

1 UNITED STATES PATENT AND TRADEMARK OFFICE  
2 BEFORE THE PATENT TRIAL AND APPEAL BOARD  
3

4 COXCOM, LLC,

Petitioner,

5 CASE IPR2015-01760

6 vs.

PATENT 6,549,130

7 JOAO CONTROL & MONITORING  
8 SYSTEMS, LLC,

9 Patent Owner.

10  
11  
12 VOLUME I  
13 DEPOSITION OF  
14 RICHARD BENNETT

15 April 28, 2016

16 9:44 A.M.

1100 Peachtree Street, NE

Suite 1100

Atlanta, Georgia

18 Lee Ann Barnes, CCR-1852, RPR, CRR  
19  
20  
21  
22  
23  
24

25 Job No. CS2300074

APPEARANCES OF COUNSEL

1  
2  
3 On behalf of the Petitioner:

4 KILPATRICK TOWNSEND & STOCKTON LLP  
5 D. CLAY HOLLOWAY, ESQ.  
6 1100 Peachtree Street, NE  
7 Suite 2800  
8 Atlanta, Georgia 30309-4528  
9 404.815.6537  
10 404.541.3484 (facsimile)  
11 cholloway@ktslaw.com

12 On behalf of the Patent Owner:

13 INSIGHT, PLC  
14 STEVEN RITCHESON, ESQ.  
15 9800D Topanga Canyon Boulevard, #347  
16 Chatsworth, California 91311  
17 818.882.1030  
18 switcheson@insightplc.com

19 Also Present:

20 Raymond Joao  
21  
22  
23  
24  
25

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

INDEX OF EXAMINATION

WITNESS: RICHARD BENNETT

EXAMINATION

PAGE

By Mr. Ritcheson

5

## INDEX TO EXHIBITS

Patent Owner's

Exhibit	Description	Page
Exhibit 1	Notice of Deposition of Richard Bennett	23
Exhibit 2	Declaration of Richard Bennett in Support of Petition for Inter Partes Review of U.S. Patent No. 6,549,130 Under 35 U.S.C. §§ 311-319 and 37 C.F.R. §§ 42.1-.80 & 42.100-.123	15
Exhibit 3	U.S. Patent Application No. 08/622,749	25
Exhibit 4	United States Patent No. 6,549,130 B1	54
Exhibit 5	Decision, Institution of Inter Partes Review, 37 C.F.R. §42.108	63
Exhibit 6	U.S. Patent No. 5,875,430	70
Exhibit 7	U.S. Patent No. 5,805,442	135
Exhibit 8	Declaration of Richard Bennett in Support of Petition for Inter Partes Review of U.S. Patent No. 7,397,363 Under 35 U.S.C. §§ 311-319 and 37 C.F.R. §§ 42.1-.80 & 42.100-.123	16

(Original exhibits are attached to the  
Original transcript.)

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

Deposition of RICHARD BENNETT

April 28, 2016

(Reporter disclosure made pursuant to Article 8.B of the Rules and Regulations of the Board of Court Reporting of the Judicial Council of Georgia.)

RICHARD BENNETT, having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY-MR. RITCHESON:

Q. Could you state and spell your name for the record, please?

A. Richard Bennett, B-E-N-N-E-T-T.

Q. Thank you, Mr. Bennett. My name is Steven Ritcheson. I introduced myself earlier. I'm one of the attorneys representing a company known as Joao Control and Monitoring Systems.

Do you understand that?

A. Yes.

Q. Okay. I'm going to refer to that entity as "JCMS" today.

Is that all right with you?

A. That's fine.

Q. Okay. My understanding is that you are

1 a -- an expert that has been retained by Cox  
2 Communications; is that accurate?

3 A. That's correct.

4 Q. Were you actually retained by Cox or by a  
5 law firm on behalf of Cox?

6 A. By a law firm on behalf of Cox.

7 Q. And what law firm is that?

8 A. Kilpatrick Townsend & Stockton.

9 Q. Have you been retained by any other law  
10 firms to act as an expert on behalf of any entity  
11 with respect to a JCMS patent?

12 A. Yes, I have.

13 Q. What other entities?

14 A. Venable and K&L Gates.

15 Q. And who is or was Venable's client?

16 A. Theirs was Verizon and some entities  
17 associated with Verizon.

18 Q. Does Terremark sound familiar?

19 A. Yeah, Terremark.

20 Q. And that's T-E-R-R-E-M-A-R-K?

21 A. I believe so.

22 Q. And who is or was the K&L client?

23 A. Time Warner Cable or some entity  
24 affiliated with Time Warner Cable.

25 Q. Have you heard of a company named Icontrol

1 Networks?

2 A. Yes, I have.

3 Q. Is that one of the entities that you were  
4 also --

5 A. Could be.

6 Q. Okay. One of the things that -- you've  
7 been deposed before; correct?

8 A. Yes.

9 Q. And, in fact, you've been deposed with  
10 respect to some of the JCMS patents before?

11 A. Yes, I have.

12 Q. One of the key things I'd like to remind  
13 you of, and it's for our sake, as well as the court  
14 reporter's, make sure we give each other time to  
15 finish our questions and answers before we start  
16 again; okay?

17 A. That's great.

18 Q. Okay. Roughly how many times have you  
19 been deposed before?

20 A. Just the times that -- on the two patents  
21 that I was deposed on relative to JCMS.

22 Q. Okay. Do you have any -- do you have any  
23 questions about the -- this process that I can  
24 answer for you?

25 A. No.

1 Q. Okay. During the day today, we're going  
2 to take breaks occasionally, and tomorrow. We'll  
3 take breaks occasionally, but you're not allowed to  
4 speak with counsel about your testimony, either the  
5 testimony you've given or the testimony you expect  
6 to give.

7 Do you understand that?

8 MR. RITCHESON: Objection. Form.

9 THE WITNESS: I wasn't aware of that.

10 Q. (By Mr. Ritcheson) Okay. If -- in light  
11 of that, will you follow my instruction not to speak  
12 with your counsel about your testimony or would you  
13 like me to inquire about it as we go ahead?

14 MR. HOLLOWAY: There's no bar. If you  
15 want to ask him questions after the break if we  
16 talked about stuff, you're allowed to do that.

17 MR. RITCHESON: There is a bar, as you  
18 probably know or you may not know. There is a  
19 bar that prohibits you from speaking with  
20 Mr. Bennett regarding his testimony.

21 MR. HOLLOWAY: There is a rule that states  
22 if I talk to him while he's on the stand, you  
23 are allowed to ask him about that.

24 MR. RITCHESON: We'll find the rule for  
25 you.

1 MR. HOLLOWAY: Okay.

2 Q. (By Mr. Ritcheson) With respect to any  
3 breaks we take, I'll ask you what you said to your  
4 attorneys if you spoke with him; okay? Okay?

5 A. You're welcome to ask me that.

6 Q. Now, this isn't your first time acting as  
7 an expert; correct?

8 A. Correct.

9 Q. How many times have you acted as an expert  
10 before?

11 A. I acted as an expert in two previous cases  
12 with Kilpatrick Townsend and I filed expert  
13 declarations, and I've -- yeah, that's it as an  
14 expert. I've worked as a consultant with law firms,  
15 as well.

16 Q. It's true that you've never testified at a  
17 trial before?

18 A. That's correct.

19 Q. Okay. Are you paid hourly for your  
20 services as an expert in this case?

21 A. Yes, I am.

22 Q. And how much do you charge for an hour?

23 A. I don't actually remember the rate for  
24 this case. I think it's 5- to \$600 an hour,  
25 something like that.

1 Q. Is that the same amount that was  
2 applicable to the other proceedings that you  
3 mentioned involving the JCMS patents?

4 A. On JCMS, yes, it's the same rate as the  
5 previous JCMS cases.

6 Q. We're here today to discuss two IPRs. Do  
7 you understand what I mean by "IPR," inter partes  
8 review?

9 A. Yes.

10 Q. So if I say "IPR," you understand what I'm  
11 talking about?

12 A. Yes, although it's ambiguous.  
13 Intellectual property rights also means IPRs.

14 Q. Okay. For the purposes of today, let's  
15 have it be inter partes view.

16 A. Yeah.

17 Q. There's two IPRs that we're here to talk  
18 about today.

19 You understand that; correct?

20 A. Uh-huh (affirmative).

21 Q. That's a "yes"?

22 A. Yes.

23 Q. One of the other rules, by the way, is to  
24 give an actual verbal response so that she knows  
25 what to write down; okay?

1 A. Okay.

2 Q. You understand that those IPRs relate to  
3 the '130 patent and the '363 patent?

4 A. Yes, I do.

5 Q. With respect to those two matters, you  
6 submitted a declaration?

7 A. Yes, I did.

8 Q. Two declarations --

9 A. Yes.

10 Q. -- one for each?

11 A. Yes.

12 Q. Roughly how much time did you spend  
13 preparing those two declarations?

14 I should ask a foundational question. Did  
15 you prepare those declarations?

16 A. Yes.

17 Q. How much time did you spend preparing  
18 those declarations?

19 A. I think it was roughly on the order of 20  
20 hours.

21 Q. 20 hours each or 20 hours total?

22 A. I think probably about 20 hours total. It  
23 could have been more. I'd have to check my records.

24 Q. And how much time have you spent in --  
25 with respect to the '363 and '130 IPRs?

1 A. About the same.

2 Q. So you haven't done anything since you did  
3 your declaration?

4 A. You mean how much time did I spend, say,  
5 preparing for this deposition?

6 Q. Or anything you've done in the interim  
7 since you completed the declaration.

8 A. Since I completed those, the only thing  
9 I've done is prepared for this deposition, which I  
10 did by simply rereading all the exhibits that were  
11 filed.

12 Q. And how much time did you spend in  
13 preparing for today's deposition?

14 A. I spent about 10 to 15 hours.

15 Q. That's total, right, not per IPR?

16 A. Yes.

17 Q. When were you actually retained by an  
18 entity with respect to the JCMS patents?

19 A. With respect to the ones we're dealing  
20 with today?

21 Q. Yes.

22 A. That would have been last July.

23 Q. And who initially retained you last July?

24 A. I believe it was Mr. Holloway, wasn't it?

25 MR. RITCHESON: What was the question?

1 I'm sorry.

2 THE WITNESS: Were you the one who  
3 retained me?

4 MR. HOLLOWAY: My name may have been on  
5 the letter.

6 THE WITNESS: Yeah, I got an e-mail from  
7 somebody in the -- in the office here.

8 Q. (By Mr. Ritcheson) And that was on behalf  
9 of Cox Communications; is that correct?

10 A. Yes.

11 Q. Were you then subsequently retained by the  
12 Venable and K&L firms?

13 A. That was a previous matter.

14 Q. That was a previous matter. Okay.  
15 When were you retained by those firms?

16 A. That was some months prior to being  
17 retained on this matter.

18 Q. With respect to the declaration that you  
19 provided in this case, did you provide copies of  
20 that, drafts of that, for comment to Venable and  
21 K&L?

22 MR. HOLLOWAY: Could you read that back?

23 (Whereupon, the record was read by the  
24 reporter as follows:

25 Question, "With respect to the

1 declaration that you provided in this case, did  
2 you provide copies of that, drafts of that, for  
3 comment to Venable and K&L?")

4 THE WITNESS: So you're asking me about  
5 the process and the preparation of my expert  
6 declaration and what sort of communication I  
7 had with the attorney?

8 Q. (By Mr. Ritcheson) I'm asking you if you  
9 had communication with attorneys at the Venable and  
10 K&L firm with respect to your declarations?

11 MR. HOLLOWAY: You can answer that "yes"  
12 or "no."

13 THE WITNESS: Yes.

14 Q. (By Mr. Ritcheson) Who?

15 MR. HOLLOWAY: Wait, wait, wait. Just so  
16 we're clear, he's asking about the declarations  
17 in the Cox-only IPRs.

18 THE WITNESS: Okay.

19 MR. RITCHESON: Yes.

20 MR. HOLLOWAY: So I just want to make sure  
21 the question's clear.

22 Q. (By Mr. Ritcheson) Yes. Do you  
23 understand what I'm getting at?

24 A. You want to know who I talked to at  
25 Kilpatrick about the --

1 Q. Well, first I want to make sure that any  
2 ambiguity is clarified.

3 With respect to the declarations that you  
4 submitted in these IPRs that we're here to talk  
5 about today -- you know what, strike that. We've  
6 had these marked, so let's actually --

7 MR. HOLLOWAY: Let's use numbers or names  
8 for them.

9 MR. RITCHESON: Exactly. Exactly.

10 MR. HOLLOWAY: Thank you.

11 Q. (By Mr. Ritcheson) With respect to -- and  
12 I've got -- I'm sorry it's disorganized, but there's  
13 a pile in front of you that --

14 MR. HOLLOWAY: Is this for me?

15 MR. RITCHESON: That is for you.

16 MR. HOLLOWAY: Okay.

17 MR. RITCHESON: It was arranged hastily.

18 MR. HOLLOWAY: That's fine. Thank you.

19 (Patent Owner's Exhibit 2 was marked for  
20 identification.)

21 Q. (By Mr. Ritcheson) With respect to  
22 Exhibit No. 2, this is a Declaration of Richard  
23 Bennett in Support of Petition for Inter Partes  
24 Review of U.S. Patent No. 6,549,130.

25 Let me hand this to you and ask you if you

1 recognize that?

2 A. Yes, I do.

3 Q. Okay. As a matter of convention, we  
4 frequently refer to patents by the last three  
5 numbers.

6 A. Yes, I'm familiar with that.

7 Q. So we'll refer to this, okay, as the '130  
8 declaration.

9 A. That's fine.

10 Q. Okay. So with respect to Exhibit 2, did  
11 you provide Exhibit 2 in draft form to the attorneys  
12 at Venable or K&L Gates for comment?

13 A. Yes, I did.

14 Q. Okay. There's also another declaration  
15 that you provided with respect to the '363 patent.  
16 I don't think we marked that. We might as well take  
17 care of that while we're here.

18 (Patent Owner's Exhibit 8 was marked for  
19 identification.)

20 Q. (By Mr. Ritcheson) Exhibit 8 that we've  
21 had marked for identification is the Declaration of  
22 Richard Bennett in Support of Petition for Inter  
23 Partes Review of U.S. Patent No. 7,397,363.

24 Have you seen this document before?

25 A. Yes, I have.

1 Q. Okay. And are Exhibit 2 and Exhibit 8,  
2 are those the declarations that you submitted with  
3 respect to the '130 and '363 patents, respectively?

4 A. They appear to be.

5 Q. With respect to Exhibit 8, did you provide  
6 drafts of Exhibit 8 to attorneys at Venable and/or  
7 K&L Gates for comment?

8 A. Yes, I did.

9 Q. Did you actually receive comments from  
10 Venable and K&L Gates attorneys with respect to  
11 Exhibits 2 and 8?

12 A. Yes, I did.

13 Q. And did you incorporate those comments  
14 into the final version of the declaration that you  
15 submitted in this matter?

16 A. Some I did; some I didn't.

17 Q. Okay.

18 MR. HOLLOWAY: I'm going to object to this  
19 entire line because the witness is actually  
20 wrong.

21 THE WITNESS: Oh.

22 MR. RITCHESON: Well, I object to your  
23 objection.

24 Q. (By Mr. Ritcheson) With respect to the --  
25 strike that.

1           With respect to the Venable and K&L Gates  
2 attorneys, do you remember which attorneys you  
3 interacted with with respect to Exhibit 2 and  
4 Exhibit 8?

5           MR. HOLLOWAY: Objection. Foundation.

6           THE WITNESS: What's the question?

7           Q. (By Mr. Ritcheson) Who at K&L Gates  
8 and/or Venable did you --

9           A. K&L Gates and Venable, what does that have  
10 to do with this case?

11          MR. HOLLOWAY: Objection. Foundation.

12          Q. (By Mr. Ritcheson) You can answer my  
13 question.

14          A. Huh?

15          Q. You can answer my question.

16          A. I don't see the relevance of it.

17          Q. It's all right. You don't have to.

18                 The process, just so you're clear, is I  
19 get to ask questions and you get to answer them.  
20 There are certain occasions where your attorney may  
21 instruct you not to answer, but at all other times,  
22 you're required to answer.

23          A. Oh. So the attorney at K&L Gates is  
24 Jackson Ho and at Venable was Megan Woodworth, I  
25 think it is.

1           Q.    Are you aware that there was a petition  
2 for inter partes review that was submitted with your  
3 declaration to the Patent Trial and Appeal Board?

4           A.    Yes, I was.

5           Q.    Did you review that document before it was  
6 submitted?

7           A.    I don't believe I did.

8           Q.    Okay. With respect to the two other  
9 matters -- and this is just foundational -- with  
10 respect to the two other matters that you -- where  
11 you acted as an expert, those were cases in which  
12 you provided expert reports?

13                   MR. HOLLOWAY:  Objection.  Form.

14                   THE WITNESS:  I'm not clear about what  
15 you're asking.

16                   MR. HOLLOWAY:  Can I request that we  
17 identify these by IPR number or, at the very  
18 least, petitioner party?  Because the witness  
19 is confused as to what you are asking him about  
20 the declaration.

21                   MR. RITCHESON:  Okay.  You don't have to  
22 have a speaking objection.  It's clear.

23                   MR. HOLLOWAY:  I know, but the record  
24 isn't clear at all.  You're using pronouns and  
25 numbers and not identifying the actual IPR

1 number or the petitioners.

2 MR. RITCHESON: With respect to the  
3 declarations, you're wrong. I identified it  
4 exactly by exhibit number. Your objections are  
5 inappropriate. You need to stop.

6 MR. HOLLOWAY: Okay. I'm just objecting  
7 to all of this --

8 MR. RITCHESON: Okay.

9 MR. HOLLOWAY: -- because there's no  
10 clarity in what we're talking about.

11 MR. RITCHESON: That's fine.

12 Q. (By Mr. Ritcheson) And if I'm unclear at  
13 any point, let me know. I'm not here to trick you  
14 or surprise you or anything; I'm just trying to get  
15 your testimony. Okay? Trust me.

16 When I was talking about the two other  
17 matters, I'm sorry, I don't know what they're  
18 called. You testified that there were two cases  
19 that you were retained by -- by K&L -- by Kilpatrick  
20 previously --

21 A. Uh-huh (affirmative).

22 Q. -- is that correct?

23 A. Yes.

24 Q. And those aren't IPRs, were they?

25 A. One -- well, I worked with Kilpatrick on a

1 previous expert report on JCMS in which I was  
2 deposed by Mr. Joao --

3 Q. Right. Okay.

4 A. -- in Washington when -- a month or two  
5 ago.

6 Q. Okay.

7 A. And before that, I worked on some other  
8 cases that were for Kilpatrick Townsend clients that  
9 are not relevant to JCMS.

10 Q. Those were the ones that I was talking  
11 about. What were those cases --

12 MR. HOLLOWAY: Objection. Form.

13 Q. (By Mr. Ritcheson) -- that did not have  
14 anything to do with JCMS? I don't know what else to  
15 call them.

16 MR. HOLLOWAY: Objection. Form.

17 THE WITNESS: They were about Ethernet  
18 patents.

19 Q. (By Mr. Ritcheson) And did you submit --  
20 those were two cases?

21 A. Well, it was -- it was actually -- there  
22 was one case that went through two phases, so -- and  
23 the initial -- it was an Ethernet patents case that  
24 dealt with some patents that had originally been  
25 granted to 3Com, to some people that I worked with

1 at 3Com.

2 And in the initial phase, there was a  
3 joint defense group of, oh, at least eight different  
4 law firms that had different clients who had been  
5 charged by the current patent owner. The patent's  
6 been through two or three different owners and the  
7 current one is -- was about to expire, and so they  
8 were trying to extract some license fees from  
9 various companies, including clients of Kilpatrick  
10 Townsend.

11 Q. Who was the patent owner?

12 MR. HOLLOWAY: Objection. Form.

13 THE WITNESS: I don't recall. I mean, the  
14 patent was originally a 3Com patent and 3Com  
15 was acquired by HP. It became an HP patent and  
16 HP sold it to a patent assertion entity --

17 Q. (By Mr. Ritcheson) Okay.

18 A. -- who was the -- and -- that had some  
19 obscure name that it's hard for me to remember.

20 Q. Have you ever had any of your opinions  
21 stricken by a court or other judicial or  
22 quasi-judicial body?

23 A. No.

24 Q. Have you ever had your testimony or  
25 declarations limited by any court or judicial or

1 quasi-judicial body?

2 A. No.

3 Q. Have you had any -- other than in this  
4 case, have you had any occasion when a court or a  
5 judicial or quasi-judicial body has found your  
6 testimony to be insufficient?

7 A. No.

8 Q. With respect to -- I'd like to talk about  
9 a couple of things having to do with -- let me back  
10 up.

11 MR. RITCHESON: Let me just for the record  
12 so, Clay, you can maybe mark on your copies,  
13 you know, what we have done with respect to  
14 marking of documents, Exhibit 1 is Notice of  
15 Deposition of Richard Bennett.

16 (Patent Owner's Exhibit 1 was marked for  
17 identification.)

18 Q. (By Mr. Ritcheson) Have you seen this  
19 document before?

20 A. Yes, I have.

21 Q. What do you understand that document to  
22 be?

23 A. Huh?

24 Q. What do you understand that document to  
25 be?

1           A.    It's a notice that the deposition -- wait  
2 a minute.  At the top, it says "Notice of Deposition  
3 of Scott Andrews," so I'm a bit confused.

4                    No, I haven't seen this before.

5           Q.    Okay.  Let me look.

6                    The cover page reads "Notice of Deposition  
7 of Richard Bennett."  In the body of it, it says  
8 that "patent owner, by and through its attorneys,  
9 will conduct cross-examination by deposition of  
10 Richard Bennett..."; correct?

11           A.    That's what it says.

12           Q.    And you're Richard Bennett?

13           A.    Yes, I am.

14           Q.    Do you understand this -- notwithstanding  
15 a -- apparently a typographical error that appears  
16 at the very top of the second page, you understand  
17 this to be the notice of deposition that required  
18 you to come here and appear today?

19           A.    Yes.

20           Q.    Okay.  With respect to Exhibit 2, we've  
21 previously identified that as the declaration you  
22 submitted in the '130 IPR; correct?

23           A.    Correct.

24                    MR. HOLLOWAY:  Objection.  Form.  It's  
25 a -- can we not call it the '130 IPR?  Let's

1 call it by its IPR number or the '130 patent in  
2 IPR number blank, because he has another '130  
3 IPR declaration, which is the source of all of  
4 this confusion.

5 MR. RITCHESON: I don't think anybody's  
6 confused.

7 MR. HOLLOWAY: Okay.

8 (Patent Owner's Exhibit 3 was marked for  
9 identification.)

10 Q. (By Mr. Ritcheson) With respect to  
11 Exhibit No. 3, have you seen this document before?

12 MR. HOLLOWAY: Which one's Exhibit 3?

13 THE WITNESS: It's the --

14 MR. HOLLOWAY: I got it.

15 THE WITNESS: What is this? The initial  
16 application? Is that what this is?

17 Yes. Yeah. This is an application, a  
18 patent disclosure, for -- that was the --  
19 apparently the initial document that became the  
20 '130 patent, but unlike the actual '130 patent,  
21 the initial disclosure related solely to a  
22 vehicle monitoring system, and I believe what I  
23 have here is the initial filing.

24 Q. (By Mr. Ritcheson) Okay. And this is the  
25 filing dated -- am I reading this correctly on the

1 front page -- March 27, 1996?

2 A. Yes.

3 Q. Okay. And in your declaration, you state  
4 that you believe that there is no disclosure of  
5 premises control in this application; is that  
6 accurate?

7 A. That's correct.

8 Q. Okay. With respect to Exhibit No. 3, is  
9 it true that there is disclosure of the remote  
10 access by a -- an owner, there's remote access to a  
11 central office computer?

12 MR. HOLLOWAY: Objection. Form.

13 THE WITNESS: "Central office computer,"  
14 I'm not sure what that means.

15 Q. (By Mr. Ritcheson) A computer at the --  
16 let's call it the central security office.

17 A. As I recall, this disclosure primarily  
18 deals with systems that are inside a motor vehicle  
19 or a vehicle that relate to a server computer that  
20 hosts the website. Figure 5B shows a website.

21 Q. Just for clarification, there are a couple  
22 of numbers that appear. Let's use the -- you see at  
23 the very bottom of the page, it says, "Petitioner  
24 Coxcom, LLC - Exhibit 1004," and I think it says  
25 "page 8"?

1 Do you see that?

2 A. Yes, I do.

3 Q. Let's use that number, because later on  
4 there's other numbers on pages. Let's use that  
5 number.

6 So on page 8 at 5B, you said?

7 A. Yes.

8 Q. Okay. With respect to the disclosures in  
9 Exhibit 3, is this a three-control device system?

10 MR. HOLLOWAY: Objection. Form.

11 THE WITNESS: Is this a three-device  
12 system?

13 Q. (By Mr. Ritcheson) Three-control device.

14 A. Three-control device.

15 MR. HOLLOWAY: Same objection.

16 THE WITNESS: I'm not really sure how to  
17 answer that, because it -- primarily, it -- it  
18 appears that there are two control device.

19 There's a control device, a sensing -- there's

20 sensing that takes place in the vehicle and

21 reporting to this website through a

22 communication mechanism, and I think the

23 communication mechanism is said to include a

24 communication processor that facilitates

25 communication between the vehicle system and

1 the website.

2 So like -- essentially, any process  
3 control system that involves a controller and a  
4 control device that are separate and distinct  
5 from each other physically, where there is a  
6 communication that takes place between the  
7 controller and the control device, we can say  
8 there are three parts to that system. In fact,  
9 I'd be hard pressed to describe a process  
10 control system that operates from afar that  
11 does not have three components.

12 Q. (By Mr. Ritcheson) With respect to the  
13 specific disclosures here, looking at, for example,  
14 the figure you pointed us to, Figure 5B on page 8,  
15 is it true that the vehicle systems can be  
16 controlled by a communication pathway that goes from  
17 the home or personal computer 150 to the server  
18 computer 510, obviously through the website, to the  
19 CPU 4? Is that what's disclosed in Exhibit 3?

20 A. I believe --

21 MR. HOLLOWAY: Objection. Form.

22 THE WITNESS: -- that is disclosed in this  
23 exhibit.

24 Q. (By Mr. Ritcheson) Okay. With respect to  
25 the -- the control device -- strike that.

1           Is the home and/or personal computer 150 a  
2 control device as that term is used in this exhibit?

3           MR. HOLLOWAY: Objection. Form.

4           THE WITNESS: I understand a home or  
5 personal computer to be the controller.

6           Q. (By Mr. Ritcheson) Okay. Or control  
7 device? Is that the term that's used in Exhibit 3?

8           A. Yeah. It's the same thing.

9           Q. Okay. And is the home and/or personal  
10 computer presumably located at a home?

11          MR. HOLLOWAY: Objection. Form.

12          THE WITNESS: I don't see any reason why  
13 it would have to be. Home computer and  
14 personal computer are essentially synonyms --

15          Q. (By Mr. Ritcheson) Understood.

16                 With respect to --

17          A. -- so home computer could travel.

18          Q. Okay. With respect to the server computer  
19 510, where is that located?

20          MR. HOLLOWAY: Objection. Form.

21          THE WITNESS: It's -- it is located  
22 wherever it's located. It's not inside the  
23 vehicle.

24          Q. (By Mr. Ritcheson) If you add to the --  
25 our discussion the Figure 11B on page 15, you see a

1 similar group of images, and I'd like to  
2 particularly talk about the on-line service and/or  
3 Internet processing site.

4 Do you see that?

5 A. Yes, I do.

6 Q. And next to it there is a central security  
7 office.

8 Do you see that?

9 A. Yes, I do.

10 Q. Do you understand that those are two  
11 alternative forms of providing an intermediary  
12 control device between the personal computer 150 and  
13 the vehicle controller CPU 4?

14 MR. HOLLOWAY: Objection. Form.

15 THE WITNESS: I'm not sure that I do  
16 understand that.

17 Q. (By Mr. Ritcheson) Okay. Do you  
18 understand -- is it your understanding that the home  
19 and/or personal computer 150 can transmit control  
20 signals to computer 970 in the central security  
21 office?

22 MR. HOLLOWAY: Objection. Form.

23 THE WITNESS: There -- it's -- the  
24 diagram's a bit unclear, because there are --  
25 okay. I see there are the jagged lines with

1 the arrows on them that interconnect these  
2 three major boxes. So in the top left, we have  
3 the on-line service and/or Internet processing  
4 site; on the top right, we have the central  
5 security office; and then on the lower left, we  
6 have both a home and personal computer inside a  
7 box with a CPU and a number of vehicle systems.

8 And it's not clear from the diagram  
9 whether that is meant to depict the home and/or  
10 personal computer as being inside the vehicle  
11 or outside the vehicle. We have a number of  
12 communication pathways. We have communication  
13 pathways between the home and personal computer  
14 and/or personal computer. There's one  
15 communication pathway that is -- that connects  
16 the personal -- let's just call it the personal  
17 computer to the vehicle positioning and  
18 locating system device.

19 We have another one that is connected to a  
20 transmitter -- I mean to a receiver, but there  
21 is no transmitter -- oh, the transmitter does  
22 not seem to be connected to the home and/or  
23 personal computer. So the transmitter points  
24 in the general direction of the on-line service  
25 and/or Internet processing site, but it doesn't

1 actually cross the boundary around this  
2 combination of the computer -- the personal  
3 computer and the vehicle.

4 But then there is another set of  
5 communication pathways between this box in the  
6 lower left that encompasses both the computer  
7 and the car with the server computer, there's a  
8 communication pathway that connects this entire  
9 collection of devices with the central security  
10 office, and then there's a stray line labeled  
11 950 that looks like a communication pathway but  
12 there's no head on that arrow. So the figure,  
13 it's not abundantly clear what 950 is supposed  
14 to represent.

15 And then we have a communication pathway  
16 between the on-line service and/or Internet  
17 processing site and the central security  
18 office.

19 So what we have here appears to be a  
20 depiction of a system of four elements, not  
21 three, because we have on-line service and/or  
22 Internet processing, server computer. We  
23 have -- that's one.

24 The second is central security office,  
25 which also has a computer, transmitter,

1 receiver, a special position data system  
2 receiver, display device, output device, and  
3 user interface device.

4 And then third we have the home and/or  
5 personal computer and then fourth we have the  
6 vehicle system, which includes the CPU, the  
7 ignition system interface, fuel pump system  
8 interface, ROM, RAM, voice synthesizer, and a  
9 transmitter and a receiver.

10 So this appears to describe a system of  
11 four elements that communicate with each other.

12 Q. (By Mr. Ritcheson) Have you read  
13 Exhibit 3 before?

14 A. I've -- I have read it, but I -- I've  
15 certainly skimmed it, I'd say that. I haven't  
16 studied it in depth.

17 Q. Do you understand how the system is  
18 disclosed as operating from your review of  
19 Exhibit 3?

20 A. In a general way.

21 Q. Is it consistent with the testimony you  
22 just provided?

23 A. My testimony is not actually about this  
24 disclosure; my testimony is about the actual patent,  
25 the '130 patent.

1           And this is an early -- this document, as  
2 I understand it, was the initial document in a  
3 process in which the inventor had extraordinary  
4 interaction with the patent examiner and modified  
5 his initial disclosure several times before the '130  
6 patent was issued. In this document, there's no  
7 description of a premises system. This is a vehicle  
8 system.

9           Q. Well, that's what I'm trying to get to,  
10 actually, is where is the computer -- regardless of  
11 the testimony you just gave with respect to three  
12 devices or four devices, focusing on device 970,  
13 where's that located?

14          A. 970 is inside a box that says "Central  
15 Security Office."

16          Q. Is it a fair conclusion, then, that the  
17 computer 970 is located at the central security  
18 office premises?

19          A. I think --

20               MR. HOLLOWAY: Objection. Form.

21               THE WITNESS: -- that's the intent -- that  
22 appears to be the intent of the diagram.

23          Q. (By Mr. Ritcheson) Is it true that the  
24 patent discloses control of computer 970 from the  
25 personal computer 150?

1 MR. HOLLOWAY: Objection. Form.

2 THE WITNESS: You said "the patent." This  
3 is not a patent. This is an initial disclosure  
4 that did not become a patent.

5 Q. (By Mr. Ritcheson) If I said "patent,"  
6 I'm sorry, but isn't it true that the application --  
7 that Exhibit 3 discloses the fact that computer 150  
8 controls the computer 970, which is located at a  
9 premises known as the central security office?

10 MR. HOLLOWAY: Objection. Form.

11 THE WITNESS: I don't believe that the  
12 personal computer controls the central security  
13 office.

14 Q. (By Mr. Ritcheson) What do you think the  
15 personal computer does with respect to the computer  
16 970 at the central security office?

17 MR. HOLLOWAY: Objection. Form.

18 THE WITNESS: I believe the personal  
19 computer reports status to the central security  
20 office.

21 Q. (By Mr. Ritcheson) I'm sorry. You think  
22 what?

23 A. It reports status.

24 Q. The home computer reports status?

25 MR. HOLLOWAY: Objection. Form.

1 THE WITNESS: Well, it's really not clear  
2 because, like I said, the -- because the home  
3 computer is inside the vehicle box and a  
4 communication -- we have a communication  
5 pathway that goes to the central -- to and from  
6 the central security office from the vehicle  
7 box.

8 The diagram itself doesn't make it clear  
9 whether the communication from this lower  
10 left-hand box to the upper right-hand box, what  
11 that communication consists of and whether it  
12 comes from the vehicle system itself or whether  
13 it comes from the home and/or personal  
14 computer.

15 Q. (By Mr. Ritcheson) I'm not asking --

16 A. The diagram is not helpful with respect to  
17 that.

18 Q. I'm not asking you to rely solely on the  
19 diagram; I'm asking you to rely on your review of  
20 Exhibit 3.

21 A. I did not --

22 MR. HOLLOWAY: Objection. Form. If you  
23 need to look at the documents to answer his  
24 questions, you can do that.

25 MR. RITCHESON: You've got to stop

1           objecting like that, Mr. Holloway. You don't  
2           get to object like that.

3           THE WITNESS: Well, the thing is my expert  
4           declaration didn't deal with this petition. It  
5           dealt with the patent.

6           Q. (By Mr. Ritcheson) It dealt with the  
7           petition, too.

8           MR. HOLLOWAY: That's not even a question.

9           MR. RITCHESON: You mean this -- you mean  
10          the application.

11          THE WITNESS: Yeah.

12          MR. HOLLOWAY: Objection. Form.

13          Q. (By Mr. Ritcheson) Okay. You -- you have  
14          said in your declaration, am I not correct, that you  
15          believe that control of premises equipment is not  
16          disclosed in the -- in Exhibit 3; correct?

17          MR. HOLLOWAY: Objection. Form.

18          THE WITNESS: Could you tell me where I  
19          did that? I'm looking at the -- at the  
20          declaration. This initial petition is not  
21          something I spent an enormous amount of time  
22          on.

23          Q. (By Mr. Ritcheson) And it's certainly  
24          listed on page I as being a -- one of the documents  
25          that you considered, correct, Exhibit 104?

1           A.    Well, page I lists exhibits that I  
2 understand to have been attached to my declaration  
3 as part of the petition for the IPR.

4           Q.    Okay.  With respect --

5           A.    That doesn't say that I studied it.

6           Q.    With respect to the '130 patent, what is  
7 your understanding that -- of the priority date?

8           MR. HOLLOWAY:  Objection to form.

9           Q.    (By Mr. Ritcheson)  Do you know what a  
10 priority date is?

11          A.    Yes, I do.

12          Q.    What is a priority date?

13          A.    It's the date at which -- that we are to  
14 consider -- it's essentially the cutoff point for  
15 prior art.

16          Q.    And what is your understanding of the  
17 priority date of the '130 patent?

18          MR. HOLLOWAY:  Objection.  Form.

19          THE WITNESS:  So there is a -- I believe  
20 there's an explicit statement in my declaration  
21 about that.  On page 4 of my declaration in  
22 paragraph 16, I said, "I have been told to  
23 assume that the date of invention for the  
24 claims of the '130 patent is July 18, 1996."

25          Q.    (By Mr. Ritcheson)  Is that the date that

1 you assumed was the priority date for your  
2 declaration? That's actually the date you used;  
3 correct?

4 A. Yes, July 18, 1996.

5 Q. So that means that any prior art that's  
6 used to challenge the '130 patent has to be after  
7 July 18, 1996; is that your understanding?

8 MR. HOLLOWAY: Objection.

9 THE WITNESS: No. That means any prior  
10 art that's used to challenge the '130 patent  
11 would be before that date, hence the term  
12 "prior."

13 Q. (By Mr. Ritcheson) What is that based on,  
14 the July 18, 1996, date?

15 MR. HOLLOWAY: Objection. Form.

16 THE WITNESS: I was told to assume that  
17 date by the lawyers --

18 Q. (By Mr. Ritcheson) Okay.

19 A. -- I think as a result of their analysis  
20 of the -- the patent.

21 Q. If the prior --

22 A. And that's a legal matter, as far as I'm  
23 concerned, and I'm not an expert on legal matters.

24 Q. Okay. Fair enough.

25 Let's talk just a little bit more about

1 the -- about the disclosures of the Exhibit 3,  
2 because it's relevant to your assumption that  
3 July 18, 1996, is the priority date.

4 With respect to -- turning to the -- back  
5 to the -- well, I guess 11B, is it your  
6 understanding of the disclosures of Exhibit 3 that a  
7 user can access and control computer 970 at the  
8 central security office?

9 MR. HOLLOWAY: Objection. Form.

10 THE WITNESS: I don't have an opinion  
11 about that.

12 Q. (By Mr. Ritcheson) Okay. Drawing your  
13 attention to page 32 of the same document, reads in  
14 the middle of the second -- the middle paragraph  
15 there, the bottom half of it reads, "The apparatus  
16 which is utilized at the central security office  
17 and/or other entity has the same control  
18 capabilities over the vehicle as that of the  
19 apparatus utilized in the vehicle"; correct?

20 MR. HOLLOWAY: Objection. Form.

21 THE WITNESS: "The -- the apparatus which  
22 is utilized at the central security office  
23 and/or other entity has the same control  
24 capabilities over the vehicle as that of the  
25 apparatus...." The sentence is unclear.

1 Q. (By Mr. Ritcheson) Okay. Is it your  
2 understanding based on the disclosures that the  
3 server at the central security office has control  
4 over the vehicle systems?

5 A. I don't have an opinion about that.

6 Q. Do you dispute that that is, in fact, the  
7 case?

8 MR. HOLLOWAY: Objection. Form.

9 THE WITNESS: I have no opinion about  
10 that.

11 Q. (By Mr. Ritcheson) Do you dispute the  
12 fact that the prior sentence here says that "upon  
13 the occurrence of a vehicle theft, or the discovery  
14 thereof, the authorized user or operator can access  
15 the apparatus so as to provide control over same  
16 while, at the same time, providing for a monitoring  
17 and/or controlling function to be performed by the  
18 central security office or other entity"?

19 MR. HOLLOWAY: Objection. Form.

20 Q. (By Mr. Ritcheson) Did I read that  
21 correctly?

22 A. Where did you read that from?

23 Q. Immediately preceding sentence.

24 MR. HOLLOWAY: Same objection.

25 THE WITNESS: So what's the question?

1 Q. (By Mr. Ritcheson) Did I read that  
2 correctly?

3 A. Did you read it correctly? "Upon the  
4 occurrence of a vehicle theft, or the discovery  
5 thereof, the authorized user or operator can access  
6 the apparatus...."

7 What's the apparatus?

8 Q. Do you have an understanding of what the  
9 apparatus is that is referenced in this document?

10 A. No. The apparatus is a -- that's a very  
11 broad term.

12 Q. Do you have an understanding of the fact  
13 that the -- that a user can access the server at the  
14 central security office?

15 MR. HOLLOWAY: Objection. Form.

16 Q. (By Mr. Ritcheson) Just "yes" or "no."

17 A. The question -- I don't know that there is  
18 a server at the central security office. There's a  
19 server at the online service and/or Internet  
20 processing site, but --

21 Q. Is computer 970 not frequently referred to  
22 as the server?

23 MR. HOLLOWAY: Objection. Form.

24 THE WITNESS: I don't know why it would be  
25 referred to as the server. A server performs

1 certain functions and I don't know that the  
2 central security office computer performs the  
3 functions that I would identify with a server.

4 Q. (By Mr. Ritcheson) You don't know what  
5 the 970 does --

6 MR. HOLLOWAY: Objection. Form.

7 Q. (By Mr. Ritcheson) -- correct?

8 A. No.

9 Q. Okay. The bottom of page 32, there's a  
10 paragraph. Could you read that into the record,  
11 please, and tell me when you're done -- or read that  
12 to yourself and tell me when you're done.

13 A. The final paragraph on page 32?

14 Q. Yes. Actually, just so there's no  
15 confusion, why don't you read that into the record,  
16 please.

17 A. Okay. "Figure 2 illustrates the vehicle  
18 positioning and locating device 13 of Figure 1" --

19 Q. I'm sorry. Are you at the bottom of  
20 page 32?

21 A. Yes.

22 Q. I asked you to read that into the record.  
23 Is that possible?

24 A. Yes. "...Figure 1, illustrating the main  
25 components thereof in block diagram" --

1 Q. I'm sorry. The bottom of page 32. At the  
2 very bottom of the page, it says "Petitioner CoxCom,  
3 LLC" --

4 MR. HOLLOWAY: He means this page number.

5 THE WITNESS: Oh, "Petitioner Coxcom,  
6 LLC - Exhibit 1004 Page 37"?

7 MR. HOLLOWAY: He wants page 32.

8 Q. (By Mr. Ritcheson) 32.

9 A. Page 32?

10 MR. HOLLOWAY: Right. This page No. 32.

11 THE WITNESS: Oh, okay.

12 MR. HOLLOWAY: It's page No. 17 of the  
13 spec.

14 THE WITNESS: So, "The apparatus which is  
15 utilized at the central security office may  
16 also be utilized in connection with an on-line  
17 service and/or on, or over, the Internet and/or  
18 the World Wide Web so as to provide for a means  
19 by which the authorized user or operator may  
20 utilize the apparatus in conjunction with a  
21 home and/or a personal computer."

22 Q. (By Mr. Ritcheson) Is it your  
23 understanding from reading that that the intention  
24 expressed there was to allow a user to access the  
25 central security office computer on or over the

1 Internet?

2 MR. HOLLOWAY: Objection. Form.

3 THE WITNESS: "May also" -- let's see.

4 The central security office apparatus may be  
5 utilized in connection with an on-line service  
6 or over the Internet or over the Worldwide Web  
7 so -- provide -- yeah, an authorized user or  
8 operator may utilize the central security  
9 apparatus in conjunction with a home or  
10 personal computer.

11 I believe -- it's -- yeah, the thing  
12 that's throwing me off here is the -- the use  
13 "in conjunction with." So I -- I don't exactly  
14 know what behavior would -- does that mean that  
15 the -- the authorized user of the central  
16 security -- at the central security office  
17 would use the personal computer to access this  
18 apparatus through the home or personal computer  
19 or from the home or personal computer?

20 So it's -- I'd have to say that I'm -- I'm  
21 confused about what this sentence is -- what  
22 this paragraph is trying to say. I mean, it  
23 implies there's some connection between the  
24 central security office and the home and/or  
25 personal computer and an apparatus which

1 apparatus seems to be distinct from the  
2 vehicle.

3 So we have an apparatus at the central  
4 security office and then we have -- the word  
5 "apparatus" occurs again in the -- at the end  
6 of the paragraph. Is the "apparatus" that is  
7 the second word of this paragraph and the  
8 "apparatus" on the second-to-the-last line in  
9 the paragraph the same apparatus or are these  
10 different apparatuses?

11 Q. (By Mr. Ritcheson) Do you know?

12 A. I don't know.

13 Q. It refers to "the apparatus."

14 Does it not make sense that we refer to  
15 the preceding reference to an apparatus?

16 A. Well, you have an --

17 MR. HOLLOWAY: Objection. Form.

18 THE WITNESS: -- apparatus in the central  
19 security office, but it's my understanding that  
20 you designate the control systems inside the  
21 vehicle also as "apparatus."

