

Case IPR2025-00857
Patent No. 10,943,058

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

APPLE INC.,
Petitioner,

v.

FERID ALLANI,
Patent Owner,

CASE IPR2025-00857
Patent No. 10,943,058

REMOTE DEPOSITION OF
BENJAMIN B. BEDERSON, PH.D.

Thursday, February 19, 2026
9:02 a.m. to 4:05 p.m. EST

Stenographically Reported By:
Vanese Killingbeck, RPR, CRR
Registered Professional Reporter
Certified Realtime Reporter

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

On Behalf of Petitioner:

ERISE IP, P.A.
II Park Renaissance
7015 College Boulevard, #700
Overland Park, Kansas 66211
(913) 777-5600
hunter.horton@eriseip.com
BY: HUNTER HORTON, ESQUIRE
VIA VIDEOCONFERENCE

On Behalf of Patent Owner:

HUDNELL LAW GROUP, PC
800 West El Camino Real, Suite 180
Mountain View, California 94040
(650) 564-3698
lewis@hudnelllaw.com
BY: LEWIS E. HUDNELL, III, ESQUIRE
VIA VIDEOCONFERENCE

Also Present:

Josie Harding,
Technology Analyst for Erise IP, P.A.

INDEX OF PROCEEDINGS

Deposition of DR. BENJAMIN BEDERSON	Page
Direct Examination by MR. HUDNELL	5
Certificate of Oath	134
Certificate of Reporter	135

PLAINTIFF'S EXHIBITS

Number	Description	Page
1	Notice of Deposition of Dr. Benjamin Bederson	13
2	Declaration of Benjamin B. Bederson	22
3	United States Patent 10,943,058 B2	46
4	Defendant Apple, Inc.'s Preliminary Disclosure of Extrinsic Evidence for Claim Constructions	94
5	Microsoft Computer Dictionary, Fourth Edition	96
6	United States Patent 6,119,155	103
7	Dictionary of Computer and Internet Terms	111
8	United States Patent 6,037,934	114

1 Deposition taken before Vanese Killingbeck, RPR,
2 CRR, Registered Professional Reporter, Certified
3 Realtime Reporter, and Notary Public in and for the
4 State of Florida at Large in the above cause.

5 - - - - -

6 COURT REPORTER: The attorneys appearing
7 in this deposition acknowledge that I am not
8 physically present in the deposition room, that
9 I will be reporting this deposition remotely,
10 and that I will administer the oath to the
11 witness remotely.

12 The parties and their counsel further
13 agree that the witness may be in a state where
14 I am not a notary and stipulate, pursuant to
15 Federal Rule of Civil Procedure 29, that this
16 deposition may be taken before me.

17 If any party does have an objection to
18 this manner of reporting or anything stated
19 above, please state so now.

20 Hearing none, we may proceed.

21 Dr. Bederson, please raise your right
22 hand.

23 Do you swear or affirm the testimony you
24 are about to give will be the truth, the whole
25 truth, and nothing but the truth so help you

1 God?

2 THEREUPON,

3 DR. BENJAMIN BEDERSON,
4 having been first duly sworn, was examined and
5 testified as follows:

6 DIRECT EXAMINATION

7 BY MR. HUDNELL:

8 Q. Good morning.

9 A. Good morning.

10 Q. My name is Lewis Hudnell. I represent the
11 patent owner Ferid Allani in this proceeding.

12 Can you please state your name and spell
13 your last name for your -- for the record.

14 A. Sure.

15 My name is Benjamin B. Bederson. Last
16 name is spelled B like boy, E, D like David,
17 E-R-S-O-N.

18 Q. Mr. Bederson, do you go by Dr. Bederson in
19 professional settings?

20 A. I do. Thank you.

21 Q. Do you have a Ph.D.?

22 A. I do.

23 Q. What's your Ph.D. in?

24 A. Computer science.

25 Q. Where do you live?

1 A. I live in Windsor, Massachusetts.

2 Q. Is that where you are now?

3 A. Yes.

4 Q. What's the address of where you are now?

5 A. I'd rather not put that on the record if
6 that's not necessary, but I'll answer it if I need
7 to.

8 Q. Well, let me ask you this: Are you at
9 your home?

10 A. I am.

11 Q. Okay. Your home in Windsor?

12 A. Yes.

13 Q. Is anyone there with you?

14 A. No.

15 Q. Do you -- have you done a virtual
16 deposition before?

17 A. I have.

18 Q. Do you have any materials with you as
19 you're -- as you're sitting there on this Zoom call?

20 A. I do.

21 Q. What do you have?

22 A. I have an electronic copy of my
23 declaration as filed.

24 And I have a paper printout of that
25 declaration, except for my CV at the end.

1 Q. When you say electronic copy, do you mean
2 you have that on your computer there?

3 A. Yes.

4 Q. Okay. Do you have anything else on your
5 computer besides your declaration and the Zoom
6 deposition room open?

7 A. I do not.

8 Q. Do you have any chat windows open?

9 A. Not beyond what's available from Zoom.

10 Q. Do you have your cell phone with you?

11 A. I do. It is on silent mode and turned
12 away from me.

13 Q. Where do you work, Dr. Bederson?

14 A. I have a number of different kinds of
15 work.

16 I'm a computer science professor, title is
17 professor emeritus at the University of Maryland.
18 I'm a consultant and entrepreneur. And I'm also do
19 a number of projects, I'll call them nonprofit
20 projects, and municipal volunteer work as well.

21 Q. Is your work on this matter part of your
22 consulting work?

23 A. Yes, it is.

24 Q. How much of your time do you spend doing
25 consulting work?

1 A. I don't count my hours that way.

2 But somewhere on the order of half I could
3 approximate.

4 Q. And for your consulting work, is it all
5 expert witness work, or is it broken up in other --
6 in other activities?

7 A. It is broken up with other activities.

8 Q. How much of your consulting work is expert
9 witness work?

10 A. Again, I don't have a specific amount, but
11 I certainly could say that it is the majority of it.
12 At least at this point.

13 Q. How much of your expert witness work is
14 work related to IPRs?

15 A. I don't have a way to answer that
16 question. I don't -- I mean, I don't have that
17 information on the top of my head. I do some work
18 that's IPRs and some work that's not IPRs.

19 Q. How much of your expert witness work is
20 related to patents?

21 A. I don't have a precise way to measure
22 that, but I think it's fair to say that the
23 significant majority but not all is related to
24 patents.

25 Q. With respect to your IPR work, have you

1 done work for both patent owners and petitioners?

2 A. Certainly I have done expert work with
3 patent owners. I would have to check my records to
4 see if any of that has been for IPRs.

5 Q. You've done expert witness work for
6 petitioners and IPRs?

7 A. Yes, I have.

8 Q. Do you have any sense of what percentage?

9 A. I don't count it that way, but I think
10 it's certainly the case that it would be the
11 majority, probably, you know, a significant
12 majority. But I don't track it particularly.

13 Q. How much expert witness work have you done
14 for Apple?

15 A. Again, I don't have a specific way sitting
16 here today to answer that question. I've certainly
17 worked for Apple as an expert witness on a number of
18 cases, but I don't know how to characterize it from
19 memory more than that.

