:11, 83:2, 83:4, 83:8 \$525 59:21 <hr/> . <hr/> .24 150:2 .3 150:2 <hr/> 0 <hr/> 00 158:12, 158:13, 213:16 0004 201:13 0018 213:16 004 200:20 01335 1:12, 7:10, 79:2 01336 7:10			

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

274

<p>1996 28:2, 29:4 1998 26:13, 33:3 1999 29:5, 36:16</p> <hr/> <p>2</p> <hr/> <p>2 158:12, 158:13 20 107:1 200 4:18, 61:1 2000 41:9, 46:5, 148:17, 148:18, 173:15 20012210079 226:18 2002 42:2, 67:13, 167:15, 167:17, 168:6 2003 4:6, 21:19, 21:20, 36:16, 162:6, 162:9, 174:7, 175:6, 175:10, 176:2 2004 4:10, 18:19, 19:14, 19:21, 63:11, 63:18, 64:4, 65:14, 66:18, 68:5, 68:7, 69:8, 70:15, 78:15, 78:16, 79:2, 87:19, 87:20, 88:1, 90:5, 90:19, 90:22, 91:2, 96:21, 97:2, 144:19, 148:21, 159:14, 159:17, 162:5, 162:6, 162:13, 162:19, 168:6,</p>	<p>169:4, 172:18, 173:10 2007 40:5, 42:2, 42:5, 46:8, 167:15 2008 42:5, 42:9, 42:12 2009 4:20, 221:2, 221:6, 221:8, 221:22, 222:8 2010 94:7 2013 55:2 2015 55:3, 57:17 2019 1:12, 7:10, 79:2 2020 1:16, 2:6, 13:4, 13:14, 225:16, 226:9 2025 226:12 21 4:6, 118:13 213 4:19 22 107:2, 118:19 221 4:20 226 1:20 24 48:18, 217:19, 217:20 28280 3:8 29 86:7</p> <hr/> <p>3</p> <hr/> <p>3 1:18, 225:17</p>	<p>3-1-1 171:12 30 49:12, 61:7 30022 3:15 301 8:2 305277 1:19 308 189:18 31 204:12, 204:22 311 171:9, 171:15, 172:5 32 220:8, 220:18, 221:12 33606 8:3 349 187:8 350 188:2, 188:5, 188:6 351 188:11, 188:16 355 189:15 372 4:12, 92:9 3867 3:16 39 219:1, 219:6, 222:4</p> <hr/> <p>4</p> <hr/> <p>4.02 171:20, 172:6 40 8:8, 8:12, 49:20, 61:7, 79:16 400 81:8</p>	<p>4000 3:7 404 3:16 42 136:7, 136:8 44 101:19, 102:2 444 3:9 45 8:8, 8:12, 101:12, 101:20, 102:2, 128:14, 129:7, 129:22, 142:17, 144:21 46 101:14, 101:16, 142:15 47 102:5, 102:7 48 101:1, 107:14 49 1:18, 225:17 4a 171:4, 171:16, 173:8, 181:13 4b 181:15, 182:15 4e 176:6, 176:7, 176:11 4m 173:7, 173:19, 173:20 4p 181:11 4q 181:11 4r 171:4, 171:16</p> <hr/> <p>5</p> <hr/> <p>5 168:6 5.0 187:15</p>
--	---	--	--

Transcript of Ivan Peter Zatkovich
Conducted on July 7, 2020

275

<p>5.60 189:1 50 40:16, 43:19, 43:20, 79:17, 144:5 500 59:19, 59:21 525 59:20 54 4:8 558 188:22 57 3:14 5755 3:14 5b 184:18, 185:8 5f 187:12, 187:16, 187:20 5g 188:11, 188:16, 189:3</p> <hr/> <p style="text-align: center;">6</p> <hr/> <p>60 49:20, 71:6, 71:10, 71:12 62 102:9, 102:19, 104:16, 104:21, 105:6, 106:4, 106:21, 107:11 63 136:7, 136:8 64 105:10 655 16:16, 19:7, 54:14, 85:19, 86:1, 93:12, 93:18, 136:4, 159:19, 168:21, 223:17 66 102:9, 104:16,</p>	<p>104:21, 105:6, 105:10, 106:4, 106:21, 107:11, 149:7, 149:18, 149:20 67 149:21 69 182:19, 182:20, 183:1</p> <hr/> <p style="text-align: center;">7</p> <hr/> <p>70 8:13, 48:16, 49:11 704 3:9 72 102:21 74 102:21, 120:10, 120:12, 120:15 75 8:13 76 102:21 78 4:10, 102:21 79 120:10 7th 94:7</p> <hr/> <p style="text-align: center;">8</p> <hr/> <p>8,064,935 1:13, 19:5 8-bit 150:3 80 102:21 8042 219:7, 221:1 82 102:21 84 102:21 855 3:16</p>	<p>86 102:21 88 102:22 89 120:12, 120:16</p> <hr/> <p style="text-align: center;">9</p> <hr/> <p>9 1:18, 2:5, 225:17 9,602,655 19:9 9.2 150:2 90 26:11 9000 184:21, 185:2, 185:6, 186:4, 187:2 91 4:12 935 4:11, 16:16, 19:3, 54:8, 54:14, 78:14, 78:21, 78:22, 79:8, 80:7, 84:12, 85:1, 85:19, 86:1, 91:12, 91:22, 92:16, 92:20, 93:1, 93:17, 98:7, 98:11, 98:14, 99:6, 100:12, 100:15, 101:2, 101:17, 101:20, 102:8, 102:13, 104:1, 104:5, 104:9, 106:8, 108:18, 115:22, 119:9, 119:22, 120:3, 132:6, 135:21, 136:3, 136:7, 137:4, 137:14, 137:21, 138:14,</p>	<p>139:14, 139:22, 142:2, 143:19, 150:12, 150:14, 152:17, 152:18, 154:16, 155:3, 155:7, 156:11, 159:19, 162:19, 168:21, 170:19, 179:7, 179:9, 179:13, 182:2, 190:16, 194:9, 205:18, 222:5, 223:12, 223:18, 224:2 94 149:3 965 86:1 97 30:16, 31:5 98 30:17, 31:5</p>
--	--	---	--