22 Q. (By Mr. Ritcheson) In this paragraph?

23 MR. HOLLOWAY: Objection. Form.

24 THE WITNESS: As I said, this paragraph is  
25 unclear to me.

1 Q. (By Mr. Ritcheson) What does the phrase  
2 "in conjunction with" mean as that term is used in  
3 that paragraph?

4 MR. HOLLOWAY: Objection. Form.

5 THE WITNESS: As I said, it -- it implies  
6 there's some sort of communication, but it  
7 doesn't tell me specifically what kind of  
8 activities are enabled by that communication.

9 Q. (By Mr. Ritcheson) Isn't it true that in  
10 response to the owner's interaction with the central  
11 control -- or central security office, that the  
12 central security office can thereafter send control  
13 signals to the vehicle?

14 MR. HOLLOWAY: Objection. Form.

15 THE WITNESS: Could you repeat the  
16 question?

17 MR. RITCHESON: Could you read it back?

18 (Whereupon, the record was read by the  
19 reporter as follows:

20 Question, "Isn't it true that in  
21 response to the owner's interaction with the  
22 central control -- or central security office,  
23 that the central security office can thereafter  
24 send control signals to the vehicle?")

25 MR. HOLLOWAY: Same objection.

1 THE WITNESS: I suppose -- I suppose it  
2 could. I don't -- I mean, I'd have to -- to  
3 read this in detail to determine whether that's  
4 the case.

5 Q. (By Mr. Ritcheson) Is it your  
6 understanding from your review of Exhibit 3, "yes"  
7 or "no," that the user computer that we've been  
8 discussing is located at a place that is remote from  
9 the vehicle?

10 MR. HOLLOWAY: Objection. Form.

11 THE WITNESS: As I've already said, it's  
12 unclear where the home and/or personal  
13 computer's located, because in Figure 5 --

14 Q. (By Mr. Ritcheson) I'm not talking about  
15 the figures.

16 A. -- b --

17 Q. I'm talking about from the actual  
18 specification.

19 MR. HOLLOWAY: Objection. Form.

20 THE WITNESS: From the specification, I  
21 don't know -- I don't have an opinion about  
22 that.

23 Q. (By Mr. Ritcheson) Is it true -- is it  
24 your understanding, according to the specification,  
25 that the computer at the central security office is

1 located at a place that is remote from the vehicle  
2 and remote from the user PC?

3 MR. HOLLOWAY: Objection. Form.

4 THE WITNESS: It's my understanding that a  
5 central security office is not a motor vehicle,  
6 so it would be -- it would be distinct.

7 Q. (By Mr. Ritcheson) And it's a premises,  
8 correct --

9 MR. HOLLOWAY: Objection. Form.

10 Q. (By Mr. Ritcheson) -- as that term is  
11 used?

12 MR. HOLLOWAY: Objection. Form.

13 THE WITNESS: Is an office a premises?

14 Q. (By Mr. Ritcheson) Yes.

15 A. I think in terms of the general structure  
16 of the English language, you would say an office is  
17 a premises.

18 Q. And is the server or the computer that's  
19 located at that office, is that equipment located at  
20 a premises?

21 MR. HOLLOWAY: Objection. Form.

22 THE WITNESS: I think it's fair to say  
23 that a computer in the central security office  
24 would be a computer in a premises.

25 Q. (By Mr. Ritcheson) Turning to page 96 --

1 again, this is at the bottom -- not at the bottom of  
2 the document --

3 A. Okay.

4 Q. -- the bottom -- the Coxcom designation --  
5 is it true that on page 96, the patent applicant  
6 discloses the use of the apparatus in premises?

7 MR. HOLLOWAY: Objection. Form.

8 THE WITNESS: In which paragraph?

9 Q. (By Mr. Ritcheson) The second paragraph,  
10 first full paragraph.

11 A. Well, there are three paragraphs on this  
12 page.

13 Q. First full paragraph.

14 A. "In the above manner" --

15 Q. Oh, I'm sorry. I cut it off. Second  
16 paragraph. "It is also envisioned that the  
17 apparatus and method of the present invention may  
18 find applications in areas other than in vehicle  
19 antitheft and/or recovery -- vehicle recovery. For  
20 example, the present invention may also find  
21 application in home, boat and/or other security  
22 systems, and the like, wherein a long-range  
23 remote-controlled and interactive system may be  
24 utilized in order to provide an immediate, or a  
25 deferred, response to a theft situation and/or to

1 provide control over desired items or devices from a  
2 remote location."

3 Did I read that correctly?

4 A. I believe you did, yes.

5 Q. Is a -- is a boat a vehicle?

6 MR. HOLLOWAY: Objection. Form.

7 THE WITNESS: Is a boat a vehicle? I  
8 don't know.

9 Q. (By Mr. Ritcheson) In 1996, would a  
10 person of ordinary skill in the art have understood  
11 that a houseboat was a premises?

12 MR. HOLLOWAY: Objection. Form.

13 THE WITNESS: I have no opinion about  
14 that.

15 Q. (By Mr. Ritcheson) In 1996, would one  
16 have understood -- a PHOSITA have understood that a  
17 boat was a premises?

18 MR. HOLLOWAY: Objection. Form.

19 THE WITNESS: A person in the -- of  
20 ordinary skill in which art?

21 Q. (By Mr. Ritcheson) The art that is --  
22 that is the subject matter of this application.

23 A. I can't recall -- I mean, in 30 years of  
24 doing product development and engineering, I can't  
25 recall a single conversation I had with any of my

1 colleagues on the question of whether a boat is a  
2 premises.

3 Q. Is a motor home a premises?

4 MR. HOLLOWAY: Objection. Form.

5 THE WITNESS: I -- it's a premises, yeah,  
6 in the sense that people can live in it.

7 Q. (By Mr. Ritcheson) Is it also a vehicle?

8 MR. HOLLOWAY: Objection. Form.

9 THE WITNESS: Yes.

10 Q. (By Mr. Ritcheson) Would a person of  
11 ordinary skill in the art in 1996 -- and we'll get  
12 into the exact definition of that, but would a  
13 person of ordinary skill in the art in 1996 have  
14 understood how to take a vehicle control system and  
15 modify it to provide premises control?

16 MR. HOLLOWAY: Objection. Form.

17 THE WITNESS: Yes, I think so. Some of  
18 the -- some of the features wouldn't map,  
19 obviously, like there's not an ignition switch  
20 in a home. There's not a fuel pump. There --  
21 there are -- I mean, there are things that are  
22 sort of -- in terms of the abstract idea of a  
23 vehicle control system, the abstract idea and  
24 that being an instance of the abstract idea of  
25 control systems, there are certain common

1 properties in all control systems such that if  
2 one started with control system A, through a  
3 series of modifications, a person could  
4 transform control system A into control system  
5 B.

6 But that would involve discarding the  
7 features that made control system A uniquely  
8 useful for controlling a vehicle, discarding  
9 those features and then replacing them with a  
10 new set of features that were applicable in a  
11 home context.

12 Q. (By Mr. Ritcheson) Would one of ordinary  
13 skill in the art have known how to do that?

14 MR. HOLLOWAY: Objection. Form.

15 THE WITNESS: If one had -- if one starts  
16 with a system that controls a motor vehicle, a  
17 regular car, and it has features that allow for  
18 control over the ignition system, say turn the  
19 car off in case it's stolen, it would be  
20 trivial for that person to apply that system to  
21 a motor home, because the motor home shares  
22 certain characteristics in common with other  
23 motor vehicles. So that would be  
24 straightforward.

25 And I think a person of ordinary skill

1           could create additional features to add to the  
2           system. I think this is one of the things that  
3           engineers are really good at. If you start  
4           with a system that does A, B, and C, probably  
5           the most common tasks performed by engineers is  
6           to add support for features D, E, and F to that  
7           system.

8                         (Patent Owner's Exhibit 4 was marked for  
9           identification.)

10          Q.     (By Mr. Ritcheson) Thank you.

11                         With respect to the '130 patent, we've had  
12          that marked as Exhibit 4.

13                         You've seen that document before; correct?

14          A.     Yes, I have.

15          Q.     One of the things I'm trying to understand  
16          is -- do you understand the term "claim  
17          construction"?

18          A.     Yes, I do.

19          Q.     Okay. One of the things I want to  
20          understand from you are the constructions that you  
21          used in -- that you relied on in preparing your  
22          declaration; okay?

23          A.     Okay.

24          Q.     Now, my understanding when you start,  
25          sir -- one at a time -- my understanding is that

1 Claim 1 of the '130 patent is at issue in this  
2 proceeding; correct?

3 And just so I'm clear, besides giving Clay  
4 a hard time, by "this proceeding," I mean -- when  
5 I'm talking about the '130 -- the '130 IPR in this  
6 case, let's call it by the designation provided,  
7 which is the --

8 MR. RITCHESON: Stand by.

9 MR. HOLLOWAY: What do you want, the IPR  
10 number?

11 MR. RITCHESON: Yeah. 1760, is that what  
12 you have?

13 MR. HOLLOWAY: This is the 1760.

14 Q. (By Mr. Ritcheson) Okay. The IPR itself  
15 is actually -- we're going to refer to it as the  
16 1760 so that we distinguish this proceeding from the  
17 other proceeding involving the '130; okay?

18 A. Uh-huh (affirmative).

19 Q. "Yes"?

20 A. Yes.

21 Q. Okay. With respect to the 1760  
22 proceeding, I understand that, for example, Claim 1  
23 is at issue.

24 Is that your understanding?

25 A. Yes.

1 Q. And going to Claim 1, which I can't tell  
2 what page it is. It's approximately 59 -- page 59.  
3 If I could ask you to turn to that.

4 A. Page 59 of what?

5 Q. Of the '130 patent, which I believe I just  
6 said was Exhibit 4.

7 Do you have that?

8 A. Yes.

9 Q. Okay. Unfortunately, patents don't seem  
10 to provide page numbers, unhelpfully. So it's -- if  
11 you just --

12 A. Well, we have column numbers and line  
13 numbers.

14 Q. We do. I didn't want to jump the gun for  
15 you there.

16 It's Column 74. Are you with me so far?

17 A. Yes, I am.

18 Q. All right. You see Claim 1 that begins at  
19 the bottom of Column 74?

20 A. Yes, I do.

21 Q. With respect to the language used in the  
22 first line, do you understand that that's called a  
23 preamble?

24 A. In the -- "What is claimed is: A control  
25 apparatus, comprising"?

1 Q. Yeah. You see the "control apparatus,  
2 comprising"? Do you see that?

3 A. Yes.

4 Q. And that's referred to as a preamble.  
5 Do you understand that?

6 A. Yes.

7 Q. When it refers -- when -- the language  
8 control apparatus then lists three control devices,  
9 is that correct, that the comprise the apparatus?

10 A. Yes. We have a first control device,  
11 second control device, and a third control device  
12 all within the body of Claim 1.

13 Q. Okay. With respect to the preamble, did  
14 you consider the term "control" as it's used there  
15 to be a limitation?

16 MR. HOLLOWAY: Objection. Form.

17 THE WITNESS: A limitation?

18 Q. (By Mr. Ritcheson) Do you understand what  
19 a limitation is of a claim?

20 MR. HOLLOWAY: Objection. Form.

21 THE WITNESS: No, I don't.

22 Q. (By Mr. Ritcheson) Did you understand  
23 that the "control" as it's used in the preamble was  
24 a term that was required to be met in order for  
25 there to be infringement?

1 MR. HOLLOWAY: Objection. Form.

2 Q. (By Mr. Ritcheson) That is, that the  
3 apparatus had to provide control?

4 A. The apparatus -- I -- I really didn't  
5 think about that.

6 Q. Were you advised what claim construction  
7 to use with respect to the 1760 IPR?

8 A. I was advised to use the plain, ordinary  
9 meaning.

10 Q. Are you familiar with the phrase "broadest  
11 reasonable interpretation"?

12 A. I am familiar with that phrase.

13 Q. What does that phrase mean?

14 A. It means the broadest meaning of the term  
15 that would be used by a reasonable person.

16 Q. Do you understand that to be different  
17 than "plain and ordinary meaning"?

18 A. Not necessarily different. I think in  
19 many instances, the -- the issue here is that a  
20 reasonable person, I think, would tend to use the  
21 plain and ordinary meaning of a term unless the term  
22 is defined in a particular way as a term of art.

23 So the plain and ordinary meaning to a  
24 person of ordinary skill in the art would be  
25 different from the plain and ordinary meaning to

1 a -- to a person who is unskilled, for example.

2 Q. Did you -- just "yes" or "no," did you  
3 discuss your -- the constructions you intended to  
4 use with counsel?

5 A. Yes.

6 Q. Do you understand that Cox has taken  
7 the -- took the position in their petition that the  
8 proper standard for construction was the broadest  
9 reasonable interpretation?

10 A. Did I -- I don't recall. I would have to  
11 look at their petition and see if they did that.

12 I have read the institution decision by  
13 the PTO on this matter in which they address the  
14 question of claim construction, and there was a -- I  
15 think an inconsistency between some of the  
16 constructions that had been requested on behalf of  
17 the inventor and what the file history showed.

18 And what the Court -- the Court  
19 essentially ruled that for a number of terms, the  
20 plain and ordinary meaning was adequate. There were  
21 a few terms that needed to be construed by the -- by  
22 the Court, and their constructions were consistent  
23 with the ones that I used in my analysis.

24 Q. Those constructions aren't in your  
25 declaration, though, are they?

1 MR. HOLLOWAY: Objection. Form.

2 THE WITNESS: Are they?

3 Q. (By Mr. Ritcheson) You said that you used  
4 the same constructions that were adopted by the --

5 A. By the petition in Section 4.

6 Q. What?

7 A. "As part of my analysis of the prior art,"  
8 I say in paragraph 20, "I have adopted the claim  
9 constructions described in Section IV of the  
10 Petition to the challenged claims of the '130  
11 patent."

12 Q. Okay. I thought you just testified that  
13 you adopted the claim construction -- that you used  
14 the claim constructions that were adopted by the  
15 PTAB or the Patent Trial and Appeal Board in the  
16 institution decision.

17 MR. HOLLOWAY: Objection. Form.

18 Q. (By Mr. Ritcheson) Did you not testify to  
19 that?

20 MR. HOLLOWAY: Objection. Form.

21 THE WITNESS: These -- the claim  
22 constructions that I used, which are initially  
23 described in Section IV of the petition to the  
24 challenged claims, are, I believe, consistent  
25 with the constructions that the PTAB issued in

1 the institution decision.

2 One of the specific issues was the  
3 definition of the term "premises," and my use  
4 of the term "premises" in this expert  
5 declaration is completely consistent with the  
6 definition -- the construction of "premises"  
7 that the PTAB issued, in which it can refer to  
8 a portion of a building or a portion of a room.

9 Q. (By Mr. Ritcheson) You noted that the --  
10 you noted that the patentee proposed certain  
11 constructions or definitions during prosecution;  
12 correct?

13 A. Yes.

14 Q. And that wasn't prosecution of this  
15 application or the prosecution that led to the '130  
16 patent; is that correct?

17 A. That's not what I meant. What I meant was  
18 that they had --

19 Q. No, no, no. I'm just trying to get a  
20 foundational point.

21 That was a different application; correct?

22 MR. HOLLOWAY: Objection. Form.

23 THE WITNESS: The -- the patent owner has  
24 used two different definitions of the term  
25 "premises" at various stages in the life of

1           this patent.

2           Q.     (By Mr. Ritcheson) With respect to the  
3 prosecution that led up to the '130 patent -- let's  
4 talk about that for a moment; okay?

5           A.     Okay.

6           Q.     -- did the patentee provide a definition  
7 of the term "premises" in that prosecution; that is,  
8 the application that ultimately issued as the '130  
9 patent?

10           MR. HOLLOWAY: Objection. Form.

11           THE WITNESS: I believe that we should  
12 look at the PTAB institution decision to answer  
13 that question.

14           Q.     (By Mr. Ritcheson) Do you have an answer  
15 independent of that decision?

16           A.     My recollection --

17           MR. HOLLOWAY: Objection. Form.

18           THE WITNESS: -- is that he did.

19           Q.     (By Mr. Ritcheson) That he did offer  
20 the --

21           A.     He offered a construction of "premises"  
22 while he was negotiating with the patent examiner to  
23 find out what the patent examiner would allow, and  
24 then he offered a different -- in the -- in the  
25 defense against this PTAB motion, offered a

1 different definition.

2 Q. What PTAB motion are you talking about?

3 A. The petition -- in response to the  
4 petition for PTAB institution.

5 Q. You think that Mr. Joao offered a  
6 different definition of "premises"?

7 A. Yes. In the second instance, he wanted  
8 "premises" to be defined as -- by a parcel of land,  
9 a structure that was on a parcel of land.

10 And in the prior history, there was no --  
11 the parcel of land issue was not there and, in fact,  
12 the initial construction that the patent examiner  
13 bought off on was -- could be a portion of a  
14 building, structure, room, et cetera.

15 Q. Sir, I'm just drilling down, because there  
16 seems to be sort of a drifting of issues here.

17 With respect to your testimony that the  
18 definition of "premises" was offered during the '130  
19 prosecution, if you could turn to page 6 of -- let  
20 me give it to you -- Exhibit 5.

21 (Patent Owner's Exhibit 5 was marked for  
22 identification.)

23 THE WITNESS: Is this the institution  
24 decision? Yes.

25 Q. (By Mr. Ritcheson) That is the

1 institution decision for the 1760 IPR; correct?

2 A. Uh-huh (affirmative).

3 Q. "Yes"?

4 A. Yes.

5 Q. With respect to page 6, does that say that  
6 the definition of "premises" was made during the  
7 '130 patent or at some other time?

8 A. It describes an ancestor of the '130  
9 patent, which would be the '1 -- the '010 patent.

10 Q. Okay. So your testimony that it was  
11 during the '130 was incorrect; is that true?

12 MR. HOLLOWAY: Objection. Form.

13 THE WITNESS: No. My statement was  
14 correct. My statement was based on the file  
15 history.

16 Q. (By Mr. Ritcheson) Okay. Drawing your  
17 attention to the second-to-last sentence of that  
18 paragraph reads, "This statement" -- which is the --  
19 the definition -- "This statement was made several  
20 years after the issuance of the '130 patent."

21 Did I read that correctly?

22 A. Yes.

23 Q. So is it not true that your testimony that  
24 the definitions were provided during the '130  
25 prosecution was not inaccurate?

1 MR. HOLLOWAY: Objection. Form.

2 THE WITNESS: I think there would be  
3 definitions offered at every one of these  
4 stages. I don't think one precludes the other.

5 Q. (By Mr. Ritcheson) And is that the  
6 understanding you relied on in issuing the  
7 declaration that you have provided in the 1760 IPR?

8 MR. HOLLOWAY: Objection. Form.

9 THE WITNESS: Again, I'm -- there seems to  
10 be some sort of a false dichotomy behind your  
11 question. Could you rephrase the question?

12 Q. (By Mr. Ritcheson) Is your understanding  
13 that the term "premises" was defined during the '130  
14 patent an underlying fact that you relied upon in  
15 providing the declaration in the 1760 IPR?

16 MR. HOLLOWAY: Objection to form.

17 THE WITNESS: It was not an underlying  
18 fact, no.

19 Q. (By Mr. Ritcheson) Isn't it true that the  
20 definition of "premises" was provided in the  
21 prosecution of a patent other than the '130 patent?

22 MR. HOLLOWAY: Objection. Form.

23 THE WITNESS: I'm sure the definition of  
24 the term "premises" has been offered in  
25 connection with hundreds of patents.

1 Q. (By Mr. Ritcheson) I'm talking about the  
2 specific definition provided by Mr. Joao.

3 MR. HOLLOWAY: Same objection.

4 THE WITNESS: That -- in the prosecution  
5 of the '010 patent, whether or not "premises"  
6 was defined there, I don't know.

7 Q. (By Mr. Ritcheson) I'm talking about  
8 '130.

9 A. '130? In the file -- it's my recollection  
10 of the file history for the '130 patent is that  
11 there was a construction of the term "premises"  
12 issued in connection with that patent, which we see  
13 on the -- on the following page. On page 7, we see  
14 the Court's construction of the term "premises."

15 Q. When you say "Court," what do you mean?

16 A. The PTAB.

17 Q. Okay. I just want to make sure I  
18 understand.

19 A. Administrative -- yeah, Patent Trial and  
20 Appeal Board.

21 Q. Okay. In providing the -- whenever  
22 Mr. Joao provided the definitions, did he provide  
23 definitions that were consistent with the plain and  
24 ordinary meaning of the terms?

25 MR. HOLLOWAY: Objection. Form.

1 Q. (By Mr. Ritcheson) If your answer is no,  
2 we can do it separately.

3 MR. HOLLOWAY: Objection. Form.

4 THE WITNESS: It's the whenever.

5 That's -- that's the word. Because I think  
6 Mr. Joao has offered constructions of "premise"  
7 multiple times.

8 Q. (By Mr. Ritcheson) Let me just -- the  
9 definition of "premises" that appears on page 7 of  
10 the institution decision -- you see that?

11 A. Uh-huh (affirmative).

12 Q. "Yes"?

13 A. Yes.

14 Q. -- is that construction consistent with  
15 the plain and ordinary meaning that one of ordinary  
16 skill in the art in 1996 would have understood that  
17 term to mean?

18 MR. HOLLOWAY: Objection. Form.

19 THE WITNESS: You're asking me if the  
20 construction of the term "premises" is  
21 consistent with plain and ordinary meaning?

22 Q. (By Mr. Ritcheson) Yes.

23 MR. HOLLOWAY: Same objection.

24 THE WITNESS: Yes, I believe this  
25 construction is consistent with the plain and

1 ordinary meaning. I believe it's also  
2 consistent with the broadest reasonable  
3 interpretation.

4 Q. (By Mr. Ritcheson) With respect to the  
5 term "remote," is that definition that's on that  
6 same page right underneath the definition of  
7 "premises," is that consistent with the plain and  
8 ordinary meaning that a person of ordinary skill in  
9 the art would have had in 1996?

10 A. Yes, I believe it is consistent.

11 Q. And with respect to the term "located at,"  
12 is the definition that is provided there consistent  
13 with the plain and ordinary meaning that a person of  
14 ordinary skill in the art at the time -- that is,  
15 1996 -- would have had?

16 MR. HOLLOWAY: Objection. Form.

17 THE WITNESS: I believe it's -- it's  
18 consistent, "located at," "situated at." It's  
19 a synonym.

20 MR. HOLLOWAY: You doing okay or do you  
21 want a break?

22 THE WITNESS: I'm doing okay. Actually, I  
23 could use a bathroom break.

24 MR. RITCHESON: Okay. Take five minutes.

25 MR. HOLLOWAY: Sure.

1 (Thereupon, there was an interruption in  
2 the proceedings.)

3 Q. (By Mr. Ritcheson) Mr. Bennett, did you  
4 speak with your counsel about the testimony that you  
5 provided or that you anticipate providing?

6 A. No, I did not.

7 Q. Okay.

8 A. We did, however, discuss the Warriors and  
9 the Braves.

10 MR. HOLLOWAY: Go Braves.

11 MR. RITCHESON: Go Warriors. California.

12 I take responsibility for it.

13 Q. (By Mr. Ritcheson) With respect to --  
14 start at Claim 1, at least, of the '130 patent.  
15 Were there any terms that are used -- if you look at  
16 Column 74 and Column 75, were there any terms that  
17 you had to define in a special -- or in a way other  
18 than the plain and ordinary meaning of the term?

19 MR. HOLLOWAY: Objection. Form.

20 THE WITNESS: Were there any terms -- the  
21 terms that were most relevant, I think, are  
22 "premises," "remote," "located at" that were  
23 construed by the PTAB, the administrative  
24 judges. Those weren't difficult.

25 The other terms like "control," "control

1 system," "control apparatus," they didn't raise  
2 any particular issues, no.

3 Q. (By Mr. Ritcheson) Okay. So you used a  
4 plain and ordinary meaning of a person of ordinary  
5 skill in the art in 1996 with respect to each of the  
6 terms in Claim 1, for example?

7 MR. HOLLOWAY: Objection. Form.

8 THE WITNESS: Yeah. I used the  
9 definitions that I or my colleagues, I think,  
10 would have -- would have used.

11 Q. (By Mr. Ritcheson) And when you say  
12 "colleagues," who are you referring to? Do you mean  
13 work --

14 A. The engineers that I worked with.

15 Q. Okay. So let's -- let's start talking  
16 about one of the pieces of -- of art that you have  
17 relied upon, which is the Koether reference.

18 MR. RITCHESON: Koether is K-O-E-T-H-E-R.

19 (Patent Owner's Exhibit 6 was marked for  
20 identification.)

21 Q. (By Mr. Ritcheson) I'm handing you  
22 Koether, which has been marked as Exhibit 6.

23 Do you recognize that as the Koether  
24 reference that you're relying on in your  
25 declaration?

1 MR. HOLLOWAY: It's going to be hard with  
2 a different pronunciation.

3 THE WITNESS: Yeah, we usually pronounce  
4 it Koether.

5 MR. RITCHESON: K-O-E-T-H-E-R.

6 MR. HOLLOWAY: It's going to throw me off  
7 all day.

8 THE WITNESS: It's German. We could say  
9 Koether, but there's no umlaut, so --

10 Q. (By Mr. Ritcheson) I'll go with Koether.

11 Generally speaking -- and we'll get to  
12 it -- what is generally disclosed in the Koether  
13 reference?

14 A. Koether describes or discloses a system  
15 for managing kitchens -- well, as the title says,  
16 "smart commercial kitchen network." So it's a  
17 system that consists of sensors that are located in  
18 kitchens that communicate status information and  
19 permit control of various kitchen appliances, such  
20 as deep fryers and ovens and heating and cooling  
21 systems for the buildings.

22 It's typically -- these apparatuses that  
23 are integrated with the kitchen appliances  
24 communicate typically wirelessly through a base  
25 station, cellular base station or a wireless base

1 station, that has limited coverage.

2 And those base stations, in turn, are  
3 connected to a data network that allows the base  
4 stations to communicate with a central control  
5 office that is able to view the status of the  
6 various appliances in the various kitchens and to  
7 turn devices on and off, to dispatch repair  
8 personnel when a device is deemed to be in a state  
9 of disrepair, and perform various accounting  
10 functions.

11 It actually provides for the -- an  
12 optional connection to an ATM network, so it can not  
13 only dispatch a repair person to make a repair, but  
14 also get him paid.

15 Q. And drawing your attention to Figure 1,  
16 can you describe those elements? Because I think  
17 it's consistent with what you just said, but just so  
18 I can get an understanding of what Figure 1 is and  
19 how it relates to your testimony there.

20 MR. HOLLOWAY: Objection. Form.

21 THE WITNESS: So in Figure 1, we have a --  
22 sort of a high-level overview of the system in  
23 which we have a local area network that's  
24 designated No. 225. Local area network would  
25 be -- for each kitchen, there would be a

1 distinct one. It has a number of devices  
2 attached to it.

3 Q. (By Mr. Ritcheson) I'm sorry, Figure 1.  
4 It's on the next page. Yeah, there's a different  
5 figure on the cover page.

6 A. Oh, I'm looking at the -- yeah, on the  
7 cover page.

8 Q. You started to use numbers I just wasn't  
9 seeing.

10 A. Yeah. Good point.

11 Okay. So Figure 1, yeah, actually gives a  
12 more reasonable overview of the system. So we  
13 have -- at the top of the diagram labeled 100, we  
14 have a number of cells, 105 cells, which are --  
15 cells are defined by the coverage area of a wireless  
16 base station, and with any cell we have various  
17 kitchen appliances and the appliances are As, Bs,  
18 and Cs.

19 Each of these base stations connects  
20 through 175, which I don't recall what that is at  
21 the moment, through a data network to a control  
22 center. Control center has a database point of sale  
23 ATM network interface and then the second -- that  
24 specialized network is designated under 210. It has  
25 terminals for operators to view. It has a database,

1 a mobile kitchen center, and service vehicles.  
2 Service vehicles are connected wirelessly to the  
3 control center.

4 Q. So I'm trying to understand the lines  
5 here.

6 Where is the control center generally?  
7 Where is that located?

8 A. That would be separate and apart from the  
9 restaurants and the kitchens.

10 Q. And maybe if there's a part of your  
11 declaration that can help or there's a part of the  
12 specification of Koether that can help.

13 I'm just trying to get sort of placed in  
14 my mind where that is and what that has attached to  
15 it, just so I can tell you exactly where I'm headed;  
16 okay?

17 MR. HOLLOWAY: Objection. Form.

18 Q. (By Mr. Ritcheson) The question is: The  
19 control center, where is that located?

20 A. So in paragraph 29 of my declaration, I  
21 say --

22 Q. Hold on. Let us all get there. 29.  
23 Okay.

24 A. I say the control center of Koether is in  
25 a separate or remote physical location from the

1       kitchens, the restaurants and the kitchens.

2               Q.   All right.  Let me break this down a  
3       little bit.

4               And I think that with respect to Koether,  
5       what are the three elements of Koether that  
6       correspond to the first, second, and third control  
7       devices of Claim 1?

8               MR. HOLLOWAY:  Objection.  Form.

9               THE WITNESS:  So this is -- I address that  
10       question in paragraph 27 of my declaration on  
11       the previous page from where we were.

12              So there's -- "As the figures and  
13       description of Koether make clear, there are  
14       three critical devices that make up the system.  
15       First, [there's] a microprocessor controller  
16       140 that's in -- that is a part of, or  
17       connected to, a specific kitchen appliance."  
18       And I'll skip the parenthetical.

19              Second, we have a base station, a kitchen  
20       base station 150, which may be wirelessly  
21       connected to the microprocessor controller.

22              And third, the third part is the control  
23       center 170 that monitors, processes, and  
24       responds to signals from the kitchen appliances  
25       and base stations.

1           So those are the three elements of the  
2           control system.

3           Q.    (By Mr. Ritcheson)  So we have 140, 150,  
4           and 170; is my recollection correct?

5           A.    Yes, 140, 150, and 170.

6           And this would be -- they are relative to  
7           the diagram on page 10 of my declaration, which is  
8           taken from the Koether patent and Figure 8 on  
9           page 10 of the exhibit that consists of the Koether  
10          patent.  Those are the numbers in the paragraph that  
11          I just read.

12          Q.    Okay.  With respect to Figure 2 of the  
13          Koether patent, can you describe for us what you  
14          believe is depicted in Figure 2?

15          A.    Well, in Figure 2 at the top, we have a  
16          kitchen appliance and a microprocessor-based  
17          controller, a receiver, and transmitter, and so this  
18          is the appliance 110 that would -- yeah, the  
19          appliance -- yeah.  It uses the same numbers.  So  
20          appliance 110, the 140 controller, and the 120 and  
21          130 transmitter receivers.

22          And in the previous, those wireless  
23          transmitters and wireless transmitter receivers are  
24          identified as infrared.  In this one they're not  
25          identified by a technology, so it could -- it is

1 generally understood to be preferably wireless for  
2 all the obvious reasons that you would want devices  
3 in a kitchen to be wireless, say you don't want  
4 people tripping over cables and that sort of thing.

5 Q. So using, I guess -- you referred to  
6 Figure 8 of Koether, the appliance is connected to  
7 the controller, which is connected to a transmitter  
8 receiver, which connects to base station 150 --

9 A. Uh-huh (affirmative).

10 Q. -- is that correct?

11 A. Yes.

12 Q. And the arrow connecting infrared  
13 transmitter receiver 820 to element 810, what is  
14 that?

15 A. That's a communication pathway.

16 Q. Is there a reason there's a person there?

17 A. I think it's an indication that a person  
18 could view status locally, as well as at the control  
19 center. You have a wireless network and so  
20 anything -- you can connect various other devices,  
21 personal computers. In 1996, it was possible to  
22 connect personal computers to wireless networks. It  
23 was actually possible in the late '80s to connect  
24 personal computers to wireless networks using  
25 infrared.

1 Q. Okay. Now, using the language of -- Claim  
2 1 indicates that the first control device is, if you  
3 look at the bottom of Column 74, is located at the  
4 premises.

5 Do you see that?

6 A. Yes.

7 Q. Okay. With respect to your mapping of  
8 Koether onto the Claim 1, what is the premises of  
9 Koether?

10 MR. HOLLOWAY: Objection to form.

11 THE WITNESS: The premises of Koether  
12 would be portions of the kitchen in which  
13 appliances were located.

14 Q. (By Mr. Ritcheson) What do you mean by  
15 "portions"?

16 A. Well, an appliance doesn't occupy the  
17 entire kitchen in most instances. An appliance is  
18 distinct from contained in, situated at, a kitchen.

19 Q. In your reading, then, there are multiple  
20 premises in the single kitchen?

21 A. As consistent with the PTAB construction  
22 of the term "premises." They said --

23 Q. It's okay. I don't have a question.

24 With respect to the term or phrase -- the  
25 terms or phrases "activating, deactivating,

1       disabling, and reenabling" -- do you see that in  
2       Claim 1?

3             A.    Yes, I do.

4             Q.    It's true that you used the plain and  
5       ordinary meaning of those terms in reaching the  
6       conclusions expressed in your declaration?

7             A.    Yes.

8             Q.    Okay.  What is -- what does "activate"  
9       mean to you?

10            A.    In the context of, say, a kitchen  
11       appliance or, say, a heating or cooling system, is  
12       cycling -- cycling on.

13            Q.    And is "deactivate," then, cycling off?

14            A.    Cycling off.

15            Q.    Okay.  With respect to those two terms,  
16       what does the term "cycling" mean?

17            A.    Well, when you -- you understand how a  
18       kitchen oven works, you have a heating element --  
19       say an electric kitchen oven, there's a heating  
20       element in the kitchen oven that can be in one of  
21       two states.  It can be either fully on or fully off.

22                    And so the control system that enables the  
23       oven to come to the temperature that you set it at  
24       through the controls on the oven includes a  
25       temperature sensor that -- that detects what the

1 temperature is inside the oven, and it turn -- and  
2 when that temperature's -- the sensed temperature is  
3 below the threshold that the user has selected by  
4 some number of degrees, the heating element will be  
5 turned on. Once it reaches the desired set point or  
6 perhaps exceeds it by a few degrees, then the  
7 heating element will be turned off.

8 So activation is turning it on;  
9 deactivation is turning it off.

10 Q. My question actually had to do with the  
11 word you used, which was "cycling." I was just  
12 trying to understand "cycling."

13 A. Well, in the course of -- say you're  
14 baking a loaf of bread and it takes 30 minutes to  
15 bake. In the course of that baking, that -- of that  
16 30 minutes, the heating element will cycle -- go  
17 between off and on and on and off several times.  
18 And so "cycling" means going between -- changing  
19 state.

20 Q. Changing state.

21 A. Changing state.

22 Q. And just for clarification, in  
23 paragraph 34 of your declaration for the 1760 IPR,  
24 if you could turn to that, I have a question about  
25 the first two sentences in particular --

1 A. Which page?

2 Q. -- as a cause of confusion.

3 Paragraph 34.

4 A. Of my declaration?

5 Q. Yes.

6 A. Okay.

7 Q. Just one second.

8 First two sentences of 34 say that "Claim  
9 1 requires" -- or "also requires that the second  
10 control device be remote from the premises," and  
11 then the next sentence is, "In Koether, this would  
12 mean the kitchen base station would be remote from  
13 kitchen appliance."

14 Do you see that?

15 A. Yes, I do.

16 Q. Okay. That seemed to suggest that the  
17 kitchen appliance was the premises.

18 That's not an accurate reading; correct?  
19 That's not what you're saying?

20 A. Well, remote from the -- the premises  
21 would be the portion of the kitchen in which the  
22 appliance is located.

23 Q. Not the appliance itself; is that correct?  
24 You see why I'm confused; right?

25 A. Well, the -- there's sort of a larger

1 disconnect here, in that the -- the way that the  
2 term "premises" is used in the '130 patent is  
3 with -- is somewhat different from the way -- well,  
4 there's -- there's -- there's sort of a very poor  
5 fit between the notion of "premises" and the nature  
6 of wireless networks.

7 So wireless -- a wireless base station has  
8 a certain coverage area; right? The signal  
9 propagates from a wireless base station and --  
10 according to a certain pattern, and the pattern of  
11 propagation, you know, you can graphically map it  
12 for any given radio transmitter.

13 And while we -- ideally, we like to  
14 portray that as like a series of hexagons or  
15 something that kind of looks like a beehive, which  
16 is the way that the diagrams are done in the Koether  
17 patent. That's sort of a conventional way of  
18 depicting it.

19 But in reality, it's never that perfect  
20 propagation pattern, so -- because there are  
21 different sources of interference that can cause the  
22 signal -- can block the signal or can reflect the  
23 signal.

24 So signals don't always propagate  
25 according to where the walls are in a building, so

1       you could have -- I could have a wireless base  
2       station against this wall and if there were a  
3       wireless station on the other side of the wall, that  
4       wireless station would have a closer proximity to  
5       the wireless base station in this room than it might  
6       have to a wireless base station in the room with the  
7       device that was on the other side of the room.

8               So the geographic proximity of a wireless  
9       device and a -- the base station and antenna that  
10      serves it doesn't correspond to where the walls are  
11      in buildings.

12              So the thing that Koether is concerned  
13      about is that he wants to have as many base stations  
14      as are required to obtain coverage over all the  
15      wireless transmitters and receivers in a coverage  
16      region, irrespective of where the walls are in the  
17      structure.

18              Q.     With respect to your conclusions regarding  
19      Koether, all I'm trying to find out is if the  
20      appliance -- if your position is the appliance is  
21      the premises or whether it's the appliance located  
22      in the room -- that is in a portion of a room that  
23      is the premises.   That's all I'm trying to find out.

24              MR. HOLLOWAY:   Objection to form.

25              THE WITNESS:   I think the way I would

1           apply the term "premises" as found in the '130  
2           patent in the Koether context would be the  
3           radio coverage area that is defined by the  
4           wireless transmitter, the base station.

5           Q.     (By Mr. Ritcheson) Okay.

6           A.     And the '130 patent also includes wireless  
7           communication, so it would actually have to be, you  
8           know, viewed in that -- in a similar light.

9           Q.     Understood. And I'm sorry to -- the horse  
10          is dead, but there's still twitching.

11          A.     Okay.

12          Q.     Because I just want to have it absolutely  
13          clear that, for example, the blender in the -- the  
14          blender itself in the kitchen is not the premises as  
15          you're understanding that term?

16          A.     The premises would be the portion of the  
17          room in which the blender is located at any given  
18          time.

19          Q.     Thank you.

20          A.     The blender could be movable, though.

21          Q.     Understood. Understood. I just needed to  
22          get some clarification on those first two sentences  
23          because of the way the language was used there.

24                         With respect to the -- I think it's called  
25          the -- strike that.

1           Is it your understanding that the  
2 transmission of data is the same as a control  
3 signal?

4           MR. HOLLOWAY: Objection. Form.

5           THE WITNESS: Transmission of data is a  
6 much larger abstraction than control signal.  
7 Control signal would be a particular form of  
8 data, a data that is -- that is transmitted in  
9 order to perform a particular purpose.

10          Q. (By Mr. Ritcheson) Okay. Sorry. Just  
11 one moment.

12                 With respect to -- this is from  
13 paragraph 3, the discussion of the kitchen base  
14 station, which you've designated as a second control  
15 device.

16          A. Paragraph 3 in my declaration?

17          Q. I'm sorry. 33.

18          A. Oh, okay.

19          Q. You read there that -- it reads there that  
20 "a person of ordinary skill in the art prior to July  
21 1996, would have understood that the kitchen base  
22 station (the second control device) provided a  
23 signal to the appliance, which when received  
24 executes an operation."

25                 Do you see that?

1           A.    Yes.

2           Q.    And then you have a citation to Koether,  
3 Column 5, lines 20 to 35 --

4           A.    Uh-huh (affirmative).

5           Q.    -- is that correct?

6           A.    Yes.

7           Q.    What is the -- what do you mean by  
8 "execute an operation" as it's used there?

9                   And if you want to look at your Koether  
10 cite, that's fine, too, but what do you mean by  
11 "executes an operation"?

12           A.    Well, what Koether says in the -- in the  
13 cited portion is that a bidirectional communication  
14 takes place at -- as he puts it, "so as to monitor  
15 and track the maintenance, repair, and energy  
16 management of kitchen appliances by means of  
17 information transmitted to and received from those  
18 appliances."

19                   So -- and then he clarifies or expands it,  
20 "Information may include cooking parameters, billing  
21 information, appliance ID, diagnostic info,  
22 maintenance instructions." So the operations would  
23 include a request for status, would include a  
24 request for diagnostics, would include instructions  
25 of a operational or diagnostic nature.

1           One of the things that Koether describes  
2           is cooking parameters, which I would think would be  
3           temperature profiles. Say in the case of an oven,  
4           it would be temperature profiles to use while a  
5           particular food item is being cooked.

6           Q.    That's one of my questions, is that -- and  
7           I may be misreading this, but the citation that you  
8           gave us at Column 5, lines 20 to 35, appear to be  
9           relating to monitoring functionality.

10           Is that not correct?

11           MR. HOLLOWAY:  Objection.  Form.

12           THE WITNESS:  It's not limited to  
13           monitoring functionality; it includes  
14           monitoring functionality.  So it's monitoring  
15           and tracking in this particular citation.

16           Q.    (By Mr. Ritcheson)  Okay.  With respect to  
17           the control center, the control center is the remote  
18           facility that's overseeing all this.

19           Am I generally getting it right?

20           A.    Uh-huh (affirmative).

21           Q.    "Yes"?

22           A.    Yes.

23           Q.    The -- I think we have -- paragraph 36 I  
24           have some questions about.  It says, "The Koether  
25           system was designed to allow for automatic

1 monitoring and control" --

2 A. Yes.

3 Q. -- is that correct?

4 A. Yes.

5 Q. And there's a citation to Column 2, lines  
6 23 through 36.

7 A. Yes.

8 Q. And turning to that, there's a description  
9 of the base station -- it's not designated as 150,  
10 but the base station interrogating the appliance.

11 Do you see that?

12 A. Yes.

13 Q. And that's the request to transmit  
14 diagnostic information?

15 A. Yes.

16 Q. Okay. Where is the -- what is the control  
17 functionality that you're relying on in this  
18 passage?

19 A. In the control -- one example of the  
20 control functionality was cited in the previous  
21 paragraph, cooking parameters.

22 Q. That's from somewhere else, not in this  
23 patent. I'm just trying to tie it -- your statement  
24 that "the Koether system was designed to allow for  
25 automatic monitoring and control," and you cite to

1 this passage. I'm wondering if, in this passage,  
2 there's something that I may have missed that you're  
3 relying on for the "control," as opposed to  
4 "monitoring."

5 A. So the kitchen --

6 MR. HOLLOWAY: Objection to form.

7 THE WITNESS: The kitchen base station,  
8 when -- the act of interrogating the appliance  
9 is exercising control over the appliance. It's  
10 telling -- when the base station interrogates  
11 the appliance for diagnostic information  
12 relative to operating conditions, that is --  
13 that's an act of control.

14 Q. (By Mr. Ritcheson) Okay. So is it a true  
15 statement, then, that "monitoring" and "control" are  
16 the same thing, in your opinion?

17 MR. HOLLOWAY: Objection. Form.

18 THE WITNESS: No, they're not the same  
19 thing.

20 Q. (By Mr. Ritcheson) How are they  
21 different?

22 A. Monitoring is -- monitoring can be  
23 performed either actively or passively. So a  
24 monitor can request -- monitoring can be  
25 accomplished by interrogating -- by actively

1       interrogating the device and saying, "What is your  
2       state," and getting a response.

3               It can also be accomplished by the device  
4       that is being monitored having triggers set in which  
5       when a certain parameter exceeds a threshold or  
6       crosses a threshold -- it could be either up or  
7       down -- that it will automatically -- without --  
8       without interrogation, it will voluntarily, of its  
9       own initiative or according to its own operational  
10      logic, send a message, an unsolicited message.

11              So these reports of state can take place  
12      in response to an actual request immediately  
13      preceding the response or it can be accomplished  
14      through operational parameters that are programmed  
15      into the device that causes it to report certain  
16      conditions.

17              Q.    With respect to the interrogation that  
18      you -- that you discussed and that's referenced in  
19      this section, does that change the state of the base  
20      station?

21              MR. HOLLOWAY:  Objection.  Form.

22              THE WITNESS:  It doesn't inherent --  
23      intrinsically necessarily change the  
24      operational state, other than, you know,  
25      it's -- it may cause a subtle change.