20 Q. Have you worked with Apple on other IPRs?

21 A. Yes, I have.

22 Q. Do you know how many?

23 A. Not off the top of my head I couldn't give
24 you a specific number.

25 Q. Approximately?

1 A. No, I really don't have an approximate
2 number to give you.

3 Q. Is it more than five?

4 A. Again, I just don't have a specific number
5 to -- to give you, so I can't answer that question
6 from memory.

7 Q. It's more than this matter?

8 A. Yes, it is more than this matter.

9 Q. Have you ever given testimony under oath?

10 A. I have.

11 Q. How many times?

12 A. I don't think I understand your question
13 about what's -- you're specifically referring to by
14 testimony under oath. For example, I believe this
15 testimony is under oath.

16 So I don't know if you're asking for any
17 particular kind of testimony or any possible
18 testimony I have given under oath.

19 Q. How many times have you been deposed?

20 A. I don't have a specific count, but I do
21 know it is somewhere around 70 times.

22 Q. You understand that you're under oath now?

23 A. I do.

24 Q. You understand that that means that you
25 are swearing that your answers to my questions are

1 true and correct?

2 A. That sounds right.

3 Q. If at any time you don't understand the
4 question, will you let me know?

5 A. I will do my best to let you know if I
6 don't understand a question.

7 Q. And if you give an answer to a question, I
8 will assume that you understood the question.

9 Is that fair?

10 A. I -- as I said, I will do my best to ask
11 if I don't understand a question, and I will do my
12 best to answer the questions as I understand them.

13 Q. Is there any reason you cannot give full
14 and complete testimony today?

15 A. No.

16 Q. Have you ever given false testimony under
17 oath?

18 A. I have not.

19 Q. Have you ever been charged with a crime?

20 A. I have not.

21 Q. What did you do to prepare for your
22 deposition?

23 A. I reviewed documents and talked with
24 counsel.

25 Q. What documents did you review?

1 A. They were largely -- I would say they're
2 all documents related to this IPR that have been
3 filed or somehow part of this IPR. I would say with
4 a focus on my declaration and the documents that I
5 cited in my declaration.

6 Q. Who did you meet with?

7 A. I met with Hunter Horton and
8 Josie Harding.

9 Q. When?

10 A. Just to be clear, I think you're
11 specifically asking about for my preparation for
12 this deposition; is that right?

13 Q. That's correct.

14 A. I met with them, I think, a couple weeks
15 ago, and then again yesterday.

16 Q. Did anyone else participate in any -- in
17 either of those meetings?

18 A. They did not.

19 Q. And how did those meetings take place?
20 Were they virtual?

21 A. Yes, they were virtual.

22 Q. And how long did you meet for each time?

23 A. I think the first time was about one hour,
24 and yesterday we met for six hours or so.

25 Q. Did you do any -- when you said you

1 reviewed documents, how long did you spend reviewing
2 documents?

3 A. A total of approximately two days.

4 Q. And that was for preparation for the
5 deposition?

6 A. Yes.

7 Q. I just want to make sure that you have
8 access to the exhibits that I want to introduce in
9 this deposition. So I'm gonna -- you should be
10 seeing on your screen -- an option to connect to the
11 Steno Connect app, which has the exhibits, and in
12 there you should see Exhibit 1.

13 A. Yes, I do see Exhibit 1.

14 (Exhibit Number 1 was marked for identification.)

15 BY MR. HUDNELL:

16 Q. Okay. And Exhibit 1 is the notice of
17 deposition of Dr. Benjamin -- do you say Bederson?

18 A. Yes, I do say Bederson. Thank you.

19 Q. Do you see that exhibit?

20 A. I do.

21 Q. Okay. And are you able to navigate the
22 exhibit?

23 A. I am.

24 Q. Okay. Did you -- so you understand that
25 this IPR concerns Mr. Allani's

1 U.S. Patent 10,943,058?

2 A. Yes.

3 Q. And if I refer to that as the '058 Patent,
4 you'll understand what I mean?

5 A. Yes.

6 Q. Okay. Have you reviewed the '058 Patent?

7 A. I have.

8 Q. How much time have you spent reviewing the
9 '058 Patent?

10 A. I don't have a way to answer that
11 question. I have not tracked that.

12 Q. And actually I said '058, but normally
13 I'll -- I may say '058.

14 But you still understand what I mean; is
15 that right? Is that fair?

16 A. Yes, I will.

17 Q. Okay. Have you reviewed the claims of the
18 '058 Patent, '058 Patent?

19 A. Yes.

20 Q. Do you have any sense for how much time
21 you've spent reviewing the claims of the
22 '058 Patent?

23 A. I do not.

24 Q. When reviewing the claims of the
25 '058 Patent, did you have any difficulty

1 understanding the claims?

2 MR. HORTON: Object to form.

3 A. I think I was able to understand them well
4 enough to perform the analysis that I did, and I
5 explained that analysis in my declaration and how I
6 understood the claims.

7 BY MR. HUDNELL:

8 Q. Did you have any difficulty understanding
9 the scope of the claims of the '058 Patent?

10 MR. HORTON: Same objection.

11 A. I think my answer's the same, which is I
12 understood the scope well enough that I was able to
13 perform the analysis that I did, and I was able to
14 explain how the -- where the scope was relevant
15 that -- how my analysis met the scope as I
16 understood it.

17 BY MR. HUDNELL:

18 Q. Was there anything unclear in the claims
19 of the '058 Patent that prevented you from
20 performing your analysis?

21 A. I'm not thinking of anything right now.

22 Q. Did you review the specification of the
23 '058 Patent to help you understand the claims of the
24 '058 Patent?

25 A. I did.

1 Q. How much time did you spend reviewing the
2 specification of the '058 Patent?

3 A. I did not track that. Don't have an
4 answer for that.

5 Q. Do you know approximately?

6 A. I do not.

7 Q. Okay. Same question for the claims of the
8 '058 Patent.

9 Do you know approximately how much time
10 you spent studying the claims of the '058 Patent?

11 A. I do not.

12 Q. Was there anything unclear about the
13 specification that prevented you from performing
14 your analysis?

15 A. I can't think of anything.

16 Q. Was there anything unclear about the
17 specification that prevented you from understanding
18 the claims of the '058 Patent?

19 A. As I said, I think I understood the
20 specification well enough so that it informed me
21 well enough so that I could understand the claims
22 well enough so that I could perform the analysis
23 that I did.

24 Q. Was there anything in the claims of the
25 '058 Patent that you did not find a description of

1 in the specification of the '058 Patent?

2 A. Well, the claims have English words, many
3 of which I interpreted through their plain and
4 ordinary meaning. I did not specifically consider
5 whether each and every word in the claim language
6 had specific support in the specification.

7 So I don't know that I have an answer for
8 that question. But as I said, I think I understood
9 the claims as they are written in light of the
10 specification.

11 Q. In your last answer, you used the phrase
12 plain and ordinary meaning.

13 What did you mean by that?

14 A. At a high level, that's how I think of
15 what a person of skill in the art at the time of the
16 patent would have understood the claims -- or claim
17 terms to mean.

18 Q. Is it your understanding that claim terms
19 are to be construed according to their plain and
20 ordinary meaning in light of the patent
21 specification?

22 A. I think that's -- I think that's right
23 that they are -- when I said -- my previous answer I
24 probably should have added in light of the
25 specification.

1 But to answer your specific question,
2 claim terms, I think, generally should be understood
3 by their plain and ordinary meaning in light of the
4 specification unless there are terms that have been
5 construed, in which case they should be understood
6 according to a construction.

7 And I think I've explained in my
8 opinion -- in my declaration when I applied
9 construed terms versus plain and ordinary meaning.

10 Q. One of the terms in the '058 -- in the
11 claims of the '058 Patent is the term icon; is that
12 right?

13 A. Yes, I think that's right.

14 Q. What's the plain and ordinary meaning of
15 the term icon in your opinion?

16 A. I addressed my opinions regarding the term
17 icon in my declaration at approximately
18 paragraphs 82 through 89.

19 And I explained in paragraph 82 that I've
20 applied patent owner's interpretation of the term
21 icon for my opinions here, and I did not offer my
22 own opinion about what the plain and ordinary
23 meaning of the term icon is.

24 Q. What is your own opinion?

25 A. I -- as I said, I didn't offer an opinion

1 about that term myself, and I don't have one off the
2 top of my head sitting here today.

3 Q. What would a person of ordinary skill in
4 the art at the time of the filing of the '058 Patent
5 understand the plain and ordinary meaning of icon to
6 be?

7 A. So I did not perform an analysis for this
8 declaration of what the plain and ordinary meaning
9 is or how a person of skill in the art would have
10 understood it.

11 I applied the patent owner's
12 interpretation for my analysis, so I don't have an
13 answer for that question sitting here today.

14 Q. But you have -- but you were a person of
15 ordinary skill in the art at the time of the filing
16 of the '058 Patent, correct -- you were at least a
17 person of ordinary skill in the art at the time of
18 the filing of the '058 Patent; is that right?

19 A. I was.

20 Q. Okay. At that time what was your
21 understanding of what an icon was?

22 A. So as I had just said, I did not develop a
23 written or -- I did not articulate a description of
24 what I thought a -- what the plain and ordinary
25 meaning of the term icon was at the time of the

1 patent. I didn't need to for the opinion that I
2 offered in this declaration.

3 As I said, I applied patent owner's
4 interpretation of this term, so I don't have an
5 answer for that sitting here today.

6 Q. So I just want to sort of clarify my last
7 question.

8 I understand that you said that you
9 don't -- you didn't form an opinion express -- I
10 understand that you didn't express an opinion of
11 what the plain and ordinary meaning of what the term
12 icon is in your declaration, but I'm simply asking
13 you as a person who was a person of at least
14 ordinary skill in the art in 1999, what you
15 personally understood an icon to be at that time?

16 MR. HORTON: Object to form. Scope.

17 A. I just don't have an answer for that
18 sitting here today. I did not consider how I -- for
19 this matter in my preparation for today, I did not
20 consider how I thought about that term at the time
21 that the '058 Patent was filed.

22 BY MR. HUDNELL:

23 Q. You'd heard of icons in 1999, correct?

24 A. I have.

25 Q. Okay. And if someone said icon to you,

1 you would understand what they meant, correct?

2 A. I would certainly want to consider the
3 context that they were using it in, who they were,
4 what their background was. So I think, like, a lot
5 of communication -- I don't have a specific -- just
6 a yes or no answer to that question. I think it
7 depends.

8 Q. You used the term icon, correct?

9 A. I have.

10 Q. You used it -- when you use it, what do
11 you mean?

12 A. Just because I use a word doesn't mean
13 that I can offer you a definition, certainly not for
14 one that is a claimed term in the patent for which I
15 offered an analysis of.

16 What I can tell you is what the analysis
17 is I did for this matter and how I understood the
18 term icon in the analysis that I did.

19 Q. We'll get to your analysis shortly.

20 But I want to know what -- when you use
21 the term icon, what do you mean?

22 A. Well, I've used the word icon I think over
23 many decades, and so I don't know that I have a -- I
24 don't have a specific definition of that term to
25 give you. So I just don't have a specific way to

1 answer that question right now.

2 Q. In your opinion, would a person of
3 ordinary skill in the art of the '058 Patent
4 understand what an icon is?

5 A. So I think I explained my opinion,
6 starting at paragraph 82 in my declaration of how a
7 person of ordinary skill in the art would have
8 understood the term -- the claimed term icon as used
9 by the patent owner, and I explained some of my
10 opinion regarding that.

11 Q. I'm gonna introduce into the Steno Connect
12 Exhibit 2, the declaration of Benjamin B. Bederson.
13 (Exhibit Number 2 was marked for identification.)

14 BY MR. HUDNELL:

15 Q. Is Exhibit 2 your declaration submitted in
16 this IPR?

17 A. It appears to be.

18 Q. And you said in your previous answer
19 that -- in paragraph 82 you begin your explanation
20 of what a person of ordinary skill in the art of the
21 '058 Patent would understand an icon to be.

22 Where in paragraph 82 are you referring
23 to?

24 A. So in my previous answer, I was -- I think
25 I said starting at paragraph 82, but that's not what

1 I intended to say.

2 In -- my declaration, I made it clear that
3 I'm explaining how I've applied patent owner's
4 interpretation, but I go on to explain how patent
5 owner's interpretation is based on the history of
6 the '058 Patent.

7 And so that history, including language of
8 documents in the prosecution history, would be
9 information that a person of ordinary skill in the
10 art would consider when they were understanding what
11 that meaning of the claim term was.

12 Q. And where specifically is that in your
13 declaration? What paragraph?

14 A. So I think there are a number of examples
15 throughout this section, which just for clarity I
16 think is in paragraphs 82 through 89.

17 One example of what I was just referring
18 to is in paragraph 84 where I explained that Claim 6
19 of the related '877 patent includes -- indicates
20 that an icon for accessing a selection page includes
21 a thematic title. So that is an example of a
22 textual icon.

23 And then another example is in
24 paragraph 85 that includes a figure on the top of
25 page 67 from the file history, which shows examples

1 of textual icons.

2 So those are examples from the file
3 history. There are more, but the those are some
4 that show some of my analysis of how I have applied
5 patent owner's interpretation and why my analysis
6 that -- in the file history of the '058 Patent, that
7 shows they would include textual icons.

8 Additionally, I also point to patent
9 owner's infringement allegations that provide
10 further evidence of their understanding of the term.

11 So, for example, on paragraph 83, at the
12 top of page 64, on the left, there is a screenshot
13 of a -- I believe this is a -- an accused product
14 where I've highlighted what they have pointed to as
15 a direct access icon that only includes text.

16 Q. Okay. I'm sorry, I was -- I see where you
17 are now. I was looking at the wrong -- the wrong
18 location, but I see where you are now. Okay.

19 A. Just to be clear, those are only some
20 examples. I think this section gives additional
21 explanation of my opinion as well.

22 Q. So I understand that you have an opinion
23 of what patent owner's understanding, you think
24 patent owner's understanding of plain and ordinary
25 meaning is.