1           For example, the device may be programmed  
2           to report its temperature every 10 seconds and  
3           if it's interrogated about its temperature say  
4           at second six, then that may reset the timer so  
5           that the next report takes place 10 seconds  
6           after the interrogation rather than, say, 10 --  
7           rather than at the time in which it would have  
8           taken place without the interrogation.

9           Q.    (By Mr. Ritcheson) Other than with  
10          respect to that particular circumstance that you  
11          just discussed -- well, strike that.

12                It's true that with respect to the passage  
13          that you cited, that there isn't any change in state  
14          contemplated at the base station by virtue of the --  
15          I'm sorry, at the appliance by virtue of the  
16          interrogation by the base station?

17           A.    The interrogation may be -- may be  
18          something that takes place in order for some control  
19          function to follow it.

20                So, for example -- I mean, if you continue  
21          to read in the -- in the Koether patent after -- at  
22          line 25 -- line 27, "The control center may take  
23          action as appropriate, including, among others,  
24          downloading updated, operating and/or diagnostic  
25          software," et cetera.

1           Before the control center downloads the  
2 software, it wants to see -- it wants to make sure  
3 that the appliance is in a state of good repair so  
4 that the -- it's very important that the download is  
5 successful. So you don't want to download software  
6 to a device in which -- in such a condition that you  
7 may fear that the download would destroy the  
8 operational software in the device and fail to  
9 supply it with a completely operational software  
10 image.

11           Q.    And you're relying on your experience, as  
12 opposed to anything that's actually disclosed in  
13 Koether?

14           A.    No. I'm reading the patent. This is what  
15 the patent -- I mean, the patent says you can do  
16 this and then after you've done that, you can -- you  
17 may want to do things like downloads.

18           Q.    Okay. In your opinion, is downloading  
19 information exercising control?

20           A.    Yes, it is.

21           MR. HOLLOWAY: Objection. Form.

22           Q.    (By Mr. Ritcheson) And what aspect of the  
23 device 140 is controlled by a download?

24           MR. HOLLOWAY: Objection. Form.

25           THE WITNESS: The -- the operational

1 software in the device is affected by the  
2 download. That's the operational software  
3 which defines the capabilities of the device,  
4 its operating parameters. It could be all  
5 these other things, like cooking parameters  
6 could be part of that download. So it's the  
7 entire body of logic that controls the way the  
8 device operates.

9 Q. (By Mr. Ritcheson) But just to be clear,  
10 you're equating downloading of data with control?

11 MR. HOLLOWAY: Objection. Form.

12 THE WITNESS: I'm equating downloading of  
13 software with control. The software controls  
14 the operation of the --

15 Q. (By Mr. Ritcheson) Oh, I understand the  
16 software controls the operation.

17 A. Yeah.

18 Q. My question was whether the -- within this  
19 context, the control center that is downloading  
20 software is controlling, for example, a base  
21 station.

22 MR. HOLLOWAY: Objection. Form.

23 THE WITNESS: Well, I think we're talking  
24 about downloading software to the appliance,  
25 right, to the controller that's part of the

1 appliance?

2 Q. (By Mr. Ritcheson) Well, it says the  
3 control center, which is 170 --

4 A. Oh, base station?

5 Q. You tell me.

6 A. Well, the base station interrogates the  
7 appliance and it may request -- the base station may  
8 interrogate the appliance or the appliance may  
9 request to transmit diagnostic, so there's the  
10 two-way communication.

11 Q. Sure.

12 A. And that diagnostic information may be  
13 immediately communicated to the control center.

14 Q. Right.

15 A. So we have the three parts of the  
16 system --

17 Q. Sure.

18 A. -- and then the control center can take  
19 action as appropriate, including, among others,  
20 downloading updated operating and/or diagnostic  
21 software to the appliance, and it can also take  
22 other -- other action such as dispatching a service  
23 vehicle or updating the accounting and inventory.

24 Q. Okay.

25 A. And it says most of these functions are

1 automatically controlled by the control center that  
2 may also be performed manually by a control center  
3 operator.

4 So the patent, I mean, it explicitly  
5 describes this as exercising control over the  
6 appliance.

7 Q. No, I -- I hear your -- I see the use of  
8 the word "control." I'm just trying to figure out  
9 whether it's your understanding that control, as you  
10 understood it -- when you're thinking about -- you  
11 said that this allows for automated monitoring or  
12 control. All I want to know is whether the control  
13 functionality that you were referring to by your --  
14 by your reference here was to the downloading of  
15 updated operating and/or diagnostic software to the  
16 appliance or whether there was something else you  
17 were pointing to as supporting that?

18 MR. HOLLOWAY: Objection. Form.

19 THE WITNESS: I think the operational  
20 software, which would include device parameters  
21 in most -- in most instances, and as well as  
22 these cooking parameters.

23 Q. (By Mr. Ritcheson) I'm just looking at  
24 this citation that you provided. The cooking  
25 parameters, device parameters, that's not mentioned

1 here; correct?

2 A. Well, when you're telling the device that  
3 you're going to download software to it and it has  
4 to be ready for that, you're controlling the device.

5 And the device, in response to that --  
6 that command, really, from the control center, will  
7 put itself in a state where it can accept a download  
8 and will replace its operating software and will  
9 reboot to a new image and, you know, get the update.  
10 It's like, you know, when you apply patches to your  
11 personal computer.

12 Q. I'm not arguing with you whether you're  
13 right or wrong; I'm just trying to make sure I  
14 understand --

15 A. Right.

16 Q. -- the totality of the control  
17 functionality that you're referring to --

18 A. In this particular.

19 Q. Hold on.  
20 -- in paragraph 36 of your declaration.

21 A. Yeah.

22 Q. Okay. With respect to -- I have a  
23 question here on the next sentence in that same  
24 paragraph 36 of your declaration in 1760 proceeding,  
25 which talks about "automatic control of the system

1 by the control center, which is claimed in the '130  
2 patent Claim 1, as the third control device, as well  
3 as Koether's -- the Koether patent's...base  
4 station."

5 This is control by the control center. If  
6 we could just turn briefly to your citation,  
7 Column 5, line 60 to 67.

8 Am I correct that the portion of the  
9 Koether patent that you cited as control was the  
10 interrogation of the controller 140 by base station  
11 150?

12 MR. HOLLOWAY: Objection to form.

13 Q. (By Mr. Ritcheson) Do you have them side  
14 by side?

15 A. Yeah. Kitchen base station 150 --

16 Q. Okay. That's the intermediate, the second  
17 device; right?

18 A. Second device.

19 Q. Okay.

20 A. -- interrogates the corresponding  
21 controller 140, which is the first or third. I  
22 mean, the --

23 Q. The appliance?

24 A. Yeah, it's the appliance. The '130 patent  
25 uses the first and third device in different ways.

1 It flip-flops them. So --

2 Q. So base station interrogates the  
3 appliance?

4 A. Uh-huh (affirmative).

5 Q. "Yes"?

6 A. Yes.

7 Q. Okay. And then that information is -- am  
8 I reading this correctly, may be communicated to the  
9 control device 170?

10 A. Yes.

11 Q. What I'm trying to do is match up the  
12 statement you made in paragraph 36 about automatic  
13 control of the system by the control center. And my  
14 specific question is: Is it your opinion that the  
15 receipt -- by receiving diagnostic information,  
16 control center 170 is exercising control over the  
17 system?

18 A. I wouldn't consider the receipt of  
19 information to constitute control.

20 Q. Is there any other part of this passage  
21 that you've cited us to that demonstrates control of  
22 the system by 170? And I'm limiting it to this  
23 citation.

24 MR. HOLLOWAY: Objection. Form.

25 THE WITNESS: So we don't want to talk

1           about the control that was in the previous  
2           citation, where in the previous citation --

3           Q.    (By Mr. Ritcheson) I just want to talk  
4           about this citation that you provided for this  
5           statement.

6           A.    So you want to know the --

7                   MR. HOLLOWAY:  Objection.  Form.

8                   THE WITNESS:  -- the boundaries of this  
9           citation?

10          Q.    (By Mr. Ritcheson) This is the citation I  
11          have a question about because I'm trying to match it  
12          up to what you said in your declaration.

13                   You understand?

14                   So in your declaration, you talked about  
15          "automatic control of the system by the control  
16          center"; correct?

17          A.    Yes.

18          Q.    And then you cite to this passage; yes?  
19          So I'm just trying to tie off what it is in this  
20          passage that leads you to believe that there is  
21          control of the system by the control center, just  
22          this passage. I just want to know what this passage  
23          says to you.

24                   MR. HOLLOWAY:  Objection.  Form.

25                   THE WITNESS:  So in this passage, what you

1           have is the base station interrogating the  
2           appliance for diagnostic, and it may -- that  
3           interrogation may include -- may be a request  
4           of -- to transmit diagnostic information, but  
5           it comes back to the base station -- well, no,  
6           it -- well, it says it may be immediately  
7           communicated to control center 170, and that  
8           information would have to pass through the base  
9           station 150.

10           So the automatic control of the system by  
11           the control center -- so the control center  
12           always has to go through the base station to  
13           get to the controller that's on the appliance  
14           so that the overall controller, for -- well,  
15           there isn't -- there isn't any control being  
16           exercised by the control center in the case  
17           where the base station has, of its own accord,  
18           requested diagnostic information from the  
19           appliance.

20           But if the request for diagnostic  
21           information originated at the control center,  
22           was passed to the base station because the base  
23           station is the gateway to the appliance, and  
24           then the base station forwarded that to the  
25           appliance and, in response to that, the

1 appliance responded with its status and that  
2 response would go through the base station and  
3 then back to the control center.

4 So in that instance, there is an exercise  
5 of control originating at the control center.

6 Q. (By Mr. Ritcheson) That's not disclosed  
7 in this passage, though; right?

8 MR. HOLLOWAY: Objection. Form.

9 THE WITNESS: It's neither disclosed  
10 nor -- I mean, it's -- it's -- this passage  
11 relates to the automatic character of -- of a  
12 transaction that takes -- that these -- it's  
13 saying that these kinds of transactions take  
14 place automatically without human -- without  
15 human intervention.

16 So the pertinence of this particular  
17 passage is on the notion of automatic. The  
18 emphasis would be on automatic resident  
19 control, but, I mean, there are control  
20 operations -- I mean, a request for status is a  
21 control.

22 Q. (By Mr. Ritcheson) I understand. I'm  
23 justify trying to drill down into your statement  
24 that the control of the system by the control center  
25 is disclosed here.

1           And that's just not the case; right?

2           MR. HOLLOWAY:  Objection.  Form.

3           THE WITNESS:  Well, the beginning the  
4           first sentence in paragraph 36, what I said  
5           was, "The Koether system was designed to allow  
6           for automatic monitoring and control."

7           Q.  (By Mr. Ritcheson)  Yes, and we talked  
8           about that.

9           A.  And in some instances, monitoring is  
10          control.  I mean, it's sort of light control, but  
11          when I request your status, I'm exercising control  
12          over you.

13          Q.  I understand your argument, but that isn't  
14          in the reference that you provided to support the  
15          position that the control center is disclosed at  
16          Column 5, line 60 to 67, as exercising control over  
17          the system --

18          MR. HOLLOWAY:  Objection.  Form.

19          Q.  (By Mr. Ritcheson)  -- correct?

20          A.  There's nothing in that sentence that is  
21          inconsistent with what you're suggesting.

22          Q.  I'm not suggesting anything.  You stated  
23          that the -- this passage supports your conclusion  
24          that the control center 170 exercises control, but  
25          in reality, all the control center's doing in this

1 passage is receiving information.

2 MR. HOLLOWAY: Objection. Form.

3 THE WITNESS: No, that's not true, because  
4 why does the -- why does the base station ask  
5 the -- ask the appliance for its state? It  
6 does that because the control center has  
7 downloaded software to the base station that  
8 tells it to do that.

9 Q. (By Mr. Ritcheson) I thought you said  
10 that somebody could interact with it directly.

11 MR. HOLLOWAY: Objection. Form.

12 Q. (By Mr. Ritcheson) Did you previously say  
13 that?

14 MR. HOLLOWAY: Objection. Form.

15 THE WITNESS: They can operate with it  
16 directly; they can also program it to operate  
17 automatically, which is the primary mode in  
18 which this automatic system would operate.

19 Q. (By Mr. Ritcheson) Okay. Have you  
20 answered the question regarding this passage to the  
21 best of your ability?

22 MR. HOLLOWAY: Objection. Form.

23 THE WITNESS: I'm not sure you're hearing  
24 what I'm saying.

25 Q. (By Mr. Ritcheson) I've heard exactly

1 what you've said.

2 A. So the passage says the basis --

3 Q. I don't have a question pending anymore  
4 other than have you -- let me ask --

5 MR. HOLLOWAY: Objection. Form.

6 Q. (By Mr. Ritcheson) -- are you done with  
7 your answer?

8 MR. HOLLOWAY: Objection. Form.

9 THE WITNESS: I'm prepared to move on.

10 Q. (By Mr. Ritcheson) And this is an  
11 unsupported statement and I understand why it may  
12 be, but at the last sentence -- I just have a small  
13 flag here on the end of 36 of your declaration in  
14 the 1760 proceeding.

15 It says, "Even in Koether's discussion of  
16 the network types for data transmission, there is no  
17 discussion of human or user intervention in the  
18 access or receipt of the communications between  
19 various devices."

20 Is that sentence accurate?

21 MR. HOLLOWAY: Objection. Form.

22 THE WITNESS: Yes, I think that's an  
23 accurate sentence, "in the discussion of  
24 network types," which would include wireless  
25 and wired networks. The network types are

1 independent of whether there is human  
2 intervention or not.

3 Q. (By Mr. Ritcheson) So what did you mean  
4 to -- what did you mean to convey with this  
5 sentence?

6 A. The automatic nature of the system. This  
7 whole paragraph is really on the fact that this is a  
8 system designed to allow for automatic monitoring  
9 and control, and so there are two examples. The  
10 following two sentences are both examples of the  
11 automatic nature of this system, which does both  
12 monitoring and control.

13 So it's able to function automatically,  
14 because the control center puts software in the base  
15 stations that have them do various things  
16 autonomously, but -- they're acting autonomously,  
17 but in accordance with the operational parameters  
18 dictated by the control center and the operation of  
19 the networks doesn't depend on human intervention.  
20 So the networks function as networks wherever the --  
21 whatever the humans are doing.

22 Q. Okay. It may not be entirely dispositive.  
23 It's just that whenever there are absolutes, my  
24 alarm bells go off.

25 And you say that there's no discussion of

1 human or user intervention in the access or receipt  
2 of communications between various devices, and I'm  
3 just trying to just internally square that with the  
4 depiction in Figure 8 of the individual that is  
5 connected wirelessly to the appliance.

6 MR. HOLLOWAY: Is that a question?

7 Q. (By Mr. Ritcheson) How would you help me  
8 square that?

9 MR. HOLLOWAY: Objection. Form.

10 THE WITNESS: The human is not the  
11 network; the human is the user of the network.  
12 It's not -- the human is not the network.

13 Q. (By Mr. Ritcheson) Understood.

14 A. The network does not depend on the human.

15 Q. Understood. It says there is no  
16 discussion of human intervention in the access of  
17 the communications.

18 A. Yeah. It's in the context of Koether's  
19 discussion of network types. So where Koether --  
20 where and in the context of Koether's discussion of  
21 network types, human is not one of the network  
22 types.

23 Q. That's what you intend to convey?

24 A. That's what I was trying to say. It's an  
25 automatic system that is subject to manual override.

1 Q. Okay. And in Figure 8, the human here --  
2 the human interaction is via a handheld terminal  
3 having, for example, a palm/laptop computer linked  
4 to 140 --

5 A. Right.

6 Q. -- correct?

7 But you didn't mean that humans are  
8 completely out of the equation, only that what?

9 A. We have a network that supports both  
10 automatic and manual operation.

11 Q. Okay. That's what I would have thought  
12 you'd said there.

13 A. We have an automatic network that supports  
14 both human and -- I mean, the human is not actually  
15 on the network. The palm is on the network.

16 Q. It's not plugged into his head.

17 MR. HOLLOWAY: Objection. Form.

18 THE WITNESS: Right. Right. I'm sure  
19 there's prior art about that, but maybe not in  
20 this time frame.

21 MR. RITCHESON: It's 12:15. Why don't we  
22 take a break.

23 MR. HOLLOWAY: Okay.

24 (Thereupon, there was an interruption in  
25 the proceedings.)

1 Q. (By Mr. Ritcheson) Mr. Bennett, did you  
2 speak with anybody about your testimony that you  
3 gave or that you expect to give in this case?

4 A. No, I did not.

5 Q. Okay. With respect to the institution  
6 decision for the '130 that's actually the 1760  
7 proceeding, if you could turn to page 11 of that.  
8 I'm sorry. I've forgotten the exhibit number. Can  
9 you read that off the front?

10 A. That would be Exhibit 5.

11 Q. Okay. Page 11.

12 Okay. You there?

13 A. Yes.

14 Q. It's the -- starting with the second full  
15 paragraph, which begins --

16 A. "We are persuaded..."?

17 Q. Yes, relating to Claim 8.

18 Do you see that?

19 A. Yes.

20 Q. It says there that Koether's  
21 microprocessor 140 communicates with the kitchen  
22 appliance using RF communications.

23 Do you see that?

24 A. Yes.

25 Q. Where is that -- where is the support for

1 that in Koether?

2 A. It's all over it.

3 Q. Well, let's -- while we're -- before we  
4 get to that, can you verify for me, looking at the  
5 '130 patent, Claim 1 -- Claim 8, rather, that the --  
6 that claim, 8, requires the first control device to  
7 communicate with the appliance via a wireless  
8 device?

9 A. So Claim 8 is, "The apparatus of Claim 1,  
10 wherein the first signal is transmitted from the  
11 first control device to at least one of," a list of  
12 many types of devices, "via a wireless device."

13 Q. Okay.

14 A. So it's a wireless device.

15 Q. And so then we have the institution  
16 decision, then, that says that they're persuaded  
17 that Koether discloses a microprocessor 140  
18 communicating with kitchen appliance 110 using RF  
19 communications.

20 Do you see that?

21 A. Yes.

22 Q. And it cites to Figures 1 and 2 and to  
23 Column 4, lines 25 to 26.

24 Do you see that?

25 A. Yes.

1 Q. Taking that out of order for a second,  
2 looking at Column 4, lines 25 to 26, that reads,  
3 "Each kitchen appliance...is preferably provided  
4 with a RF transmitter..., RF receiver... and  
5 microprocessor based controller 140, as illustrated  
6 in Figure 2."

7 Did I read that correctly?

8 A. Yes, "Each kitchen appliance...is  
9 preferably provided with an RF transmitter...."

10 Q. Okay. But in Figure 2, I only have one  
11 set of transmitters and receivers by which the  
12 controller communicates with the base station; isn't  
13 that true?

14 MR. HOLLOWAY: Objection. Form.

15 THE WITNESS: Figure 1 and 2, and -- I  
16 don't understand the question.

17 Q. (By Mr. Ritcheson) Sure. Let's look at  
18 Figure 2 --

19 A. Okay.

20 Q. -- by way of example.

21 What is the significance of the box that's  
22 drawn around the kitchen appliance controller and  
23 transmitter receiver elements?

24 MR. HOLLOWAY: Objection. Form.

25 THE WITNESS: The box -- kitchen appliance

1 controller and transmitter receiver, I think  
2 that's the -- you have one-to-one relationship  
3 between an appliance and a controller and you  
4 have a one-to-one relationship between  
5 controller and transmitter receiver, and the  
6 collection of those three elements would  
7 constitute a device or an apparatus or a  
8 system. That's the way I'd read that diagram.

9 Q. (By Mr. Ritcheson) And is the CPU or the  
10 controller 140, is that a part of the kitchen  
11 appliance?

12 MR. HOLLOWAY: Objection. Form.

13 THE WITNESS: It's a -- in a one-to-one  
14 relationship. The patent makes it clear that  
15 the microprocessor controller could be  
16 integrated into the kitchen appliance or it  
17 could be connected to the kitchen appliance.  
18 But for every microprocessor controller,  
19 there's one and only one kitchen appliance.

20 Q. (By Mr. Ritcheson) Okay. So my question  
21 is not whether the controller 140 communicates with  
22 the base station via RF receiver -- RF transmitter  
23 120 and receives from RF receiver 130, my question  
24 is: Where is it disclosed that the microprocessor  
25 140 communicates to the appliance 110 via RF?

1 MR. HOLLOWAY: Objection. Form.

2 THE WITNESS: I don't know that the  
3 microprocessor controller would communicate  
4 with the appliance itself using RF.

5 Q. (By Mr. Ritcheson) Okay.

6 A. I think what the diagram illustrates is  
7 there's an antenna on the controller that's pointed  
8 in the direction of the base station.

9 Q. And that's using RF to connect the  
10 controller 140 to the base station 150?

11 A. Right.

12 Q. Okay.

13 A. But in the case where the controller is  
14 integrated with the kitchen appliance, then you  
15 could effectively say that the kitchen appliance is  
16 communicating over RF with the base station, because  
17 in that instance, the controller and the appliance  
18 would be indistinguishable.

19 Q. Okay.

20 A. Yeah. I think what this diagram is meant  
21 to represent is the functional decomposition of a  
22 system --

23 Q. I understand.

24 A. -- in a -- you know, a circuit diagram.

25 Q. I appreciate that.

1           Okay. With respect to Claim 12, which is,  
2 I believe, the next one down, if you look at  
3 page 11, it says that "we are persuaded that the  
4 present record supports the contention that  
5 Koether's control center receiving diagnostic  
6 information...teaches the limitations of Claim 12."

7           A. Uh-huh (affirmative).

8           Q. Do you see that?

9           A. Yes.

10          Q. So let's unpack that a little bit.

11           Claim 12, let's go to Claim 12 so that we  
12 can have a common understanding of that.

13           Can you read that to yourself?

14          A. I've read it.

15          Q. Okay. And that claim is where the  
16 system -- that is 110; correct? If we're looking at  
17 Koether, Koether 110 is the system?

18          MR. HOLLOWAY: Object to form.

19          Q. (By Mr. Ritcheson) Do you know what I  
20 mean?

21          A. So we're on -- in the '130 patent, Claim  
22 12 of the '130 patent, and your question is?

23          Q. What element of Koether are you calling  
24 the premises appliance for the purposes of Claim 12?  
25 If you want to look at your declaration, that's

1 fine.

2 A. The combination of the appliance, the  
3 microprocessor controller, and the RF communication  
4 system would be the -- the element that corresponds  
5 to the premises system, a device, equipment,  
6 et cetera.

7 Q. Okay. Now, that is -- is that the same  
8 device that you're calling a control device, the  
9 first control device?

10 MR. HOLLOWAY: Objection. Form.

11 THE WITNESS: That's the device I'm  
12 calling the premises device.

13 Q. (By Mr. Ritcheson) Do you understand  
14 the -- the term "dependent claim"?

15 A. Yes.

16 Q. Okay. Is it your understanding that a  
17 dependent claim includes limitations from another  
18 claim?

19 A. It would include the limitations in the  
20 primary claim, the independent claim.

21 Q. And in this case --

22 A. Claim 1 is an independent claim; Claim 12  
23 is a dependent claim.

24 Q. Depending from Claim 1?

25 A. Yes.

1 Q. So in Claim 1, we've got a first control  
2 device that generates a signal to control -- and I'm  
3 alighting this -- a premises appliance --

4 MR. HOLLOWAY: Objection. Form.

5 Q. (By Mr. Ritcheson) -- is that correct?

6 MR. HOLLOWAY: Same objection.

7 THE WITNESS: Yeah. Control device --  
8 well, we have a first control device --

9 Q. (By Mr. Ritcheson) Yes.

10 A. -- we have a second control device, and  
11 then we have a third control device.

12 Q. Yes.

13 With respect to the first control device,  
14 it's true that the first control device generates or  
15 transmits a signal to a premises appliance, for  
16 example?

17 MR. HOLLOWAY: Objection. Form.

18 THE WITNESS: Well, it at least one of  
19 generates and transmits a first signal for at  
20 least one of activating, deactivating,  
21 disabling, and reenabling at least one of a  
22 premises system, a premises device.

23 So that implies that it is different from  
24 a premises system.

25 Q. (By Mr. Ritcheson) Okay.

1           A.    The premises system in Claim 1 is also  
2 held to be a control device.  The premises system, I  
3 think, would be the third control device, which is  
4 held to be a control device.

5           Q.    So with respect to Claim 12, it says that  
6 the premises device is a monitoring device.

7                   Do you see that?

8           MR. HOLLOWAY:  Objection.  Form.

9           THE WITNESS:  "Where the third control  
10 device is a monitoring device."  So when --

11          Q.    (By Mr. Ritcheson)  Where do you see,  
12 "Where the third control" --

13          A.    Well, it refers back -- "the apparatus of  
14 Claim 1."  The apparatus of Claim 1 consists of  
15 three control devices.

16          Q.    And -- and an appliance?

17          MR. HOLLOWAY:  Objection.  Form.

18          THE WITNESS:  I don't think Claim 1  
19 uses -- does Claim 1 use the term "appliance"?

20          Q.    (By Mr. Ritcheson)  It's the third-to-last  
21 line.

22          A.    Oh, "premises appliance."

23          Q.    Okay.

24          A.    Yeah.  Okay.  So the premises appliance.

25                   So you're asking about Claim 12.  "The

1 apparatus of Claim 1, wherein the at least one  
2 of" -- this is -- the sentence is obscure --  
3 "wherein the at least one of a premises system, a  
4 premises device, a premises equipment, a premises  
5 equipment system, and a premises appliance, is a  
6 monitoring device for at least one of" -- multiple  
7 purposes.

8 So we've identified the appliance of Claim  
9 1, and I believe the intent of this very awkward  
10 paragraph is to limit Claim 1 to one of the  
11 components in which it's doing monitoring of various  
12 parameters and, as a result of that monitoring, the  
13 apparatus provides information regarding -- either  
14 information -- either data and information that's  
15 either recorded or read by the monitoring device.

16 So there is some sense of an appliance.

17 Q. This is where the appliance is a  
18 monitoring device; correct?

19 MR. HOLLOWAY: Objection. Form.

20 THE WITNESS: Yes.

21 Q. (By Mr. Ritcheson) Okay. In Koether,  
22 what is the monitoring device of Koether?

23 MR. HOLLOWAY: Objection. Form.

24 THE WITNESS: The monitoring device -- I  
25 don't really understand Koether as having a

1 single monitoring device.

2 Q. (By Mr. Ritcheson) I agree.

3 MR. HOLLOWAY: Is that a question?

4 MR. RITCHESON: Nope.

5 Q. (By Mr. Ritcheson) Thank you.

6 With respect to Claim 15, your  
7 understanding is that the PTAB is -- declined to  
8 institute a review of Claim 15; is that correct?

9 A. I believe that's -- that's the way -- I'm  
10 not a lawyer, but that's what it -- that's what --  
11 my reading of the -- of this document, this  
12 institution decision. Well, it says they don't  
13 believe there's a high likelihood of success in a  
14 challenge to 15.

15 Q. Where are you reading from?

16 A. On page 14 of the institution decision,  
17 the first paragraph, the Court says, "...we have  
18 reviewed the proposed ground challenging Claim 15 as  
19 obvious over Koether and level of ordinary  
20 skill...", and the conclusion is, "...we are not  
21 persuaded, that petitioner has established a  
22 reasonable likelihood of prevailing in its challenge  
23 to Claim 15 on this ground."

24 I don't know whether that means they've  
25 declined -- they've declined to consider Claim 15 or

1 simply that their preliminary judgment is they're  
2 not persuaded as of yet that Claim 15 is disputable.

3 Q. You understand that Claim 15 is not within  
4 the 1760 proceeding?

5 MR. HOLLOWAY: Objection. Form.

6 THE WITNESS: I don't know whether that's  
7 the case or not. If you tell me -- is it the  
8 case?

9 Q. (By Mr. Ritcheson) I'm just wondering  
10 what your understanding is.

11 MR. HOLLOWAY: Same objection.

12 THE WITNESS: I'm unsure.

13 Q. (By Mr. Ritcheson) Okay. Drawing your  
14 attention to '130, the '130 patent, Claim 17, can  
15 you read that to yourself?

16 A. Okay. I've read it.

17 Q. So is it your understanding that this is  
18 also a dependent claim depending from Claim 1?

19 A. It says -- yes, begins with, "The  
20 apparatus of Claim 1...."

21 Q. And this claim requires that the first  
22 control device generate a confirmation or  
23 notification signal; is that correct?

24 A. That's correct.

25 Q. And this signal is to provide information

1 regarding, and then there's a list of -- of events;  
2 correct?

3 A. That's correct.

4 Q. With respect to your -- your declaration,  
5 you say -- and it's the first time that I saw it in  
6 your declaration, which is why it jumped out at me.

7 I believe it's -- paragraph 42 and 43 deal  
8 with Claim 17; is that accurate?

9 MR. HOLLOWAY: Objection. Form.

10 THE WITNESS: Paragraph 42 begins with the  
11 word "claim" and the number 17, yes.

12 Q. (By Mr. Ritcheson) And 43 also relates to  
13 Claim 17?

14 A. Yes, it does.

15 Q. Okay. And the reason that it jumped out  
16 at me is paragraph 42 doesn't have any citations to  
17 the Koether patent, does it?

18 MR. HOLLOWAY: Object to the form.

19 THE WITNESS: It refers to -- paragraph 42  
20 refers to Koether's discussion of, for example,  
21 the realtime control of the kitchen appliance  
22 by the remote control center. So there's not a  
23 specific -- there's not a specific reference,  
24 there's a general reference to the Koether  
25 discussion of the -- of that topic.

1 Q. (By Mr. Ritcheson) With respect to  
2 Koether, are you aware of -- do you know if the word  
3 "confirmation" appears anywhere in that entire  
4 patent?

5 MR. HOLLOWAY: Objection. Form.

6 THE WITNESS: "Confirmation"?

7 Q. (By Mr. Ritcheson) Yep.

8 A. I would have to look for the -- I didn't  
9 look for the word "confirmation."

10 Q. "Confirmation" or "notification," either  
11 one. I've searched. I didn't find it.

12 MR. HOLLOWAY: Object to form.

13 THE WITNESS: "Notification" -- there's  
14 bidirectional communication, and in my  
15 experience as a designer of network protocols,  
16 notification -- there's a common network  
17 technique called automatic request repeat, ARQ,  
18 in which --

19 Q. (By Mr. Ritcheson) AR- --

20 A. ARQ, automatic repeat request.

21 Q. ARQ is automatic repeat request?

22 A. Yeah.

23 Q. ARQ?

24 A. ARQ. You can look it up in Wikipedia.

25 Repeat request, yeah.

1           So -- in which a transmitter sends a unit  
2 of information, a packet or a frame, to a receiver  
3 and the receiver sends an acknowledgment saying that  
4 it received it correctly, and it knows it received  
5 it correctly because there's a checksum that's  
6 computed on the transmitted packet before  
7 transmission that allows the receiver to verify  
8 correct reception.

9           Q.    And this says, "I received your message  
10 with no errors."

11          A.    "I received your message without an  
12 error," and there are some instances in which  
13 there's a negative response that says, "I've  
14 received a message, I think it's from you, but I  
15 can't decode it."

16               And then there's another scenario in  
17 which -- and you have a point to multipoint network  
18 like this wireless network in Koether, where there's  
19 no negative response, to where essentially the  
20 negative response is the absence of a positive  
21 response.

22               And so because wireless networks have a  
23 high error rate -- the typical error rate for an  
24 Ethernet, for example, is one lost frame out of  
25 every million frames, but in a Wi-Fi network, for

1 example, the typical error rate is about one lost  
2 frame out of 100.

3 So Wi-Fi has an automatic repeat request  
4 designed into the structure of Wi-Fi, so you can't  
5 really communicate across it -- a Wi-Fi network  
6 without getting notifications from the receiver of  
7 the message it received when it received -- whenever  
8 it receives it correctly.

9 And so it's so basic to the notion of  
10 wireless networks that when someone describes a  
11 network that is bidirectional and wireless, I would  
12 assume that unless he says otherwise, there's a  
13 system of acknowledgments.

14 Q. Is that what you're relying on to support  
15 the declaration that you've provided in this 1760  
16 proceeding?

17 A. That's part of it. That's part of it, and  
18 the other part is the notion of sending queries,  
19 asking for status, and then getting a response to  
20 the query that asked for status.

21 So when I -- if the controller sends a  
22 message to the appliance that disables it, I would  
23 expect a -- an acknowledgment at both the network  
24 and the application layer saying it's been disabled.  
25 But in the absence of that, the controller would be

1 able to find out that the device had disabled itself  
2 in response to that command by querying its status  
3 subsequently.

4 Q. So you have two instances --

5 A. Three.

6 Q. Sorry?

7 A. Three instances.

8 Q. Tell me. The query, the ARQ --

9 A. The network-level acknowledgment that the  
10 message was received correctly, a potential concrete  
11 response from the device saying that it is now going  
12 to disable itself, and then a third, which would be  
13 a request for status that either doesn't get a  
14 response or gets a response that says the device has  
15 been disabled.

16 And each of these would occur without  
17 human intervention. Each of these could be an  
18 automatic.

19 Q. That's fine. There's no question.

20 So the network-level message, is that also  
21 the ARQ? Is that the same thing?

22 A. Yes.

23 Q. Okay. And then the response to status?

24 A. Would be a response to a --

25 Q. Okay. Got it.

1           A.    Well, it's a response to a control  
2 request, to a command.

3           Q.    And then, I'm sorry, what was the third  
4 one?

5           A.    A non-response or an elicited response.

6           Q.    And that's different than a query as to  
7 status?

8           A.    No, it's a query as to status. That's a  
9 query as to status.

10          Q.    So I still end up with two, query as to  
11 status and ARQ.

12          A.    The third one is a response to the  
13 request, an application layer response to the  
14 request to disable from the device saying, "I am now  
15 going to disable myself."

16                   Presumably, a disabled system is not  
17 capable of notifying that it is now disabled. The  
18 closest you could get to that in the real world  
19 would be the device saying, "I'm now going -- I'm  
20 going to try to disable myself."

21          Q.    Okay. With respect to ARQ, where in  
22 Koether is ARQ disclosed?

23          A.    He doesn't go into that level of detail on  
24 describing the wireless network, because what he's  
25 doing is he's trying to describe an application that

1 uses a wireless network.

2 Q. The application --

3 A. So he has references. There's a textbook  
4 that he references that describes the design of  
5 wireless networks, and in that textbook, which I  
6 haven't read, I'd be willing to bet that ARQs are  
7 described in that textbook.

8 Q. But it's true, isn't it, that in  
9 paragraphs 42 and 43, none of what you just  
10 testified to is present in there, is it?

11 A. In those particular paragraphs?

12 Q. Right.

13 A. I wouldn't say that. He describes the  
14 method of requesting status from a device.

15 Q. Let's have a look at that. What citation  
16 are you looking at?

17 A. Where does Koether describe the  
18 diagnostic -- the capability for the controller to  
19 request status?

20 Q. No, where did you point the PTAB to in  
21 paragraph 43?

22 MR. HOLLOWAY: Objection. Form.

23 THE WITNESS: Well, this follows a  
24 discussion of the status monitoring and status  
25 requesting, so I didn't -- there's not a

1           repetition of -- okay. So there is, however,  
2           in 43, a reference to Column 13, lines 2  
3           through 8, of Koether.

4           Q.     (By Mr. Ritcheson) Okay. And that  
5           section, 2 through 8, reads, "Inasmuch as controller  
6           140 and thus control center 170 knows whether the  
7           appliance is in idle or cook mode, the appliance can  
8           judiciously be turned off without affecting the  
9           operation of the appliance."

10          A.     Yes.

11          Q.     "Alternatively, base station 105 may place  
12          the appropriate kitchen appliance in the power cycle  
13          'off' state and inform control center 170 of its  
14          actions."

15                   Did I read that correctly?

16          A.     Yes.

17          Q.     And that's the section you're relying on?

18                   MR. HOLLOWAY: Objection. Form.

19                   THE WITNESS: Yes.

20          Q.     (By Mr. Ritcheson) Any other section of  
21          Koether that is identified by you in paragraph 43?

22          A.     I also refer to Column 4, lines 60 through  
23          63, and to Column 12, lines 5 through 8.

24          Q.     And those are at the bottom of that  
25          paragraph; correct?

1           A.    Yeah, the last line.

2           Q.    Okay.  And if we look at those sections,  
3           is there an explicit discussion of the control  
4           device, the first control device, sending a  
5           notification or confirmation signal?

6           MR. HOLLOWAY:  Objection.  Form.

7           Q.    (By Mr. Ritcheson)  We can start with  
8           paragraph -- Column 4.

9           MR. HOLLOWAY:  Same objection.

10          THE WITNESS:  Column 4 --

11          Q.    (By Mr. Ritcheson)  I believe that's,  
12          "Moreover, such controllers may include built-in  
13          intelligence sensing and diagnostic equipment, which  
14          coupled through an interface board, detect and  
15          identify various types of failures."

16                Did I read that correctly?

17          A.    Yes.

18          Q.    And then Column 12, lines 5 through 8 is  
19          part of a sentence.  "In accordance with principles  
20          of the invention, it is further contemplated that  
21          the control center may, if desired, alternatively  
22          control in realtime the peak power demand of the  
23          kitchen appliances...."

24                Did I read that portion of the sentence  
25          correctly?

1 MR. HOLLOWAY: Objection. Form.

2 THE WITNESS: Yes.

3 Q. (By Mr. Ritcheson) Other than those two  
4 passages, is it true that no other support for your  
5 position is taken in paragraph 43 of your  
6 declaration?

7 MR. HOLLOWAY: Objection. Form.

8 THE WITNESS: It's true that paragraph 43  
9 only includes three specific references to the  
10 Koether patent. Those would be the Column 13  
11 reference, the Column 4 reference, and the  
12 Column 12 reference.

13 But it is also true that the discussion of  
14 notifications that spans paragraph 42 and 43  
15 refers to the discussion of realtime control of  
16 kitchen appliances by the remote control  
17 center, as well as the bidirectional  
18 communication between the elements of the  
19 Koether system.

20 Q. (By Mr. Ritcheson) Okay.

21 A. So the Koether system enables the control  
22 center to inquire about status, to query the device  
23 about status -- the appliance device, the appliance  
24 controller, about status and receive a variety of  
25 information, which is really what I say in my

1 concluding sentence, that the -- "...it would have  
2 been obvious to a person of ordinary skill in the  
3 art prior to [the priority date] to incorporate such  
4 a confirmation signal from the kitchen appliance  
5 controller upon such an occurrence given the express  
6 sensing and diagnostic capabilities of the  
7 controllers, as well as the stated benefits,"  
8 et cetera.

9 Q. Okay. I didn't have any question, but I  
10 appreciate you reading that again. I was pausing to  
11 look at the claim again.

12 Now, those claims that we've discussed I  
13 think are claims where you have said that the  
14 disclosure of Koether, when combined with the  
15 knowledge of one of ordinary skill in the art, is  
16 sufficient to render the '103 [sic] claims obvious;  
17 is that correct?

18 MR. HOLLOWAY: Objection. Form.

19 THE WITNESS: '103 claims?

20 Q. (By Mr. Ritcheson) '130. Sorry.

21 MR. HOLLOWAY: Same objection.

22 Q. (By Mr. Ritcheson) Let me just -- that  
23 was botched up. I apologize.

24 With respect to Claims 1, 8, 12, 17, 98,  
25 145, and 149, your position is that Koether,

1 combined with the knowledge of one of ordinary skill  
2 in the art, renders those claims obvious; is that  
3 correct?

4 MR. HOLLOWAY: Objection. Form.

5 Can you read that back one more time?

6 Sorry.

7 (Whereupon, the record was read by the  
8 reporter as follows:

9 Question, "With respect to  
10 Claims 1, 8, 12, 17, 98, 145, and 149, your  
11 position is that Koether, combined with the  
12 knowledge of one of ordinary skill in the art,  
13 renders those claims obvious; is that  
14 correct?")

15 MR. HOLLOWAY: Same objection.

16 THE WITNESS: My position is that Claims  
17 1, 8, 12, 15, 17, 98, and 145 and not 149, as  
18 you put in your question, are rendered obvious  
19 to a person of ordinary skill in the art by  
20 Koether, in combination with the knowledge that  
21 I would expect a person of ordinary skill in  
22 the art to have in the subject matter of the  
23 claims. So I don't know about whether -- did  
24 you mean to include 149 or is that --

25 Q. (By Mr. Ritcheson) If you want to say not

1 149, that's fine.

2 MR. HOLLOWAY: Objection. Form.

3 MR. RITCHESON: If he says not 149 --

4 MR. HOLLOWAY: You know, I'm getting tired  
5 of you just like blatantly making  
6 misrepresentations --

7 MR. RITCHESON: About what?

8 MR. HOLLOWAY: -- and mistakes as actual  
9 testimony. So --

10 MR. RITCHESON: You know what, I'm getting  
11 tired of you interrupting, Clay, so keep your  
12 mouth shut.

13 MR. HOLLOWAY: Well, you make comments  
14 constantly and I have to ask you if you're  
15 asking a question, and several times it's been  
16 no.

17 MR. RITCHESON: You don't have to, and, in  
18 fact, this whole thing you're doing right now  
19 is inappropriate and you need to stop. Pretend  
20 you're in court. Can you remember that?

21 MR. HOLLOWAY: I would make the same  
22 objection on your questions that are really  
23 statements.

24 MR. RITCHESON: Okay. You've got to stop  
25 talking now.

1 MR. HOLLOWAY: Okay.

2 Q. (By Mr. Ritcheson) Okay. Do you have an  
3 opinion as to 149, Claim 149?

4 MR. HOLLOWAY: Objection. Form.

5 THE WITNESS: I don't believe I've offered  
6 one. Did I offer one in my declaration.

7 Q. (By Mr. Ritcheson) I'm asking you.

8 A. I don't recall offering an opinion on 149.

9 Q. Do you have any opinion as to whether  
10 Claim 149 is invalid?

11 MR. HOLLOWAY: Objection. Form.

12 THE WITNESS: I haven't offered one.

13 Now, I did review Claim 149. On page 1 of  
14 my declaration, in paragraph 2 I did list 149.

15 Q. (By Mr. Ritcheson) I agree.

16 MR. RITCHESON: There's no question  
17 pending, Clay. Don't throw your hands up.

18 MR. HOLLOWAY: Then don't talk. If he's  
19 giving an answer, you don't need to say, "I  
20 agree," or, "That's right."

21 MR. RITCHESON: If there is no question  
22 pending, there is, by definition, no answer.

23 MR. HOLLOWAY: Well, that's --

24 MR. RITCHESON: Yes. It's called English;  
25 all right? Okay. There's no question pending.

1 MR. HOLLOWAY: He was giving an answer.

2 MR. RITCHESON: There is no answer. I  
3 asked him if he had an opinion as to 149.

4 MR. HOLLOWAY: You may continue your  
5 answer to the question as to whether you have  
6 an opinion on Claim 149.

7 Q. (By Mr. Ritcheson) Have you expressed an  
8 opinion in your declaration as to Claim 149,  
9 Mr. Bennett?

10 MR. HOLLOWAY: Were you done answering the  
11 question the first time?

12 THE WITNESS: I don't recall -- I mean, I  
13 said I don't recall giving -- rendering an  
14 opinion on 149, and looking through my  
15 declaration, I don't see anything that  
16 refreshes my memory on that.

17 Q. (By Mr. Ritcheson) One way or the other?

18 A. Well, let me keep paging through here.

19 So, no, I didn't offer an opinion on 149.  
20 I said I was going to, but I didn't.

21 Q. Okay. Thank you.

22 There are a number of claims that you  
23 believe are obvious over Koether in combination with  
24 another reference, I believe, called Crater; is that  
25 correct?

1 A. That's correct.

2 (Patent Owner's Exhibit 7 was marked for  
3 identification.)

4 Q. (By Mr. Ritcheson) Let's look at Crater,  
5 which we've marked as Exhibit 7.

6 Are you familiar with that reference?

7 A. Yes, I am.

8 Q. Generally speaking, as you did for the  
9 Koether reference, can you tell us what the Crater  
10 patent is directed to?

11 A. The Crater patent describes an integrated  
12 control system that includes sensors, controllers,  
13 storage media, and a communications module for  
14 facilitating communication between control devices  
15 and a web server.