1 I guess my question is: What is your
2 opinion of what a person of ordinary skill in the
3 art would understand an icon to be?

4 MR. HORTON: Object to form.

5 A. So as I said, I did not offer an opinion
6 about what a person of skill in the art would have
7 thought the plain and ordinary meaning of the icon
8 was.

9 I think in my earlier answer, I was
10 referring to a slightly different question where you
11 asked about how they would understand the
12 '058 Patent claims. And in that case I think a
13 person of skill in the art would consider the patent
14 itself as well as its file history to support their
15 understanding of the term.

16 BY MR. HUDNELL:

17 Q. But you don't have an opinion of what that
18 understanding would be; is that right?

19 A. That's right. My opinion is about the
20 patent owner's apparent understanding of this term.

21 Q. And for the purposes of assessing the
22 validity of the claims of the '058 Patent -- for the
23 purposes of assessing the claims of the '058 Patent,
24 that analysis requires using a person of ordinary
25 skill in the art's understanding; is that right?

1 MR. HORTON: Object to form.

2 A. Well, that sounds like a legal question.
3 I'm not a lawyer. I don't have any legal opinions
4 here. But I can tell you what the analysis that I
5 did is.

6 BY MR. HUDNELL:

7 Q. What is your understanding of the legal
8 requirement for assessing the validity of the claims
9 of the '058 Patent?

10 A. I was provided with the legal framework by
11 counsel about how to understand the requirements of
12 the validity analysis that I performed, and that's
13 in my declaration in paragraphs 18 through 29.

14 Q. Did your understanding require you to
15 apply the understanding of a person of ordinary
16 skill in the art as to the meaning of the claims of
17 the '058 Patent in order to assess their validity?

18 MR. HORTON: Object to form.

19 A. I explained my answer to that question in
20 part in paragraph 19 where I say that I had been
21 informed that under the Phillips standard claim
22 terms are to be given the meaning they would have to
23 a person having ordinary skill in the art at the
24 time of the invention, taking into consideration the
25 patent, its file history, and secondarily, any

1 applicable extrinsic evidence, e.g., dictionary
2 definitions.

3 And then I go on to explain that I
4 understand that for purposes of this proceeding,
5 petitioner has proposed the PTAB apply patent
6 owner's constructions advanced in the parallel
7 litigation. I've reviewed these constructions in
8 the petition and applied them to my analyses herein.

9 For any other claim language, I've applied
10 its plain meaning as instructed by Phillips.

11 And then obviously as we have been talking
12 about regarding the term icon, I have applied patent
13 owner's interpretation of the plain and ordinary
14 meaning of the term icon, and I went on to explain
15 how I understood patent owner's interpretation of
16 the plain and ordinary meaning.

17 But beyond that, I don't have any further
18 opinion about what is required by law.

19 BY MR. HUDNELL:

20 Q. Patent owner's construction is plain and
21 ordinary meaning, correct?

22 A. I don't understand the question.

23 What patent owner's construction are you
24 referring to?

25 Q. Of icon.

1 So you say in paragraph 19 that you just
2 read, petitioners propose the PTAB apply patent
3 owner's construction advanced in the parallel
4 litigation.

5 Well, that construction was plain and
6 ordinary meaning; is that right?

7 A. Yes, that's right.

8 Q. Okay. Then -- oops.

9 In paragraph 83 -- well, let me back -- in
10 paragraph 82 -- well, let me back up a step.

11 Do you know what patent owner's
12 understanding of the plain and ordinary meaning of
13 icon is?

14 A. I explained in these paragraphs, starting
15 in paragraph 82, that patent owner's interpretation
16 of the plain and ordinary meaning of icon is broad
17 enough to include icons that include only text.

18 Q. That's your interpretation of what you
19 think patent owner's construction is, right -- or
20 what you think patent owner's understanding is,
21 right?

22 A. That is my opinion about what patent
23 owner's interpretation of that term is, and I
24 explained that in this section of my report,
25 including giving numerous examples where patent

1 owner has used the term icon to describe user
2 interface elements that include only text.

3 Q. But you don't actually know what patent
4 owner's understanding is; is that right?

5 A. I think I just did explain that
6 understanding.

7 I did not offer a definition, but I did
8 explain my understanding of how patent owner has
9 used the term and therefore what their understanding
10 is.

11 Q. Have you ever talked to Mr. Allani?

12 MR. HORTON: Object to form.

13 A. I have not.

14 BY MR. HUDNELL:

15 Q. Do you know Mr. Allani?

16 A. I do not.

17 Q. Have you ever heard of him before this
18 proceeding?

19 A. I have not.

20 Q. Do you have any understanding of what
21 Mr. Allani thought an icon was in -- at the time of
22 the filing of the '058 Patent in 1999?

23 A. I explained in this section for numerous
24 reasons, both in 1999 as well as since then, how he
25 has understood that term to include icons that

1 include only text.

2 For example, in paragraph 84, I explained
3 that the '058 Patent explains, quote, the selection
4 icons preferably include an item or a thematic title
5 opening an access to a page, end quote.

6 I then go on to explain other disclosures,
7 all of which support my opinion that I've described
8 here, that the patent as written, in 1999, includes
9 an understanding of icons to include only text.

10 Q. When you say icons to include only text,
11 do you mean that the icon is text?

12 A. What I mean by this is that the icons, as
13 claimed, as I understood by the patent owner, are
14 textual icons.

15 So, for example, those are icons --
16 they -- their understanding of this term includes
17 icons that includes only text but do not require the
18 inclusion of other elements, such as images, for
19 example.

20 Q. The '058 Patent never uses the term
21 textual icon; is that right?

22 A. I would have to check, but I don't recall
23 it doing so.

24 Q. If you look at paragraph -- well, let me
25 see here.

1 What do you mean by a textual -- when you
2 say textual icon, what do you mean?

3 A. As I just said, a textual icon is an icon
4 that includes only text.

5 So, for example, a textual icon is an icon
6 that does not include an image.

7 Q. So look at -- so I guess what I'm trying
8 to understand, is there a difference between a
9 textual icon and text in your mind?

10 A. I did not -- I don't think I performed an
11 analysis specifically distinguishing that, but I did
12 point out that in patent owner's infringement
13 allegations, they did identify an example of a
14 direct access icon that appears to be only text.

15 Q. That example's not evidence of the meaning
16 of the term icon in 1999, correct?

17 MR. HORTON: Object to form.

18 A. That sounds like it's a legal question.

19 I do understand that is how the patent
20 owner is interpreting their own claims from 1999
21 today.

22 But I've also given other evidence in my
23 declaration of how the patent and its file history
24 also give examples of textual icons.

25

1 BY MR. HUDNELL:

2 Q. The example that you show in paragraph 83,
3 for patent owner's infringement contention, those
4 contentions didn't exist in 1999, correct?

5 A. I believe that's right.

6 Q. Do you know where these contentions came
7 from?

8 A. I refer to a number of documents that I
9 considered in paragraph 17 of my declaration. And
10 the last items towards the end of that list on
11 page 16 describe a number of documents from a
12 district court lawsuit, and I believe the
13 contentions came from that.

14 Q. Do you know when these contentions were
15 served in that district court lawsuit?

16 A. I see in my declaration, which is on
17 page 16, that is part of paragraph 17, it lists a
18 date for these lawsuit documents of June 3rd, 2024.

19 Q. Do you know if these were preliminary
20 contentions?

21 A. I see in paragraph 83 on the top of
22 page 64, I've described Exhibit 1035 as infringement
23 contentions, but I do not know sitting here today
24 whether those were preliminary contentions or not.

25 Q. Do you have any understanding of whether

1 these contentions were prepared before the Court in
2 the district court litigation conducted claim
3 construction?

4 MR. HORTON: Object to form.

5 A. I don't know that the timing of documents
6 or actions in that case.

7 BY MR. HUDNELL:

8 Q. Do you have any understanding of whether
9 these contentions were prepared before patent owner
10 proposed a construction for the term icon in the
11 district court litigation?

12 MR. HORTON: Object to form.

13 A. Actually, I guess I do know based on what
14 I wrote in paragraph 35, which is at the time that I
15 wrote this declaration in April of 2025, that both
16 parties had offered proposals for claim terms,
17 including the claim term icon, but my understanding
18 is there had not been a decision about these
19 constructions at the time that I wrote my
20 declaration.

21 BY MR. HUDNELL:

22 Q. And these contentions were prepared before
23 that time, correct?

24 A. Yes, that's right.

25 Q. These contentions don't provide a

1 definition of icon, correct?

2 A. I'm not aware of them providing a written
3 definition beyond plain and ordinary meaning, but
4 they do provide some insight into how patent owner
5 understood the term.

6 Q. But you don't know exactly what that
7 understanding was, correct?

8 A. Well, as I explained in paragraph 83 of my
9 declaration, I do understand that patent owner's --
10 sorry -- I do know that patent owner's understanding
11 of the term was broad enough to include a textual
12 icon.

13 Q. These contentions don't change the plain
14 and ordinary meaning of the term icon to a person of
15 ordinary skill in the art in 1999, do they?

16 MR. HORTON: Object to form.

17 A. That sounds like that may require a legal
18 interpretation, but I can say that these contentions
19 were not available in 1999, but they do inform me
20 today as to how patent owner understands the term
21 that they claimed in 1999.

22 BY MR. HUDNELL:

23 Q. These contentions are not evidence that
24 can be considered under a Phillips analysis; is that
25 correct?

1 MR. HORTON: Object to form.

2 A. That sounds like a legal question to which
3 I don't have an answer, but I did explain to you
4 what my opinion is and how this evidence informs my
5 opinion.

6 MR. HORTON: Counsel, we've been going for
7 a little over an hour.

8 MR. HUDNELL: Yeah, yeah.

9 MR. HORTON: Do you mind if we take a
10 quick break?

11 MR. HUDNELL: Yep. That's good.

12 (Recess taken.)

13 BY MR. HUDNELL:

14 Q. Welcome back, Dr. Bederson.

15 Let's look at the image that you included
16 in paragraph 85 of your declaration, Exhibit 2 on
17 page 67.

18 A. Okay. I'm there.

19 Q. All right. Do you see the oval with Gap
20 written in it?

21 A. I do.

22 Q. Is that an icon?

23 A. Yes. As I explained in the text of
24 paragraph 85, the inventor expressly states that the
25 screen depicted in the attachment shows selectable

1 icons for specific brand name stores that sell
2 women's clothing, and it goes on to explain that
3 includes this icon with the word Gap.

4 Q. Now, you've been -- in some of your
5 previous answers, you used -- you've used the phrase
6 textual icon or icon that includes text.

7 I'm wondering if this oval with the Gap is
8 one or both of those.

9 A. I think it is both.

10 And to be clear, I see that the icon is
11 rendered on top of a background, which includes part
12 of a W from the word web.

13 Q. Uh-huh.

14 A. But it looks like that's background behind
15 the icon, and the icon itself includes only the
16 word -- only the text Gap.

17 And sorry --

18 (Simultaneous cross-talk.)

19 BY MR. HUDNELL:

20 Q. So when you --

21 A. -- certainly there are other examples of
22 other icons on this page, which don't include that
23 background like the example with the Gap does.

24 Q. If the oval with Gap in it didn't have the
25 oval, would it still be an icon?

1 A. I don't have opinions about hypotheticals
2 that I did not form opinions about.

3 But this one is an example of an icon for
4 the reasons I explained. There are also other
5 additional examples that are rectangular icons, but
6 they are all examples of textual icons that the
7 patent owner has identified as being an icon.

8 Q. What makes it an icon?

9 A. Well, in this case, in part, the fact that
10 the patent owner has said that it is an icon, so
11 this shows their understanding that it is an icon.

12 Q. What about your understanding?

13 A. As I said, I applied patent owner's
14 interpretations for these interpretations.

15 Q. In your opinion do you consider the Gap
16 with the oval to be an icon?

17 A. I didn't offer an opinion about whether it
18 is, and I don't have one sitting here today.

19 Q. I'm just asking you if you do or not.

20 A. I do not have an opinion about that today.

21 Q. I don't -- I'm not asking if you have an
22 opinion. I'm just wondering if you would consider
23 that an icon.

24 MR. HORTON: Object to form.

25 A. I don't think I understand the distinction

1 between what I understand and what my opinion is.

2 But as I said, I didn't offer an opinion
3 about this, about whether I have an opinion whether
4 this is an icon, and I don't have one today.

5 BY MR. HUDNELL:

6 Q. Would you call it an icon?

7 MR. HORTON: Same objection.

8 A. I would call it an icon under patent
9 owner's understanding since they described it as an
10 icon.

11 BY MR. HUDNELL:

12 Q. I'm talking about separate from what the
13 patent owner has said, just you as an expert in this
14 field, would you call this oval with the Gap written
15 in it an icon?

16 A. I just don't have an opinion about that
17 sitting here today.

18 Q. Is that because you -- are you able to --
19 is that because you're not able to determine whether
20 that's an icon or not?

21 A. It's because I haven't performed that
22 analysis.

23 Q. What would you need to perform the
24 analysis?

25 A. Primarily time.

1 Q. Anything else?

2 A. I would need to have a specific
3 understanding of what are the requirements for that
4 analysis. So, for example, am I performing that
5 analysis based on the patent claim as understood in
6 light of the specification and as well as its file
7 history? If I could consider other kinds of
8 information that I understand regarding the patent
9 owner's understanding of the term.

10 So in order to form my analysis, I would
11 need to be -- have clarity about which kinds of
12 information I was including in that analysis.

13 Q. What would you need to consider in order
14 to determine whether you personally would call this
15 an icon or not?

16 A. Same answer. Whether I would personally
17 call it an icon or not would depend on what
18 information I was considering.

19 If I was considering it outside of the
20 context of this patent without the benefit of the
21 patent's specification and file history and patent
22 owner's apparent understanding of the term. So
23 whether or not I included that information would
24 inform what kind of opinion I would have about how I
25 would use that term.