16 Q. How is Koether different from -- or is  
17 Crater different from Koether?

18 MR. HOLLOWAY: Objection. Form.

19 THE WITNESS: The answer to that question  
20 would be very long. I think a complete  
21 analysis of how --

22 Q. (By Mr. Ritcheson) Not thorough, just  
23 from a high level.

24 MR. HOLLOWAY: Objection. Form.

25 THE WITNESS: At a high level, the utility

1 of the Crater patent in terms of prior art is  
2 the -- it's very explicit in describing a web  
3 server as a portion of a three-part control  
4 system.

5 Q. (By Mr. Ritcheson) Okay.

6 A. There are references in -- there are  
7 places where Koether gets very close to describing a  
8 web server, but he doesn't use the term -- the terms  
9 "Internet" and "web."

10 For example, he has an ISDN system and he  
11 says "the ISDN," which is a digital telephony  
12 system.

13 Q. This isn't in Crater; right?

14 A. No. I'm telling you what -- where -- the  
15 boundary. You asked me the differences between the  
16 two patents.

17 Q. Fair enough.

18 A. And so what Koether does is he describes  
19 an ISDN system, which is a digital telephone  
20 networking technology, and he says the ISDN system  
21 could use X.25, and X.25 is a network-layer protocol  
22 that is similar in function to TCP/IP.

23 Q. It's an alternative to TCP/IP.

24 MR. HOLLOWAY: Object to form.

25 THE WITNESS: Yeah. And at the time in

1           the 1990s, especially in the early '90s, from  
2           the early '90s to the mid '90s to the --  
3           actually, to the time of the filing of these  
4           patents, there was quite an active competition  
5           going on in the networking community between  
6           X.25 and TCP/IP in terms of deciding what the  
7           future standard protocol would be for the  
8           worldwide public network, digital data network.

9           And actually there was a lot of politics  
10          in it. X.25 was preferred by the telephone  
11          companies because it gave them a position of  
12          control and TCP/IP was more preferred by  
13          computer people because they believed it  
14          allowed them greater flexibility for  
15          experimentation, and then there was a third  
16          effort called the Open Systems Interconnection  
17          standards process that was sponsored by the  
18          International Standards Organization, ISO, that  
19          charted a middle ground where they proposed to  
20          move forward with a network layer called the  
21          connection-oriented network layer, CONS, that  
22          was based on the design of X.25 and a  
23          connectionless network layer, CLNS, that was  
24          based on the datagram model that IP implements  
25          and it also had been implemented in previous

1 networks such as Secloud and DECnet -- Secloud,  
2 DECnet, and Xerox Network Systems, XNS.

3 And so when a networking person sees a  
4 reference in the mid '90s to a system that says  
5 it could use X.25 on top of ISDN, then that --  
6 then I think the thought that would come to  
7 mind is that, well, if it could use X.25, it  
8 could also use TCP/IP, and if it uses TCP/IP,  
9 then it would typically be a member of the  
10 public Internet.

11 Q. (By Mr. Ritcheson) So the question was:  
12 How is Crater different? You seem to be  
13 defending --

14 A. So Crater very explicitly endorses TCP/IP  
15 as the option of choice to perform the function that  
16 could also be performed by X.25.

17 Q. Any other differences between Crater and  
18 Koether?

19 MR. HOLLOWAY: Objection. Form.

20 THE WITNESS: There are many other  
21 differences, some major and some minor, but  
22 the -- the primary significance of Crater is  
23 that it's very explicit about web pages and the  
24 Internet.

25 Q. (By Mr. Ritcheson) Are they directed --

1 are those two references directed to different  
2 industries?

3 MR. HOLLOWAY: Objection. Form.

4 THE WITNESS: Those two references?

5 Q. (By Mr. Ritcheson) Crater and Koether.

6 A. Well, you know, the question of how you  
7 define an industry is always interesting, but if  
8 we -- if -- one of the industry -- if the industry  
9 in question is the control systems industry, then I  
10 think they're both directed at the control systems  
11 industry.

12 Koether is very obviously very  
13 specifically directed at food service control  
14 systems --

15 Q. Right.

16 A. -- but Koether -- the principles in the  
17 system that Koether teaches are generally applicable  
18 across an entire range of industries in which  
19 control systems can perform a meaningful role.

20 Q. I understand where you're trying to get.  
21 I'm just trying to find out on a fundamental level  
22 whether these patents are directed to different  
23 industries.

24 Assuming for the sake of argument that  
25 Koether is directed to the food services industry,

1 what is the industry that Crater is directed to?

2 MR. HOLLOWAY: Objection. Form.

3 THE WITNESS: Well, the title of the  
4 Crater patent is, "Distributed interface  
5 architecture for programmable industrial  
6 control systems," so the industry that -- and  
7 Crater was apparently an employee of Control  
8 Technology Corporation, the assignee of the  
9 patent. So this is directed at the industry  
10 that provides control systems.

11 Q. (By Mr. Ritcheson) And is it true that  
12 Crater is directed to specific industrial  
13 applications, such as, you know, hostile  
14 environments like oil rigs?

15 MR. HOLLOWAY: Object to the form.

16 THE WITNESS: I don't think there is  
17 anything in Crater that would preclude it from  
18 being utilized across a general range of  
19 industries.

20 Q. (By Mr. Ritcheson) I didn't mean to  
21 suggest preclude; I'm just asking if it was true  
22 that it was directed to those specific types of  
23 industrial applications?

24 MR. HOLLOWAY: Same objection.

25 THE WITNESS: I think it's directed at

1 industrial control systems generally. And the  
2 reason that I think that is that in -- the  
3 title of his patent uses the term  
4 "architecture," and so architecture is a  
5 synonym, more or less, for design or structure.  
6 And the architecture of a control system tells  
7 us how broad its application can be, and the --  
8 rather than a specific use case.

9 And so you design a system according to an  
10 architecture to allow it to expand and to be  
11 improved upon and to become more robust than it  
12 is, perhaps, in its initial embodiment. The  
13 architecture has to have enough flexibility  
14 designed into it to allow that to happen, and I  
15 believe that's his intent. It's a very brief  
16 patent. He doesn't try to confuse us with  
17 excessive ornamentation and detailing, he  
18 simply gives a straightforward description of a  
19 control system that would utilize the Worldwide  
20 Web.

21 Q. (By Mr. Ritcheson) Right.

22 But looking at the --

23 MR. HOLLOWAY: Were you done with your  
24 answer?

25 THE WITNESS: What?

1 MR. HOLLOWAY: Were you done with your  
2 answer?

3 THE WITNESS: Yeah.

4 MR. HOLLOWAY: Okay.

5 MR. RITCHESON: Are you happy now?

6 MR. HOLLOWAY: If he was done with his  
7 answer, I'm happy.

8 MR. RITCHESON: Well, then stop  
9 interrupting.

10 THE WITNESS: Well, you interrupted me.

11 MR. HOLLOWAY: That's my point.

12 THE WITNESS: That's why he did it.

13 Q. (By Mr. Ritcheson) No, you paused. It  
14 was fairly --

15 A. Well, I pause a lot.

16 Q. Me too.

17 With respect to Crater, the very first  
18 sentence in the "Background of Invention"  
19 indicates -- or reads, "Sophisticated industrial  
20 processes, such as oil refining, automobile assembly  
21 or power generation, require the cooperative  
22 execution of numerous interdependent tasks by many  
23 different pieces of equipment."

24 Did I read that correctly?

25 A. Yes, you did.

1 Q. Do you think Crater was patentable when  
2 the patent issued?

3 MR. HOLLOWAY: Objection. Form.

4 THE WITNESS: It's hard to say. I mean, I  
5 haven't really looked at it -- I haven't really  
6 examined it from that standpoint and I don't  
7 have an enormous expertise in patentability.

8 I mean, most of what I learned about  
9 patentability, frankly, came up in reading the  
10 recent District Court decision on the '363  
11 patent that deemed it unpatentable.

12 Q. (By Mr. Ritcheson) Do you understand  
13 there's a difference between patentability and  
14 patent eligibility?

15 MR. HOLLOWAY: Objection. Form.

16 THE WITNESS: I can't say that I do, no.

17 Q. (By Mr. Ritcheson) Let me ask it in a  
18 different form.

19 A. So were you asking me about  
20 patentability --

21 Q. Yes.

22 A. -- or about patent eligibility?

23 Q. Patentability. That is, for example,  
24 is -- was -- in your opinion, was Crater novel?

25 MR. HOLLOWAY: Objection. Form.

1 THE WITNESS: I'm not aware of a prior  
2 patent that addresses the use of the Worldwide  
3 Web in a control system.

4 It strikes me as it would have been rather  
5 obvious to use the Worldwide Web as a portion  
6 of a control system in terms of the goals and  
7 general aspirations that the designers of the  
8 Web -- and I don't mean just Tim Berners-Lee,  
9 but the people from the broader Internet  
10 community who developed the RFC for HTTP/1.1.  
11 It was -- some of the people I worked with at  
12 Enterprise Integration Technologies worked on  
13 that -- to develop that standard to improve the  
14 original Tim Berners-Lee design for the Web  
15 protocol into something that used network  
16 resources more efficiently.

17 They had broad aspirations for the  
18 application of web technology, so I think it  
19 would have been a fairly -- it would have been  
20 fairly intuitive for someone who was a student  
21 or a practitioner of control systems to have  
22 considered incorporating the web into the  
23 control system in some fashion.

24 Q. (By Mr. Ritcheson) Which is what you  
25 stated in your declaration?

1 A. Uh-huh (affirmative).

2 Q. "Yes"?

3 A. Yes.

4 Q. With respect to the Internet, you have  
5 some familiarity with the use of the Internet in  
6 1996; correct?

7 A. Yes.

8 Q. Okay.

9 A. I personally used the Internet and worked  
10 on the design of Internet protocols since the mid  
11 '80s.

12 Q. Okay. So are you aware of any concerns  
13 regarding the security of the Internet in 1996?

14 MR. HOLLOWAY: Objection. Form.

15 THE WITNESS: There were concerns about  
16 the security of the Internet from the very  
17 beginning that persist until this very day.

18 Q. (By Mr. Ritcheson) In 1996, were you  
19 aware of any teachings by any industry leaders that  
20 suggested that the use of the Internet should be  
21 avoided because it was insecure?

22 MR. HOLLOWAY: Objection. Form.

23 THE WITNESS: There were concerns about  
24 the resiliency of the Internet in the 1990s  
25 that were expressed by prominent figures such

1 as Bob Metcalfe, who predicted famously that  
2 the Internet would rapidly grind to a halt  
3 because it couldn't deal with congestion. Was  
4 that in -- that may have been in the '80s.

5 There was an incident that occurred in  
6 the -- in 1985 time frame called Internet  
7 congestion collapse, in which the -- what  
8 happened was the Internet -- when Internet --  
9 TCP/IP and the public Internet was first rolled  
10 out, the long-haul links were all provided by  
11 ARPANET, by the ARPANET NCP in particular,  
12 which is a communications -- it was called a  
13 gateway at the time, we used the term "gateway"  
14 and now we would call devices like that  
15 routers -- as a communication processor that  
16 interconnects sites that are distant from each  
17 other.

18 And the ARPANET had a flow control  
19 mechanism that prevented an ARPANET node  
20 gateway from receiving more information than it  
21 could process in any given unit of time, so it  
22 was a self-limiting system with respect to  
23 congestion.

24 But when people stopped using ARPANET  
25 nodes to connect from -- oh, and the design of

1 ARPANET is very similar to X.25, as a matter of  
2 fact. X.25 is based on the ARPANET design.

3 When the Lawrence Livermore National Lab  
4 stopped using ARPANET to connect to the  
5 Berkeley campus -- the Lawrence Livermore Lab's  
6 in Livermore, California and Berkeley's some  
7 70 miles away, more or less -- they discovered  
8 a situation in which a -- the data link between  
9 the two sites would slow to a crawl. So it was  
10 a high capacity, had at least -- was at least a  
11 T1 capacity, 1-1/2 megabit per second line,  
12 maybe more, maybe BS3, and it would -- it would  
13 crawl to a halt because data was being offered  
14 to the data link so much faster than it could  
15 process it that packets were constantly being  
16 discarded.

17 And the response of those systems to a  
18 lost packet when they didn't receive their  
19 positive acknowledgment, the ARQ that I was  
20 talking about earlier, it would immediately  
21 resend the packet. And so if packets are being  
22 lost because of congestion and then they're  
23 being immediately resent, then the congestion  
24 situation will never resolve because every- --  
25 everyone who's lost a packet is slamming the

1 network with more traffic.

2 So the only way to actually resolve the  
3 situation was to turn -- was to unplug the  
4 computers from the network and reboot them so  
5 that they came up in a state where they weren't  
6 trying to retransmit a packet that had already  
7 been -- had failed several times.

8 And so this is called Internet congestion  
9 collapse, and so it was sort of a crisis in the  
10 Internet engineering community and there were a  
11 couple of proposals that were put forward for  
12 how to resolve it, one by Ross, Jeng of DEC and  
13 another by a fellow named Van Jacobson, who  
14 worked at the Livermore lab, in which  
15 essentially -- and the Jacobson approach won.

16 And so what he did was he developed a  
17 software patch that went into BSD, and it  
18 switches the operating system that most folks  
19 were using on the Internet at this time -- this  
20 is like '85 -- such that when a -- when a  
21 computer started to transmit using TCP, that at  
22 the beginning, it would go in -- begin in a  
23 state called slow start and then it would  
24 gradually ramp up the rate in which it  
25 transmitted information in response to each

1           successful acknowledgment, and then if it  
2           failed to get an acknowledgment, it would  
3           radically reduce its transmission rate. So the  
4           radical reduction in the transmission rate  
5           allowed the congestion scenario to resolve.

6           And so this is one of the instances in  
7           which it was found that the design of TCP/IP  
8           was lacking in terms of -- of this one  
9           particular scenario, congestion management, as  
10          TCP/IP had not really been designed with the  
11          intention of becoming the worldwide global  
12          network that everybody and his brother, you  
13          know, uses for everything.

14          But the response of the Internet community  
15          was to improve the protocols. And so while  
16          there were -- there were similar concerns --  
17          the security was known to be weak in the early  
18          days of the Internet. Security was known to be  
19          weak at that time because the way you secure  
20          endpoints on a network is through encryption  
21          and authentication, and encryption is a highly  
22          CPU-intensive activity and the CPUs that we had  
23          to work with in the 1970s and '80s were so much  
24          less powerful than the ones we have today that  
25          while the computer scientists who designed the

1 Internet knew what was necessary to secure it,  
2 they literally did not have the physical  
3 computation resources available at a reasonable  
4 price to do it.

5 But what's happened is as we've gone  
6 along, we've been able to improve the security  
7 by leaps and bounds from what it was initially  
8 so that there's very -- today, for example, a  
9 majority of the traffic that traverses the  
10 public Internet is encrypted, and in 1996,  
11 virtually none of it was encrypted.

12 I mean, even passwords would go across the  
13 Internet in plain text, and that doesn't happen  
14 anymore. It's pretty much impossible to find a  
15 system that sends passwords in clear text.

16 So there have always been concerns about  
17 security and there have been various efforts to  
18 solve security as a -- not as an  
19 industry-specific problem, but as a general  
20 problem -- well, actually in both ways. The  
21 banking industry has always been in the --  
22 taken the leadership position on Internet  
23 security.

24 Q. (By Mr. Ritcheson) Are you familiar with  
25 a Morgan Stanley report called the Internet report?

1 A. No, I'm not.

2 Q. Do you know if in 1996, X.25 was  
3 considered to be more secure than the Internet?

4 A. It was marketed as being more secure.

5 Q. Why? I think I intuitively understand,  
6 but I would love to know why.

7 A. Well, it was a telephone company product,  
8 so the telephone companies had a great deal of  
9 control over the X.25. Certainly, the initial wave  
10 of X.25 networks were all telephone company devised  
11 and developed and supported.

12 And it was widely believed, certainly at  
13 the time, that the scientists working at Bell Labs  
14 knew more about networking than anybody else did. I  
15 mean, they certainly believed that and there were a  
16 lot of bright people working at Bell Labs in the  
17 '80s and '90s, and they were probably -- probably  
18 had more resources to work with. And the more  
19 resources you have -- and it's a more centralized  
20 system, so it was possible to exercise control over  
21 points of the network and to limit the behavior of  
22 bad actors.

23 Q. What would have been the reason that you  
24 would have combined Koether with Crater? What were  
25 the -- what do you see as the advantages?

1           A.    Well, X.25 -- I mean, Koether uses --  
2           teaches X.25 as a network layer protocol for the  
3           distribution of his functions.  And while X.25 was  
4           very aggressively promoted by the phone companies,  
5           X.25 is not as well distributed or as inexpensive as  
6           TCP/IP is.

7                     And so the -- the belief that -- if you  
8           were inclined to believe that TCP/IP was going to  
9           win over X.25 and you were inclined to believe that  
10          the web was a truly transformative technology that  
11          would soon be built into every device, then you  
12          would be attracted to take the option -- the other  
13          path that Koether refers to but doesn't explore,  
14          which is to use the Internet and the web as the  
15          vehicle for -- in which to incorporate the control  
16          functions that he teaches.  You'd be inclined to  
17          follow Crater's advice on incorporating the web into  
18          the -- or incorporating the control system into the  
19          web.

20                    For convenience, he -- Koether also -- he  
21          discusses the formatting of messages and that the  
22          messages that flow to the control center from the  
23          base stations have to have a specific syntax and a  
24          specific kind of formatting in order for them to  
25          display on the screens in the control center.

1           And the question of the syntax that these  
2 messages -- these operator-oriented messages had to  
3 have a particular form of presentation is also  
4 discussed in Crater. So they both talk about the  
5 syntax of the messages that flow.

6           Q.    When you speak about a convenience, let me  
7 drill into that a little bit, if you'll pardon the  
8 pun.

9           Did more people in 1996 have phone lines  
10 or Internet connections?

11          A.    In 1996, way more people had phone lines  
12 than had Internet connections.

13          Q.    When did Internet become more -- as  
14 popular as it is today? Is there something that  
15 happened that caused it to become --

16          A.    Well, there were two things that happened  
17 that made the Internet -- that transformed the  
18 Internet from its original incarnation in which it  
19 was a research network to the general-purpose  
20 network that it is today.

21                And the first of those was a decision by  
22 the Clinton administration to decommission NSFNET,  
23 which is the backbone that the research Internet  
24 used. It was encumbered by an acceptable use policy  
25 that forbade the use of -- forbade commercial

1 activities.

2 So in decommissioning NSFNET, the Clinton  
3 administration opened the Internet to the public  
4 because it could only run on commercial facilities.

5 Q. When was that?

6 A. This was in the 1994, '5, '6 -- mid '90s.

7 And the plan was -- this was when Al Gore  
8 is alleged to have said he invented the Internet.  
9 What he was talking about is that he took the  
10 initiative within the Clinton administration to  
11 enact this policy of making the Internet open to the  
12 public and he did secure some funding for -- you  
13 know, for that to happen, so he's kind of been  
14 maligned for that. So there was a policy decision  
15 that was made by the White House and accepted by the  
16 Congress.

17 There was a technology that made something  
18 like the Internet necessary, and that was the  
19 personal computer. Because before, people -- if you  
20 don't have a computer in your home, you certainly  
21 don't -- aren't going to achieve much benefit from  
22 having an Internet connection --

23 Q. Right.

24 A. -- which the Internet being a  
25 computer-oriented network, unlike the telephone

1 network.

2 Q. Right.

3 A. And the third thing was the advent of --  
4 actually, the third thing is the advent of broadband  
5 networking capabilities like DSL and cable modem and  
6 high-speed wireless that also made it more useful by  
7 increasing the bandwidth.

8 Q. And if we put sort of a timeline of that  
9 together, what are we talking about in terms of when  
10 those events happened?

11 A. Well, so the Worldwide Web was invented in  
12 the very early '90s and could really only be used in  
13 research institutions because nobody else was  
14 connected to the Internet.

15 The Clinton administration decision was  
16 made around -- let's say they started talking it up  
17 publicly around '93.

18 The personal computer, the IBM personal  
19 computer was introduced in 1981 and was initially  
20 designed to be a home computer, achieved its first  
21 wave of popularity actually as a business computer  
22 and then -- because it's too expensive for people to  
23 have at home. The original design used a television  
24 display and had 40 characters on a line and used an  
25 audiotape for storage medium, didn't have a floppy

1 disk.

2 They became cheaper, so they became more  
3 plentiful, so more people had them in their homes  
4 and more people were dialing up to services like  
5 CompuServe and the Source and America On-Line and  
6 doing networking kinds of things.

7 And then those services ultimately opened  
8 up to the public Internet after the White House  
9 decision.

10 So America On-Line, I mean, that would  
11 have been -- and CompuServe -- I mean, I got my  
12 first Macintosh in 1984 and the first thing I did  
13 was connected it to CompuServe with a modem.

14 Q. So we've talked a little bit about Crater  
15 and Koether together.

16 What are the disadvantages that would come  
17 from combining those?

18 MR. HOLLOWAY: Objection. Form.

19 THE WITNESS: The security thing would be  
20 a disadvantage.

21 Q. (By Mr. Ritcheson) And any other  
22 disadvantages that you can think of?

23 A. Not in a meaningful sense. I think  
24 actually -- even if you -- if you built a system  
25 like the Koether system, even if you didn't want to

1 be part of the public Internet for security reasons,  
2 you might want to have a private Internet like the  
3 one that Ford Aerospace built in the '80s, when Ford  
4 Aerospace wanted to use TCP/IP to connect all of  
5 their facilities. But because it was a commercial  
6 activity, there was -- they couldn't use the same  
7 facilities that the actual Internet used, the  
8 NSFNET, so they leased their own lines and simply  
9 used TCP/IP to run a private network.

10 Q. Thinking about those sorts of options, let  
11 me ask you a question this way: What cost impact  
12 would there be to introducing -- in 1996 to  
13 introducing -- or combining, rather, Crater with  
14 Koether?

15 A. It would be less expensive to use a  
16 combination of Crater and Koether than to use ISDN  
17 and a strictly closed network.

18 Q. That would include the costs of a leased  
19 line?

20 A. The leased line and the equipment, the  
21 interconnection equipment to get you on the -- ISDN  
22 coverage was pretty spotty.

23 I would think as a designer, the primary  
24 benefit of going with the web was the fact that it  
25 made user interface design very easy.

1           So the -- in the -- in the mid to late  
2 '90s and early 2000s, I did a lot of contract  
3 programming work involving the creation of network  
4 diagnostics and equipment diagnostics. I worked for  
5 companies like Cisco and -- 3Com and Cisco and  
6 Network Equipment Technologies.

7           And at -- the system that I created for  
8 Network Equipment Technologies, I used HTML to lay  
9 out the operator screens that the diagnostic ran  
10 under, just because it was easier to describe those  
11 screens with HTML and use the tools for page  
12 creation that had been created for the web than to  
13 code all that stuff by hand, which is the way we  
14 would have done it before the web.

15           Q.   How important is user interface to  
16 Koether?

17           MR. HOLLOWAY:  Objection.  Form.

18           THE WITNESS:  It's sort of an open-ended  
19 question, isn't it?  Certainly, user interface  
20 is part of the system.  He describes the  
21 requirements of user interface, of how to  
22 implement it in terms of formatting the  
23 messages and that the messages have to have a  
24 particular syntax, but it's not a teaching on  
25 what makes one user interface preferable to

1 another.

2 Q. (By Mr. Ritcheson) Is the -- is the --  
3 the user that is interfacing with the Koether system  
4 is an employee of the -- the rental company --

5 MR. HOLLOWAY: Objection. Form.

6 Q. (By Mr. Ritcheson) -- am I right?

7 A. Koether describes a number of different  
8 users. I think even a franchise owner is one of the  
9 users that he -- so you have people that work in the  
10 kitchen, people that work at the central office that  
11 are monitoring a number of different kitchens, and  
12 he even has franchise owners, if I'm not  
13 misremembering that.

14 Q. Let's look back at Koether.

15 A. So in the background of the invention,  
16 Column 1, Koether mentions a concern about a labor  
17 shortage and the low efficiency of people in the  
18 food service industry to perform the tasks that are  
19 essentially necessary for just about any industry,  
20 that aren't specific to food service, that when  
21 they -- he seems to suggest that once people in the  
22 food service industry get away from simply preparing  
23 food, their efficiency drops and they're 20 percent  
24 as efficient as they might be. So his concern is  
25 about work allocation, primarily, so he devised a

1 system to allocate labor more effectively for this  
2 industry.

3 And he -- in that connection, he -- I do  
4 recall that he described a number of different  
5 users. So on -- in paragraph -- in Column 2, line  
6 60, he has some -- so line 63, "Advantageously, this  
7 allows service personnel as well as control center  
8 operators" to perform various functions. So --

9 Q. I'm not seeing the user.

10 A. Well, I would consider those personnel to  
11 be users.

12 Q. Oh. Why do you understand that to be  
13 true? It says that "The service" -- I mean,  
14 continuing on, "[The] service personnel may request  
15 the control center to generate and transmit various"  
16 messages. I just -- it's a minor point, but I'm  
17 trying to figure out who the intended user is of the  
18 Koether system. It seems to be the control -- the  
19 control center --

20 A. I remember reading a paragraph  
21 specifically on your -- on your question.

22 Q. Okay.

23 A. I have to -- and it wasn't something I  
24 opined on --

25 Q. Right.

1           A.    -- so I don't have a specific reference.  
2 I have to search for it.

3           Q.    I'm with you.

4           A.    But it's my understanding that -- it's my  
5 recollection, anyway, that Koether -- Koether refers  
6 to a number of different users --

7           Q.    Okay.

8           A.    -- including -- including, I do recall, a  
9 reference to franchise owners. If I had -- if I  
10 could do a text search for "franchise."

11          Q.    I did a text search for "franchise" and  
12 it's not coming up.

13          A.    Oh, really?

14               MR. HOLLOWAY:  Objection.  Form.

15          Q.    (By Mr. Ritcheson)  Is there something  
16 else?  Let me try "owner."

17          A.    But I would -- you know, look at his  
18 diagrams.  I mean, he's got pictures of terminals,  
19 and my assumption is that anywhere where you have a  
20 terminal, you have a user.

21          Q.    I concede that there's a user somewhere.  
22 My question --

23          A.    So he has a terminal that's attached to a  
24 base station and he has another terminal that's  
25 attached to the control center, and we also --

1 Q. Where are you looking at?

2 A. He also describes people walking around  
3 with these handheld devices --

4 Q. Right.

5 A. -- that are in the kitchen.

6 Q. Right. But they're not connected via the  
7 Internet; right?

8 A. Yeah, it's unclear.

9 MR. RITCHESON: All right. Why don't we  
10 take a break. Maybe if you have a chance, you  
11 can have a peek and see if you can find the  
12 section you're referring to. I didn't  
13 immediately see it and I'm curious if we can  
14 tie a bow around it.

15 MR. HOLLOWAY: Objection. If you want to  
16 do it on the record, that's fine.

17 MR. RITCHESON: Okay. Stay on the record.

18 MR. HOLLOWAY: So do you want him to look  
19 for this?

20 MR. RITCHESON: Sure.

21 MR. HOLLOWAY: Okay. He wants you to find  
22 the section that talks about the multiple  
23 users.

24 THE WITNESS: Okay. The system primary --  
25 the most common references I find users in

1 referring to the portions of this -- of the  
2 Koether patent that precede the recitation of  
3 claims address service personnel.

4 Q. (By Mr. Ritcheson) Where are you pointing  
5 to?

6 A. Well, he talks -- in Column 2, line 2,  
7 "Maintenance and repair, once initialized, are  
8 monitored...." So those are -- that maintenance and  
9 repair are performed by maintenance and repair  
10 people, who are dispatched by the system.

11 He says in Column 2, lines 32, 33, the  
12 following, "Most of the functions are automatically  
13 controlled by the control center, but may also be  
14 performed manually by a control center operator."  
15 The control center operator is one of the users that  
16 is described as using the system.

17 We have service personnel again on line  
18 56, service personnel and control center operators  
19 in the previous lines that I referenced at 66 or so  
20 following.

21 Then there is -- there's some discussion  
22 of the kitchen personnel.

23 Q. Where?

24 A. Column 6, lines 47, and following we have  
25 a -- well, line -- beginning with line 49, "Data

1 transmitted through communication controller...can  
2 be displayed on a communication display...The  
3 display controller...is provided with a map display  
4 which displays information regarding the kitchen  
5 appliances in a graphical manner" -- graphical  
6 manner the way a web page might -- "preexisting maps  
7 of arbitrarily large" -- so it's Google Maps circa  
8 1996 with the location so that people could be  
9 dispatched to it.

10 (Thereupon, there was an interruption in  
11 the proceedings.)

12 THE WITNESS: Column 10, line 1,  
13 "Referring to Figure 8 on-site repair is  
14 enhanced through the...portable" -- so there's  
15 a user there, the portable -- the user of the  
16 portable device that interrogates the system  
17 and gets various information so it helps the  
18 repair person do their thing.

19 We have -- also, when we drop down here to  
20 lines -- well, lines 53 and following, we're  
21 talking about transfers of funds from the  
22 customers' and subscribers' financial  
23 institution to the service agency. I don't  
24 know that there's a -- if that really means  
25 that the -- the customers' or the subscribers'

1           accounting people are users. I mean, they're  
2           sort of implicated. There's money transfers  
3           taking place that would otherwise have to be  
4           done immediately by humans. So I guess you  
5           wouldn't technically call them users.

6           Q.     (By Mr. Ritcheson) Anything else?

7           A.     So -- and there is in here -- somewhere  
8           there's -- when the system has decided that a piece  
9           of equipment in the kitchen is defective, it puts up  
10          a notice to the kitchen personnel not to use that  
11          appliance. I forget where I saw that, but it's in  
12          this portion that precedes the claims.

13          Q.     Anything else?

14          A.     The discussion of cooking profiles leads  
15          me to believe that the --

16          Q.     Where are you looking?

17          A.     Cooking profiles are, for example,  
18          mentioned in Claim 18, where a cooking profile can  
19          be -- can be modified -- cooking profiles are  
20          mentioned maybe a half dozen times, if not more, in  
21          this -- in the Koether patent, suggests that when  
22          a -- when a kitchen personnel is using an appliance  
23          that has had a cooking profile installed in it,  
24          unbeknownst to the user, they're actually using the  
25          system, because the cooking profile would be

1 controlling the device.

2 So presumably -- there's not much detail  
3 on what a cooking profile is, but if it's what I  
4 think it is, it's like the "popcorn" button on a  
5 microwave that -- you know, that just runs the  
6 microwave for some period of time that it thinks is  
7 correct for cooking popcorn. So I'm using a cooking  
8 profile every time I punch that button.

9 But, yeah, I think actually the best  
10 answer is that as the diagrams -- in every place  
11 where there's a terminal in a diagram, there's a  
12 user.

13 Q. Okay.

14 A. So the overview diagram, the Diagram 1,  
15 Diagram -- I mean Figure 2, Figure 3. Figure 4 is a  
16 graphical description of the map with a location,  
17 which would be used by the service personnel.

18 Q. When we're talking about the display  
19 controller 220, where is that located? That's on  
20 Figure 3. I think you referenced it earlier.

21 A. This is in the control center.

22 Q. And the terminals 185 are also in the  
23 control center?

24 MR. HOLLOWAY: Objection. Form.

25 THE WITNESS: Yeah. In Figure 1, we have

1 a terminal 185 that it has a direct line to the  
2 control center, and in Figure 3 we have  
3 terminals 185 that are on a local area network  
4 that attaches to a communication controller and  
5 a display controller.

6 MR. RITCHESON: Okay. All right. Why  
7 don't we take a break.

8 (Thereupon, there was an interruption in  
9 the proceedings.)

10 Q. (By Mr. Ritcheson) All right. Let's  
11 continue with Claim 10 of the '130 patent.

12 I believe the portion of your -- you treat  
13 them together, 10 and 119, I believe, in  
14 paragraph 52 of your declaration; is that correct?

15 A. Let me get the right document here.

16 Yep. Paragraph 52?

17 Q. Yeah. And I think that deals collectively  
18 with Claims 10 and 119.

19 A. Yeah.

20 Q. And in this case, if you turn to -- I'm at  
21 119 of the '130 patent so that you can actually see  
22 the language that's involved. I have that at  
23 Column 95.

24 A. Okay.

25 Q. And this is a dependent claim depending

1 from Claim 98; correct?

2 A. Yes.

3 Q. All right. Seems to be a similar  
4 configuration of three control devices.

5 A. But this is where the roles have been  
6 reversed, and so the first control device is the  
7 thing that used to be called the third control  
8 device.

9 Q. Okay. So the first control device is used  
10 for activating the premises equipment?

11 A. It's the control center.

12 Q. You sure?

13 A. Wait a minute. No, no. It's at the  
14 premises.

15 Q. Okay.

16 A. Well, it's capable -- yeah, capable of  
17 operating on a premises device. Let me see. You  
18 can't ever take anything for granted.

19 Q. Yeah, right. All right.

20 A. Oh, yeah, and the third control device is  
21 at the remote location. So, yeah, the first one is  
22 at the premises and then the intermediate system is  
23 some unknown location and the third is remote, is  
24 basically the control center.

25 Q. Okay.

1 A. And so when you get to --

2 Q. 119?

3 A. -- 119, we've presumed all of that, and on  
4 the premises we have a video recording device  
5 instead of some other kind of sensor, video  
6 recording device and a camera -- oh, one of -- oh,  
7 one of A and B. It would have been easier just to  
8 say one to be either A or B, but that's what we  
9 have, either video recording device or camera for  
10 obtaining video information at the premises.

11 Q. Okay.

12 A. Yeah.

13 Q. And that feature -- that is, the video  
14 recording device -- is not in Koether; correct?

15 MR. HOLLOWAY: Objection to form.

16 THE WITNESS: Koether -- Koether has the  
17 typical kind of open-ended claim that -- what  
18 he's describing is an architecture that is  
19 built on certain principles, and he's given us  
20 one embodiment of it.

21 But if we substitute in a video camera for  
22 a temperature sensor, we haven't really changed  
23 the principles in the architecture; we've just  
24 changed the embodiment.

25 Q. (By Mr. Ritcheson) Right. And I probably

1 asked a poor question, but it seems, from my reading  
2 of your declaration, that you're adding Crater to  
3 Koether in order to get Claim 119.

4 Am I misreading that?

5 MR. HOLLOWAY: Objection. Form.

6 THE WITNESS: It is kind of a belt and  
7 suspender situation. I think Koether actually  
8 covers 119, but the addition of Crater covers  
9 it twice.

10 Q. (By Mr. Ritcheson) And I don't know this.  
11 In your report for 119, do you rely solely on the  
12 combination of Koether and Crater?

13 A. Knowledge of person of ordinary skill of  
14 the art is also something that my report's based on.

15 Q. Okay. I'm sorry. It's the end of the  
16 day. I'm asking bad questions.

17 My reading of your declaration is that  
18 Claim 119 is addressed only in paragraph 52.

19 Is that accurate?

20 MR. HOLLOWAY: Objection. Form.

21 THE WITNESS: Paragraph 52 addresses Claim  
22 119 more directly than the rest of my report  
23 does.

24 Q. (By Mr. Ritcheson) I mean, I'm trying to  
25 pin this down.

1           A.    No, I don't think there's a specific  
2           reference to 119 in my report other than in  
3           paragraph 52.

4           Q.    Okay.  And paragraph 52 relies on Crater  
5           in order to provide the video --

6           A.    In order to make the -- in order to  
7           make -- oh, go ahead and ask your question.  I'm  
8           sorry.  I interrupted you.

9           Q.    No, it's okay.

10          A.    Go ahead and ask the question.

11          Q.    -- to add the camera for obtaining video  
12          information or video recording device; correct?

13          A.    I rely on Crater to make that crystal  
14          clear.  The video -- I say Crater teaches the --  
15          expressly teaches the transmission of realtime video  
16          to the monitoring station, because Crater's very  
17          heavy on the multimedia aspect.  But it is  
18          multimedia for a purpose, it's not entertainment  
19          multimedia, so Crater, as I explain towards the end  
20          of -- on page 25 on the third line, that he has a  
21          motivation for this.  The reason that he wants video  
22          at the premises is for monitoring purposes.

23                 So the video camera enables the personnel  
24          in the control center to be able to see what's going  
25          on in the monitored station, which is, you know,

1 additional information to what they would know with  
2 the Koether system as it's described.

3 Q. So why would you combine -- why would you  
4 add Crater to Koether?

5 MR. HOLLOWAY: Objection. Form.

6 THE WITNESS: Because Crater mentions the  
7 word "video." 119 tries to distinguish itself  
8 from the other claims by mentioning video.

9 But video is a particular -- it's a  
10 sensor. A video camera is a sensor, just like  
11 a temperature sensor is a sensor, only instead  
12 of sensing heat, it senses light.

13 So if you design the architecture of the  
14 system that enables you to sense temperature,  
15 it's a fairly trivial modification of that  
16 system to have it sense light.

17 Q. (By Mr. Ritcheson) In the smart kitchen  
18 environment, why would you want to have -- I could  
19 understand why you want to have appliances that you  
20 could -- that you could monitor, but why would you  
21 want to have video?

22 A. I think there are some -- well, it's  
23 always a good idea to have multiple sensors if you  
24 can, because sensors are prone to failure. And so  
25 if you wanted to have another level of

1 confirmation -- if you have a sensor that says  
2 there's been a particular kind of failure in the --  
3 in the deep fryer and you can look at it, you can  
4 discern whether the visual evidence confirms the  
5 sensor evidence.

6 Q. What sort of visual indicia of that  
7 failure would you see?

8 A. Oh, bubbling oil, an absence of oil in the  
9 deep fat fryer, maybe the presence of a cat in it.  
10 I mean, there are lots of things that you can see  
11 that would tell you things that your sensor wasn't  
12 designed to report.

13 Q. Sort of an operational issue?

14 A. Uh-huh (affirmative).

15 Q. "Yes"?

16 A. Yes.

17 Q. Isn't that the sort of thing that a cook  
18 would see, the cat in the deep fryer?

19 MR. HOLLOWAY: Objection. Form.

20 THE WITNESS: Well, I think anything the  
21 eye can perceive through a video camera, the  
22 eye can perceive directly, unless it's a  
23 infrared or something like that. There's a  
24 spectra of light that are not visible to the  
25 human eye.

1 Q. (By Mr. Ritcheson) Other than the cat in  
2 the deep fryer -- and I know that was a joke --

3 A. Well, I mean, this -- you know, Koether  
4 teaches fast food restaurants and kids that work in  
5 fast food restaurants have been known to do some  
6 weird things.

7 Q. Would the addition of a video camera make  
8 the equipment more reliable than, for example, using  
9 the controller that's already disclosed in Koether?

10 MR. HOLLOWAY: Objection. Form.

11 THE WITNESS: More? I don't believe it  
12 would make it more reliable. I don't think  
13 that's the motivation. I think the motivation  
14 is to make the repairs and maintenance more  
15 efficient.

16 The efficient allocation of personnel is  
17 Koether's goal. The more information you have,  
18 the more efficiently you can assign the  
19 personnel.

20 Q. (By Mr. Ritcheson) Any other reason for  
21 combining Koether with adding a video --

22 A. Additional information. It makes the  
23 video thing crystal clear.

24 Q. It makes what?

25 A. The video thing crystal clear.

1 Q. What other observable conditions do you  
2 believe might be visible through a video camera in  
3 the kitchen?

4 MR. HOLLOWAY: Objection. Form.

5 THE WITNESS: That's a totally open-ended  
6 question.

7 Q. (By Mr. Ritcheson) Okay.

8 A. I mean, I've already said anything you can  
9 see with the eye, you can see through a video  
10 camera.

11 Q. Is there anything that you can see through  
12 the eye that you couldn't also detect through  
13 sensors at the equipment? I'm trying to find the  
14 reason to add the video camera to all of this.

15 MR. HOLLOWAY: Objection. Form.

16 THE WITNESS: I think I've already  
17 answered that.

18 Q. (By Mr. Ritcheson) It's additional  
19 information?

20 A. Additional information.

21 Q. Okay. Let's leave it there, then.

22 And I think this is true, that -- let me  
23 just double check -- Claim 10 is a similar -- yes.

24 If you look at Claim 10, you'll agree, I  
25 think, that this is a claim that depends from Claim

1 1 and includes the same language with respect to  
2 video recording device or a camera?

3 A. It does appear to be the case that Claim  
4 10 and 119 are redundant.

5 Q. Well, similar.

6 A. Extremely similar.

7 Q. Okay. Let me double check here. I think  
8 I've got one more, Claim 124. Does that sound  
9 right? I believe it's Claim -- paragraph 55 of your  
10 declaration.

11 A. 124. Yep, paragraph 55 addresses 124,  
12 storage media.

13 Q. Now, this is a -- 124, I have is a  
14 dependent -- a dependent dependent claim. This  
15 is -- if you look at it, I believe -- we've talked  
16 about Claim 119, which depends from Claim 98. I  
17 believe this says that 124 depends also from Claim  
18 119, which depends from Claim 98.

19 A. Why make it straightforward when you can  
20 make it complicated?

21 Yeah, the apparatus of 119 where, in  
22 addition to the video recording device or camera,  
23 there's a storage medium for recording videos or  
24 pictures --

25 Q. Okay.

1 A. -- translating that into English.

2 Q. Now, that means that there's some --  
3 there's not just a broadcast of the image to the  
4 control center, but there's also a -- some sort of  
5 storage media at the camera itself?

6 A. Yeah. So this is your security camera in  
7 7-Eleven that the cops look at to figure out who  
8 robbed you.

9 Q. Now, it's true that the -- that the  
10 Koether patent discloses sending information to the  
11 control center so that the control center can, for  
12 example, send repair personnel, maintenance people;  
13 yes?

14 A. Yes.

15 MR. HOLLOWAY: Objection. Form.

16 Q. (By Mr. Ritcheson) Why, then, would you  
17 want to have storage medium at the kitchen, which is  
18 not where the repair and maintenance people are  
19 being sent from?

20 MR. HOLLOWAY: Objection. Form.

21 THE WITNESS: Why would I want -- why  
22 would I want to record the video --

23 Q. (By Mr. Ritcheson) Yes.

24 A. -- at the kitchen?

25 Q. Yes.

1           A.    There's plenty of reasons.  One of them is  
2   for redundancy.  So it's good to have a copy of all  
3   the video that's captured at the site so that people  
4   can play it back and look at it, even though it may  
5   not have been completely and correctly transferred  
6   to the control center.  So we have a distributed  
7   network here, and the value of distributed networks  
8   is resiliency, right, among other things.

9           There are going to be situations in which  
10  the communications link between the kitchen and the  
11  control center is down or is overloaded or has  
12  got -- experiencing some sort of problem.  In any  
13  case like that, you wouldn't want information that  
14  was captured in the kitchen to be lost.

15           So you retain that information so that  
16  whenever the link is restored, you can upload the  
17  information to the control center and get the  
18  control center up to date on what's happening in the  
19  kitchen.

20           Or if, say, there's an earthquake, it may  
21  be a long time until service is restored at the  
22  control center, but you still need to have that --  
23  it's good to have that information at the kitchen so  
24  that you can make immediate repairs.

25           Q.    But Koether has all that information --

1 that is, the information that's gathered at the  
2 kitchen -- stored at the base station; correct?

3 A. It's -- I think that's an optional  
4 scenario.

5 Q. There isn't any disclosure in Koether of  
6 storage of any of the information elsewhere -- I  
7 mean, in the kitchen, for example, is there?

8 A. So you're making a distinction between  
9 storing it on the base station versus storing it on  
10 the microprocessor controller in Koether?

11 Q. Well, we know that the base station is  
12 remote from the kitchen, or at least from the  
13 kitchen appliance.

14 A. It's remote from the appliance, yes, but  
15 it could be just at the far end of the kitchen.

16 Q. But in this case, the video camera is  
17 actually in the kitchen --

18 A. Okay.

19 Q. -- because it's -- isn't that how --

20 A. Yes.

21 Q. -- am I reading that correctly?

22 A. Yes.

23 Q. And the camera would be storing this  
24 information at the kitchen even though all the other  
25 information is stored at the base station --

1 MR. HOLLOWAY: Objection. Form.

2 Q. (By Mr. Ritcheson) -- is that true?

3 A. As a general -- I mean, I don't think that  
4 limitation necessarily applies.

5 Q. Which one?

6 A. That Koether -- Koether's pretty flexible  
7 in terms of allocating functions to devices; right?  
8 So you have these three devices and a lot of the  
9 functions that are performed by the individual  
10 devices can be performed also as easily by another  
11 one of the devices.