1 Q. You said that you have a cell phone,
2 correct?

3 A. I do.

4 Q. What type of cell phone is it?

5 A. It's an Apple iPhone.

6 Q. Does it have icons?

7 MR. HORTON: Object to form.

8 A. Are you asking if -- that question about
9 whether they meet the '058 Patent's claimed term
10 icon?

11 BY MR. HUDNELL:

12 Q. No. Just asking if they have -- if
13 there's features on the interface of the iPhone that
14 you have that you call icons?

15 MR. HORTON: Object to form. Scope.

16 A. So to be clear, you're asking me about my
17 opinion in 2026, outside of the scope of the
18 '058 Patent, so it has no bearing on the
19 '058 Patent?

20 BY MR. HUDNELL:

21 Q. Yes.

22 A. So under that understanding, the answer is
23 probably. I'm pretty confident that Apple uses the
24 term icon to describe some elements of its user
25 interface. So there probably are some elements of

1 user interface that use icons.

2 Q. What elements?

3 A. I -- not looking at the product in front
4 of me, and I didn't perform that analysis for today.
5 But as I said, I think my recollection is that Apple
6 uses the term icon to describe some of the elements
7 in its graphical user interface, and I think there
8 are probably -- are icons on the interface.

9 Q. Why are they icons?

10 I mean, I guess what I'm saying is what
11 makes them icons as opposed to something else?

12 MR. HORTON: Object to form.

13 A. So, again, outside of the context of this
14 IPR, my declaration and the '058 Patent, at least to
15 my recollection, Apple uses the word icon to
16 describe them, so that's one reason that I might use
17 the word icon to describe some of the elements on
18 the interface as well.

19 BY MR. HUDNELL:

20 Q. Any others? Any other reasons?

21 A. I think some of the elements use graphical
22 and textual elements as visual indicators. Those
23 are probably some of the reasons that I would
24 consider and probably why Apple has considered using
25 the term icon to describe some of those elements.

1 But, again, that's very high level. I'm
2 not offering a specific set of requirements about
3 what would make something an icon or not.

4 Q. Can you think of any of the icons that you
5 have on your iPhone?

6 MR. HORTON: Object to form.

7 A. I was just referring to my previous
8 answers, my general thinking about how some of the
9 interface elements of the iPhone work and how Apple
10 has described it generally, but I was not thinking
11 about specific interface elements in my answer.

12 BY MR. HUDNELL:

13 Q. Right. I'm just wondering if you can name
14 a specific interface element that you'd call an
15 icon.

16 MR. HORTON: Object to form.

17 A. So, again, I have not done that analysis
18 here, so I don't have an opinion about a specific
19 interface element on an iPhone today that is an
20 icon.

21 BY MR. HUDNELL:

22 Q. Any particular features of the iPhone that
23 you access through the interface that you can think
24 of right now?

25 MR. HORTON: Object to form.

1 A. So I think that question did not use the
2 term icon. You're just asking me are there elements
3 of the interface that I can use to access --
4 actually, maybe you can re-ask the question. I'm
5 not sure I understood it.

6 BY MR. HUDNELL:

7 Q. Just in your everyday ordinary use of your
8 iPhone, is there a feature that you access through
9 the interface of the iPhone that you can think of
10 right now?

11 MR. HORTON: Same objection.

12 A. Yes, I can think of some features I can
13 access through the interface.

14 BY MR. HUDNELL:

15 Q. Can you give me an example?

16 A. So on my home screen, there is a button
17 that when I press it, it opens the settings feature.

18 Q. Is that settings button an icon?

19 MR. HORTON: Object to form.

20 A. Well, I think it's a button. It may
21 include an icon. But, again, I haven't performed
22 that analysis today.

23 BY MR. HUDNELL:

24 Q. Do you call it an icon?

25 A. I don't recall ever calling that button an

1 icon.

2 Q. Does Apple call it an icon?

3 MR. HORTON: Object to form.

4 A. Sorry. I do not know.

5 BY MR. HUDNELL:

6 Q. Are there any buttons on the interface of
7 the iPhone that you call an icon?

8 A. I think I generally probably refer to them
9 as buttons. I don't have a specific recollection of
10 having referred to those buttons as icons. I may
11 have. Not sure.

12 Q. Going back to the declaration -- your
13 declaration, Exhibit 2, paragraph 85, and the image
14 there, are there any icons in this image that are
15 just text without a box or a shape around them?

16 A. I didn't analyze that.

17 What I did analyze is that patent owner
18 specifically identified certain elements that are
19 icons that only have text, and I've highlighted
20 those in green in the annotated version of the image
21 that I included in my report.

22 Q. Did patent owner identify any icons that
23 are just text that have no shape or -- shape around
24 them?

25 A. I do not recall them having done that.

1 Q. Is there a difference between text and an
2 icon that includes text?

3 A. I did not offer an opinion about that, any
4 potential distinction there. My opinion is about
5 how patent owner understood the term icon.

6 Q. And in the material that you considered
7 from the patent owner -- in the material from the
8 specification that you considered from the patent
9 owner -- I mean specification and file history,
10 because this image comes from the file history, is
11 there -- did you find any evidence of the patent
12 owner calling just text an icon?

13 MR. HORTON: Object to form.

14 A. Well, I don't have the '058 Patent in
15 front of me, but I did point out in paragraph 84
16 that the '058 Patent itself explains that the
17 selection icons preferably include an item or
18 thematic title opening an access to a page.

19 So the patent does describe a thematic
20 title as an example of a selection icon.

21 BY MR. HUDNELL:

22 Q. I'm sorry. You were reading from
23 paragraph 84?

24 A. Yes. Around line 3 and 4 of paragraph 84.
25 I guess I can also go on. The following

1 sentence gives additional examples of textual icons,
2 such as the text calendar, AD12, 1st division games,
3 and return.

4 Q. Are those references to icons that include
5 text, or just text?

6 A. I would have to look at the '058 Patent to
7 definitively answer your question, but I don't
8 recall them having anything beyond text.

9 Q. Okay. Let's mark the '058 Patent as
10 Exhibit 3.

11 (Exhibit Number 3 was marked for identification.)

12 BY MR. HUDNELL:

13 Q. Is your share still open? I know
14 sometimes it --

15 A. It is.

16 Q. I'm going to introduce Exhibit 3, which is
17 U.S. Patent 10,943,058.

18 So if you could -- and do you recognize
19 Exhibit 3 as the '058 Patent?

20 A. Yes, it appears to be.

21 Q. Okay. So I guess as a follow-up to my
22 previous question, the references that you point to
23 in paragraph 84 of your declaration, are those --
24 are those references from the '058 Patent to icons
25 that include text or just text?

1 A. Certainly some of them are just text.

2 So, for example, I point to -- I list a
3 few examples, and I point to paragraph 4 -- sorry --
4 column 4, lines 9 through 27. And the first example
5 there, and I read from the patent: If a user of the
6 apparatus points on the icon of theme TH1.

7 So if we look at TH1, in Figure 2, that is
8 just text.

9 Another example is at line 13, it
10 describes an icon LOX, and looking at Figure 2, in a
11 box labeled P1, LOX is just text.