12 So in real life, you often tend to let --  
13 if the chip that you built your base station out of  
14 has some sort of storage interface built into it,  
15 then it would be natural to just sort of plug a hard  
16 drive into that and let that be your storage.

17 But if you had some other kind of flash  
18 memory or something that you wanted to use on an  
19 appliance controller, you might store a video there.  
20 I mean, cameras nowadays store video internally, so  
21 it could very well be that you had a camera that's  
22 stored -- where the storage was done by the camera  
23 itself.

24 Q. For how long?

25 MR. HOLLOWAY: Objection. Form.

1 THE WITNESS: Well, today it could be  
2 hours.

3 Q. (By Mr. Ritcheson) In 1996?

4 MR. HOLLOWAY: Same.

5 THE WITNESS: In 1996, it was not that  
6 long. But with low-resolution pictures, it  
7 could be long enough to be useful.

8 Q. (By Mr. Ritcheson) In this scenario where  
9 you've added the video camera of Crater to Koether,  
10 that's -- that's a redundancy, as well, isn't it?

11 A. Uh-huh (affirmative). In control systems,  
12 there's nothing wrong with redundancy. Redundancy's  
13 how we achieve our reliability.

14 Q. At what -- from an engineering perspective  
15 in 1996, at what point is there a cost/benefit  
16 analysis of -- why would I add this level of  
17 redundancy?

18 MR. HOLLOWAY: Objection. Form.

19 THE WITNESS: Well, I think that question  
20 actually comes up in the -- in Claim 124  
21 itself. In 124, you have a video recording  
22 device and a camera, as well as a storage  
23 medium for storing the video -- the recorded  
24 video.

25 Q. (By Mr. Ritcheson) Okay.

1           A.    So "video recording device" implies the  
2 storage media.  You don't have a -- you don't have a  
3 VCR without a tape.

4                    So is the -- is the intent of 124 to  
5 distinguish the videotape from the video recording,  
6 the VCR?

7           Q.    Which one's the VCR?  I'm sorry.

8           A.    The video recording device.

9           Q.    That's -- VCR is --

10          A.    Video recording device.  A VCR is a video  
11 recording device.

12          Q.    You think that within the context of the  
13 '130 patent that the video recording device is a  
14 VCR?

15          A.    I'm using the term as an equivalent for a  
16 video -- as an example of a video recording device.  
17 So I don't know, "video recording device," does it  
18 have a special meaning?

19          Q.    Does it have a special meaning?

20          A.    I don't see a special meaning defined to  
21 it.  I don't see it defined anywhere.  So we're just  
22 to take video recording device according to its  
23 plain and ordinary meaning or broadest possible  
24 reasonable interpretation, so we have a recording  
25 device and then we also have a storage medium.

1           So how is the storage medium -- how is  
2           that distinguishable from a video recording device?  
3           Recording is storage. Committing information to  
4           storage, that's recording.

5           So I -- I can only guess as to what the  
6           purpose of having a storage medium added to a  
7           storage -- a device that already has a storage  
8           medium. When I have a storage medium, then we're  
9           not realtime anymore, are we?

10          Q.     That's correct.

11                     What does "realtime" mean to you?

12          MR. HOLLOWAY:  Objection.  Form.

13          THE WITNESS:  What does "realtime" mean to  
14          me in the context of?

15          Q.     (By Mr. Ritcheson)  Is it Crater?

16          A.     The field of invention that we're talking  
17          about here?

18          Q.     In the context of Crater.  Wasn't Crater  
19          the one that you said had -- yes, "realtime video  
20          information," paragraph 55 of your declaration.

21                     What did you mean when you called that  
22          realtime video information?

23          A.     Realtime video is video information that's  
24          transmitted from the point of capture to the point  
25          of viewing with minimal delay over the propagation

1 inherent in the speed of light and which can be  
2 processed and viewed at the same rate at which it's  
3 recorded.

4 MR. RITCHESON: Wow. Could you read that  
5 back?

6 (Whereupon, the record was read by the  
7 reporter as follows:

8 Answer, "Realtime video is video  
9 information that's transmitted from the point  
10 of capture to the point of viewing with minimal  
11 delay over the propagation inherent in the  
12 speed of light and which can be processed and  
13 viewed at the same rate at which it's  
14 recorded.")

15 Q. (By Mr. Ritcheson) There's a reason I  
16 couldn't hear that the first time.

17 MR. RITCHESON: Let me take a break and  
18 see if we're -- if we can wrap for the  
19 afternoon.

20 MR. HOLLOWAY: Okay.

21 (Thereupon, there was an interruption in  
22 the proceedings.)

23 MR. RITCHESON: We're done for the day.

24 (Whereupon, the deposition was suspended  
25 at 3:37 p.m.)

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

(Pursuant to Rule 30(e) of the Federal  
Rules of Civil Procedure and/or O.C.G.A.  
9-11-30(e), signature of the witness has been  
reserved.)

C E R T I F I C A T E

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

STATE OF GEORGIA:

COUNTY OF FULTON:

I hereby certify that the foregoing transcript was taken down, as stated in the caption, and the questions and answers thereto were reduced to typewriting under my direction; that the foregoing pages represent a true, complete, and correct transcript of the evidence given upon said hearing, and I further certify that I am not of kin or counsel to the parties in the case; am not in the regular employ of counsel for any of said parties; nor am I in anywise interested in the result of said case.



LEE ANN BARNES, CCR B-1852, RPR, CRR

1 COURT REPORTER DISCLOSURE  
2

3 Pursuant to Article 10.B. of the Rules and  
4 Regulations of the Board of Court Reporting of the  
5 Judicial Council of Georgia which states: "Each  
6 court reporter shall tender a disclosure form at the  
7 time of the taking of the deposition stating the  
8 arrangements made for the reporting services of the  
9 certified court reporter, by the certified court  
10 reporter, the court reporter's employer, or the  
11 referral source for the deposition, with any party  
12 to the litigation, counsel to the parties or other  
13 entity. Such form shall be attached to the  
14 deposition transcript," I make the following  
15 disclosure:

16 I am a Georgia Certified Court Reporter. I am here  
17 as a representative of Veritext Legal Solutions.  
18 Veritext Legal Solutions was contacted to provide  
19 court reporting services for the deposition.  
20 Veritext Legal Solutions will not be taking this  
21 deposition under any contract that is prohibited by  
22 O.C.G.A. 9-11-28 (c).

23 Veritext Legal Solutions has no contract/agreement  
24 to provide reporting services with any party to the  
25 case, any counsel in the case, or any reporter or  
reporting agency from whom a referral might have  
been made to cover this deposition. Veritext Legal  
Solutions will charge its usual and customary rates  
to all parties in the case, and a financial discount  
will not be given to any party to this litigation.

20  
21 

22  
23 LEE ANN BARNES, CCR B-1852, RPR, CRR  
24  
25



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

Veritext Legal Solutions  
290 W. Mt. Pleasant Ave. - Suite 3200  
Livingston, New Jersey 07039  
Toll Free: 800-227-8440 Fax: 973-629-1287

\_\_\_\_\_, 2016

To: Clay Holloway, Esq.

Case Name: Coxcom LLC v. Joao Control & Monitoring Systems LLC

Veritext Reference Number: 2300074

Witness: Richard Bennett Deposition Date: 4/28/2016

Dear Sir/Madam:

Enclosed please find a deposition transcript. Please have the witness review the transcript and note any changes or corrections on the included errata sheet, indicating the page, line number, change, and the reason for the change. Have the witness' signature at the bottom of the sheet notarized except in California where they are signing under penalty of perjury and forward the errata sheet back to us at the address shown above.

If the jurat is not returned within thirty days of your receipt of this letter, the reading and signing will be deemed waived.

Sincerely,

Production Department

Encl.

cc: Steven Ritcheson, Esq.

<b>&amp;</b>	176:21	<b>15</b> 4:5 12:14 29:25	24:20 43:17 76:12
<b>&amp;</b> 1:6 2:4 4:8,19 6:8 188:3 189:6	<b>11b</b> 29:25 40:5	118:6,8,14,18,23,25	76:14,15 88:5
<b>0</b>	<b>12</b> 113:1,6,11,11,22	119:2,3 131:17	109:22 110:6,10,15
<b>010</b> 64:9 66:5	113:24 114:22	<b>150</b> 28:17 29:1	110:18 127:2,5
<b>07039</b> 189:2	116:5,25 127:23	30:12,19 34:25 35:7	133:14 160:5 163:6
<b>08/622,749</b> 4:9	128:18 129:12	75:20 76:3,5 77:8	163:6,11 166:15
<b>1</b>	130:24 131:10,17	88:9 97:11,15 100:9	<b>20</b> 11:19,21,21,22
<b>1</b> 4:3 23:14,16 43:18	<b>120</b> 76:20 111:23	112:10	60:8 86:3 87:8
43:24 55:1,22 56:1	<b>123</b> 4:8,19	<b>16</b> 4:16 38:22	159:23
56:18 57:12 64:9	<b>124</b> 176:8,11,11,13	<b>17</b> 44:12 119:14	<b>2000s</b> 158:2
69:14 70:6 72:15,18	176:17 181:20,21	120:8,11,13 130:24	<b>2016</b> 1:14 5:1
72:21 73:3,11 75:7	182:4	131:10,17	188:22 189:4
78:2,8 79:2 81:9	<b>12:15</b> 107:21	<b>170</b> 75:23 76:4,5	<b>210</b> 73:24
97:2 109:5,9,22	<b>13</b> 43:18 127:2	94:3 98:9,16,22	<b>220</b> 166:19
110:15 114:22,24	129:10	100:7 102:24 127:6	<b>225</b> 72:24
115:1 116:1,14,14	<b>130</b> 11:3,25 16:7	127:13	<b>23</b> 4:3 88:6
116:18,19 117:1,9	17:3 24:22,25 25:1	<b>175</b> 73:20	<b>2300074</b> 189:7
117:10 119:18,20	25:2,20,20 33:25	<b>1760</b> 55:11,13,16,21	<b>25</b> 4:9 91:22 109:23
130:24 131:10,17	34:5 38:6,17,24	58:7 64:1 65:7,15	110:2 171:20
133:13 159:16	39:6,10 54:11 55:1	80:23 96:24 104:14	<b>26</b> 109:23 110:2
164:12 166:14,25	55:5,5,17 56:5	108:6 119:4 123:15	<b>27</b> 26:1 75:10 91:22
176:1	60:10 61:15 62:3,8	<b>18</b> 38:24 39:4,7,14	<b>28</b> 1:14 5:1
<b>1-1/2</b> 147:11	63:18 64:7,8,11,20	40:3 165:18	<b>2800</b> 2:5
<b>1.1.</b> 144:10	64:24 65:13,21 66:8	<b>185</b> 166:22 167:1,3	<b>29</b> 74:20,22
<b>10</b> 12:14 76:7,9 91:2	66:9,10 69:14 76:21	<b>1852</b> 1:18 186:16	<b>290</b> 189:1
91:5,6 164:12	82:2 84:1,6 97:1,24	187:23	<b>3</b>
167:11,13,18	108:6 109:5 111:23	<b>1970s</b> 149:23	<b>3</b> 4:9 25:8,11,12
175:23,24 176:4	113:21,22 119:14	<b>1981</b> 155:19	26:8 27:9 28:19
<b>10.b.</b> 187:3	119:14 130:20	<b>1984</b> 156:12	29:7 33:13,19 35:7
<b>100</b> 73:13 123:2	167:11,21 182:13	<b>1985</b> 146:6	36:20 37:16 40:1,6
<b>1004</b> 26:24 44:6	<b>135</b> 4:15	<b>1990s</b> 137:1 145:24	48:6 85:13,16
<b>103</b> 130:16,19	<b>14</b> 118:16	<b>1994</b> 154:6	166:15,20 167:2
<b>104</b> 37:25	<b>140</b> 75:16 76:3,5,20	<b>1996</b> 26:1 38:24	<b>30</b> 51:23 80:14,16
<b>105</b> 73:14 127:11	92:23 97:10,21	39:4,7,14 40:3 51:9	185:1
<b>11</b> 108:7,11 113:3	107:4 108:21	51:15 52:11,13	<b>30309-4528</b> 2:6
<b>110</b> 76:18,20 109:18	109:17 110:5	67:16 68:9,15 70:5	<b>311-319</b> 4:7,18
111:25 113:16,17	111:10,21,25	77:21 85:21 145:6	<b>32</b> 40:13 43:9,13,20
<b>1100</b> 1:16,16 2:5	112:10 127:6	145:13,18 150:10	44:1,7,8,9,10
<b>119</b> 167:13,18,21	<b>145</b> 130:25 131:10	151:2 153:9,11	163:11
169:2,3 170:3,8,11	131:17	157:12 164:8 181:3	<b>3200</b> 189:1
170:18,22 171:2	<b>149</b> 130:25 131:10	181:5,15	<b>33</b> 85:17 163:11
172:7 176:4,16,18	131:17,24 132:1,3	<b>2</b>	<b>34</b> 80:23 81:3,8
	133:3,3,8,10,13,14	<b>2</b> 4:5 15:19,22 16:10	<b>347</b> 2:12
	134:3,6,8,14,19	16:11 17:1,11 18:3	

<p><b>35</b> 4:7,18 86:3 87:8  <b>36</b> 87:23 88:6 96:20  96:24 98:12 102:4  104:13  <b>363</b> 11:3,25 16:15  17:3 143:10  <b>37</b> 4:7,12,18 44:6  <b>3:37</b> 184:25  <b>3com</b> 21:25 22:1,14  22:14 158:5</p>	<p><b>54</b> 4:10  <b>55</b> 176:9,11 183:20  <b>56</b> 163:18  <b>59</b> 56:2,2,4  <b>5b</b> 26:20 27:6 28:14</p>	<p><b>810</b> 77:13  <b>818.882.1030</b> 2:13  <b>820</b> 77:13  <b>85</b> 148:20</p>	<p><b>accord</b> 100:17  <b>accounting</b> 72:9  94:23 165:1  <b>accurate</b> 6:2 26:6  81:18 104:20,23  120:8 170:19  <b>achieve</b> 154:21  181:13  <b>achieved</b> 155:20  <b>acknowledgment</b>  122:3 123:23 124:9  147:19 149:1,2  <b>acknowledgments</b>  123:13  <b>acquired</b> 22:15  <b>act</b> 6:10 89:8,13  <b>acted</b> 9:9,11 19:11  <b>acting</b> 9:6 105:16  <b>action</b> 91:23 94:19  94:22  <b>actions</b> 127:14  <b>activate</b> 79:8  <b>activating</b> 78:25  115:20 168:10  <b>activation</b> 80:8  <b>active</b> 137:4  <b>actively</b> 89:23,25  <b>activities</b> 47:8 154:1  <b>activity</b> 149:22  157:6  <b>actors</b> 151:22  <b>actual</b> 10:24 19:25  25:20 33:24 48:17  90:12 132:8 157:7  <b>add</b> 29:24 54:1,6  171:11 172:4  175:14 181:16  <b>added</b> 181:9 183:6  <b>adding</b> 170:2 174:21  <b>addition</b> 170:8  174:7 176:22  <b>additional</b> 54:1  172:1 174:22  175:18,20</p>
<p><b>4</b></p>	<p><b>6</b></p>	<p><b>9</b></p>	
<p><b>4</b> 4:10 28:19 30:13  38:21 54:8,12 56:6  60:5 109:23 110:2  127:22 128:8,10  129:11 166:15  <b>4/28/2016</b> 188:3  189:8  <b>40</b> 155:24  <b>404.541.3484</b> 2:7  <b>404.815.6537</b> 2:6  <b>42</b> 120:7,10,16,19  126:9 129:14  <b>42.1</b> 4:8,19  <b>42.100</b> 4:8,19  <b>42.108</b> 4:13  <b>43</b> 120:7,12 126:9  126:21 127:2,21  129:5,8,14  <b>47</b> 163:24  <b>49</b> 163:25</p>	<p><b>6</b> 4:14 63:19 64:5  70:19,22 154:6  163:24  <b>6,549,130</b> 1:5 4:7,11  15:24  <b>60</b> 97:7 102:16  127:22 160:6  <b>600</b> 9:24  <b>63</b> 4:12 127:23  160:6  <b>66</b> 163:19  <b>67</b> 97:7 102:16</p>	<p><b>9-11-28</b> 187:14  <b>9-11-30</b> 185:3  <b>90s</b> 137:1,2,2 138:4  151:17 154:6  155:12 158:2  <b>91311</b> 2:12  <b>93</b> 155:17  <b>95</b> 167:23  <b>950</b> 32:11,13  <b>96</b> 49:25 50:5  <b>970</b> 30:20 34:12,14  34:17,24 35:8,16  40:7 42:21 43:5  <b>973-629-1287</b> 189:2  <b>98</b> 130:24 131:10,17  168:1 176:16,18  <b>9800d</b> 2:12  <b>9:44</b> 1:15</p>	
<p><b>5</b></p>	<p><b>7</b></p>	<p><b>a</b></p>	
<p><b>5</b> 3:3 4:12 9:24  48:13 63:20,21 86:3  87:8 97:7 102:16  108:10 127:23  128:18 154:6  <b>5,805,442</b> 4:15  <b>5,875,430</b> 4:14  <b>510</b> 28:18 29:19  <b>52</b> 167:14,16 170:18  170:21 171:3,4  <b>53</b> 164:20</p>	<p><b>7</b> 4:15 66:13 67:9  135:2,5 177:7  <b>7,397,363</b> 4:18  16:23  <b>70</b> 4:14 147:7  <b>74</b> 56:16,19 69:16  78:3  <b>75</b> 69:16</p>	<p><b>a.m.</b> 1:15  <b>ability</b> 103:21  <b>able</b> 72:5 105:13  124:1 150:6 171:24  <b>absence</b> 122:20  123:25 173:8  <b>absolutely</b> 84:12  <b>absolutes</b> 105:23  <b>abstract</b> 52:22,23,24  <b>abstraction</b> 85:6  <b>abundantly</b> 32:13  <b>accept</b> 96:7  <b>acceptable</b> 153:24  <b>accepted</b> 154:15  <b>access</b> 26:10,10 40:7  41:14 42:5,13 44:24  45:17 104:18 106:1  106:16  <b>accomplished</b> 89:25  90:3,13</p>	
<p><b>8</b></p>	<p><b>8</b></p>		

<p><b>address</b> 59:13 75:9 163:3 189:13</p> <p><b>addressed</b> 170:18</p> <p><b>addresses</b> 144:2 170:21 176:11</p> <p><b>adequate</b> 59:20</p> <p><b>administration</b> 153:22 154:3,10 155:15</p> <p><b>administrative</b> 66:19 69:23</p> <p><b>adopted</b> 60:4,8,13 60:14</p> <p><b>advantageously</b> 160:6</p> <p><b>advantages</b> 151:25</p> <p><b>advent</b> 155:3,4</p> <p><b>advice</b> 152:17</p> <p><b>advised</b> 58:6,8</p> <p><b>aerospace</b> 157:3,4</p> <p><b>afar</b> 28:10</p> <p><b>affiliated</b> 6:24</p> <p><b>affirmative</b> 10:20 20:21 55:18 64:2 67:11 77:9 86:4 87:20 98:4 113:7 145:1 173:14 181:11</p> <p><b>afternoon</b> 184:19</p> <p><b>agency</b> 164:23 187:17</p> <p><b>aggressively</b> 152:4</p> <p><b>ago</b> 21:5</p> <p><b>agree</b> 118:2 133:15 133:20 175:24</p> <p><b>agreement</b> 187:16</p> <p><b>ahead</b> 8:13 171:7,10</p> <p><b>al</b> 154:7</p> <p><b>alarm</b> 105:24</p> <p><b>lighting</b> 115:3</p> <p><b>alleged</b> 154:8</p> <p><b>allocate</b> 160:1</p> <p><b>allocating</b> 180:7</p> <p><b>allocation</b> 159:25 174:16</p>	<p><b>allow</b> 44:24 53:17 62:23 87:25 88:24 102:5 105:8 141:10 141:14</p> <p><b>allowed</b> 8:3,16,23 137:14 149:5</p> <p><b>allows</b> 72:3 95:11 122:7 160:7</p> <p><b>alternative</b> 30:11 136:23</p> <p><b>alternatively</b> 127:11 128:21</p> <p><b>ambiguity</b> 15:2</p> <p><b>ambiguous</b> 10:12</p> <p><b>america</b> 156:5,10</p> <p><b>amount</b> 10:1 37:21</p> <p><b>analysis</b> 39:19 59:23 60:7 135:21 181:16</p> <p><b>ancestor</b> 64:8</p> <p><b>andrews</b> 24:3</p> <p><b>ann</b> 1:18 186:16 187:23</p> <p><b>answer</b> 7:24 14:11 18:12,15,19,21,22 27:17 36:23 62:12 62:14 67:1 104:7 133:19,22 134:1,2,5 135:19 141:24 142:2,7 166:10 184:8</p> <p><b>answered</b> 103:20 175:17</p> <p><b>answering</b> 134:10</p> <p><b>answers</b> 7:15 186:7</p> <p><b>antenna</b> 83:9 112:7</p> <p><b>anticipate</b> 69:5</p> <p><b>antitheft</b> 50:19</p> <p><b>anybody</b> 108:2 151:14</p> <p><b>anybody's</b> 25:5</p> <p><b>anymore</b> 104:3 150:14 183:9</p> <p><b>anyway</b> 161:5</p> <p><b>anywise</b> 186:11</p>	<p><b>apart</b> 74:8</p> <p><b>apologize</b> 130:23</p> <p><b>apparatus</b> 40:15,19 40:21,25 41:15 42:6 42:7,9,10 44:14,20 45:4,9,18,25 46:1,3 46:5,6,8,9,13,15,18 46:21 50:6,17 56:25 57:1,8,9 58:3,4 70:1 109:9 111:7 116:13 116:14 117:1,13 119:20 176:21</p> <p><b>apparatuses</b> 46:10 71:22</p> <p><b>apparently</b> 24:15 25:19 140:7</p> <p><b>appeal</b> 1:2 19:3 60:15 66:20</p> <p><b>appear</b> 17:4 24:18 26:22 87:8 176:3</p> <p><b>appearances</b> 2:1</p> <p><b>appears</b> 24:15 27:18 32:19 33:10 34:22 67:9 121:3</p> <p><b>appliance</b> 75:17 76:16,18,19,20 77:6 78:16,17 79:11 81:13,17,22,23 83:20,20,21 85:23 86:21 88:10 89:8,9 89:11 91:15 92:3 93:24 94:1,7,8,8,21 95:6,16 97:23,24 98:3 100:2,13,19,23 100:25 101:1 103:5 106:5 108:22 109:7 109:18 110:3,8,22 110:25 111:3,11,16 111:17,19,25 112:4 112:14,15,17 113:24 114:2 115:3 115:15 116:16,19 116:22,24 117:5,8 117:16,17 120:21 123:22 127:7,7,9,12</p>	<p>129:23,23 130:4 165:11,22 179:13 179:14 180:19</p> <p><b>appliances</b> 71:19,23 72:6 73:17,17 75:24 78:13 86:16,18 128:23 129:16 164:5 172:19</p> <p><b>applicable</b> 10:2 53:10 139:17</p> <p><b>applicant</b> 50:5</p> <p><b>application</b> 4:9 25:16,17 26:5 35:6 37:10 50:21 51:22 61:15,21 62:8 123:24 125:13,25 126:2 141:7 144:18</p> <p><b>applications</b> 50:18 140:13,23</p> <p><b>applies</b> 180:4</p> <p><b>apply</b> 53:20 84:1 96:10</p> <p><b>appreciate</b> 112:25 130:10</p> <p><b>approach</b> 148:15</p> <p><b>appropriate</b> 91:23 94:19 127:12</p> <p><b>approximately</b> 56:2</p> <p><b>april</b> 1:14 5:1</p> <p><b>ar</b> 121:19</p> <p><b>arbitrarily</b> 164:7</p> <p><b>architecture</b> 140:5 141:4,4,6,10,13 169:18,23 172:13</p> <p><b>area</b> 72:23,24 73:15 82:8 84:3 167:3</p> <p><b>areas</b> 50:18</p> <p><b>arguing</b> 96:12</p> <p><b>argument</b> 102:13 139:24</p> <p><b>arpanet</b> 146:11,11 146:18,19,24 147:1 147:2,4</p> <p><b>arq</b> 121:17,20,21,23 121:24 124:8,21</p>
--	--	---	--

<p>125:11,21,22 147:19</p> <p><b>arqs</b> 126:6</p> <p><b>arranged</b> 15:17</p> <p><b>arrangements</b> 187:5</p> <p><b>arrow</b> 32:12 77:12</p> <p><b>arrows</b> 31:1</p> <p><b>art</b> 38:15 39:5,10 51:10,20,21 52:11 52:13 53:13 58:22 58:24 60:7 67:16 68:9,14 70:5,16 85:20 107:19 130:3 130:15 131:2,12,19 131:22 136:1 170:14</p> <p><b>article</b> 5:4 187:3</p> <p><b>asked</b> 43:22 123:20 134:3 136:15 170:1</p> <p><b>asking</b> 14:4,8,16 19:15,19 36:15,18 36:19 67:19 116:25 123:19 132:15 133:7 140:21 143:19 170:16</p> <p><b>aspect</b> 92:22 171:17</p> <p><b>aspirations</b> 144:7,17</p> <p><b>assembly</b> 142:20</p> <p><b>assertion</b> 22:16</p> <p><b>assign</b> 174:18</p> <p><b>assignee</b> 140:8</p> <p><b>assignment</b> 188:2</p> <p><b>associated</b> 6:17</p> <p><b>assume</b> 38:23 39:16 123:12</p> <p><b>assumed</b> 39:1</p> <p><b>assuming</b> 139:24</p> <p><b>assumption</b> 40:2 161:19</p> <p><b>atlanta</b> 1:17 2:6</p> <p><b>atm</b> 72:12 73:23</p> <p><b>attached</b> 4:20 38:2 73:2 74:14 161:23 161:25 187:8</p>	<p><b>attaches</b> 167:4</p> <p><b>attention</b> 40:13 64:17 72:15 119:14</p> <p><b>attorney</b> 14:7 18:20 18:23</p> <p><b>attorneys</b> 5:17 9:4 14:9 16:11 17:6,10 18:2,2 24:8</p> <p><b>attracted</b> 152:12</p> <p><b>audiotape</b> 155:25</p> <p><b>authentication</b> 149:21</p> <p><b>authorized</b> 41:14 42:5 44:19 45:7,15</p> <p><b>automated</b> 95:11</p> <p><b>automatic</b> 87:25 88:25 96:25 98:12 99:15 100:10 101:11,17,18 102:6 103:18 105:6,8,11 106:25 107:10,13 121:17,20,21 123:3 124:18</p> <p><b>automatically</b> 90:7 95:1 101:14 103:17 105:13 163:12</p> <p><b>automobile</b> 142:20</p> <p><b>autonomously</b> 105:16,16</p> <p><b>available</b> 150:3</p> <p><b>ave</b> 189:1</p> <p><b>avoided</b> 145:21</p> <p><b>aware</b> 8:9 19:1 121:2 144:1 145:12 145:19</p> <p><b>awkward</b> 117:9</p>	<p>159:14 178:4 184:5 189:13</p> <p><b>backbone</b> 153:23</p> <p><b>background</b> 142:18 159:15</p> <p><b>bad</b> 151:22 170:16</p> <p><b>bake</b> 80:15</p> <p><b>baking</b> 80:14,15</p> <p><b>bandwidth</b> 155:7</p> <p><b>banking</b> 150:21</p> <p><b>bar</b> 8:14,17,19</p> <p><b>barnes</b> 1:18 186:16 187:23</p> <p><b>base</b> 71:24,25,25 72:2,3 73:16,19 75:19,20,25 77:8 81:12 82:7,9 83:1,5 83:6,9,13 84:4 85:13,21 88:9,10 89:7,10 90:19 91:14 91:16 93:20 94:4,6 94:7 97:3,10,15 98:2 100:1,5,8,12 100:17,22,22,24 101:2 103:4,7 105:14 110:12 111:22 112:8,10,16 127:11 152:23 161:24 179:2,9,11 179:25 180:13</p> <p><b>based</b> 39:13 41:2 64:14 76:16 110:5 137:22,24 147:2 170:14</p> <p><b>basic</b> 123:9</p> <p><b>basically</b> 168:24</p> <p><b>basis</b> 104:2</p> <p><b>bathroom</b> 68:23</p> <p><b>becoming</b> 149:11</p> <p><b>beehive</b> 82:15</p> <p><b>beginning</b> 102:3 145:17 148:22 163:25</p> <p><b>begins</b> 56:18 108:15 119:19 120:10</p>	<p><b>behalf</b> 2:3,10 6:5,6 6:10 13:8 59:16</p> <p><b>behavior</b> 45:14 151:21</p> <p><b>belief</b> 152:7</p> <p><b>believe</b> 6:21 12:24 19:7 25:22 26:4 28:20 35:11,18 37:15 38:19 45:11 51:4 56:5 60:24 62:11 67:24 68:1,10 68:17 76:14 99:20 113:2 117:9 118:9 118:13 120:7 128:11 133:5 134:23,24 141:15 152:8,9 165:15 167:12,13 174:11 175:2 176:9,15,17</p> <p><b>believed</b> 137:13 151:12,15</p> <p><b>bell</b> 151:13,16</p> <p><b>bells</b> 105:24</p> <p><b>belt</b> 170:6</p> <p><b>benefit</b> 154:21 157:24 181:15</p> <p><b>benefits</b> 130:7</p> <p><b>bennett</b> 1:13 3:2 4:4 4:5,16 5:1,8,14,15 8:20 15:23 16:22 23:15 24:7,10,12 69:3 108:1 134:9 188:4,20 189:8</p> <p><b>berkeley</b> 147:5</p> <p><b>berkeley's</b> 147:6</p> <p><b>berners</b> 144:8,14</p> <p><b>best</b> 103:21 166:9</p> <p><b>bet</b> 126:6</p> <p><b>bidirectional</b> 86:13 121:14 123:11 129:17</p> <p><b>billing</b> 86:20</p> <p><b>bit</b> 24:3 30:24 39:25 75:3 113:10 153:7 156:14</p>
	<b>b</b>		
	<p><b>b</b> 5:14 48:16 53:5 54:4 169:7,8 186:16 187:23</p> <p><b>b1</b> 4:11</p> <p><b>back</b> 13:22 23:9 40:4 47:17 100:5 101:3 116:13 131:5</p>		

<p><b>blank</b> 25:2  <b>blatantly</b> 132:5  <b>blender</b> 84:13,14,17  84:20  <b>block</b> 43:25 82:22  <b>board</b> 1:2 5:5 19:3  60:15 66:20 128:14  187:3  <b>boat</b> 50:21 51:5,7,17  52:1  <b>bob</b> 146:1  <b>body</b> 22:22 23:1,5  24:7 57:12 93:7  <b>botched</b> 130:23  <b>bottom</b> 26:23 40:15  43:9,19 44:1,2 50:1  50:1,4 56:19 78:3  127:24 189:12  <b>bought</b> 63:13  <b>boulevard</b> 2:12  <b>boundaries</b> 99:8  <b>boundary</b> 32:1  136:15  <b>bounds</b> 150:7  <b>bow</b> 162:14  <b>box</b> 31:7 32:5 34:14  36:3,7,10,10 110:21  110:25  <b>boxes</b> 31:2  <b>braves</b> 69:9,10  <b>bread</b> 80:14  <b>break</b> 8:15 68:21,23  75:2 107:22 162:10  167:7 184:17  <b>breaks</b> 8:2,3 9:3  <b>brief</b> 141:15  <b>briefly</b> 97:6  <b>bright</b> 151:16  <b>broad</b> 42:11 141:7  144:17  <b>broadband</b> 155:4  <b>broadcast</b> 177:3  <b>broader</b> 144:9  <b>broadest</b> 58:10,14  59:8 68:2 182:23</p>	<p><b>brother</b> 149:12  <b>bs</b> 73:17  <b>bs3</b> 147:12  <b>bsd</b> 148:17  <b>bubbling</b> 173:8  <b>building</b> 61:8 63:14  82:25  <b>buildings</b> 71:21  83:11  <b>built</b> 128:12 152:11  156:24 157:3  169:19 180:13,14  <b>business</b> 155:21  <b>button</b> 166:4,8</p> <p style="text-align: center;"><b>c</b></p> <p><b>c</b> 54:4 186:1,1  187:14  <b>c.f.r.</b> 4:7,13,18  <b>cable</b> 6:23,24 155:5  <b>cables</b> 77:4  <b>california</b> 2:12  69:11 147:6 188:21  189:12  <b>call</b> 21:15 24:25  25:1 26:16 31:16  55:6 146:14 165:5  <b>called</b> 20:18 56:22  84:24 121:17  133:24 134:24  137:16,20 146:6,12  148:8,23 150:25  168:7 183:21  <b>calling</b> 113:23 114:8  114:12  <b>camera</b> 169:6,9,21  171:11,23 172:10  173:21 174:7 175:2  175:10,14 176:2,22  177:5,6 179:16,23  180:21,22 181:9,22  <b>cameras</b> 180:20  <b>campus</b> 147:5  <b>canyon</b> 2:12</p>	<p><b>capabilities</b> 40:18  40:24 93:3 130:6  155:5  <b>capability</b> 126:18  <b>capable</b> 125:17  168:16,16  <b>capacity</b> 147:10,11  <b>caption</b> 186:7  <b>capture</b> 183:24  184:10  <b>captured</b> 178:3,14  <b>car</b> 32:7 53:17,19  <b>care</b> 16:17  <b>case</b> 1:5 9:20,24  13:19 14:1 18:10  21:22,23 23:4 41:7  48:4 53:19 55:6  87:3 100:16 102:1  108:3 112:13  114:21 119:7,8  141:8 167:20 176:3  178:13 179:16  186:10,11 187:17  187:17,19 188:3  189:6  <b>cases</b> 9:11 10:5  19:11 20:18 21:8,11  21:20  <b>cat</b> 173:9,18 174:1  <b>cause</b> 81:2 82:21  90:25  <b>caused</b> 153:15  <b>causes</b> 90:15  <b>cc</b> 189:25  <b>ccr</b> 1:18 186:16  187:23  <b>cell</b> 73:16  <b>cells</b> 73:14,14,15  <b>cellular</b> 71:25  <b>center</b> 73:22,22 74:1  74:3,6,19,24 75:23  77:19 87:17,17  91:22 92:1 93:19  94:3,13,18 95:1,2  96:6 97:1,5 98:13</p>	<p>98:16 99:16,21  100:7,11,11,16,21  101:3,5,24 102:15  102:24 103:6  105:14,18 113:5  120:22 127:6,13  128:21 129:17,22  152:22,25 160:7,15  160:19 161:25  163:13,14,15,18  166:21,23 167:2  168:11,24 171:24  177:4,11,11 178:6  178:11,17,18,22  <b>center's</b> 102:25  <b>central</b> 26:11,13,16  30:6,20 31:4 32:9  32:17,24 34:14,17  35:9,12,16,19 36:5  36:6 40:8,16,22  41:3,18 42:14,18  43:2 44:15,25 45:4  45:8,15,16,24 46:3  46:18 47:10,11,12  47:22,22,23 48:25  49:5,23 72:4 159:10  <b>centralized</b> 151:19  <b>certain</b> 18:20 43:1  52:25 53:22 61:10  82:8,10 90:5,15  169:19  <b>certainly</b> 33:15  37:23 151:9,12,15  154:20 158:19  <b>certified</b> 187:6,6,11  <b>certify</b> 186:6,9  <b>cetera</b> 63:14 91:25  114:6 130:8  <b>challenge</b> 39:6,10  118:14,22  <b>challenged</b> 60:10,24  <b>challenging</b> 118:18  <b>chance</b> 162:10  <b>change</b> 90:19,23,25  91:13 188:5 189:11</p>
--	--	---	--

<p>189:12  <b>changed</b> 169:22,24  <b>changes</b> 189:11  <b>changing</b> 80:18,20  80:21  <b>character</b> 101:11  <b>characteristics</b>  53:22  <b>characters</b> 155:24  <b>charge</b> 9:22 187:18  <b>charged</b> 22:5  <b>charted</b> 137:19  <b>chatsworth</b> 2:12  <b>cheaper</b> 156:2  <b>check</b> 11:23 175:23  176:7  <b>checksum</b> 122:5  <b>chip</b> 180:13  <b>choice</b> 138:15  <b>cholloway</b> 2:7  <b>circa</b> 164:7  <b>circuit</b> 112:24  <b>circumstance</b> 91:10  <b>cisco</b> 158:5,5  <b>citation</b> 86:2 87:7,15  88:5 95:24 97:6  98:23 99:2,2,4,9,10  126:15  <b>citations</b> 120:16  <b>cite</b> 86:10 88:25  99:18  <b>cited</b> 86:13 88:20  91:13 97:9 98:21  <b>cites</b> 109:22  <b>civil</b> 185:2  <b>claim</b> 54:16 55:1,22  56:1,18 57:12,19  58:6 59:14 60:8,13  60:14,21 69:14 70:6  75:7 78:1,8 79:2  81:8 97:2 108:17  109:5,5,6,9,9 113:1  113:6,11,11,15,21  113:24 114:14,17  114:18,20,20,22,22</p>	<p>114:22,23,24 115:1  116:1,5,14,14,18,19  116:25 117:1,8,10  118:6,8,18,23,25  119:2,3,14,18,18,20  119:21 120:8,11,13  130:11 133:3,10,13  134:6,8 165:18  167:11,25 168:1  169:17 170:3,18,21  175:23,24,25,25  176:3,8,9,14,16,16  176:17,18 181:20  <b>claimed</b> 56:24 97:1  <b>claims</b> 38:24 60:10  60:24 130:12,13,16  130:19,24 131:2,10  131:13,16,23  134:22 163:3  165:12 167:18  172:8  <b>clarification</b> 26:21  80:22 84:22  <b>clarified</b> 15:2  <b>clarifies</b> 86:19  <b>clarity</b> 20:10  <b>clay</b> 2:4 23:12 55:3  132:11 133:17  189:5  <b>clear</b> 14:16,21 18:18  19:14,22,24 31:8  32:13 36:1,8 55:3  75:13 84:13 93:9  111:14 150:15  171:14 174:23,25  <b>client</b> 6:15,22  <b>clients</b> 21:8 22:4,9  <b>clinton</b> 153:22 154:2  154:10 155:15  <b>clns</b> 137:23  <b>close</b> 136:7  <b>closed</b> 157:17  <b>closer</b> 83:4  <b>closest</b> 125:18</p>	<p><b>code</b> 158:13  <b>collapse</b> 146:7 148:9  <b>colleagues</b> 52:1 70:9  70:12  <b>collection</b> 32:9  111:6  <b>collectively</b> 167:17  <b>column</b> 56:12,16,19  69:16,16 78:3 86:3  87:8 88:5 97:7  102:16 109:23  110:2 127:2,22,23  128:8,10,18 129:10  129:11,12 159:16  160:5 163:6,11,24  164:12 167:23  <b>combination</b> 32:2  114:2 131:20  134:23 157:16  170:12  <b>combine</b> 172:3  <b>combined</b> 130:14  131:1,11 151:24  <b>combining</b> 156:17  157:13 174:21  <b>come</b> 24:18 79:23  138:6 156:16  <b>comes</b> 36:12,13  100:5 181:20  <b>coming</b> 161:12  <b>command</b> 96:6  124:2 125:2  <b>comment</b> 13:20 14:3  16:12 17:7  <b>comments</b> 17:9,13  132:13  <b>commercial</b> 71:16  153:25 154:4 157:5  <b>commission</b> 188:25  <b>committing</b> 183:3  <b>common</b> 52:25  53:22 54:5 113:12  121:16 162:25  <b>communicate</b> 33:11  71:18,24 72:4 109:7</p>	<p>112:3 123:5  <b>communicated</b>  94:13 98:8 100:7  <b>communicates</b>  108:21 110:12  111:21,25  <b>communicating</b>  109:18 112:16  <b>communication</b>  14:6,9 27:22,23,24  27:25 28:6,16 31:12  31:12,15 32:5,8,11  32:15 36:4,4,9,11  47:6,8 77:15 84:7  86:13 94:10 114:3  121:14 129:18  135:14 146:15  164:1,2 167:4  <b>communications</b> 6:2  13:9 104:18 106:2  106:17 108:22  109:19 135:13  146:12 178:10  <b>community</b> 137:5  144:10 148:10  149:14  <b>companies</b> 22:9  137:11 151:8 152:4  158:5  <b>company</b> 5:17 6:25  151:7,10 159:4  <b>competition</b> 137:4  <b>complete</b> 135:20  186:8  <b>completed</b> 12:7,8  <b>completely</b> 61:5  92:9 107:8 178:5  <b>complicated</b> 176:20  <b>components</b> 28:11  43:25 117:11  <b>comprise</b> 57:9  <b>comprising</b> 56:25  57:2  <b>compuserve</b> 156:5  156:11,13</p>
--	---	---	---

<p><b>computation</b> 150:3  <b>computed</b> 122:6  <b>computer</b> 26:11,13  26:15,19 28:17,18  29:1,5,10,13,14,17  29:18 30:12,19,20  31:6,10,13,14,17,23  32:2,3,6,7,22,25  33:5 34:10,17,24,25  35:7,8,12,15,15,19  35:24 36:3,14 40:7  42:21 43:2 44:21,25  45:10,17,18,19,25  48:7,25 49:18,23,24  96:11 107:3 137:13  148:21 149:25  154:19,20,25  155:18,19,20,21  <b>computer's</b> 48:13  <b>computers</b> 77:21,22  77:24 148:4  <b>concede</b> 161:21  <b>concern</b> 159:16,24  <b>concerned</b> 39:23  83:12  <b>concerns</b> 145:12,15  145:23 149:16  150:16  <b>concluding</b> 130:1  <b>conclusion</b> 34:16  102:23 118:20  <b>conclusions</b> 79:6  83:18  <b>concrete</b> 124:10  <b>condition</b> 92:6  <b>conditions</b> 89:12  90:16 175:1  <b>conduct</b> 24:9  <b>configuration</b> 168:4  <b>confirmation</b>  119:22 121:3,6,9,10  128:5 130:4 173:1  <b>confirms</b> 173:4  <b>confuse</b> 141:16</p>	<p><b>confused</b> 19:19 24:3  25:6 45:21 81:24  <b>confusion</b> 25:4  43:15 81:2  <b>congestion</b> 146:3,7  146:23 147:22,23  148:8 149:5,9  <b>congress</b> 154:16  <b>conjunction</b> 44:20  45:9,13 47:2  <b>connect</b> 77:20,22,23  112:9 146:25 147:4  157:4  <b>connected</b> 31:19,22  72:3 74:2 75:17,21  77:6,7 106:5 111:17  155:14 156:13  162:6  <b>connecting</b> 77:12  <b>connection</b> 44:16  45:5,23 65:25 66:12  72:12 137:21  154:22 160:3  <b>connectionless</b>  137:23  <b>connections</b> 153:10  153:12  <b>connects</b> 31:15 32:8  73:19 77:8  <b>cons</b> 137:21  <b>consider</b> 38:14  57:14 98:18 118:25  160:10  <b>considered</b> 37:25  144:22 151:3  <b>consistent</b> 33:21  59:22 60:24 61:5  66:23 67:14,21,25  68:2,7,10,12,18  72:17 78:21  <b>consists</b> 36:11 71:17  76:9 116:14  <b>constantly</b> 132:14  147:15</p>	<p><b>constitute</b> 98:19  111:7  <b>construction</b> 54:17  58:6 59:8,14 60:13  61:6 62:21 63:12  66:11,14 67:14,20  67:25 78:21  <b>constructions</b> 54:20  59:3,16,22,24 60:4  60:9,14,22,25 61:11  67:6  <b>construed</b> 59:21  69:23  <b>consultant</b> 9:14  <b>contacted</b> 187:12  <b>contained</b> 78:18  <b>contemplated</b> 91:14  128:20  <b>contention</b> 113:4  <b>context</b> 53:11 79:10  84:2 93:19 106:18  106:20 182:12  183:14,18  <b>continue</b> 91:20  134:4 167:11  <b>continuing</b> 160:14  <b>contract</b> 158:2  187:13,16  <b>control</b> 1:6 5:18  26:5 27:9,13,14,18  27:19 28:3,4,7,10  28:25 29:2,6 30:12  30:19 34:24 37:15  40:7,17,23 41:3,15  46:20 47:11,12,22  47:24 51:1 52:14,15  52:23,25 53:1,2,4,4  53:7,18 56:24 57:1  57:8,8,10,11,11,14  57:23 58:3 69:25,25  70:1 71:19 72:4  73:21,22 74:3,6,19  74:24 75:6,22 76:2  77:18 78:2 79:22  81:10 85:2,6,7,14</p>	<p>85:22 87:17,17 88:1  88:16,19,20,25 89:3  89:9,13,15 91:18,22  92:1,19 93:10,13,19  94:3,13,18 95:1,2,5  95:8,9,12,12 96:6  96:16,25 97:1,2,5,5  97:9 98:9,13,13,16  98:16,19,21 99:1,15  99:15,21,21 100:7  100:10,11,11,15,16  100:21 101:3,5,5,19  101:19,21,24,24  102:6,10,10,11,15  102:16,24,24,25  103:6 105:9,12,14  105:18 109:6,11  113:5 114:8,9 115:1  115:2,7,8,10,11,13  115:14 116:2,3,4,9  116:12,15 119:22  120:21,22 125:1  127:6,13 128:3,4,21  128:22 129:15,16  129:21 135:12,14  136:3 137:12 139:9  139:10,13,19 140:6  140:7,10 141:1,6,19  144:3,6,21,23  146:18 151:9,20  152:15,18,22,25  160:7,15,18,19  161:25 163:13,14  163:15,18 166:21  166:23 167:2 168:4  168:6,7,9,11,20,24  171:24 177:4,11,11  178:6,11,17,18,22  181:11 188:3 189:6  <b>controlled</b> 28:16  50:23 92:23 95:1  163:13  <b>controller</b> 28:3,7  29:5 30:13 75:15,21  76:17,20 77:7 93:25</p>
--	--	--	---