12 Q. If you look at Figure 1, the '058 Patent,
13 do you see the rectangle in the far left side that
14 has the oval with TH1 in it?

15 A. I do.

16 Q. Okay. Is that oval with TH1 in it
17 representing just text?

18 A. Yes, I believe it is, and that is -- as I
19 said, Figure 2 also has an example of TH1 without an
20 oval.

21 Q. Why do you say the oval in Figure 1 is
22 representing just text?

23 A. I didn't say the oval is representing just
24 text.

25 I said the icon described as TH1 is just

1 text.

2 Q. And why does it have an oval around it, in
3 Figure 1?

4 A. I don't know why it has an oval around it,
5 but I agree it does have an oval around it.

6 And in Figure 2, it has TH1 without an
7 oval around it.

8 Q. So then how are you able to determine --

9 COURT REPORTER: Counsel, sorry, your
10 question broke up.

11 So then how are you able to determine --

12 MR. HUDNELL: You can scratch that. I'm
13 going to ask a different question.

14 BY MR. HUDNELL:

15 Q. Would a person of person of ordinary skill
16 in the art reviewing Figure 1 of the '058 Patent and
17 the oval containing TH1 understand that to be
18 indicating that it's not just text?

19 MR. HORTON: Object to form.

20 A. My understanding of the '058 Patent is
21 that it would have -- a person of skill in the art
22 would have understood the disclosures of TH1 to
23 include a textual-only icon, certainly at least
24 because of Figure 2.

25 I think Figure 1 also shows that same

1 textual icon surrounded by an oval, but I don't see
2 that oval as being part of the described icon, at
3 least in part, because Figure 2 shows that same icon
4 without an oval. So the oval seems to be an
5 additional element.

6 BY MR. HUDNELL:

7 Q. A person of ordinary skill in the art
8 wouldn't consider that additional element to
9 indicate that that icon is something different than
10 just text?

11 A. As I just said, my primary opinion is that
12 the patent clearly discloses a text-only icon, and
13 that is at least because it describes TH1 as being
14 an icon. Figure 2 clearly shows TH1 as including
15 nothing but text.

16 So that is enough to support my
17 understanding -- my opinion that the patent clearly
18 discloses text-only icons.

19 In addition, I think that a person of
20 skill in the art would also understand Figure 1's
21 disclosure of TH1 to be a text-only icon surrounded
22 by an oval. But that doesn't affect my overall
23 opinion that the patent clearly shows the disclosure
24 of text-only icons for the reasons I just explained,
25 as well as the other reasons in my declaration.

1 Q. Why does Figure 1 have the oval if it's
2 just text?

3 A. I think I've already answered that, which
4 is the patent describes TH1 as the icon, and in
5 Figure 1, it shows the TH1 icon surrounded by an
6 oval. I don't know why there is an oval around TH1
7 in Figure 1, but I do know that Figure 2 shows TH1
8 without an oval.

9 Q. The language that you read from column 4,
10 I guess starting at line 9, was it?

11 A. Yes. That is part of what I read.

12 Q. If the user of the apparatus points on the
13 icon of theme TH1, is that what you -- you read
14 that, right?

15 A. Yes.

16 Q. Okay. Isn't TH1 just -- where is -- how
17 do you -- why is it that you understand that TH1 is
18 the icon as opposed to just an indication of the
19 theme?

20 A. I suppose both of us should have read that
21 complete sentence, which will clarify that. So I'll
22 read the complete sentence in column 4 starting on
23 line 9, where it says: If the user of the apparatus
24 points on the icon of theme TH1, for example, the
25 sport theme, if he clicks on this icon, a page PI

1 dedicated to the sport theme is then displayed.

2 So that is a clear disclosure that while I
3 agree, it first describes TH1 as a theme, it clearly
4 is describing an icon of that theme that you can
5 click on. So that is why I understand TH1 to
6 indicate an icon.

7 I also note that it offers consistent
8 descriptions of other text-only icons. I also read
9 starting at line -- I think it's 14, an icon LOX.
10 And Figure 2, very similarly to TH1, has a text-only
11 depiction of the icon LOX in the box, just slightly
12 lower where the overall box is labeled P1. And this
13 is a case where it describes it as an icon, not a
14 theme that is -- can be clicked on as an icon.

15 Q. I'm sorry. Where does it say that LOX can
16 be clicked on? What line was that?

17 A. Sorry. I was referring back to the
18 description of TH1 as being something an icon that
19 you can click on.

20 Q. Uh-huh.

21 A. At line 14, it just says an icon LOX for
22 accessing a site for -- dedicated to a plurality of
23 sports. It doesn't specifically say that you can
24 click on that icon.

25 Q. And if you go back to Figure 1 of the

1 '058 Patent, at the top of the page, the middle
2 rectangle.

3 Do you see that?

4 A. I do.

5 Q. Do you see the oval with LOX in it?

6 A. I do.

7 Q. Okay. And the fact that LOX is surrounded
8 by an oval, you believe a person of ordinary skill
9 in the art wouldn't understand that to be
10 representing an icon that's not just text; is that
11 right?

12 MR. HORTON: Object to form.

13 A. Sorry. That's right for essentially the
14 same reasons that I gave, describing TH1, which is
15 the patent describes LOX as being an icon, and
16 Figure 2 clearly shows that LOX is that icon without
17 a surrounding oval. Figure 1 also shows that same
18 icon, LOX in this case, with a surrounding oval.

19 BY MR. HUDNELL:

20 Q. If you look at column 3, line 63 or so,
21 this is a description of Figure 1 -- this is part of
22 the description of Figure 1.

23 Do you see that?

24 A. I do.

25 Q. And it refers to icons L01 through L0 --

1 LOI.

2 Do you see that?

3 A. I do.

4 Q. And would a person of ordinary skill in
5 the art understand that to be -- to include the LOX
6 that we're looking at -- that we were looking at
7 in -- that list, that string, that would include the
8 LOX that we're looking at in the top of -- the
9 rectangle at the top middle of Figure 1, right?

10 A. I don't think so, because if you look at
11 Figure 2, for example, the top box labeled P0 has
12 the elements L01, L02, dot, dot, dot, LOI, so that
13 seems to be consistent with the description you just
14 read in column 3.

15 But then looking lower in Figure 2 in the
16 box labeled P1, additionally, there are other
17 elements labeled LOX and LOY. So those do not seem
18 to be part of the general description of L01, L02
19 through LOI.

20 That's consistent with Figure 1 where the
21 box on the left has L01, L02 -- it's a little hard
22 to read -- L0 something, that might be LOI, but
23 that's distinguished from the middle box P1 which
24 has LOX and LOY.

25 So, anyway, my answer to your question --

1 Q. Well --

2 A. -- the answer to your question is no.

3 Q. Okay. Well, if you look at Figure 2, L01
4 through L0I are on P0.

5 Do you see that?

6 Or in the box labeled P0.

7 Do you see that?

8 A. Yes, that's what I've described.

9 Q. Okay. And do you understand P0 to be
10 page zero?

11 A. I think that's probably right in column
12 line -- sorry -- column 3, line 61, it describes a
13 first page, P0.

14 Q. And so would P0 correspond to P0 in
15 Figure 1?

16 A. It looks like it may.

17 Q. Does the box labeled P1 correspond to
18 the -- in Figure 2 -- correspond to the box labeled
19 P1 in Figure 1?

20 A. I don't see it specifically calling out
21 P1, but it looks like it may.

22 Q. You don't see what specifically is calling
23 out P1?

24 A. I don't see the specification specifically
25 calling out P1, but it looks like P1 of Figure 2 may

1 correspond to P1 of Figure 1.