<p>97:10,21 100:13,14 110:5,12,22 111:1,3 111:5,10,15,18,21 112:3,7,10,13,17 114:3 123:21,25 126:18 127:5 129:24 130:5 164:1 164:3 166:19 167:4 167:5 174:9 179:10 180:19 <b>controllers</b> 128:12 130:7 135:12 <b>controlling</b> 41:17 53:8 93:20 96:4 166:1 <b>controls</b> 35:8,12 53:16 79:24 93:7,13 93:16 <b>convenience</b> 152:20 153:6 <b>convention</b> 16:3 <b>conventional</b> 82:17 <b>conversation</b> 51:25 <b>convey</b> 105:4 106:23 <b>cook</b> 127:7 173:17 <b>cooked</b> 87:5 <b>cooking</b> 86:20 87:2 88:21 93:5 95:22,24 165:14,17,18,19,23 165:25 166:3,7,7 <b>cooling</b> 71:20 79:11 <b>cooperative</b> 142:21 <b>copies</b> 13:19 14:2 23:12 <b>cops</b> 177:7 <b>copy</b> 178:2 <b>corporation</b> 140:8 <b>correct</b> 6:3 7:7 9:7,8 9:18 10:19 13:9 20:22 24:10,22,23 26:7 37:14,16,25 39:3 40:19 43:7 49:8 54:13 55:2 57:9 61:12,16,21 64:1,14 76:4 77:10</p>	<p>81:18,23 86:5 87:10 88:3 96:1 97:8 99:16 102:19 107:6 113:16 115:5 117:18 118:8 119:23,24 120:2,3 122:8 127:25 130:17 131:3,14 134:25 135:1 145:6 166:7 167:14 168:1 169:14 171:12 179:2 183:10 186:8 <b>corrections</b> 189:11 <b>correctly</b> 25:25 41:21 42:2,3 51:3 64:21 98:8 110:7 122:4,5 123:8 124:10 127:15 128:16,25 142:24 178:5 179:21 <b>correspond</b> 75:6 83:10 <b>corresponding</b> 97:20 <b>corresponds</b> 114:4 <b>cost</b> 157:11 181:15 <b>costs</b> 157:18 <b>council</b> 5:6 187:4 <b>counsel</b> 2:1 8:4,12 59:4 69:4 186:10,10 187:7,17 <b>county</b> 186:4 <b>couple</b> 23:9 26:21 148:11 <b>coupled</b> 128:14 <b>course</b> 80:13,15 <b>court</b> 5:5 7:13 22:21 22:25 23:4 59:18,18 59:22 66:15 118:17 132:20 143:10 187:1,3,4,6,6,6,11 187:12 <b>court's</b> 66:14 <b>cover</b> 24:6 73:5,7 187:18</p>	<p><b>coverage</b> 72:1 73:15 82:8 83:14,15 84:3 157:22 <b>covers</b> 170:8,8 <b>cox</b> 6:1,4,5,6 13:9 14:17 59:6 <b>coxcom</b> 1:3 26:24 44:2,5 50:4 188:3 189:6 <b>cpu</b> 28:19 30:13 31:7 33:6 111:9 149:22 <b>cpus</b> 149:22 <b>crater</b> 134:24 135:4 135:9,11,17 136:1 136:13 138:12,14 138:17,22 139:5 140:1,4,7,12,17 142:17 143:1,24 151:24 153:4 156:14 157:13,16 170:2,8,12 171:4,13 171:14,19 172:4,6 181:9 183:15,18,18 <b>crater's</b> 152:17 171:16 <b>crawl</b> 147:9,13 <b>create</b> 54:1 <b>created</b> 158:7,12 <b>creation</b> 158:3,12 <b>crisis</b> 148:9 <b>critical</b> 75:14 <b>cross</b> 24:9 32:1 <b>crosses</b> 90:6 <b>crr</b> 1:18 186:16 187:23 <b>crystal</b> 171:13 174:23,25 <b>cs</b> 73:18 <b>cs2300074</b> 1:25 188:2 <b>curious</b> 162:13 <b>current</b> 22:5,7 <b>customary</b> 187:18</p>	<p><b>customers</b> 164:22 164:25 <b>cut</b> 50:15 <b>cutoff</b> 38:14 <b>cycle</b> 80:16 127:12 <b>cycling</b> 79:12,12,13 79:14,16 80:11,12 80:18</p> <hr/> <p style="text-align: center;"><b>d</b></p> <hr/> <p><b>d</b> 2:4 54:6 <b>data</b> 33:1 72:3 73:21 85:2,5,8,8 93:10 104:16 117:14 137:8 147:8,13,14 163:25 <b>database</b> 73:22,25 <b>datagram</b> 137:24 <b>date</b> 38:7,10,12,13 38:17,23,25 39:1,2 39:11,14,17 40:3 130:3 178:18 188:3 189:8 <b>dated</b> 25:25 <b>day</b> 8:1 71:7 145:17 170:16 184:23 188:22 <b>days</b> 149:18 189:15 <b>deactivate</b> 79:13 <b>deactivating</b> 78:25 115:20 <b>deactivation</b> 80:9 <b>dead</b> 84:10 <b>deal</b> 37:4 120:7 146:3 151:8 <b>dealing</b> 12:19 <b>deals</b> 26:18 167:17 <b>dealt</b> 21:24 37:5,6 <b>dear</b> 189:9 <b>dec</b> 148:12 <b>decided</b> 165:8 <b>deciding</b> 137:6 <b>decision</b> 4:12 59:12 60:16 61:1 62:12,15 63:24 64:1 67:10</p>
--	--	---	---

<p>108:6 109:16 118:12,16 143:10 153:21 154:14 155:15 156:9 <b>declaration</b> 4:5,16 11:6 12:3,7 13:18 14:1,6 15:22 16:8 16:14,21 17:14 19:3 19:20 24:21 25:3 26:3 37:4,14,20 38:2,20,21 39:2 54:22 59:25 61:5 65:7,15 70:25 74:11 74:20 75:10 76:7 79:6 80:23 81:4 85:16 96:20,24 99:12,14 104:13 113:25 120:4,6 123:15 129:6 133:6 133:14 134:8,15 144:25 167:14 170:2,17 176:10 183:20 <b>declarations</b> 9:13 11:8,13,15,18 14:10 14:16 15:3 17:2 20:3 22:25 <b>declined</b> 118:7,25 118:25 <b>decnet</b> 138:1,2 <b>decode</b> 122:15 <b>decommission</b> 153:22 <b>decommissioning</b> 154:2 <b>decomposition</b> 112:21 <b>deemed</b> 72:8 143:11 189:16 <b>deep</b> 71:20 173:3,9 173:18 174:2 <b>defective</b> 165:9 <b>defending</b> 138:13 <b>defense</b> 22:3 62:25</p>	<p><b>deferred</b> 50:25 <b>define</b> 69:17 139:7 <b>defined</b> 58:22 63:8 65:13 66:6 73:15 84:3 182:20,21 <b>defines</b> 93:3 <b>definition</b> 52:12 61:3,6 62:6 63:1,6 63:18 64:6,19 65:20 65:23 66:2 67:9 68:5,6,12 133:22 <b>definitions</b> 61:11,24 64:24 65:3 66:22,23 70:9 <b>degrees</b> 80:4,6 <b>delay</b> 183:25 184:11 <b>demand</b> 128:22 <b>demonstrates</b> 98:21 <b>department</b> 189:22 <b>depend</b> 105:19 106:14 <b>dependent</b> 114:14 114:17,23 119:18 167:25 176:14,14 176:14 <b>depending</b> 114:24 119:18 167:25 <b>depends</b> 175:25 176:16,17,18 <b>depict</b> 31:9 <b>depicted</b> 76:14 <b>depicting</b> 82:18 <b>depiction</b> 32:20 106:4 <b>deposed</b> 7:7,9,19,21 21:2 <b>deposition</b> 1:13 4:3 5:1 12:5,9,13 23:15 24:1,2,6,9,17 184:24 187:5,7,8,12 187:13,18 188:3 189:8,10 <b>depth</b> 33:16 <b>describe</b> 28:9 33:10 72:16 76:13 125:25</p>	<p>126:17 158:10 <b>described</b> 60:9,23 126:7 160:4 163:16 172:2 <b>describes</b> 64:8 71:14 87:1 95:5 123:10 126:4,13 135:11 136:18 158:20 159:7 162:2 <b>describing</b> 125:24 136:2,7 169:18 <b>description</b> 4:2 34:7 75:13 88:8 141:18 166:16 <b>design</b> 126:4 137:22 141:5,9 144:14 145:10 146:25 147:2 149:7 155:23 157:25 172:13 <b>designate</b> 46:20 <b>designated</b> 72:24 73:24 85:14 88:9 <b>designation</b> 50:4 55:6 <b>designed</b> 87:25 88:24 102:5 105:8 123:4 141:14 149:10,25 155:20 173:12 <b>designer</b> 121:15 157:23 <b>designers</b> 144:7 <b>desired</b> 51:1 80:5 128:21 <b>destroy</b> 92:7 <b>detail</b> 48:3 125:23 166:2 <b>detailing</b> 141:17 <b>detect</b> 128:14 175:12 <b>detects</b> 79:25 <b>determine</b> 48:3 <b>develop</b> 144:13 <b>developed</b> 144:10 148:16 151:11</p>	<p><b>development</b> 51:24 <b>device</b> 27:9,11,13,14 27:18,19 28:4,7,25 29:2,7 30:12 31:18 33:2,2,3 34:12 43:18 57:10,11,11 72:8 78:2 81:10 83:7,9 85:15,22 90:1,3,15 91:1 92:6 92:8,23 93:1,3,8 95:20,25 96:2,4,5 97:2,17,18,25 98:9 109:6,8,11,12,14 111:7 114:5,8,8,9 114:11,12 115:2,7,8 115:10,11,13,14,22 116:2,3,4,6,6,10,10 117:4,6,15,18,22,24 118:1 119:22 124:1 124:11,14 125:14 125:19 126:14 128:4,4 129:22,23 152:11 164:16 166:1 168:6,8,9,17 168:20 169:4,6,9,14 171:12 176:2,22 181:22 182:1,8,10 182:11,13,16,17,22 182:25 183:2,7 <b>devices</b> 32:9 34:12 34:12 51:1 57:8 72:7 73:1 75:7,14 77:2,20 104:19 106:2 109:12 116:15 135:14 146:14 162:3 168:4 180:7,8,10,11 <b>devised</b> 151:10 159:25 <b>diagnostic</b> 86:21,25 88:14 89:11 91:24 94:9,12,20 95:15 98:15 100:2,4,18,20 113:5 126:18 128:13 130:6 158:9</p>
--	--	---	---

<p><b>diagnostics</b> 86:24 158:4,4</p> <p><b>diagram</b> 31:8 34:22 36:8,16,19 43:25 73:13 76:7 111:8 112:6,20,24 166:11 166:14,14,15</p> <p><b>diagram's</b> 30:24</p> <p><b>diagrams</b> 82:16 161:18 166:10</p> <p><b>dialing</b> 156:4</p> <p><b>dichotomy</b> 65:10</p> <p><b>dictated</b> 105:18</p> <p><b>difference</b> 143:13</p> <p><b>differences</b> 136:15 138:17,21</p> <p><b>different</b> 22:3,4,6 46:10 58:16,18,25 61:21,24 62:24 63:1 63:6 71:2 73:4 82:3 82:21 89:21 97:25 115:23 125:6 135:16,17 138:12 139:1,22 142:23 143:18 159:7,11 160:4 161:6</p> <p><b>difficult</b> 69:24</p> <p><b>digital</b> 136:11,19 137:8</p> <p><b>direct</b> 167:1</p> <p><b>directed</b> 135:10 138:25 139:1,10,13 139:22,25 140:1,9 140:12,22,25</p> <p><b>direction</b> 31:24 112:8 186:8</p> <p><b>directly</b> 103:10,16 170:22 173:22</p> <p><b>disable</b> 124:12 125:14,15,20</p> <p><b>disabled</b> 123:24 124:1,15 125:16,17</p> <p><b>disables</b> 123:22</p> <p><b>disabling</b> 79:1 115:21</p>	<p><b>disadvantage</b> 156:20</p> <p><b>disadvantages</b> 156:16,22</p> <p><b>discarded</b> 147:16</p> <p><b>discarding</b> 53:6,8</p> <p><b>discern</b> 173:4</p> <p><b>disclosed</b> 28:19,22 33:18 37:16 71:12 92:12 101:6,9,25 102:15 111:24 125:22 174:9</p> <p><b>discloses</b> 34:24 35:7 50:6 71:14 109:17 177:10</p> <p><b>disclosure</b> 5:3 25:18 25:21 26:4,9,17 33:24 34:5 35:3 130:14 179:5 187:1 187:4,9</p> <p><b>disclosures</b> 27:8 28:13 40:1,6 41:2</p> <p><b>disconnect</b> 82:1</p> <p><b>discount</b> 187:19</p> <p><b>discovered</b> 147:7</p> <p><b>discovery</b> 41:13 42:4</p> <p><b>discuss</b> 10:6 59:3 69:8</p> <p><b>discussed</b> 90:18 91:11 130:12 153:4</p> <p><b>discusses</b> 152:21</p> <p><b>discussing</b> 48:8</p> <p><b>discussion</b> 29:25 85:13 104:15,17,23 105:25 106:16,19 106:20 120:20,25 126:24 128:3 129:13,15 163:21 165:14</p> <p><b>disk</b> 156:1</p> <p><b>disorganized</b> 15:12</p> <p><b>dispatch</b> 72:7,13</p> <p><b>dispatched</b> 163:10 164:9</p>	<p><b>dispatching</b> 94:22</p> <p><b>display</b> 33:2 152:25 155:24 164:2,3,3 166:18 167:5</p> <p><b>displayed</b> 164:2</p> <p><b>displays</b> 164:4</p> <p><b>dispositive</b> 105:22</p> <p><b>disputable</b> 119:2</p> <p><b>dispute</b> 41:6,11</p> <p><b>disrepair</b> 72:9</p> <p><b>distant</b> 146:16</p> <p><b>distinct</b> 28:4 46:1 49:6 73:1 78:18</p> <p><b>distinction</b> 179:8</p> <p><b>distinguish</b> 55:16 172:7 182:5</p> <p><b>distinguishable</b> 183:2</p> <p><b>distributed</b> 140:4 152:5 178:6,7</p> <p><b>distribution</b> 152:3</p> <p><b>district</b> 143:10</p> <p><b>document</b> 16:24 19:5 23:19,21,24 25:11,19 34:1,2,6 40:13 42:9 50:2 54:13 118:11 167:15</p> <p><b>documents</b> 23:14 36:23 37:24</p> <p><b>doing</b> 51:24 68:20 68:22 102:25 105:21 117:11 125:25 132:18 156:6</p> <p><b>double</b> 175:23 176:7</p> <p><b>download</b> 92:4,5,7 92:23 93:2,6 96:3,7</p> <p><b>downloaded</b> 103:7</p> <p><b>downloading</b> 91:24 92:18 93:10,12,19 93:24 94:20 95:14</p> <p><b>downloads</b> 92:1,17</p> <p><b>dozen</b> 165:20</p>	<p><b>draft</b> 16:11</p> <p><b>drafts</b> 13:20 14:2 17:6</p> <p><b>drawing</b> 40:12 64:16 72:15 119:13</p> <p><b>drawn</b> 110:22</p> <p><b>drifting</b> 63:16</p> <p><b>drill</b> 101:23 153:7</p> <p><b>drilling</b> 63:15</p> <p><b>drive</b> 180:16</p> <p><b>drop</b> 164:19</p> <p><b>drops</b> 159:23</p> <p><b>dsl</b> 155:5</p> <p><b>duly</b> 5:8</p> <hr/> <p style="text-align: center;"><b>e</b></p> <hr/> <p><b>e</b> 5:14,14 6:20,20 13:6 54:6 70:18,18 71:5,5 185:1,3 186:1,1</p> <p><b>earlier</b> 5:16 147:20 166:20</p> <p><b>early</b> 34:1 137:1,2 149:17 155:12 158:2</p> <p><b>earthquake</b> 178:20</p> <p><b>easier</b> 158:10 169:7</p> <p><b>easily</b> 180:10</p> <p><b>easy</b> 157:25</p> <p><b>effectively</b> 112:15 160:1</p> <p><b>efficiency</b> 159:17,23</p> <p><b>efficient</b> 159:24 174:15,16</p> <p><b>efficiently</b> 144:16 174:18</p> <p><b>effort</b> 137:16</p> <p><b>efforts</b> 150:17</p> <p><b>eight</b> 22:3</p> <p><b>either</b> 8:4 79:21 89:23 90:6 117:13 117:14,15 121:10 124:13 169:8,9</p> <p><b>electric</b> 79:19</p>
--	---	---	---

<p><b>element</b> 77:13 79:18 79:20 80:4,7,16 113:23 114:4 <b>elements</b> 32:20 33:11 72:16 75:5 76:1 110:23 111:6 129:18 <b>eleven</b> 177:7 <b>elicited</b> 125:5 <b>eligibility</b> 143:14,22 <b>embodiment</b> 141:12 169:20,24 <b>emphasis</b> 101:18 <b>employ</b> 186:10 <b>employee</b> 140:7 159:4 <b>employer</b> 187:6 <b>enabled</b> 47:8 <b>enables</b> 79:22 129:21 171:23 172:14 <b>enact</b> 154:11 <b>encl</b> 189:24 <b>enclosed</b> 189:10 <b>encompasses</b> 32:6 <b>encrypted</b> 150:10 150:11 <b>encryption</b> 149:20 149:21 <b>encumbered</b> 153:24 <b>ended</b> 158:18 169:17 175:5 <b>endorses</b> 138:14 <b>endpoints</b> 149:20 <b>energy</b> 86:15 <b>engineering</b> 51:24 148:10 181:14 <b>engineers</b> 54:3,5 70:14 <b>english</b> 49:16 133:24 177:1 <b>enhanced</b> 164:14 <b>enormous</b> 37:21 143:7</p>	<p><b>enterprise</b> 144:12 <b>entertainment</b> 171:18 <b>entire</b> 17:19 32:8 78:17 93:7 121:3 139:18 <b>entirely</b> 105:22 <b>entities</b> 6:13,16 7:3 <b>entity</b> 5:21 6:10,23 12:18 22:16 40:17 40:23 41:18 187:8 <b>environment</b> 172:18 <b>environments</b> 140:14 <b>envisioned</b> 50:16 <b>equating</b> 93:10,12 <b>equation</b> 107:8 <b>equipment</b> 37:15 49:19 114:5 117:4,5 128:13 142:23 157:20,21 158:4,6,8 165:9 168:10 174:8 175:13 <b>equivalent</b> 182:15 <b>errata</b> 188:1 189:11 189:13 <b>error</b> 24:15 122:12 122:23,23 123:1 <b>errors</b> 122:10 <b>especially</b> 137:1 <b>esq</b> 2:4,11 189:5,25 <b>essentially</b> 28:2 29:14 38:14 59:19 122:19 148:15 159:19 <b>established</b> 118:21 <b>et</b> 63:14 91:25 114:6 130:8 <b>ethernet</b> 21:17,23 122:24 <b>events</b> 120:1 155:10 <b>everybody</b> 149:12 <b>evidence</b> 173:4,5 186:9</p>	<p><b>exact</b> 52:12 <b>exactly</b> 15:9,9 20:4 45:13 74:15 103:25 <b>examination</b> 3:1,3 5:10 24:9 <b>examined</b> 5:9 143:6 <b>examiner</b> 34:4 62:22,23 63:12 <b>example</b> 28:13 50:20 55:22 59:1 70:6 84:13 88:19 91:1,20 93:20 107:3 110:20 115:16 120:20 122:24 123:1 136:10 143:23 150:8 165:17 174:8 177:12 179:7 182:16 <b>examples</b> 105:9,10 <b>exceeds</b> 80:6 90:5 <b>excessive</b> 141:17 <b>execute</b> 86:8 <b>executes</b> 85:24 86:11 <b>execution</b> 142:22 <b>exercise</b> 101:4 151:20 <b>exercised</b> 100:16 <b>exercises</b> 102:24 <b>exercising</b> 89:9 92:19 95:5 98:16 102:11,16 <b>exhibit</b> 4:2,3,5,9,10 4:12,14,15,16 15:19 15:22 16:10,11,18 16:20 17:1,1,5,6 18:3,4 20:4 23:14 23:16 24:20 25:8,11 25:12 26:8,24 27:9 28:19,23 29:2,7 33:13,19 35:7 36:20 37:16,25 40:1,6 44:6 48:6 54:8,12 56:6 63:20,21 70:19</p>	<p>70:22 76:9 108:8,10 135:2,5 <b>exhibits</b> 4:1,20 12:10 17:11 38:1 <b>expand</b> 141:10 <b>expands</b> 86:19 <b>expect</b> 8:5 108:3 123:23 131:21 <b>expensive</b> 155:22 157:15 <b>experience</b> 92:11 121:15 <b>experiencing</b> 178:12 <b>experimentation</b> 137:15 <b>expert</b> 6:1,10 9:7,9 9:11,12,14,20 14:5 19:11,12 21:1 37:3 39:23 61:4 <b>expertise</b> 143:7 <b>expire</b> 22:7 <b>expires</b> 188:25 <b>explain</b> 171:19 <b>explicit</b> 38:20 128:3 136:2 138:23 <b>explicitly</b> 95:4 138:14 <b>explore</b> 152:13 <b>express</b> 130:5 <b>expressed</b> 44:24 79:6 134:7 145:25 <b>expressly</b> 171:15 <b>extract</b> 22:8 <b>extraordinary</b> 34:3 <b>extremely</b> 176:6 <b>eye</b> 173:21,22,25 175:9,12</p> <hr/> <p style="text-align: center;"><b>f</b></p> <hr/> <p><b>f</b> 54:6 186:1 <b>facilitates</b> 27:24 <b>facilitating</b> 135:14 <b>facilities</b> 154:4 157:5,7</p>
--	--	---	---

<b>facility</b> 87:18 <b>facsimile</b> 2:7 <b>fact</b> 7:9 28:8 35:7 41:6,12 42:12 63:11 65:14,18 105:7 132:18 147:2 157:24 <b>fail</b> 92:8 <b>failed</b> 148:7 149:2 <b>failure</b> 172:24 173:2 173:7 <b>failures</b> 128:15 <b>fair</b> 34:16 39:24 49:22 136:17 <b>fairly</b> 142:14 144:19 144:20 172:15 <b>false</b> 65:10 <b>familiar</b> 6:18 16:6 58:10,12 135:6 150:24 <b>familiarity</b> 145:5 <b>famously</b> 146:1 <b>far</b> 39:22 56:16 179:15 <b>fashion</b> 144:23 <b>fast</b> 174:4,5 <b>faster</b> 147:14 <b>fat</b> 173:9 <b>fax</b> 189:2 <b>fear</b> 92:7 <b>feature</b> 169:13 <b>features</b> 52:18 53:7 53:9,10,17 54:1,6 <b>federal</b> 185:1 <b>fees</b> 22:8 <b>fellow</b> 148:13 <b>fi</b> 122:25 123:3,4,5 <b>field</b> 183:16 <b>figure</b> 26:20 28:14 28:14 29:25 32:12 43:17,18,24 48:13 72:15,18,21 73:3,5 73:11 76:8,12,14,15 77:6 95:8 106:4 107:1 110:6,10,15	110:18 160:17 164:13 166:15,15 166:15,20,25 167:2 177:7 <b>figures</b> 48:15 75:12 109:22 145:25 <b>file</b> 59:17 64:14 66:9 66:10 <b>filed</b> 9:12 12:11 <b>filing</b> 25:23,25 137:3 <b>final</b> 17:14 43:13 <b>financial</b> 164:22 187:19 <b>find</b> 8:24 50:18,20 62:23 83:19,23 121:11 124:1 139:21 150:14 162:11,21,25 175:13 189:10 <b>fine</b> 5:24 15:18 16:9 20:11 86:10 114:1 124:19 132:1 162:16 <b>finish</b> 7:15 <b>firm</b> 6:5,6,7 14:10 <b>firms</b> 6:10 9:14 13:12,15 22:4 <b>first</b> 5:8 9:6 15:1 50:10,13 56:22 57:10 75:6,15 78:2 80:25 81:8 84:22 97:21,25 102:4 109:6,10,11 114:9 115:1,8,13,14,19 118:17 119:21 120:5 128:4 134:11 142:17 146:9 153:21 155:20 156:12,12 168:6,9 168:21 184:16 <b>fit</b> 82:5 <b>five</b> 68:24 <b>flag</b> 104:13	<b>flash</b> 180:17 <b>flexibility</b> 137:14 141:13 <b>flexible</b> 180:6 <b>flip</b> 98:1 <b>floppy</b> 155:25 <b>flops</b> 98:1 <b>flow</b> 146:18 152:22 153:5 <b>focusing</b> 34:12 <b>folks</b> 148:18 <b>follow</b> 8:11 91:19 152:17 <b>following</b> 66:13 105:10 163:12,20 163:24 164:20 187:8 <b>follows</b> 5:9 13:24 47:19 126:23 131:8 184:7 <b>food</b> 87:5 139:13,25 159:18,20,22,23 174:4,5 <b>forbade</b> 153:25,25 <b>ford</b> 157:3,3 <b>foregoing</b> 186:6,8 <b>forget</b> 165:11 <b>forgotten</b> 108:8 <b>form</b> 8:8 16:11 19:13 21:12,16 22:12 24:24 26:12 27:10 28:21 29:3,11 29:20 30:14,22 34:20 35:1,10,17,25 36:22 37:12,17 38:8 38:18 39:15 40:9,20 41:8,19 42:15,23 43:6 45:2 46:17,23 47:4,14 48:10,19 49:3,9,12,21 50:7 51:6,12,18 52:4,8 52:16 53:14 57:16 57:20 58:1 60:1,17 60:20 61:22 62:10 62:17 64:12 65:1,8	65:16,22 66:25 67:3 67:18 68:16 69:19 70:7 72:20 74:17 75:8 78:10 83:24 85:4,7 87:11 89:6 89:17 90:21 92:21 92:24 93:11,22 95:18 97:12 98:24 99:7,24 101:8 102:2 102:18 103:2,11,14 103:22 104:5,8,21 106:9 107:17 110:14,24 111:12 112:1 113:18 114:10 115:4,17 116:8,17 117:19,23 119:5 120:9,18 121:5,12 126:22 127:18 128:6 129:1 129:7 130:18 131:4 132:2 133:4,11 135:18,24 136:24 138:19 139:3 140:2 140:15 143:3,15,18 143:25 145:14,22 153:3 156:18 158:17 159:5 161:14 166:24 169:15 170:5,20 172:5 173:19 174:10 175:4,15 177:15,20 180:1,25 181:18 183:12 187:4,8 <b>formatting</b> 152:21 152:24 158:22 <b>forms</b> 30:11 <b>forward</b> 137:20 148:11 189:13 <b>forwarded</b> 100:24 <b>found</b> 23:5 84:1 149:7 <b>foundation</b> 18:5,11 <b>foundational</b> 11:14 19:9 61:20
--	--	--	---

<p><b>four</b> 32:20 33:11 34:12 <b>fourth</b> 33:5 <b>frame</b> 107:20 122:2 122:24 123:2 146:6 <b>frames</b> 122:25 <b>franchise</b> 159:8,12 161:9,10,11 <b>frankly</b> 143:9 <b>free</b> 189:2 <b>frequently</b> 16:4 42:21 <b>front</b> 15:13 26:1 108:9 <b>fryer</b> 173:3,9,18 174:2 <b>fryers</b> 71:20 <b>fuel</b> 33:7 52:20 <b>full</b> 50:10,13 108:14 <b>fully</b> 79:21,21 <b>fulton</b> 186:4 <b>function</b> 41:17 91:19 105:13,20 136:22 138:15 <b>functional</b> 112:21 <b>functionality</b> 87:9 87:13,14 88:17,20 95:13 96:17 <b>functions</b> 43:1,3 72:10 94:25 152:3 152:16 160:8 163:12 180:7,9 <b>fundamental</b> 139:21 <b>funding</b> 154:12 <b>funds</b> 164:21 <b>further</b> 128:20 186:9 <b>future</b> 137:7</p>	<p><b>gathered</b> 179:1 <b>general</b> 31:24 33:20 49:15 120:24 140:18 144:7 150:19 153:19 180:3 <b>generally</b> 71:11,12 74:6 77:1 87:19 135:8 139:17 141:1 <b>generate</b> 119:22 160:15 <b>generates</b> 115:2,14 115:19 <b>generation</b> 142:21 <b>geographic</b> 83:8 <b>georgia</b> 1:17 2:6 5:6 186:3 187:4,11 <b>german</b> 71:8 <b>getting</b> 14:23 87:19 90:2 123:6,19 132:4 132:10 <b>give</b> 7:14 8:6 10:24 63:20 108:3 <b>given</b> 8:5 82:12 84:17 130:5 146:21 169:19 186:9 187:19 <b>gives</b> 73:11 141:18 <b>giving</b> 55:3 133:19 134:1,13 <b>global</b> 149:11 <b>go</b> 8:13 69:10,11 71:10 80:16 100:12 101:2 105:24 113:11 125:23 148:22 150:12 171:7,10 <b>goal</b> 174:17 <b>goals</b> 144:6 <b>goes</b> 28:16 36:5 <b>going</b> 5:21 8:1 17:18 55:15 56:1 71:1,6 80:18 96:3 124:11 125:15,19,20 134:20 137:5 152:8</p>	<p>154:21 157:24 171:24 178:9 <b>good</b> 54:3 73:10 92:3 172:23 178:2 178:23 <b>google</b> 164:7 <b>gore</b> 154:7 <b>gradually</b> 148:24 <b>granted</b> 21:25 168:18 <b>graphical</b> 164:5,5 166:16 <b>graphically</b> 82:11 <b>great</b> 7:17 151:8 <b>greater</b> 137:14 <b>grind</b> 146:2 <b>ground</b> 118:18,23 137:19 <b>group</b> 22:3 30:1 <b>guess</b> 40:5 77:5 165:4 183:5 <b>gun</b> 56:14</p>	<p><b>haul</b> 146:10 <b>head</b> 32:12 107:16 <b>headed</b> 74:15 <b>hear</b> 95:7 184:16 <b>heard</b> 6:25 103:25 <b>hearing</b> 103:23 186:9 <b>heat</b> 172:12 <b>heating</b> 71:20 79:11 79:18,19 80:4,7,16 <b>heavy</b> 171:17 <b>held</b> 116:2,4 <b>help</b> 74:11,12 106:7 <b>helpful</b> 36:16 <b>helps</b> 164:17 <b>hexagons</b> 82:14 <b>high</b> 72:22 118:13 122:23 135:23,25 147:10 155:6 <b>highly</b> 149:21 <b>history</b> 59:17 63:10 64:15 66:10</p>
		<b>h</b>	
		<p><b>h</b> 70:18 71:5 <b>half</b> 40:15 165:20 <b>halt</b> 146:2 147:13 <b>hand</b> 15:25 36:10,10 158:13 <b>handheld</b> 107:2 162:3 <b>handing</b> 70:21 <b>hands</b> 133:17 <b>happen</b> 141:14 150:13 154:13 <b>happened</b> 146:8 150:5 153:15,16 155:10 <b>happening</b> 178:18 <b>happy</b> 142:5,7 <b>hard</b> 22:19 28:9 55:4 71:1 143:4 180:15 <b>hastily</b> 15:17</p>	<p><b>ho</b> 18:24 <b>hold</b> 74:22 96:19 <b>holloway</b> 2:4 8:14 8:21 9:1 12:24 13:4 13:22 14:11,15,20 15:7,10,14,16,18 17:18 18:5,11 19:13 19:16,23 20:6,9 21:12,16 22:12 24:24 25:7,12,14 26:12 27:10,15 28:21 29:3,11,20 30:14,22 34:20 35:1 35:10,17,25 36:22 37:1,8,12,17 38:8 38:18 39:8,15 40:9 40:20 41:8,19,24 42:15,23 43:6 44:4 44:7,10,12 45:2 46:17,23 47:4,14,25 48:10,19 49:3,9,12 49:21 50:7 51:6,12 51:18 52:4,8,16</p>

<p>53:14 55:9,13 57:16 57:20 58:1 60:1,17 60:20 61:22 62:10 62:17 64:12 65:1,8 65:16,22 66:3,25 67:3,18,23 68:16,20 68:25 69:10,19 70:7 71:1,6 72:20 74:17 75:8 78:10 83:24 85:4 87:11 89:6,17 90:21 92:21,24 93:11,22 95:18 97:12 98:24 99:7,24 101:8 102:2,18 103:2,11,14,22 104:5,8,21 106:6,9 107:17,23 110:14 110:24 111:12 112:1 113:18 114:10 115:4,6,17 116:8,17 117:19,23 118:3 119:5,11 120:9,18 121:5,12 126:22 127:18 128:6,9 129:1,7 130:18,21 131:4,15 132:2,4,8,13,21 133:1,4,11,18,23 134:1,4,10 135:18 135:24 136:24 138:19 139:3 140:2 140:15,24 141:23 142:1,4,6,11 143:3 143:15,25 145:14 145:22 156:18 158:17 159:5 161:14 162:15,18 162:21 166:24 169:15 170:5,20 172:5 173:19 174:10 175:4,15 177:15,20 180:1,25 181:4,18 183:12 184:20 189:5</p>	<p><b>home</b> 28:17 29:1,4,9 29:10,13,17 30:18 31:6,9,13,22 33:4 35:24 36:2,13 44:21 45:9,18,19,24 48:12 50:21 52:3,20 53:11 53:21,21 154:20 155:20,23 <b>homes</b> 156:3 <b>horse</b> 84:9 <b>hostile</b> 140:13 <b>hosts</b> 26:20 <b>hour</b> 9:22,24 <b>hourly</b> 9:19 <b>hours</b> 11:20,21,21 11:22 12:14 181:2 <b>house</b> 154:15 156:8 <b>houseboat</b> 51:11 <b>hp</b> 22:15,15,16 <b>html</b> 158:8,11 <b>http</b> 144:10 <b>huh</b> 10:20 18:14 20:21 23:23 55:18 64:2 67:11 77:9 86:4 87:20 98:4 113:7 145:1 173:14 181:11 <b>human</b> 101:14,15 104:17 105:1,19 106:1,10,11,12,14 106:16,21 107:1,2 107:14,14 124:17 173:25 <b>humans</b> 105:21 107:7 165:4 <b>hundreds</b> 65:25</p>	<p>54:9 63:22 70:20 135:3 <b>identified</b> 20:3 24:21 76:24,25 117:8 127:21 <b>identify</b> 19:17 43:3 128:15 <b>identifying</b> 19:25 <b>idle</b> 127:7 <b>ignition</b> 33:7 52:19 53:18 <b>illustrated</b> 110:5 <b>illustrates</b> 43:17 112:6 <b>illustrating</b> 43:24 <b>image</b> 92:10 96:9 177:3 <b>images</b> 30:1 <b>immediate</b> 50:24 178:24 <b>immediately</b> 41:23 90:12 94:13 100:6 147:20,23 162:13 165:4 <b>impact</b> 157:11 <b>implement</b> 158:22 <b>implemented</b> 137:25 <b>implements</b> 137:24 <b>implicated</b> 165:2 <b>implies</b> 45:23 47:5 115:23 182:1 <b>important</b> 92:4 158:15 <b>impossible</b> 150:14 <b>improve</b> 144:13 149:15 150:6 <b>improved</b> 141:11 <b>inaccurate</b> 64:25 <b>inappropriate</b> 20:5 132:19 <b>inasmuch</b> 127:5 <b>incarnation</b> 153:18 <b>incident</b> 146:5</p>	<p><b>inclined</b> 152:8,9,16 <b>include</b> 27:23 86:20 86:23,23,24 95:20 100:3 104:24 114:19 128:12 131:24 157:18 <b>included</b> 189:11 <b>includes</b> 33:6 79:24 84:6 87:13 114:17 129:9 135:12 176:1 <b>including</b> 22:9 91:23 94:19 161:8,8 <b>inconsistency</b> 59:15 <b>inconsistent</b> 102:21 <b>incorporate</b> 17:13 130:3 152:15 <b>incorporating</b> 144:22 152:17,18 <b>incorrect</b> 64:11 <b>increasing</b> 155:7 <b>independent</b> 62:15 105:1 114:20,22 <b>index</b> 3:1 4:1 <b>indicates</b> 78:2 142:19 <b>indicating</b> 189:11 <b>indication</b> 77:17 <b>indicia</b> 173:6 <b>indistinguishable</b> 112:18 <b>individual</b> 106:4 180:9 <b>industrial</b> 140:5,12 140:23 141:1 142:19 <b>industries</b> 139:2,18 139:23 140:19 <b>industry</b> 139:7,8,8,9 139:11,25 140:1,6,9 145:19 150:19,21 159:18,19,22 160:2 <b>inexpensive</b> 152:5 <b>info</b> 86:21 <b>inform</b> 127:13</p>
	<b>i</b>		
	<p><b>ibm</b> 155:18 <b>icontrol</b> 6:25 <b>idea</b> 52:22,23,24 172:23 <b>ideally</b> 82:13 <b>identification</b> 15:20 16:19,21 23:17 25:9</p>		

<p><b>information</b> 71:18 86:17,20,21 88:14 89:11 92:19 94:12 98:7,15,19 100:4,8 100:18,21 103:1 113:6 117:13,14,14 119:25 122:2 129:25 146:20 148:25 164:4,17 169:10 171:12 172:1 174:17,22 175:19,20 177:10 178:13,15,17,23,25 179:1,6,24,25 183:3 183:20,22,23 184:9</p> <p><b>infrared</b> 76:24 77:12,25 173:23</p> <p><b>infringement</b> 57:25</p> <p><b>inherent</b> 90:22 184:1,11</p> <p><b>initial</b> 21:23 22:2 25:15,19,21,23 34:2 34:5 35:3 37:20 63:12 141:12 151:9</p> <p><b>initialized</b> 163:7</p> <p><b>initially</b> 12:23 60:22 150:7 155:19</p> <p><b>initiative</b> 90:9 154:10</p> <p><b>inquire</b> 8:13 129:22</p> <p><b>insecure</b> 145:21</p> <p><b>inside</b> 26:18 29:22 31:6,10 34:14 36:3 46:20 80:1</p> <p><b>insight</b> 2:11</p> <p><b>insightplc.com</b> 2:13</p> <p><b>installed</b> 165:23</p> <p><b>instance</b> 52:24 63:7 101:4 112:17</p> <p><b>instances</b> 58:19 78:17 95:21 102:9 122:12 124:4,7 149:6</p> <p><b>institute</b> 118:8</p>	<p><b>institution</b> 4:12 59:12 60:16 61:1 62:12 63:4,23 64:1 67:10 108:5 109:15 118:12,16 164:23</p> <p><b>institutions</b> 155:13</p> <p><b>instruct</b> 18:21</p> <p><b>instruction</b> 8:11</p> <p><b>instructions</b> 86:22 86:24</p> <p><b>insufficient</b> 23:6</p> <p><b>integrated</b> 71:23 111:16 112:14 135:11</p> <p><b>integration</b> 144:12</p> <p><b>intellectual</b> 10:13</p> <p><b>intelligence</b> 128:13</p> <p><b>intend</b> 106:23</p> <p><b>intended</b> 59:3 160:17</p> <p><b>intensive</b> 149:22</p> <p><b>intent</b> 34:21,22 117:9 141:15 182:4</p> <p><b>intention</b> 44:23 149:11</p> <p><b>inter</b> 4:6,12,17 10:7 10:15 15:23 16:22 19:2</p> <p><b>interact</b> 103:10</p> <p><b>interacted</b> 18:3</p> <p><b>interaction</b> 34:4 47:10,21 107:2</p> <p><b>interactive</b> 50:23</p> <p><b>interconnect</b> 31:1</p> <p><b>interconnection</b> 137:16 157:21</p> <p><b>interconnects</b> 146:16</p> <p><b>interdependent</b> 142:22</p> <p><b>interested</b> 186:11</p> <p><b>interesting</b> 139:7</p> <p><b>interface</b> 33:3,7,8 73:23 128:14 140:4 157:25 158:15,19</p>	<p>158:21,25 180:14</p> <p><b>interfacing</b> 159:3</p> <p><b>interference</b> 82:21</p> <p><b>interim</b> 12:6</p> <p><b>intermediary</b> 30:11</p> <p><b>intermediate</b> 97:16 168:22</p> <p><b>internally</b> 106:3 180:20</p> <p><b>international</b> 137:18</p> <p><b>internet</b> 30:3 31:3 31:25 32:16,22 42:19 44:17 45:1,6 136:9 138:10,24 144:9 145:4,5,9,10 145:13,16,20,24 146:2,6,8,8,9 148:8 148:10,19 149:14 149:18 150:1,10,13 150:22,25 151:3 152:14 153:10,12 153:13,17,18,23 154:3,8,11,18,22,24 155:14 156:8 157:1 157:2,7 162:7</p> <p><b>interpretation</b> 58:11 59:9 68:3 182:24</p> <p><b>interrogate</b> 94:8</p> <p><b>interrogated</b> 91:3</p> <p><b>interrogates</b> 89:10 94:6 97:20 98:2 164:16</p> <p><b>interrogating</b> 88:10 89:8,25 90:1 100:1</p> <p><b>interrogation</b> 90:8 90:17 91:6,8,16,17 97:10 100:3</p> <p><b>interrupted</b> 142:10 171:8</p> <p><b>interrupting</b> 132:11 142:9</p> <p><b>interruption</b> 69:1 107:24 164:10 167:8 184:21</p>	<p><b>intervention</b> 101:15 104:17 105:2,19 106:1,16 124:17</p> <p><b>intrinsically</b> 90:23</p> <p><b>introduced</b> 5:16 155:19</p> <p><b>introducing</b> 157:12 157:13</p> <p><b>intuitive</b> 144:20</p> <p><b>intuitively</b> 151:5</p> <p><b>invalid</b> 133:10</p> <p><b>invented</b> 154:8 155:11</p> <p><b>invention</b> 38:23 50:17,20 128:20 142:18 159:15 183:16</p> <p><b>inventor</b> 34:3 59:17</p> <p><b>inventory</b> 94:23</p> <p><b>involve</b> 53:6</p> <p><b>involved</b> 167:22</p> <p><b>involves</b> 28:3</p> <p><b>involving</b> 10:3 55:17 158:3</p> <p><b>ip</b> 136:22,23 137:6 137:12,24 138:8,8 138:14 146:9 149:7 149:10 152:6,8 157:4,9</p> <p><b>ipr</b> 10:7,10 12:15 19:17,25 24:22,25 25:1,2,3 38:3 55:5,9 55:14 58:7 64:1 65:7,15 80:23</p> <p><b>ipr2015-01760</b> 1:5</p> <p><b>iprs</b> 10:6,13,17 11:2 11:25 14:17 15:4 20:24</p> <p><b>irrespective</b> 83:16</p> <p><b>isdn</b> 136:10,11,19 136:20 138:5 157:16,21</p> <p><b>iso</b> 137:18</p> <p><b>issuance</b> 64:20</p>
--	---	---	---

<p><b>issue</b> 55:1,23 58:19 63:11 173:13 <b>issued</b> 34:6 60:25 61:7 62:8 66:12 143:2 <b>issues</b> 61:2 63:16 70:2 <b>issuing</b> 65:6 <b>item</b> 87:5 <b>items</b> 51:1 <b>iv</b> 60:9,23</p>	<p>20:19 <b>keep</b> 132:11 134:18 <b>key</b> 7:12 <b>kids</b> 174:4 <b>kilpatrick</b> 2:4 6:8 9:12 14:25 20:19,25 21:8 22:9 <b>kin</b> 186:9 <b>kind</b> 47:7 82:15 152:24 154:13 169:5,17 170:6 173:2 180:17</p>	<p>95:12 96:9,10 99:6 99:22 112:2,24 113:19 118:24 119:6 121:2 131:23 132:4,10 139:6 140:13 149:13 151:2,6 154:13 161:17 164:24 166:5 170:10 171:25 172:1 174:2 174:3 179:11 182:17</p>	<p>160:18 161:5,5 163:2 165:21 169:14,16,16 170:3 170:7,12 172:2,4 174:3,9,21 177:10 178:25 179:5,10 180:6 181:9 <b>koether's</b> 97:3 104:15 106:18,20 108:20 113:5 120:20 174:17 180:6 <b>ktslaw.com</b> 2:7</p>
<p style="text-align: center;"><b>j</b></p>	<p><b>kinds</b> 101:13 156:6 <b>kitchen</b> 71:16,19,23 72:25 73:17 74:1 75:17,19,24 76:16 77:3 78:12,17,18,20 79:10,18,19,20 81:12,13,17,21 84:14 85:13,21 86:16 89:5,7 97:15 108:21 109:18 110:3,8,22,25 111:10,16,17,19 112:14,15 120:21 127:12 128:23 129:16 130:4 159:10 162:5 163:22 164:4 165:9 165:10,22 172:17 175:3 177:17,24 178:10,14,19,23 179:2,7,12,13,15,17 179:24 <b>kitchens</b> 71:15,18 72:6 74:9 75:1,1 159:11 <b>knew</b> 150:1 151:14 <b>know</b> 8:18,18 14:24 15:5 19:23 20:13,17 21:14 23:13 38:9 42:17,24 43:1,4 45:14 46:11,12 48:21 51:8 66:6 82:11 84:8 90:24</p>	<p><b>knowledge</b> 130:15 131:1,12,20 170:13 <b>known</b> 5:17 35:9 53:13 149:17,18 174:5 <b>knows</b> 10:24 122:4 127:6 <b>koether</b> 70:17,18,22 70:23 71:4,9,10,12 71:14 74:12,24 75:4 75:5,13 76:8,9,13 77:6 78:8,9,11 81:11 82:16 83:12 83:19 84:2 86:2,9 86:12 87:1,24 88:24 91:21 92:13 97:3,9 102:5 106:19 109:1 109:17 113:17,17 113:23 117:21,22 117:25 118:19 120:17,24 121:2 122:18 125:22 126:17 127:3,21 129:10,19,21 130:14,25 131:11 131:20 134:23 135:9,16,17 136:7 136:18 138:18 139:5,12,16,17,25 151:24 152:1,13,20 156:15,25 157:14 157:16 158:16 159:3,7,14,16</p>	<p style="text-align: center;"><b>i</b></p> <p><b>lab</b> 147:3 148:14 <b>lab's</b> 147:5 <b>labeled</b> 32:10 73:13 <b>labor</b> 159:16 160:1 <b>labs</b> 151:13,16 <b>lacking</b> 149:8 <b>land</b> 63:8,9,11 <b>language</b> 49:16 56:21 57:7 78:1 84:23 167:22 176:1 <b>laptop</b> 107:3 <b>large</b> 164:7 <b>larger</b> 81:25 85:6 <b>late</b> 77:23 158:1 <b>law</b> 6:5,6,7,9 9:14 22:4 <b>lawrence</b> 147:3,5 <b>lawyer</b> 118:10 <b>lawyers</b> 39:17 <b>lay</b> 158:8 <b>layer</b> 123:24 125:13 136:21 137:20,21 137:23 152:2 <b>leaders</b> 145:19 <b>leadership</b> 150:22 <b>leads</b> 99:20 165:14 <b>leaps</b> 150:7 <b>learned</b> 143:8 <b>leased</b> 157:8,18,20</p>
<p style="text-align: center;"><b>k</b></p>	<p><b>k</b> 6:20 70:18 71:5 <b>k&amp;l</b> 6:14,22 13:12 13:21 14:3,10 16:12 17:7,10 18:1,7,9,23</p>	<p><b>95:12 96:9,10 99:6</b> <b>99:22 112:2,24</b> <b>113:19 118:24</b> <b>119:6 121:2 131:23</b> <b>132:4,10 139:6</b> <b>140:13 149:13</b> <b>151:2,6 154:13</b> <b>161:17 164:24</b> <b>166:5 170:10</b> <b>171:25 172:1 174:2</b> <b>174:3 179:11</b> <b>182:17</b></p>	<p><b>160:18 161:5,5</b> <b>163:2 165:21</b> <b>169:14,16,16 170:3</b> <b>170:7,12 172:2,4</b> <b>174:3,9,21 177:10</b> <b>178:25 179:5,10</b> <b>180:6 181:9</b> <b>koether's 97:3</b> <b>104:15 106:18,20</b> <b>108:20 113:5</b> <b>120:20 174:17</b> <b>180:6</b> <b>ktslaw.com 2:7</b></p>

<p><b>leave</b> 175:21  <b>led</b> 61:15 62:3  <b>lee</b> 1:18 144:8,14  186:16 187:23  <b>left</b> 31:2,5 32:6  36:10  <b>legal</b> 39:22,23  187:11,12,13,16,18  188:1 189:1  <b>letter</b> 13:5 189:16  <b>level</b> 72:22 118:19  124:9,20 125:23  135:23,25 139:21  172:25 181:16  <b>license</b> 22:8  <b>life</b> 61:25 180:12  <b>light</b> 8:10 84:8  102:10 172:12,16  173:24 184:1,12  <b>likelihood</b> 118:13,22  <b>limit</b> 117:10 151:21  <b>limitation</b> 57:15,17  57:19 180:4  <b>limitations</b> 113:6  114:17,19  <b>limited</b> 22:25 72:1  87:12  <b>limiting</b> 98:22  146:22  <b>line</b> 17:19 30:2 31:3  31:24 32:10,16,21  44:16 45:5 46:8  56:12,22 91:22,22  97:7 102:16 116:21  128:1 147:11  155:24 156:5,10  157:19,20 160:5,6  163:6,17,25,25  164:12 167:1  171:20 188:5  189:11  <b>lines</b> 30:25 74:4  86:3 87:8 88:5  109:23 110:2 127:2  127:22,23 128:18</p>	<p>153:9,11 157:8  163:11,19,24  164:20,20  <b>link</b> 147:8,14 178:10  178:16  <b>linked</b> 107:3  <b>links</b> 146:10  <b>list</b> 109:11 120:1  133:14  <b>listed</b> 37:24  <b>lists</b> 38:1 57:8  <b>literally</b> 150:2  <b>litigation</b> 187:7,19  <b>little</b> 39:25 75:3  113:10 153:7  156:14  <b>live</b> 52:6  <b>livermore</b> 147:3,5,6  148:14  <b>livingston</b> 189:2  <b>llc</b> 1:3,7 26:24 44:3  44:6 188:3,3 189:6  189:6  <b>llp</b> 2:4  <b>loaf</b> 80:14  <b>local</b> 72:23,24 167:3  <b>locally</b> 77:18  <b>located</b> 29:10,19,21  29:22 34:13,17 35:8  48:8,13 49:1,19,19  68:11,18 69:22  71:17 74:7,19 78:3  78:13 81:22 83:21  84:17 166:19  <b>locating</b> 31:18 43:18  <b>location</b> 51:2 74:25  164:8 166:16  168:21,23  <b>logic</b> 90:10 93:7  <b>long</b> 50:22 135:20  146:10 178:21  180:24 181:6,7  <b>look</b> 24:5 36:23  59:11 62:12 69:15  78:3 86:9 110:17</p>	<p>113:2,25 121:8,9,24  126:15 128:2  130:11 135:4  159:14 161:17  162:18 173:3  175:24 176:15  177:7 178:4  <b>looked</b> 143:5  <b>looking</b> 28:13 37:19  73:6 95:23 109:4  110:2 113:16  126:16 134:14  141:22 162:1  165:16  <b>looks</b> 32:11 82:15  <b>lost</b> 122:24 123:1  147:18,22,25  178:14  <b>lot</b> 137:9 142:15  151:16 158:2 180:8  <b>lots</b> 173:10  <b>love</b> 151:6  <b>low</b> 159:17 181:6  <b>lower</b> 31:5 32:6 36:9</p>	<p><b>manual</b> 106:25  107:10  <b>manually</b> 95:2  163:14  <b>map</b> 52:18 82:11  164:3 166:16  <b>mapping</b> 78:7  <b>maps</b> 164:6,7  <b>march</b> 26:1  <b>mark</b> 23:12  <b>marked</b> 15:6,19  16:16,18,21 23:16  25:8 54:8,12 63:21  70:19,22 135:2,5  <b>marketed</b> 151:4  <b>marking</b> 23:14  <b>match</b> 98:11 99:11  <b>matter</b> 13:13,14,17  16:3 17:15 39:22  51:22 59:13 131:22  147:1  <b>matters</b> 11:5 19:9  19:10 20:17 39:23  <b>mean</b> 10:7 12:4  22:13 31:20 37:9,9  45:14,22 47:2 48:2  51:23 52:21 55:4  58:13 66:15 67:17  70:12 78:14 79:9,16  81:12 86:7,10 91:20  92:15 95:4 97:22  101:10,19,20  102:10 105:3,4  107:7,14 113:20  131:24 134:12  140:20 143:4,8  144:8 150:12  151:15 152:1  156:10,11 160:13  161:18 165:1  166:15 170:24  173:10 174:3 175:8  179:7 180:3,20  183:11,13,21</p>
		<b>m</b>	
		<p><b>m</b> 6:20  <b>macintosh</b> 156:12  <b>madam</b> 189:9  <b>mail</b> 13:6  <b>main</b> 43:24  <b>maintenance</b> 86:15  86:22 163:7,8,9  174:14 177:12,18  <b>major</b> 31:2 138:21  <b>majority</b> 150:9  <b>making</b> 132:5  154:11 179:8  <b>maligned</b> 154:14  <b>management</b> 86:16  149:9  <b>managing</b> 71:15  <b>manner</b> 50:14 164:5  164:6</p>	

<p><b>meaning</b> 58:9,14,17 58:21,23,25 59:20 66:24 67:15,21 68:1 68:8,13 69:18 70:4 79:5 182:18,19,20 182:23 <b>meaningful</b> 139:19 156:23 <b>means</b> 10:13 26:14 39:5,9 44:4,18 58:14 80:18 86:16 118:24 164:24 177:2 <b>meant</b> 31:9 61:17,17 112:20 <b>mechanism</b> 27:22 27:23 146:19 <b>media</b> 135:13 176:12 177:5 182:2 <b>medium</b> 155:25 176:23 177:17 181:23 182:25 183:1,6,8,8 <b>megabit</b> 147:11 <b>megan</b> 18:24 <b>member</b> 138:9 <b>memory</b> 134:16 180:18 <b>mentioned</b> 10:3 95:25 165:18,20 <b>mentioning</b> 172:8 <b>mentions</b> 159:16 172:6 <b>message</b> 90:10,10 122:9,11,14 123:7 123:22 124:10,20 <b>messages</b> 152:21,22 153:2,2,5 158:23,23 160:16 <b>met</b> 57:24 <b>metcalfe</b> 146:1 <b>method</b> 50:17 126:14 <b>microprocessor</b> 75:15,21 76:16</p>	<p>108:21 109:17 110:5 111:15,18,24 112:3 114:3 179:10 <b>microwave</b> 166:5,6 <b>mid</b> 137:2 138:4 145:10 154:6 158:1 <b>middle</b> 40:14,14 137:19 <b>miles</b> 147:7 <b>million</b> 122:25 <b>mind</b> 74:14 138:7 <b>minimal</b> 183:25 184:10 <b>minor</b> 138:21 160:16 <b>minute</b> 24:2 168:13 <b>minutes</b> 68:24 80:14 80:16 <b>misreading</b> 87:7 170:4 <b>misremembering</b> 159:13 <b>misrepresentations</b> 132:6 <b>missed</b> 89:2 <b>mistakes</b> 132:8 <b>mobile</b> 74:1 <b>mode</b> 103:17 127:7 <b>model</b> 137:24 <b>modem</b> 155:5 156:13 <b>modification</b> 172:15 <b>modifications</b> 53:3 <b>modified</b> 34:4 165:19 <b>modify</b> 52:15 <b>module</b> 135:13 <b>moment</b> 62:4 73:21 85:11 <b>money</b> 165:2 <b>monitor</b> 86:14 89:24 172:20 <b>monitored</b> 90:4 163:8 171:25</p>	<p><b>monitoring</b> 1:6 5:18 25:22 41:16 87:9,13 87:14,14 88:1,25 89:4,15,22,22,24 95:11 102:6,9 105:8 105:12 116:6,10 117:6,11,12,15,18 117:22,24 118:1 126:24 159:11 171:16,22 188:3 189:6 <b>monitors</b> 75:23 <b>month</b> 21:4 <b>months</b> 13:16 <b>morgan</b> 150:25 <b>motion</b> 62:25 63:2 <b>motivation</b> 171:21 174:13,13 <b>motor</b> 26:18 49:5 52:3 53:16,21,21,23 <b>mouth</b> 132:12 <b>movable</b> 84:20 <b>move</b> 104:9 137:20 <b>mt</b> 189:1 <b>multimedia</b> 171:17 171:18,19 <b>multiple</b> 67:7 78:19 117:6 162:22 172:23 <b>multipoint</b> 122:17</p>	<p><b>necessary</b> 150:1 154:18 159:19 <b>need</b> 20:5 36:23 132:19 133:19 178:22 <b>needed</b> 59:21 84:21 <b>negative</b> 122:13,19 122:20 <b>negotiating</b> 62:22 <b>neither</b> 101:9 <b>network</b> 71:16 72:3 72:12,23,24 73:21 73:23,24 77:19 104:16,24,25 106:11,11,12,14,19 106:21,21 107:9,13 107:15,15 121:15 121:16 122:17,18 122:25 123:5,11,23 124:9,20 125:24 126:1 136:21 137:8 137:8,20,21,23 138:2 144:15 148:1 148:4 149:12,20 151:21 152:2 153:19,20 154:25 155:1 157:9,17 158:3,6,8 167:3 178:7 <b>networking</b> 136:20 137:5 138:3 151:14 155:5 156:6 <b>networks</b> 7:1 77:22 77:24 82:6 104:25 105:19,20,20 122:22 123:10 126:5 138:1 151:10 178:7 <b>never</b> 9:16 82:19 147:24 <b>new</b> 53:10 96:9 189:2 <b>node</b> 146:19 <b>nodes</b> 146:25</p>
		<p><b>n</b></p>	
		<p><b>n</b> 5:14,14 <b>name</b> 5:12,15 13:4 22:19 188:3,4 189:6 <b>named</b> 6:25 148:13 <b>names</b> 15:7 <b>national</b> 147:3 <b>natural</b> 180:15 <b>nature</b> 82:5 86:25 105:6,11 <b>nep</b> 146:11 <b>ne</b> 1:16 2:5 <b>necessarily</b> 58:18 90:23 180:4</p>	

<p><b>non</b> 125:5  <b>nope</b> 118:4  <b>notarized</b> 189:12  <b>notary</b> 188:21,24  <b>note</b> 189:11  <b>noted</b> 61:9,10  <b>notice</b> 4:3 23:14              24:1,2,6,17 165:10  <b>notification</b> 119:23              121:10,13,16 128:5  <b>notifications</b> 123:6              129:14  <b>notifying</b> 125:17  <b>notion</b> 82:5 101:17              123:9,18  <b>notwithstanding</b>              24:14  <b>novel</b> 143:24  <b>nowadays</b> 180:20  <b>nsfnet</b> 153:22 154:2              157:8  <b>number</b> 19:17 20:1              20:4 25:1,2 27:3,5              31:7,11 44:4 55:10              59:19 73:1,14 80:4              108:8 120:11              134:22 159:7,11              160:4 161:6 189:7              189:11  <b>numbers</b> 15:7 16:5              19:25 26:22 27:4              56:10,12,13 73:8              76:10,19  <b>numerous</b> 142:22</p>	<p>21:12,16 22:12          24:24 26:12 27:10          27:15 28:21 29:3,11          29:20 30:14,22          34:20 35:1,10,17,25          36:22 37:12,17 38:8          38:18 39:8,15 40:9          40:20 41:8,19,24          42:15,23 43:6 45:2          46:17,23 47:4,14,25          48:10,19 49:3,9,12          49:21 50:7 51:6,12          51:18 52:4,8,16          53:14 57:16,20 58:1          60:1,17,20 61:22          62:10,17 64:12 65:1          65:8,16,22 66:3,25          67:3,18,23 68:16          69:19 70:7 72:20          74:17 75:8 78:10          83:24 85:4 87:11          89:6,17 90:21 92:21          92:24 93:11,22          95:18 97:12 98:24          99:7,24 101:8 102:2          102:18 103:2,11,14          103:22 104:5,8,21          106:9 107:17          110:14,24 111:12          112:1 114:10 115:4          115:6,17 116:8,17          117:19,23 119:5,11          120:9 121:5 126:22          127:18 128:6,9          129:1,7 130:18,21          131:4,15 132:2,22          133:4,11 135:18,24          138:19 139:3 140:2          140:24 143:3,15,25          145:14,22 156:18          158:17 159:5          161:14 162:15          166:24 169:15          170:5,20 172:5          173:19 174:10</p>	<p>175:4,15 177:15,20          180:1,25 181:18          183:12  <b>objections</b> 20:4  <b>obscure</b> 22:19 117:2  <b>observable</b> 175:1  <b>obtain</b> 83:14  <b>obtaining</b> 169:10              171:11  <b>obvious</b> 77:2 118:19              130:2,16 131:2,13              131:18 134:23              144:5  <b>obviously</b> 28:18              52:19 139:12  <b>occasion</b> 23:4  <b>occasionally</b> 8:2,3  <b>occasions</b> 18:20  <b>occupy</b> 78:16  <b>occur</b> 124:16  <b>occurred</b> 146:5  <b>occurrence</b> 41:13              42:4 130:5  <b>occurs</b> 46:5  <b>offer</b> 62:19 133:6              134:19  <b>offered</b> 62:21,24,25              63:5,18 65:3,24              67:6 133:5,12              147:13  <b>offering</b> 133:8  <b>office</b> 1:1 13:7 26:11              26:13,16 30:7,21              31:5 32:10,18,24              34:15,18 35:9,13,16              35:20 36:6 40:8,16              40:22 41:3,18 42:14              42:18 43:2 44:15,25              45:4,16,24 46:4,19              47:11,12,22,23              48:25 49:5,13,16,19              49:23 72:5 159:10  <b>oh</b> 17:21 18:23 22:3              31:21 44:5,11 50:15              73:6 85:18 93:15</p>	<p>94:4 116:22 146:25          160:12 161:13          168:20 169:6,6          171:7 173:8  <b>oil</b> 140:14 142:20              173:8,8  <b>okay</b> 5:21,25 7:6,16              7:18,22 8:1,10 9:1,4              9:4,19 10:14,25              11:1 13:14 14:18              15:16 16:3,7,10,14              17:1,17 19:8,21              20:6,8,15 21:3,6              22:17 24:5,20 25:7              25:24 26:3,8 27:8              28:24 29:6,9,18              30:17,25 37:13 38:4              39:18,24 40:12 41:1              43:9,17 44:11 50:3              54:19,22,23 55:14              55:17,21 56:9 57:13              60:12 62:4,5 64:10              64:16 66:17,21              68:20,22,24 69:7              70:3,15 73:11 74:16              74:23 76:12 78:1,7              78:23 79:8,15 81:6              81:16 84:5,11 85:10              85:18 87:16 88:16              89:14 92:18 94:24              96:22 97:16,19 98:7              103:19 105:22              107:1,11,23 108:5              108:11,12 109:13              110:10,19 111:20              112:5,12,19 113:1              113:15 114:7,16              115:25 116:23,24              117:21 119:13,16              120:15 124:23,25              125:21 127:1,4              128:2 129:20 130:9              132:24 133:1,2,25              134:21 136:5 142:4              145:8,12 160:22</p>
<b>o</b>			
<p><b>o</b> 70:18 71:5  <b>o.c.g.a.</b> 185:2 187:14  <b>object</b> 17:18,22 37:2              113:18 120:18              121:12 136:24              140:15  <b>objecting</b> 20:6 37:1  <b>objection</b> 8:8 17:23              18:5,11 19:13,22</p>			

<p>161:7 162:17,21,24 166:13 167:6,24 168:9,15,25 169:11 170:15 171:4,9 175:7,21 176:7,25 179:18 181:25 184:20 <b>once</b> 80:5 159:21 163:7 <b>one's</b> 25:12 182:7 <b>ones</b> 12:19 21:10 59:23 149:24 <b>online</b> 42:19 <b>open</b> 137:16 154:11 158:18 169:17 175:5 <b>opened</b> 154:3 156:7 <b>operate</b> 103:15,16 103:18 <b>operates</b> 28:10 93:8 <b>operating</b> 33:18 89:12 91:24 93:4 94:20 95:15 96:8 148:18 168:17 <b>operation</b> 85:24 86:8,11 93:14,16 105:18 107:10 127:9 <b>operational</b> 86:25 90:9,14,24 92:8,9 92:25 93:2 95:19 105:17 173:13 <b>operations</b> 86:22 101:20 <b>operator</b> 41:14 42:5 44:19 45:8 95:3 153:2 158:9 163:14 163:15 <b>operators</b> 73:25 160:8 163:18 <b>opined</b> 160:24 <b>opinion</b> 40:10 41:5 41:9 48:21 51:13 89:16 92:18 98:14 133:3,8,9 134:3,6,8</p>	<p>134:14,19 143:24 <b>opinions</b> 22:20 <b>opposed</b> 89:3 92:12 <b>option</b> 138:15 152:12 <b>optional</b> 72:12 179:3 <b>options</b> 157:10 <b>order</b> 11:19 50:24 57:24 85:9 91:18 110:1 152:24 170:3 171:5,6,6 <b>ordinary</b> 51:10,20 52:11,13 53:12,25 58:8,17,21,23,24,25 59:20 66:24 67:15 67:15,21 68:1,8,8 68:13,14 69:18 70:4 70:4 79:5 85:20 118:19 130:2,15 131:1,12,19,21 170:13 182:23 <b>organization</b> 137:18 <b>oriented</b> 137:21 153:2 154:25 <b>original</b> 4:20,21 144:14 153:18 155:23 <b>originally</b> 21:24 22:14 <b>originated</b> 100:21 <b>originating</b> 101:5 <b>ornamentation</b> 141:17 <b>output</b> 33:2 <b>outside</b> 31:11 <b>oven</b> 79:18,19,20,23 79:24 80:1 87:3 <b>ovens</b> 71:20 <b>overall</b> 100:14 <b>overloaded</b> 178:11 <b>override</b> 106:25 <b>overseeing</b> 87:18 <b>overview</b> 72:22 73:12 166:14</p>	<p><b>owner</b> 1:8 2:10 22:5 22:11 24:8 26:10 61:23 159:8 161:16 <b>owner's</b> 4:2 15:19 16:18 23:16 25:8 47:10,21 54:8 63:21 70:19 135:2 <b>owners</b> 22:6 159:12 161:9</p> <hr/> <p style="text-align: center;"><b>p</b></p> <hr/> <p><b>p.m.</b> 184:25 <b>packet</b> 122:2,6 147:18,21,25 148:6 <b>packets</b> 147:15,21 <b>page</b> 3:3 4:2 24:6,16 26:1,23,25 27:6 28:14 29:25 37:24 38:1,21 40:13 43:9 43:13,20 44:1,2,4,6 44:7,9,10,12 49:25 50:5,12 56:2,2,4,10 63:19 64:5 66:13,13 67:9 68:6 73:4,5,7 75:11 76:7,9 81:1 108:7,11 113:3 118:16 133:13 158:11 164:6 171:20 188:5 189:11 <b>pages</b> 27:4 138:23 186:8 <b>paging</b> 134:18 <b>paid</b> 9:19 72:14 <b>palm</b> 107:3,15 <b>paragraph</b> 38:22 40:14 43:10,13 45:22 46:6,7,9,22 46:24 47:3 50:8,9 50:10,13,16 60:8 64:18 74:20 75:10 76:10 80:23 81:3 85:13,16 87:23 88:21 96:20,24 98:12 102:4 105:7</p>	<p>108:15 117:10 118:17 120:7,10,16 120:19 126:21 127:21,25 128:8 129:5,8,14 133:14 160:5,20 167:14,16 170:18,21 171:3,4 176:9,11 183:20 <b>paragraphs</b> 50:11 126:9,11 <b>parameter</b> 90:5 <b>parameters</b> 86:20 87:2 88:21 90:14 93:4,5 95:20,22,25 95:25 105:17 117:12 <b>parcel</b> 63:8,9,11 <b>pardon</b> 153:7 <b>parenthetical</b> 75:18 <b>part</b> 38:3 60:7 74:10 74:11 75:16,22 93:6 93:25 98:20 111:10 123:17,17,18 128:19 136:3 157:1 158:20 <b>partes</b> 4:6,12,17 10:7,15 15:23 16:23 19:2 <b>particular</b> 58:22 70:2 80:25 85:7,9 87:5,15 91:10 96:18 101:16 126:11 146:11 149:9 153:3 158:24 172:9 173:2 <b>particularly</b> 30:2 <b>parties</b> 186:10,10 187:7,19 <b>parts</b> 28:8 94:15 <b>party</b> 19:18 187:7 187:16,19 <b>pass</b> 100:8 <b>passage</b> 88:18 89:1 89:1 91:12 98:20 99:18,20,22,22,25 101:7,10,17 102:23</p>
--	---	--	---

<p>103:1,20 104:2  <b>passages</b> 129:4  <b>passed</b> 100:22  <b>passively</b> 89:23  <b>passwords</b> 150:12  150:15  <b>patch</b> 148:17  <b>patches</b> 96:10  <b>patent</b> 1:1,2,5,8 2:10  4:2,6,9,10,14,15,17  6:11 11:3,3 15:19  15:24 16:15,18,23  19:3 22:5,11,14,14  22:15,16 23:16 24:8  25:1,8,18,20,20  33:24,25 34:4,6,24  35:2,3,4,5 37:5 38:6  38:17,24 39:6,10,20  50:5 54:8,11 55:1  56:5 60:11,15 61:16  61:23 62:1,3,9,22  62:23 63:12,21 64:7  64:9,9,20 65:14,21  65:21 66:5,10,12,19  69:14 70:19 76:8,10  76:13 82:2,17 84:2  84:6 88:23 91:21  92:14,15,15 95:4  97:2,9,24 109:5  111:14 113:21,22  119:14 120:17  121:4 129:10 135:2  135:10,11 136:1  140:4,9 141:3,16  143:2,11,14,22  144:2 163:2 165:21  167:11,21 177:10  182:13  <b>patent's</b> 22:5 97:3  <b>patentability</b> 143:7  143:9,13,20,23  <b>patentable</b> 143:1  <b>patentee</b> 61:10 62:6  <b>patents</b> 7:10,20 10:3  12:18 16:4 17:3</p>	<p>21:18,23,24 56:9  65:25 136:16 137:4  139:22  <b>path</b> 152:13  <b>pathway</b> 28:16  31:15 32:8,11,15  36:5 77:15  <b>pathways</b> 31:12,13  32:5  <b>pattern</b> 82:10,10,20  <b>pause</b> 142:15  <b>paused</b> 142:13  <b>pausing</b> 130:10  <b>pc</b> 49:2  <b>peachtree</b> 1:16 2:5  <b>peak</b> 128:22  <b>peek</b> 162:11  <b>penalty</b> 189:13  <b>pending</b> 104:3  133:17,22,25  <b>people</b> 21:25 52:6  77:4 137:13 144:9  144:11 146:24  151:16 153:9,11  154:19 155:22  156:3,4 159:9,10,17  159:21 162:2  163:10 164:8 165:1  177:12,18 178:3  <b>perceive</b> 173:21,22  <b>percent</b> 159:23  <b>perfect</b> 82:19  <b>perform</b> 72:9 85:9  138:15 139:19  159:18 160:8  <b>performed</b> 41:17  54:5 89:23 95:2  138:16 163:9,14  180:9,10  <b>performs</b> 42:25 43:2  <b>period</b> 166:6  <b>perjury</b> 189:13  <b>permit</b> 71:19  <b>persist</b> 145:17</p>	<p><b>person</b> 51:10,19  52:10,13 53:3,20,25  58:15,20,24 59:1  68:8,13 70:4 72:13  77:16,17 85:20  130:2 131:19,21  138:3 164:18  170:13  <b>personal</b> 28:17 29:1  29:5,9,14 30:12,19  31:6,10,13,14,16,16  31:23 32:2 33:5  34:25 35:12,15,18  36:13 44:21 45:10  45:17,18,19,25  48:12 77:21,22,24  96:11 154:19  155:18,18  <b>personally</b> 145:9  <b>personnel</b> 72:8  160:7,10,14 163:3  163:17,18,22  165:10,22 166:17  171:23 174:16,19  177:12  <b>perspective</b> 181:14  <b>persuaded</b> 108:16  109:16 113:3  118:21 119:2  <b>pertinence</b> 101:16  <b>petition</b> 4:6,17  15:23 16:22 19:1  37:4,7,20 38:3 59:7  59:11 60:5,10,23  63:3,4  <b>petitioner</b> 1:4 2:3  19:18 26:23 44:2,5  118:21  <b>petitioners</b> 20:1  <b>phase</b> 22:2  <b>phases</b> 21:22  <b>phone</b> 152:4 153:9  153:11  <b>phosita</b> 51:16</p>	<p><b>phrase</b> 47:1 58:10  58:12,13 78:24  <b>phrases</b> 78:25  <b>physical</b> 74:25  150:2  <b>physically</b> 28:5  <b>pictures</b> 161:18  176:24 181:6  <b>piece</b> 165:8  <b>pieces</b> 70:16 142:23  <b>pile</b> 15:13  <b>pin</b> 170:25  <b>place</b> 27:20 28:6  48:8 49:1 86:14  90:11 91:5,8,18  101:14 127:11  165:3 166:10  <b>placed</b> 74:13  <b>places</b> 136:7  <b>plain</b> 58:8,17,21,23  58:25 59:20 66:23  67:15,21,25 68:7,13  69:18 70:4 79:4  150:13 182:23  <b>plan</b> 154:7  <b>play</b> 178:4  <b>plc</b> 2:11  <b>pleasant</b> 189:1  <b>please</b> 5:13 43:11,16  189:10,10  <b>plentiful</b> 156:3  <b>plenty</b> 178:1  <b>plug</b> 180:15  <b>plugged</b> 107:16  <b>point</b> 20:13 38:14  61:20 73:10,22 80:5  122:17 126:20  142:11 160:16  181:15 183:24,24  184:9,10  <b>pointed</b> 28:14 112:7  <b>pointing</b> 95:17  163:4  <b>points</b> 31:23 151:21</p>
---	--	---	--

<p><b>policy</b> 153:24 154:11,14</p> <p><b>politics</b> 137:9</p> <p><b>poor</b> 82:4 170:1</p> <p><b>popcorn</b> 166:4,7</p> <p><b>popular</b> 153:14</p> <p><b>popularity</b> 155:21</p> <p><b>portable</b> 164:14,15 164:16</p> <p><b>portion</b> 61:8,8 63:13 81:21 83:22 84:16 86:13 97:8 128:24 136:3 144:5 165:12 167:12</p> <p><b>portions</b> 78:12,15 163:1</p> <p><b>portray</b> 82:14</p> <p><b>position</b> 33:1 59:7 83:20 102:15 129:5 130:25 131:11,16 137:11 150:22</p> <p><b>positioning</b> 31:17 43:18</p> <p><b>positive</b> 122:20 147:19</p> <p><b>possible</b> 43:23 77:21 77:23 151:20 182:23</p> <p><b>potential</b> 124:10</p> <p><b>power</b> 127:12 128:22 142:21</p> <p><b>powerful</b> 149:24</p> <p><b>practitioner</b> 144:21</p> <p><b>preamble</b> 56:23 57:4,13,23</p> <p><b>precede</b> 163:2</p> <p><b>precedes</b> 165:12</p> <p><b>preceding</b> 41:23 46:15 90:13</p> <p><b>preclude</b> 140:17,21</p> <p><b>precludes</b> 65:4</p> <p><b>predicted</b> 146:1</p> <p><b>preexisting</b> 164:6</p> <p><b>preferable</b> 158:25</p>	<p><b>preferably</b> 77:1 110:3,9</p> <p><b>preferred</b> 137:10,12</p> <p><b>preliminary</b> 119:1</p> <p><b>premise</b> 67:6</p> <p><b>premises</b> 26:5 34:7 34:18 35:9 37:15 49:7,13,17,20,24 50:6 51:11,17 52:2 52:3,5,15 61:3,4,6 61:25 62:7,21 63:6 63:8,18 64:6 65:13 65:20,24 66:5,11,14 67:9,20 68:7 69:22 78:4,8,11,20,22 81:10,17,20 82:2,5 83:21,23 84:1,14,16 113:24 114:5,12 115:3,15,22,22,24 116:1,2,6,22,24 117:3,4,4,4,5 168:10,14,17,22 169:4,10 171:22</p> <p><b>preparation</b> 14:5</p> <p><b>prepare</b> 11:15</p> <p><b>prepared</b> 12:9 104:9</p> <p><b>preparing</b> 11:13,17 12:5,13 54:21 159:22</p> <p><b>presence</b> 173:9</p> <p><b>present</b> 2:16 50:17 50:20 113:4 126:10</p> <p><b>presentation</b> 153:3</p> <p><b>pressed</b> 28:9</p> <p><b>presumably</b> 29:10 125:16 166:2</p> <p><b>presumed</b> 169:3</p> <p><b>pretend</b> 132:19</p> <p><b>pretty</b> 150:14 157:22 180:6</p> <p><b>prevailing</b> 118:22</p> <p><b>prevented</b> 146:19</p> <p><b>previous</b> 9:11 10:5 13:13,14 21:1 75:11 76:22 88:20 99:1,2</p>	<p>137:25 163:19</p> <p><b>previously</b> 20:20 24:21 103:12</p> <p><b>price</b> 150:4</p> <p><b>primarily</b> 26:17 27:17 159:25</p> <p><b>primary</b> 103:17 114:20 138:22 157:23 162:24</p> <p><b>principles</b> 128:19 139:16 169:19,23</p> <p><b>prior</b> 13:16 38:15 39:5,9,12,21 41:12 60:7 63:10 85:20 107:19 130:3 136:1 144:1</p> <p><b>priority</b> 38:7,10,12 38:17 39:1 40:3 130:3</p> <p><b>private</b> 157:2,9</p> <p><b>probably</b> 8:18 11:22 54:4 151:17,17 169:25</p> <p><b>problem</b> 150:19,20 178:12</p> <p><b>procedure</b> 185:2</p> <p><b>proceeding</b> 55:2,4 55:16,17,22 96:24 104:14 108:7 119:4 123:16</p> <p><b>proceedings</b> 10:2 69:2 107:25 164:11 167:9 184:22</p> <p><b>process</b> 7:23 14:5 18:18 28:2,9 34:3 137:17 146:21 147:15</p> <p><b>processed</b> 184:2,12</p> <p><b>processes</b> 75:23 142:20</p> <p><b>processing</b> 30:3 31:3,25 32:17,22 42:20</p> <p><b>processor</b> 27:24 146:15</p>	<p><b>product</b> 51:24 151:7</p> <p><b>production</b> 189:22</p> <p><b>profile</b> 165:18,23,25 166:3,8</p> <p><b>profiles</b> 87:3,4 165:14,17,19</p> <p><b>program</b> 103:16</p> <p><b>programmable</b> 140:5</p> <p><b>programmed</b> 90:14 91:1</p> <p><b>programming</b> 158:3</p> <p><b>prohibited</b> 187:13</p> <p><b>prohibits</b> 8:19</p> <p><b>prominent</b> 145:25</p> <p><b>promoted</b> 152:4</p> <p><b>prone</b> 172:24</p> <p><b>pronounce</b> 71:3</p> <p><b>pronouns</b> 19:24</p> <p><b>pronunciation</b> 71:2</p> <p><b>propagate</b> 82:24</p> <p><b>propagates</b> 82:9</p> <p><b>propagation</b> 82:11 82:20 183:25 184:11</p> <p><b>proper</b> 59:8</p> <p><b>properties</b> 53:1</p> <p><b>property</b> 10:13</p> <p><b>proposals</b> 148:11</p> <p><b>proposed</b> 61:10 118:18 137:19</p> <p><b>prosecution</b> 61:11 61:14,15 62:3,7 63:19 64:25 65:21 66:4</p> <p><b>protocol</b> 136:21 137:7 144:15 152:2</p> <p><b>protocols</b> 121:15 145:10 149:15</p> <p><b>provide</b> 13:19 14:2 16:11 17:5 41:15 44:18 45:7 50:24 51:1 52:15 56:10 58:3 62:6 66:22 119:25 171:5</p>
---	---	---	---

<p>187:12,16  <b>provided</b> 13:19 14:1  16:15 19:12 33:22  55:6 64:24 65:7,20  66:2,22 68:12 69:5  85:22 95:24 99:4  102:14 110:3,9  123:15 146:10  164:3  <b>provides</b> 72:11  117:13 140:10  <b>providing</b> 30:11  41:16 65:15 66:21  69:5  <b>proximity</b> 83:4,8  <b>ptab</b> 60:15,25 61:7  62:12,25 63:2,4  66:16 69:23 78:21  118:7 126:20  <b>pto</b> 59:13  <b>public</b> 137:8 138:10  146:9 150:10 154:3  154:12 156:8 157:1  188:24  <b>publicly</b> 155:17  <b>pump</b> 33:7 52:20  <b>pun</b> 153:8  <b>punch</b> 166:8  <b>purpose</b> 85:9 153:19  171:18 183:6  <b>purposes</b> 10:14  113:24 117:7  171:22  <b>pursuant</b> 5:3 185:1  187:3  <b>put</b> 96:7 131:18  148:11 155:8  <b>puts</b> 86:14 105:14  165:9</p>	<p><b>querying</b> 124:2  <b>question</b> 11:14  12:25 13:25 18:6,13  18:15 37:8 41:25  42:17 47:16,20 52:1  59:14 62:13 65:11  65:11 74:18 75:10  78:23 80:10,24  93:18 96:23 98:14  99:11 103:20 104:3  106:6 110:16  111:20,23 113:22  118:3 124:19 130:9  131:9,18 132:15  133:16,21,25 134:5  134:11 135:19  138:11 139:6,9  153:1 157:11  158:19 160:21  161:22 170:1 171:7  171:10 175:6  181:19  <b>question's</b> 14:21  <b>questions</b> 7:15,23  8:15 18:19 36:24  87:6,24 132:22  170:16 186:7  <b>quite</b> 137:4</p>	<p>184:2,13  <b>rates</b> 187:18  <b>raymond</b> 2:16  <b>reaches</b> 80:5  <b>reaching</b> 79:5  <b>read</b> 13:22,23 33:12  33:14 41:20,22 42:1  42:3 43:10,11,15,22  47:17,18 48:3 51:3  59:12 64:21 76:11  85:19 91:21 108:9  110:7 111:8 113:13  113:14 117:15  119:15,16 126:6  127:15 128:16,24  131:5,7 142:24  184:4,6  <b>reading</b> 25:25 44:23  78:19 81:18 92:14  98:8 118:11,15  130:10 143:9  160:20 170:1,17  179:21 189:16  <b>reads</b> 24:6 40:13,15  64:18 85:19 110:2  127:5 142:19  <b>ready</b> 96:4  <b>real</b> 125:18 180:12  <b>reality</b> 82:19 102:25  <b>really</b> 27:16 36:1  54:3 58:4 96:6  105:7 117:25 123:5  129:25 132:22  143:5,5 149:10  155:12 161:13  164:24 169:22  <b>realtime</b> 120:21  128:22 129:15  171:15 183:9,11,13  183:19,22,23 184:8  <b>reason</b> 29:12 77:16  120:15 141:2  151:23 171:21  174:20 175:14  184:15 188:5</p>	<p>189:12  <b>reasonable</b> 58:11,15  58:20 59:9 68:2  73:12 118:22 150:3  182:24  <b>reasons</b> 77:2 157:1  178:1  <b>reboot</b> 96:9 148:4  <b>recall</b> 22:13 26:17  51:23,25 59:10  73:20 133:8 134:12  134:13 160:4 161:8  <b>receipt</b> 98:15,18  104:18 106:1  189:15  <b>receive</b> 17:9 129:24  147:18  <b>received</b> 85:23  86:17 122:4,4,9,11  122:14 123:7,7  124:10  <b>receiver</b> 31:20 33:1  33:2,9 76:17 77:8  77:13 110:4,23  111:1,5,22,23 122:2  122:3,7 123:6  <b>receivers</b> 76:21,23  83:15 110:11  <b>receives</b> 111:23  123:8  <b>receiving</b> 98:15  103:1 113:5 146:20  <b>reception</b> 122:8  <b>recitation</b> 163:2  <b>recognize</b> 16:1  70:23  <b>recollection</b> 62:16  66:9 76:4 161:5  <b>record</b> 5:13 13:23  19:23 23:11 43:10  43:15,22 47:18  113:4 131:7 162:16  162:17 177:22  184:6</p>
<p><b>q</b></p>	<p><b>r</b></p>		
<p><b>quasi</b> 22:22 23:1,5  <b>queries</b> 123:18  <b>query</b> 123:20 124:8  125:6,8,9,10 129:22</p>	<p><b>r</b> 6:20,20,20 70:18  71:5 186:1  <b>radical</b> 149:4  <b>radically</b> 149:3  <b>radio</b> 82:12 84:3  <b>raise</b> 70:1  <b>ram</b> 33:8  <b>ramp</b> 148:24  <b>ran</b> 158:9  <b>range</b> 50:22 139:18  140:18  <b>rapidly</b> 146:2  <b>rate</b> 9:23 10:4  122:23,23 123:1  148:24 149:3,4</p>		

<p><b>recorded</b> 117:15 181:23 184:3,14</p> <p><b>recording</b> 169:4,6,9 169:14 171:12 176:2,22,23 181:21 182:1,5,8,10,11,13 182:16,17,22,24 183:2,3,4</p> <p><b>records</b> 11:23</p> <p><b>recovery</b> 50:19,19</p> <p><b>reduce</b> 149:3</p> <p><b>reduced</b> 186:7</p> <p><b>reduction</b> 149:4</p> <p><b>redundancy</b> 178:2 181:10,12,17</p> <p><b>redundancy's</b> 181:12</p> <p><b>redundant</b> 176:4</p> <p><b>reenabling</b> 79:1 115:21</p> <p><b>refer</b> 5:21 16:4,7 46:14 55:15 61:7 127:22</p> <p><b>reference</b> 46:15 70:17,24 71:13 95:14 102:14 120:23,24 127:2 129:11,11,12 134:24 135:6,9 138:4 161:1,9 171:2 189:7</p> <p><b>referenced</b> 42:9 90:18 163:19 166:20</p> <p><b>references</b> 126:3,4 129:9 136:6 139:1,4 162:25</p> <p><b>referral</b> 187:7,17</p> <p><b>referred</b> 42:21,25 57:4 77:5</p> <p><b>referring</b> 70:12 95:13 96:17 162:12 163:1 164:13</p> <p><b>refers</b> 46:13 57:7 116:13 120:19,20</p>	<p>129:15 152:13 161:5</p> <p><b>refining</b> 142:20</p> <p><b>reflect</b> 82:22</p> <p><b>refreshes</b> 134:16</p> <p><b>regarding</b> 8:20 83:18 103:20 117:13 120:1 145:13 164:4</p> <p><b>regardless</b> 34:10</p> <p><b>region</b> 83:16</p> <p><b>regular</b> 53:17 186:10</p> <p><b>regulations</b> 5:4 187:3</p> <p><b>relate</b> 11:2 26:19</p> <p><b>related</b> 25:21</p> <p><b>relates</b> 72:19 101:11 120:12</p> <p><b>relating</b> 87:9 108:17</p> <p><b>relationship</b> 111:2,4 111:14</p> <p><b>relative</b> 7:21 76:6 89:12</p> <p><b>relevance</b> 18:16</p> <p><b>relevant</b> 21:9 40:2 69:21</p> <p><b>reliability</b> 181:13</p> <p><b>reliable</b> 174:8,12</p> <p><b>relied</b> 54:21 65:6,14 70:17</p> <p><b>relies</b> 171:4</p> <p><b>rely</b> 36:18,19 170:11 171:13</p> <p><b>relying</b> 70:24 88:17 89:3 92:11 123:14 127:17</p> <p><b>remember</b> 9:23 18:2 22:19 132:20 160:20</p> <p><b>remind</b> 7:12</p> <p><b>remote</b> 26:9,10 48:8 49:1,2 50:23 51:2 68:5 69:22 74:25 81:10,12,20 87:17</p>	<p>120:22 129:16 168:21,23 179:12 179:14</p> <p><b>render</b> 130:16</p> <p><b>rendered</b> 131:18</p> <p><b>rendering</b> 134:13</p> <p><b>renders</b> 131:2,13</p> <p><b>rental</b> 159:4</p> <p><b>repair</b> 72:7,13,13 86:15 92:3 163:7,9 163:9 164:13,18 177:12,18</p> <p><b>repairs</b> 174:14 178:24</p> <p><b>repeat</b> 47:15 121:17 121:20,21,25 123:3</p> <p><b>repetition</b> 127:1</p> <p><b>rephrase</b> 65:11</p> <p><b>replace</b> 96:8</p> <p><b>replacing</b> 53:9</p> <p><b>report</b> 21:1 90:15 91:2,5 150:25,25 170:11,22 171:2 173:12</p> <p><b>report's</b> 170:14</p> <p><b>reporter</b> 5:3 13:24 47:19 131:8 184:7 187:1,4,6,6,11,17</p> <p><b>reporter's</b> 7:14 187:6</p> <p><b>reporting</b> 5:5 27:21 187:3,5,12,16,17</p> <p><b>reports</b> 19:12 35:19 35:23,24 90:11</p> <p><b>represent</b> 32:14 112:21 186:8</p> <p><b>representative</b> 187:11</p> <p><b>representing</b> 5:17</p> <p><b>request</b> 19:16 86:23 86:24 88:13 89:24 90:12 94:7,9 100:3 100:20 101:20 102:11 121:17,20 121:21,25 123:3</p>	<p>124:13 125:2,13,14 126:19 160:14</p> <p><b>requested</b> 59:16 100:18</p> <p><b>requesting</b> 126:14 126:25</p> <p><b>require</b> 142:21</p> <p><b>required</b> 18:22 24:17 57:24 83:14 188:21</p> <p><b>requirements</b> 158:21</p> <p><b>requires</b> 81:9,9 109:6 119:21</p> <p><b>rereading</b> 12:10</p> <p><b>research</b> 153:19,23 155:13</p> <p><b>resend</b> 147:21</p> <p><b>resent</b> 147:23</p> <p><b>reserved</b> 185:4</p> <p><b>reset</b> 91:4</p> <p><b>resident</b> 101:18</p> <p><b>resiliency</b> 145:24 178:8</p> <p><b>resolution</b> 181:6</p> <p><b>resolve</b> 147:24 148:2,12 149:5</p> <p><b>resources</b> 144:16 150:3 151:18,19</p> <p><b>respect</b> 6:11 7:10 9:2 11:5,25 12:18 12:19 13:18,25 14:10 15:3,11,21 16:10,15 17:3,5,10 17:24 18:1,3 19:8 19:10 20:2 23:8,13 24:20 25:10 26:8 27:8 28:12,24 29:16 29:18 34:11 35:15 36:16 38:4,6 40:4 54:11 55:21 56:21 57:13 58:7 62:2 63:17 64:5 68:4,11 69:13 70:5 75:4 76:12 78:7,24 79:15</p>
--	---	---	---

83:18 84:24 85:12 87:16 90:17 91:10 91:12 96:22 108:5 113:1 115:13 116:5 118:6 120:4 121:1 125:21 130:24 131:9 142:17 145:4 146:22 176:1 <b>respectively</b> 17:3 <b>responded</b> 101:1 <b>responds</b> 75:24 <b>response</b> 10:24 47:10,21 50:25 63:3 90:2,12,13 96:5 100:25 101:2 122:13,19,20,21 123:19 124:2,11,14 124:14,23,24 125:1 125:5,5,12,13 147:17 148:25 149:14 <b>responsibility</b> 69:12 <b>rest</b> 170:22 <b>restaurants</b> 74:9 75:1 174:4,5 <b>restored</b> 178:16,21 <b>result</b> 39:19 117:12 186:11 <b>retain</b> 178:15 <b>retained</b> 6:1,4,9 12:17,23 13:3,11,15 13:17 20:19 <b>retransmit</b> 148:6 <b>returned</b> 189:15 <b>reversed</b> 168:6 <b>review</b> 4:6,12,17 10:8 15:24 16:23 19:2,5 33:18 36:19 48:6 118:8 133:13 189:11 <b>reviewed</b> 118:18 <b>rf</b> 108:22 109:18 110:4,4,9 111:22,22 111:23,25 112:4,9 112:16 114:3	<b>rfc</b> 144:10 <b>richard</b> 1:13 3:2 4:4 4:5,16 5:1,8,14 15:22 16:22 23:15 24:7,10,12 188:4,20 189:8 <b>right</b> 5:23 12:15 18:17 21:3 31:4 36:10 44:10 56:18 68:6 75:2 81:24 82:8 87:19 93:25 94:14 96:13,15 97:17 101:7 102:1 107:5,18,18 112:11 126:12 132:18 133:20,25 136:13 139:15 141:21 154:23 155:2 159:6 160:25 162:4,6,7,9 167:6,10,15 168:3 168:19,19 169:25 176:9 178:8 180:7 <b>rights</b> 10:13 <b>rigs</b> 140:14 <b>ritcheson</b> 2:11 3:3 5:11,16 8:8,10,17 8:24 9:2 12:25 13:8 14:8,14,19,22 15:9 15:11,15,17,21 16:20 17:22,24 18:7 18:12 19:21 20:2,8 20:11,12 21:13,19 22:17 23:11,18 25:5 25:10,24 26:15 27:13 28:12,24 29:6 29:15,24 30:17 33:12 34:23 35:5,14 35:21 36:15,25 37:6 37:9,13,23 38:9,25 39:13,18 40:12 41:1 41:11,20 42:1,16 43:4,7 44:8,22 46:11,22 47:1,9,17 48:5,14,23 49:7,10 49:14,25 50:9 51:9	51:15,21 52:7,10 53:12 54:10 55:8,11 55:14 57:18,22 58:2 60:3,18 61:9 62:2 62:14,19 63:25 64:16 65:5,12,19 66:1,7 67:1,8,22 68:4,24 69:3,11,13 70:3,11,18,21 71:5 71:10 73:3 74:18 76:3 78:14 84:5 85:10 87:16 89:14 89:20 91:9 92:22 93:9,15 94:2 95:23 97:13 99:3,10 101:6 101:22 102:7,19 103:9,12,19,25 104:6,10 105:3 106:7,13 107:21 108:1 110:17 111:9 111:20 112:5 113:19 114:13 115:5,9,25 116:11 116:20 117:21 118:2,4,5 119:9,13 120:12 121:1,7,19 127:4,20 128:7,11 129:3,20 130:20,22 131:25 132:3,7,10 132:17,24 133:2,7 133:15,16,21,24 134:2,7,17 135:4,22 136:5 138:11,25 139:5 140:11,20 141:21 142:5,8,13 143:12,17 144:24 145:18 150:24 156:21 159:2,6 161:15 162:9,17,20 163:4 165:6 167:6 167:10 169:25 170:10,24 172:17 174:1,20 175:7,18 177:16,23 180:2 181:3,8,25 183:15	184:4,15,17,23 189:25 <b>robbed</b> 177:8 <b>robust</b> 141:11 <b>role</b> 139:19 <b>roles</b> 168:5 <b>rolled</b> 146:9 <b>rom</b> 33:8 <b>room</b> 61:8 63:14 83:5,6,7,22,22 84:17 <b>ross</b> 148:12 <b>roughly</b> 7:18 11:12 11:19 <b>routers</b> 146:15 <b>rpr</b> 1:18 186:16 187:23 <b>rule</b> 8:21,24 185:1 <b>ruled</b> 59:19 <b>rules</b> 5:4 10:23 185:2 187:3 <b>run</b> 154:4 157:9 <b>runs</b> 166:5
<b>s</b>			
<b>s</b> 188:5 <b>sake</b> 7:13 139:24 <b>sale</b> 73:22 <b>saw</b> 120:5 165:11 <b>saying</b> 81:19 90:1 101:13 103:24 122:3 123:24 124:11 125:14,19 <b>says</b> 24:2,7,11 26:23 26:24 34:14 41:12 44:2 71:15 86:12 87:24 92:15 94:2,25 99:23 100:6 104:2 104:15 106:15 108:20 109:16 113:3 116:5 118:12 118:17 119:19 122:9,13 123:12 124:14 132:3 136:11,20 138:4			

<p>160:13 163:11 173:1 176:17 <b>scenario</b> 122:16 149:5,9 179:4 181:8 <b>scientists</b> 149:25 151:13 <b>scott</b> 24:3 <b>screens</b> 152:25 158:9,11 <b>search</b> 161:2,10,11 <b>searched</b> 121:11 <b>secloud</b> 138:1,1 <b>second</b> 24:16 32:24 40:14 46:7,8 50:9 50:15 57:11 63:7 64:17 73:23 75:6,19 81:7,9 85:14,22 91:4 97:16,18 108:14 110:1 115:10 147:11 <b>seconds</b> 91:2,5 <b>section</b> 60:5,9,23 90:19 127:5,17,20 162:12,22 <b>sections</b> 128:2 <b>secure</b> 149:19 150:1 151:3,4 154:12 <b>security</b> 26:16 30:6 30:20 31:5 32:9,17 32:24 34:15,17 35:9 35:12,16,19 36:6 40:8,16,22 41:3,18 42:14,18 43:2 44:15 44:25 45:4,8,16,16 45:24 46:4,19 47:11 47:12,22,23 48:25 49:5,23 50:21 145:13,16 149:17 149:18 150:6,17,18 150:23 156:19 157:1 177:6 <b>see</b> 18:16 26:22 27:1 29:12,25 30:4,8,25 45:3 56:18 57:1,2 59:11 66:12,13</p>	<p>67:10 78:5 79:1 81:14,24 85:25 88:11 92:2 95:7 108:18,23 109:20 109:24 113:8 116:7 116:11 134:15 151:25 162:11,13 167:21 168:17 171:24 173:7,10,18 175:9,9,11 182:20 182:21 184:18 <b>seeing</b> 73:9 160:9 <b>seen</b> 16:24 23:18 24:4 25:11 54:13 <b>sees</b> 138:3 <b>selected</b> 80:3 <b>self</b> 146:22 <b>send</b> 47:12,24 90:10 177:12 <b>sending</b> 123:18 128:4 177:10 <b>sends</b> 122:1,3 123:21 150:15 <b>sense</b> 46:14 52:6 117:16 156:23 172:14,16 <b>sensed</b> 80:2 <b>senses</b> 172:12 <b>sensing</b> 27:19,20 128:13 130:6 172:12 <b>sensor</b> 79:25 169:5 169:22 172:10,10 172:11,11 173:1,5 173:11 <b>sensors</b> 71:17 135:12 172:23,24 175:13 <b>sent</b> 177:19 <b>sentence</b> 40:25 41:12,23 45:21 64:17 81:11 96:23 102:4,20 104:12,20 104:23 105:5 117:2 128:19,24 130:1</p>	<p>142:18 <b>sentences</b> 80:25 81:8 84:22 105:10 <b>separate</b> 28:4 74:8 74:25 <b>separately</b> 67:2 <b>series</b> 53:3 82:14 <b>server</b> 26:19 28:17 29:18 32:7,22 41:3 42:13,18,19,22,25 42:25 43:3 49:18 135:15 136:3,8 <b>serves</b> 83:10 <b>service</b> 30:2 31:3,24 32:16,21 42:19 44:17 45:5 74:1,2 94:22 139:13 159:18,20,22 160:7 160:13,14 163:3,17 163:18 164:23 166:17 178:21 <b>services</b> 9:20 139:25 156:4,7 187:5,12,16 <b>set</b> 32:4 53:10 79:23 80:5 90:4 110:11 <b>shares</b> 53:21 <b>sheet</b> 188:1 189:11 189:12,13 <b>shortage</b> 159:17 <b>showed</b> 59:17 <b>shown</b> 189:13 <b>shows</b> 26:20 <b>shut</b> 132:12 <b>sic</b> 130:16 <b>side</b> 83:3,7 97:13,14 <b>signal</b> 82:8,22,22,23 85:3,6,7,23 109:10 115:2,15,19 119:23 119:25 128:5 130:4 <b>signals</b> 30:20 47:13 47:24 75:24 82:24 <b>signature</b> 185:3 186:15 187:22 189:12</p>	<p><b>significance</b> 110:21 138:22 <b>signing</b> 189:12,16 <b>similar</b> 30:1 84:8 136:22 147:1 149:16 168:3 175:23 176:5,6 <b>simply</b> 12:10 119:1 141:18 157:8 159:22 <b>sincerely</b> 189:20 <b>single</b> 51:25 78:20 118:1 <b>sir</b> 54:25 63:15 189:9 <b>site</b> 30:3 31:4,25 32:17 42:20 164:13 178:3 <b>sites</b> 146:16 147:9 <b>situated</b> 68:18 78:18 <b>situation</b> 50:25 147:8,24 148:3 170:7 <b>situations</b> 178:9 <b>six</b> 91:4 <b>skill</b> 51:10,20 52:11 52:13 53:13,25 58:24 67:16 68:8,14 70:5 85:20 118:20 130:2,15 131:1,12 131:19,21 170:13 <b>skimmed</b> 33:15 <b>skip</b> 75:18 <b>slamming</b> 147:25 <b>slow</b> 147:9 148:23 <b>small</b> 104:12 <b>smart</b> 71:16 172:17 <b>software</b> 91:25 92:2 92:5,8,9 93:1,2,13 93:13,16,20,24 94:21 95:15,20 96:3 96:8 103:7 105:14 148:17 <b>sold</b> 22:16</p>
---	--	---	---

<p><b>solely</b> 25:21 36:18 170:11</p> <p><b>solutions</b> 187:11,12 187:13,16,18 188:1 189:1</p> <p><b>solve</b> 150:18</p> <p><b>somebody</b> 13:7 103:10</p> <p><b>somewhat</b> 82:3</p> <p><b>soon</b> 152:11</p> <p><b>sophisticated</b> 142:19</p> <p><b>sorry</b> 13:1 15:12 20:17 35:6,21 43:19 44:1 50:15 73:3 84:9 85:10,17 91:15 108:8 124:6 125:3 130:20 131:6 170:15 171:8 182:7</p> <p><b>sort</b> 14:6 47:6 52:22 63:16 65:10 72:22 74:13 77:4 81:25 82:4,17 102:10 148:9 155:8 158:18 165:2 173:6,13,17 177:4 178:12 180:14,15</p> <p><b>sorts</b> 157:10</p> <p><b>sound</b> 6:18 176:8</p> <p><b>source</b> 25:3 156:5 187:7</p> <p><b>sources</b> 82:21</p> <p><b>spans</b> 129:14</p> <p><b>speak</b> 8:4,11 69:4 108:2 153:6</p> <p><b>speaking</b> 8:19 19:22 71:11 135:8</p> <p><b>spec</b> 44:13</p> <p><b>special</b> 33:1 69:17 182:18,19,20</p> <p><b>specialized</b> 73:24</p> <p><b>specific</b> 28:13 61:2 66:2 75:17 98:14 120:23,23 129:9 140:12,22 141:8</p>	<p>150:19 152:23,24 159:20 161:1 171:1</p> <p><b>specifically</b> 47:7 139:13 160:21</p> <p><b>specification</b> 48:18 48:20,24 74:12</p> <p><b>spectra</b> 173:24</p> <p><b>speed</b> 155:6 184:1 184:12</p> <p><b>spell</b> 5:12</p> <p><b>spend</b> 11:12,17 12:4 12:12</p> <p><b>spent</b> 11:24 12:14 37:21</p> <p><b>spoke</b> 9:4</p> <p><b>sponsored</b> 137:17</p> <p><b>spotty</b> 157:22</p> <p><b>square</b> 106:3,8</p> <p><b>stages</b> 61:25 65:4</p> <p><b>stand</b> 8:22 55:8</p> <p><b>standard</b> 59:8 137:7 144:13</p> <p><b>standards</b> 137:17,18</p> <p><b>standpoint</b> 143:6</p> <p><b>stanley</b> 150:25</p> <p><b>start</b> 7:15 54:3,24 69:14 70:15 128:7 148:23</p> <p><b>started</b> 53:2 73:8 148:21 155:16</p> <p><b>starting</b> 108:14</p> <p><b>starts</b> 53:15</p> <p><b>state</b> 5:12 26:3 72:8 80:19,20,21 90:2,11 90:19,24 91:13 92:3 96:7 103:5 127:13 148:5,23 186:3</p> <p><b>stated</b> 102:22 130:7 144:25 186:7</p> <p><b>statement</b> 38:20 64:13,14,18,19 88:23 89:15 98:12 99:5 101:23 104:11</p> <p><b>statements</b> 132:23</p>	<p><b>states</b> 1:1 4:10 8:21 79:21 187:4</p> <p><b>stating</b> 187:5</p> <p><b>station</b> 71:25,25 72:1 73:16 75:19,20 77:8 81:12 82:7,9 83:2,3,4,5,6,9 84:4 85:14,22 88:9,10 89:7,10 90:20 91:14 91:16 93:21 94:4,6 94:7 97:4,10,15 98:2 100:1,5,9,12 100:17,22,23,24 101:2 103:4,7 110:12 111:22 112:8,10,16 127:11 161:24 171:16,25 179:2,9,11,25 180:13</p> <p><b>stations</b> 72:2,4 73:19 75:25 83:13 105:15 152:23</p> <p><b>status</b> 35:19,23,24 71:18 72:5 77:18 86:23 101:1,20 102:11 123:19,20 124:2,13,23 125:7,8 125:9,11 126:14,19 126:24,24 129:22 129:23,24</p> <p><b>stay</b> 162:17</p> <p><b>steven</b> 2:11 5:15 189:25</p> <p><b>stockton</b> 2:4 6:8</p> <p><b>stolen</b> 53:19</p> <p><b>stop</b> 20:5 36:25 132:19,24 142:8</p> <p><b>stopped</b> 146:24 147:4</p> <p><b>storage</b> 135:13 155:25 176:12,23 177:5,17 179:6 180:14,16,22 181:22 182:2,25 183:1,3,4,6,7,8</p>	<p><b>store</b> 180:19,20</p> <p><b>stored</b> 179:2,25 180:22</p> <p><b>storing</b> 179:9,9,23 181:23</p> <p><b>straightforward</b> 53:24 141:18 176:19</p> <p><b>stray</b> 32:10</p> <p><b>street</b> 1:16 2:5</p> <p><b>stricken</b> 22:21</p> <p><b>strictly</b> 157:17</p> <p><b>strike</b> 15:5 17:25 28:25 84:25 91:11</p> <p><b>strikes</b> 144:4</p> <p><b>structure</b> 49:15 63:9 63:14 83:17 123:4 141:5</p> <p><b>student</b> 144:20</p> <p><b>studied</b> 33:16 38:5</p> <p><b>stuff</b> 8:16 158:13</p> <p><b>subject</b> 51:22 106:25 131:22</p> <p><b>submit</b> 21:19</p> <p><b>submitted</b> 11:6 15:4 17:2,15 19:2,6 24:22</p> <p><b>subscribed</b> 188:21</p> <p><b>subscribers</b> 164:22 164:25</p> <p><b>subsequently</b> 13:11 124:3</p> <p><b>substitute</b> 169:21</p> <p><b>subtle</b> 90:25</p> <p><b>success</b> 118:13</p> <p><b>successful</b> 92:5 149:1</p> <p><b>sufficient</b> 130:16</p> <p><b>suggest</b> 81:16 140:21 159:21</p> <p><b>suggested</b> 145:20</p> <p><b>suggesting</b> 102:21 102:22</p> <p><b>suggests</b> 165:21</p>
--	---	---	---

<p><b>suite</b> 1:16 2:5 189:1  <b>supply</b> 92:9  <b>support</b> 4:5,16  15:23 16:22 54:6  102:14 108:25  123:14 129:4  <b>supported</b> 151:11  <b>supporting</b> 95:17  <b>supports</b> 102:23  107:9,13 113:4  <b>suppose</b> 48:1,1  <b>supposed</b> 32:13  <b>sure</b> 7:14 14:20 15:1  26:14 27:16 30:15  65:23 66:17 68:25  92:2 94:11,17 96:13  103:23 107:18  110:17 162:20  168:12  <b>surprise</b> 20:14  <b>suspended</b> 184:24  <b>suspender</b> 170:7  <b>switch</b> 52:19  <b>switches</b> 148:18  <b>sworn</b> 5:8 188:21  <b>switcheson</b> 2:13  <b>synonym</b> 68:19  141:5  <b>synonyms</b> 29:14  <b>syntax</b> 152:23 153:1  153:5 158:24  <b>synthesizer</b> 33:8  <b>system</b> 25:22 27:9  27:12,25 28:3,8,10  31:18 32:20 33:1,6  33:7,7,10,17 34:7,8  36:12 50:23 52:14  52:23 53:2,4,4,7,16  53:18,20 54:2,4,7  70:1 71:14,17 72:22  73:12 75:14 76:2  79:11,22 87:25  88:24 94:16 96:25  98:13,17,22 99:15  99:21 100:10</p>	<p>101:24 102:5,17  103:18 105:6,8,11  106:25 111:8  112:22 113:16,17  114:4,5 115:22,24  116:1,2 117:3,5  123:13 125:16  129:19,21 135:12  136:4,10,12,19,20  138:4 139:17 141:6  141:9,19 144:3,6,23  146:22 148:18  150:15 151:20  152:18 156:24,25  158:7,20 159:3  160:1,18 162:24  163:10,16 164:16  165:8,25 168:22  172:2,14,16  <b>systems</b> 1:7 5:18  26:18 28:15 31:7  41:4 46:20 50:22  52:25 53:1 71:21  137:16 138:2 139:9  139:10,14,19 140:6  140:10 141:1  144:21 147:17  181:11 188:3 189:6</p>	<p>101:12  <b>talk</b> 8:22 10:17 15:4  23:8 30:2 39:25  62:4 98:25 99:3  133:18 153:4  <b>talked</b> 8:16 14:24  99:14 102:7 156:14  176:15  <b>talking</b> 10:11 20:10  20:16 21:10 48:14  48:17 55:5 63:2  66:1,7 70:15 93:23  132:25 147:20  154:9 155:9,16  164:21 166:18  183:16  <b>talks</b> 96:25 162:22  163:6  <b>tape</b> 182:3  <b>tasks</b> 54:5 142:22  159:18  <b>tcp</b> 136:22,23 137:6  137:12 138:8,8,14  146:9 148:21 149:7  149:10 152:6,8  157:4,9  <b>teaches</b> 113:6  139:17 152:2,16  171:14,15 174:4  <b>teaching</b> 158:24  <b>teachings</b> 145:19  <b>technically</b> 165:5  <b>technique</b> 121:17  <b>technologies</b> 144:12  158:6,8  <b>technology</b> 76:25  136:20 140:8  144:18 152:10  154:17  <b>telephone</b> 136:19  137:10 151:7,8,10  154:25  <b>telephony</b> 136:11  <b>television</b> 155:23</p>	<p><b>tell</b> 37:18 43:11,12  47:7 56:1 74:15  94:5 119:7 124:8  135:9 173:11  <b>telling</b> 89:10 96:2  136:14  <b>tells</b> 103:8 141:6  <b>temperature</b> 79:23  79:25 80:1,2 87:3,4  91:2,3 169:22  172:11,14  <b>temperature's</b> 80:2  <b>tend</b> 58:20 180:12  <b>tender</b> 187:4  <b>term</b> 29:2,7 39:11  42:11 47:2 49:10  54:16 57:14,24  58:14,21,21,22 61:3  61:4,24 62:7 65:13  65:24 66:11,14  67:17,20 68:5,11  69:18 78:22,24  79:16 82:2 84:1,15  114:14 116:19  136:8 141:3 146:13  182:15  <b>terminal</b> 107:2  161:20,23,24  166:11 167:1  <b>terminals</b> 73:25  161:18 166:22  167:3  <b>terms</b> 49:15 52:22  59:19,21 66:24  69:15,16,20,21,25  70:6 78:25 79:5,15  136:1,8 137:6 144:6  149:8 155:9 158:22  180:7  <b>terremark</b> 6:18,19  <b>testified</b> 5:9 9:16  20:18 60:12 126:10  <b>testify</b> 60:18  <b>testimony</b> 8:4,5,5,12  8:20 20:15 22:24</p>
	<p><b>t</b></p>		
	<p><b>t</b> 5:14,14 6:20 70:18  71:5 186:1,1  <b>t1</b> 147:11  <b>take</b> 8:2,3 9:3 16:16  52:14 68:24 69:12  90:11 91:22 94:18  94:21 101:13  107:22 152:12  162:10 167:7  168:18 182:22  184:17  <b>taken</b> 59:6 76:8 91:8  129:5 150:22 186:7  <b>takes</b> 27:20 28:6  80:14 86:14 91:5,18</p>		

<p>23:6 33:21,23,24 34:11 63:17 64:10 64:23 69:4 72:19 108:2 132:9 <b>text</b> 150:13,15 161:10,11 <b>textbook</b> 126:3,5,7 <b>thank</b> 5:15 15:10,18 54:10 84:19 118:5 134:21 <b>theft</b> 41:13 42:4 50:25 <b>theirs</b> 6:16 <b>thereof</b> 41:14 42:5 43:25 <b>thereto</b> 186:7 <b>thing</b> 12:8 29:8 37:3 45:11 77:4 83:12 89:16,19 124:21 132:18 155:3,4 156:12,19 164:18 168:7 173:17 174:23,25 <b>things</b> 7:6,12 23:9 52:21 54:2,15,19 87:1 92:17 93:5 105:15 153:16 156:6 173:10,11 174:6 178:8 <b>think</b> 9:24 11:19,22 16:16 18:25 25:5 26:24 27:22 34:19 35:14,21 39:19 49:15,22 52:17 53:25 54:2 58:5,18 58:20 59:15 63:5 65:2,4 67:5 69:21 70:9 72:16 75:4 77:17 83:25 84:24 87:2,23 93:23 95:19 104:22 111:1 112:6 112:20 116:3,18 122:14 130:13 135:20 138:6 139:10 140:16,25</p>	<p>141:2 143:1 144:18 151:5 156:22,23 157:23 159:8 166:4 166:9,20 167:17 170:7 171:1 172:22 173:20 174:12,13 175:16,22,25 176:7 179:3 180:3 181:19 182:12 <b>thinking</b> 95:10 157:10 <b>thinks</b> 166:6 <b>third</b> 33:4 57:11 75:6,22,22 97:2,21 97:25 115:11 116:3 116:9,12,20 124:12 125:3,12 137:15 155:3,4 168:7,20,23 171:20 <b>thirty</b> 189:15 <b>thorough</b> 135:22 <b>thought</b> 60:12 103:9 107:11 138:6 <b>three</b> 16:4 22:6 27:9 27:11,13,14 28:8,11 31:2 32:21 34:11 50:11 57:8 75:5,14 76:1 94:15 111:6 116:15 124:5,7 129:9 136:3 168:4 180:8 <b>threshold</b> 80:3 90:5 90:6 <b>throw</b> 71:6 133:17 <b>throwing</b> 45:12 <b>tie</b> 88:23 99:19 162:14 <b>tim</b> 144:8,14 <b>time</b> 6:23,24 7:14 9:6 11:12,17,24 12:4,12 37:21 41:16 54:25 55:4 64:7 68:14 84:18 91:7 107:20 120:5 131:5 134:11 136:25</p>	<p>137:3 146:6,13,21 148:19 149:19 151:13 166:6,8 178:21 184:16 187:5 <b>timeline</b> 155:8 <b>timer</b> 91:4 <b>times</b> 7:18,20 9:9 18:21 34:5 67:7 80:17 132:15 148:7 165:20 <b>tired</b> 132:4,11 <b>title</b> 71:15 140:3 141:3 <b>today</b> 5:22 8:1 10:6 10:14,18 12:20 15:5 24:18 149:24 150:8 153:14,20 181:1 <b>today's</b> 12:13 <b>told</b> 38:22 39:16 <b>toll</b> 189:2 <b>tomorrow</b> 8:2 <b>tools</b> 158:11 <b>top</b> 24:2,16 31:2,4 73:13 76:15 138:5 <b>topanga</b> 2:12 <b>topic</b> 120:25 <b>total</b> 11:21,22 12:15 <b>totality</b> 96:16 <b>totally</b> 175:5 <b>townsend</b> 2:4 6:8 9:12 21:8 22:10 <b>track</b> 86:15 <b>tracking</b> 87:15 <b>trademark</b> 1:1 <b>traffic</b> 148:1 150:9 <b>transaction</b> 101:12 <b>transactions</b> 101:13 <b>transcript</b> 4:21 186:6,9 187:8 189:10,11 <b>transferred</b> 178:5 <b>transfers</b> 164:21 165:2</p>	<p><b>transform</b> 53:4 <b>transformative</b> 152:10 <b>transformed</b> 153:17 <b>translating</b> 177:1 <b>transmission</b> 85:2,5 104:16 122:7 149:3 149:4 171:15 <b>transmit</b> 30:19 88:13 94:9 100:4 148:21 160:15 <b>transmits</b> 115:15,19 <b>transmitted</b> 85:8 86:17 109:10 122:6 148:25 164:1 183:24 184:9 <b>transmitter</b> 31:20 31:21,21,23 32:25 33:9 76:17,21,23 77:7,13 82:12 84:4 110:4,9,23 111:1,5 111:22 122:1 <b>transmitters</b> 76:23 83:15 110:11 <b>travel</b> 29:17 <b>traverses</b> 150:9 <b>treat</b> 167:12 <b>trial</b> 1:2 9:17 19:3 60:15 66:19 <b>trick</b> 20:13 <b>tries</b> 172:7 <b>triggers</b> 90:4 <b>tripping</b> 77:4 <b>trivial</b> 53:20 172:15 <b>true</b> 9:16 26:9 28:15 34:23 35:6 47:9,20 48:23 50:5 64:11,23 65:19 79:4 89:14 91:12 103:3 110:13 115:14 126:8 129:4 129:8,13 140:11,21 160:13 175:22 177:9 180:2 186:8 <b>truly</b> 152:10</p>
--	--	---	---

<p><b>trust</b> 20:15  <b>try</b> 125:20 141:16  161:16  <b>trying</b> 20:14 22:8  34:9 45:22 54:15  61:19 74:4,13 80:12  83:19,23 88:23 95:8  96:13 98:11 99:11  99:19 101:23 106:3  106:24 125:25  139:20,21 148:6  160:17 170:24  175:13  <b>turn</b> 53:18 56:3  63:19 72:2,7 80:1  80:24 97:6 108:7  148:3 167:20  <b>turned</b> 80:5,7 127:8  <b>turning</b> 40:4 49:25  80:8,9 88:8  <b>twice</b> 170:9  <b>twitching</b> 84:10  <b>two</b> 7:20 9:11 10:6  10:17 11:5,8,13  19:8,10 20:16,18  21:4,20,22 22:6  27:18 30:10 61:24  79:15,21 80:25 81:8  84:22 94:10 105:9  105:10 124:4  125:10 129:3  136:16 139:1,4  147:9 153:16  <b>types</b> 104:16,24,25  106:19,21,22  109:12 128:15  140:22  <b>typewriting</b> 186:8  <b>typical</b> 122:23 123:1  169:17  <b>typically</b> 71:22,24  138:9  <b>typographical</b> 24:15</p>	<p style="text-align: center;"><b>u</b></p> <p><b>u.s.</b> 4:6,9,14,15,17  15:24 16:23  <b>u.s.c.</b> 4:7,18  <b>uh</b> 10:20 20:21  55:18 64:2 67:11  77:9 86:4 87:20  98:4 113:7 145:1  173:14 181:11  <b>ultimately</b> 62:8  156:7  <b>umlaut</b> 71:9  <b>unbeknownst</b>  165:24  <b>unclear</b> 20:12 30:24  40:25 46:25 48:12  162:8  <b>underlying</b> 65:14,17  <b>underneath</b> 68:6  <b>understand</b> 5:19 8:7  10:7,10,19 11:2  14:23 23:21,24  24:14,16 29:4 30:10  30:16,18 33:17 34:2  38:2 54:15,16,20  55:22 56:22 57:5,18  57:22 58:16 59:6  66:18 74:4 79:17  80:12 93:15 96:14  99:13 101:22  102:13 104:11  110:16 112:23  114:13 117:25  119:3 139:20  143:12 151:5  160:12 172:19  <b>understanding</b> 5:25  30:18 38:7,16 39:7  40:6 41:2 42:8,12  44:23 46:19 48:6,24  49:4 54:24,25 55:24  65:6,12 72:18 84:15  85:1 95:9 113:12  114:16 118:7</p>	<p>119:10,17 161:4  <b>understood</b> 29:15  51:10,16,16 52:14  67:16 77:1 84:9,21  84:21 85:21 95:10  106:13,15  <b>unfortunately</b> 56:9  <b>unhelpfully</b> 56:10  <b>uniquely</b> 53:7  <b>unit</b> 122:1 146:21  <b>united</b> 1:1 4:10  <b>unknown</b> 168:23  <b>unpack</b> 113:10  <b>unpatentable</b>  143:11  <b>unplug</b> 148:3  <b>unskilled</b> 59:1  <b>unsolicited</b> 90:10  <b>unsupported</b> 104:11  <b>unsure</b> 119:12  <b>update</b> 96:9  <b>updated</b> 91:24  94:20 95:15  <b>updating</b> 94:23  <b>upload</b> 178:16  <b>upper</b> 36:10  <b>use</b> 15:7 26:22 27:3  27:4 45:12,17 50:6  58:7,8,20 59:4 61:3  68:23 73:8 87:4  95:7 116:19 136:8  136:21 138:5,7,8  141:8 144:2,5 145:5  145:20 152:14  153:24,25 157:4,6  157:15,16 158:11  165:10 180:18  <b>useful</b> 53:8 155:6  181:7  <b>user</b> 33:3 40:7 41:14  42:5,13 44:19,24  45:7,15 48:7 49:2  80:3 104:17 106:1  106:11 157:25  158:15,19,21,25</p>	<p>159:3 160:9,17  161:20,21 164:15  164:15 165:24  166:12  <b>users</b> 159:8,9 160:5  160:11 161:6  162:23,25 163:15  165:1,5  <b>uses</b> 76:19 97:25  116:19 126:1 138:8  141:3 149:13 152:1  <b>usual</b> 187:18  <b>usually</b> 71:3  <b>utility</b> 135:25  <b>utilize</b> 44:20 45:8  141:19  <b>utilized</b> 40:16,19,22  44:15,16 45:5 50:24  140:18</p> <p style="text-align: center;"><b>v</b></p> <p><b>v</b> 188:3 189:6  <b>value</b> 178:7  <b>van</b> 148:13  <b>variety</b> 129:24  <b>various</b> 22:9 61:25  71:19 72:6,6,9  73:16 77:20 104:19  105:15 106:2  117:11 128:15  150:17 160:8,15  164:17  <b>vcr</b> 182:3,6,7,9,10  182:14  <b>vehicle</b> 25:22 26:18  26:19 27:20,25  28:15 29:23 30:13  31:7,10,11,17 32:3  33:6 34:7 36:3,6,12  40:18,19,24 41:4,13  42:4 43:17 46:2,21  47:13,24 48:9 49:1  49:5 50:18,19 51:5  51:7 52:7,14,23  53:8,16 94:23</p>
---	--	---	---

<p>152:15  <b>vehicles</b> 53:23 74:1                  74:2  <b>venable</b> 6:14 13:12                  13:20 14:3,9 16:12                  17:6,10 18:1,8,9,24  <b>venable's</b> 6:15  <b>verbal</b> 10:24  <b>verify</b> 109:4 122:7  <b>veritext</b> 187:11,12                  187:13,16,18 188:1                  189:1,7  <b>verizon</b> 6:16,17  <b>version</b> 17:14  <b>versus</b> 179:9  <b>video</b> 169:4,5,9,10                  169:13,21 171:5,11                  171:12,14,15,21,23                  172:7,8,9,10,21                  173:21 174:7,21,23                  174:25 175:2,9,14                  176:2,22 177:22                  178:3 179:16                  180:19,20 181:9,21                  181:23,24 182:1,5,8                  182:10,10,13,16,16                  182:17,22 183:2,19                  183:22,23,23 184:8                  184:8  <b>videos</b> 176:23  <b>videotape</b> 182:5  <b>view</b> 10:15 72:5                  73:25 77:18  <b>viewed</b> 84:8 184:2                  184:13  <b>viewing</b> 183:25                  184:10  <b>virtually</b> 150:11  <b>virtue</b> 91:14,15  <b>visible</b> 173:24 175:2  <b>visual</b> 173:4,6  <b>voice</b> 33:8  <b>volume</b> 1:12  <b>voluntarily</b> 90:8</p>	<p><b>vs</b> 1:5</p> <hr/> <p style="text-align: center;"><b>w</b></p> <hr/> <p><b>w</b> 189:1  <b>wait</b> 14:15,15,15                  24:1 168:13  <b>waived</b> 189:16  <b>walking</b> 162:2  <b>wall</b> 83:2,3  <b>walls</b> 82:25 83:10,16  <b>want</b> 8:15 14:20,24                  15:1 54:19 55:9                  56:14 66:17 68:21                  77:2,3 84:12 86:9                  92:5,17 95:12 98:25                  99:3,6,22 113:25                  131:25 156:25                  157:2 162:15,18                  172:18,19,21                  177:17,21,22                  178:13  <b>wanted</b> 63:7 157:4                  172:25 180:18  <b>wants</b> 44:7 83:13                  92:2,2 162:21                  171:21  <b>warner</b> 6:23,24  <b>warriors</b> 69:8,11  <b>washington</b> 21:4  <b>wave</b> 151:9 155:21  <b>way</b> 10:23 33:20                  58:22 69:17 82:1,3                  82:16,17 83:25                  84:23 93:7 94:10                  110:20 111:8 118:9                  134:17 148:2                  149:19 153:11                  157:11 158:13                  164:6  <b>ways</b> 97:25 150:20  <b>we've</b> 15:5 16:20                  24:20 48:7 54:11                  115:1 117:8 130:12                  135:5 150:5,6                  156:14 169:3,23</p>	<p>176:15  <b>weak</b> 149:17,19  <b>web</b> 44:18 45:6                  135:15 136:2,8,9                  138:23 141:20                  144:3,5,8,14,18,22                  152:10,14,17,19                  155:11 157:24                  158:12,14 164:6  <b>website</b> 26:20,20                  27:21 28:1,18  <b>weird</b> 174:6  <b>welcome</b> 9:5  <b>went</b> 21:22 148:17  <b>white</b> 154:15 156:8  <b>wi</b> 122:25 123:3,4,5  <b>wide</b> 44:18  <b>widely</b> 151:12  <b>wikipedia</b> 121:24  <b>willing</b> 126:6  <b>win</b> 152:9  <b>wired</b> 104:25  <b>wireless</b> 71:25 73:15                  76:22,23 77:1,3,19                  77:22,24 82:6,7,7,9                  83:1,3,4,5,6,8,15                  84:4,6 104:24 109:7                  109:12,14 122:18                  122:22 123:10,11                  125:24 126:1,5                  155:6  <b>wirelessly</b> 71:24                  74:2 75:20 106:5  <b>witness</b> 3:2 8:9 13:2                  13:6 14:4,13,18                  17:19,21 18:6 19:14                  19:18 21:17 22:13                  25:13,15 26:13                  27:11,16 28:22 29:4                  29:12,21 30:15,23                  34:21 35:2,11,18                  36:1 37:3,11,18                  38:19 39:9,16 40:10                  40:21 41:9,25 42:24                  44:5,11,14 45:3</p>	<p>46:18,24 47:5,15                  48:1,11,20 49:4,13                  49:22 50:8 51:7,13                  51:19 52:5,9,17                  53:15 57:17,21 60:2                  60:21 61:23 62:11                  62:18 63:23 64:13                  65:2,9,17,23 66:4                  67:4,19,24 68:17,22                  69:20 70:8 71:3,8                  72:21 75:9 78:11                  83:25 85:5 87:12                  89:7,18 90:22 92:25                  93:12,23 95:19                  98:25 99:8,25 101:9                  102:3 103:3,15,23                  104:9,22 106:10                  107:18 110:15,25                  111:13 112:2                  114:11 115:7,18                  116:9,18 117:20,24                  119:6,12 120:10,19                  121:6,13 126:23                  127:19 128:10                  129:2,8 130:19                  131:16 133:5,12                  134:12 135:19,25                  136:25 138:20                  139:4 140:3,16,25                  141:25 142:3,10,12                  143:4,16 144:1                  145:15,23 156:19                  158:18 162:24                  164:12 166:25                  169:16 170:6,21                  172:6 173:20                  174:11 175:5,16                  177:21 181:1,5,19                  183:13 185:3 188:4                  189:8,10  <b>witness'</b> 189:12  <b>won</b> 148:15  <b>wondering</b> 89:1                  119:9</p>
--	---	---	--

<p><b>woodworth</b> 18:24  <b>word</b> 46:4,7 67:5              80:11 95:8 120:11              121:2,9 172:7  <b>work</b> 70:13 149:23              151:18 158:3 159:9              159:10,25 174:4  <b>worked</b> 9:14 20:25              21:7,25 70:14              144:11,12 145:9              148:14 158:4  <b>working</b> 151:13,16  <b>works</b> 79:18  <b>world</b> 44:18 125:18  <b>worldwide</b> 45:6              137:8 141:19 144:2              144:5 149:11              155:11  <b>wow</b> 184:4  <b>wrap</b> 184:18  <b>write</b> 10:25  <b>wrong</b> 17:20 20:3              96:13 181:12</p>	<p>167:17,19 168:16              168:19,20,21              169:12 176:21              177:6  <b>years</b> 51:23 64:20  <b>yep</b> 121:7 167:16              176:11</p>
<b>x</b>	
<p><b>x.25</b> 136:21,21              137:6,10,22 138:5,7              147:1,2 151:2,10              152:1,2,3,5,9  <b>x.25.</b> 138:16 151:9  <b>xerox</b> 138:2  <b>xns</b> 138:2</p>	
<b>y</b>	
<p><b>yeah</b> 6:19 9:13              10:16 13:6 25:17              29:8 37:11 45:7,11              52:5 55:11 57:1              66:19 70:8 71:3              73:4,6,10,11 76:18              76:19 93:17 96:21              97:15,24 106:18              112:20 115:7              116:24 121:22,25              128:1 136:25 142:3              162:8 166:9,25</p>	

Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and

(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate.

The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF SEPTEMBER 1, 2014. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS  
COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted fashion to authenticated parties who are permitted to access the material. Our data is hosted in a Tier 4 SSAE 16 certified facility.

Veritext Legal Solutions complies with all federal and State regulations with respect to the provision of court reporting services, and maintains its neutrality and independence regardless of relationship or the financial outcome of any litigation. Veritext requires adherence to the foregoing professional and ethical standards from all of its subcontractors in their independent contractor agreements.

Inquiries about Veritext Legal Solutions' confidentiality and security policies and practices should be directed to Veritext's Client Services Associates indicated on the cover of this document or at [www.veritext.com](http://www.veritext.com).