2 Q. Is there any difference between -- in
3 terms of what they represent, is there any
4 difference between the L0 ovals on P0 versus P1?

5 A. Well, I think they're described
6 differently. I mean, they each have various
7 descriptions, so the spec, you know, is what it is.
8 But they're not the same.

9 Q. I guess I didn't ask that question well
10 enough, so let me try that again.

11 So then going back to the column -- where
12 are we?

13 Column 3, line 63, where it says icons L01
14 through L0I, and that being -- you understand that
15 that's a reference to the L01, L02 and L0I icons in
16 P0 on Figure 1; is that fair?

17 A. Yes, I think that's right.

18 Q. Okay. Do you understand the specification
19 describing those as just text?

20 A. I think this is a broad description that
21 can include just text, yes.

22 So, for example, it describes that they
23 can feature merchant sites or portals, and it
24 doesn't describe those as excluding just text.

25 Q. Well, it says it has to be icons featuring

1 merchant sites.

2 A. Right. It explains that those are icons,
3 and it gives a number of examples of things that
4 those icons can feature.

5 Q. Uh-huh.

6 A. And some of those examples of things that
7 it can feature are merchant sites or portals. It
8 doesn't describe those merchant sites or portals as
9 excluding text. So I think this description is
10 broad enough to include text-only icons.

11 Q. And the fact that the -- that those icons,
12 as shown in Figure -- those LOI -- L01, L02, LOI
13 icons as shown in -- in Figure 1, the fact that they
14 have an oval around them, are you saying that that
15 doesn't suggest to you that they're not just text?

16 A. That's right, for the reasons I've already
17 explained, since, for example, Figure 2 also shows
18 icon L01, L02 through LOI without an oval. So it
19 looks to me like it's referring to L01, L02 through
20 LOI as text-only icons, and that in Figure 1, it
21 also draws an oval around them.

22 Q. Do you see in paragraph -- so jumping back
23 to Exhibit 2, your declaration, the same paragraph
24 we were looking at in paragraph 84, you reference
25 here in the last sentence, Claim 20 of the '058

1 Patent, which claims icons comprising textual
2 elements.

3 Do you see that?

4 A. I do.

5 Q. Okay. Is an icon comprising textual
6 elements different than just text?

7 A. I think an icon comprising textual
8 elements includes just text, but it is not limited
9 to just text.

10 Q. Why is that?

11 A. Well, because my understanding of the word
12 comprise is it's not limited to the things that it
13 comprises. So an icon can comprise the text,
14 textual elements, but it is not limited to the
15 textual elements in Claim 20, so -- but it also does
16 not require anything beyond textual elements, so in
17 other words Claim 20 shows that an icon -- the
18 claimed icon of Claim 20 includes icons that both
19 are only text -- include only textual elements, as
20 well as including other kinds of elements.

21 Q. Well, Claim 20 requires two things, right?
22 You have to have an icon, and that icon has to
23 comprise textual elements; is that right?

24 A. Well, Claim 20 is dependent from Claim 1,
25 so includes all of the things of Claim 1, and it

1 refers back to the icons of Claim 1.

2 So in Claim 1, it's describing that
3 claims 1 -- Claim 1's icons must comprise textual
4 elements. That is, they cannot exclude textual
5 elements.

6 Q. So if an icon is just text, what does it
7 mean to have text comprising textual elements?

8 A. I don't understand your question. What
9 Claim 20 says is that an icon must comprise textual
10 elements.

11 Q. Right.

12 And so if an icon is understood to be just
13 text, what does it mean when the claim says -- if we
14 construe icon to be just text, what does Claim 20
15 mean when it says text comprising textual elements?

16 MR. HORTON: Object to form.

17 A. I'm not sure -- I don't understand your
18 question by if we construe icon to mean just text.
19 I don't think anyone has construed icon to be just
20 text.

21 I've explained pretty clearly that I'm
22 implying patent owner's construction of icon to be
23 the plain and ordinary meaning, where I've explained
24 that they clearly understand that plain and ordinary
25 meaning to be broad enough to include just textual

1 icons -- sorry -- just to include textual icons,
2 that is just textual elements.

3 And Claim 20 is consistent with that. It
4 describes icons that can comprise textual elements.
5 Also, Claim 20, as I said, does not restrict icons
6 from including other things, but it doesn't exclude
7 icons that don't include textual elements.

8 BY MR. HUDNELL:

9 Q. So for icons that are just text, what are
10 the textual elements that it comprises?

11 A. I don't understand your question. What
12 I've said is that the icons, as patent owner
13 understands them, can include a textual element, but
14 not including nontextual elements. And I've given
15 numerous examples of those, of how patent owner
16 understands that term.

17 Q. If you look at the figure in paragraph 85,
18 the image in paragraph 85, and if we go back to the
19 Gap example that I've referenced before. And if --
20 if the image here just said Gap without the oval
21 around it, you would consider that an icon, correct?

22 A. I didn't form an opinion about that
23 hypothetical example.

24 Q. Would you consider that an icon?

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

1 Q. Are you able to determine whether that's
2 an icon or not?

3 A. I think I'm capable of thinking about
4 that, but I haven't done that for this analysis.

5 Q. In the image on paragraph 85, where you
6 see the Gap with the oval around it, what's the
7 icon?

8 A. Well, patent owner, as I explained in
9 paragraph 85, identifies, quote, Gap, as the
10 selectable icon.

11 Q. What's the textual element?

12 A. The textual element is Gap.

13 Q. Is the oval part of the icon?

14 A. That's not how patent owner has described
15 it.

16 Q. Do you believe that the patent owner's
17 describing just the words Gap without the oval
18 around it?

19 A. No. That's what they -- that's how they
20 identified it.

21 I mean, it's clearly within the oval. I'm
22 not disputing what the figure shows. I'm just
23 describing what patent owner said about it.

24 Q. Patent owner said, in your paragraph 85,
25 you say that the patent owner says that the screen

1 depicted in the attachment shows selectable icons
2 for specific brand name stores that sell women's
3 clothing, in particular Gap.

4 So what's the -- what part of the Gap
5 oval -- the oval with the Gap in it makes it
6 selectable?

7 A. It looks like they are referring to the
8 function that is available, which is that it is
9 selectable. So they don't describe this in a lot
10 more detail, but it looks like a user can use a user
11 interface device to select the selectable icon,
12 so -- which includes the text Gap.

13 Q. Do you see down at the bottom of the image
14 in the box with e-mail, with the rectangle around
15 it?

16 A. I do.

17 Q. Okay. And you say in paragraph 85 that
18 the patent owner described that icon as being
19 selectable.

20 Do you see that?

21 A. I do.

22 Q. What makes that box with e-mail in it
23 selectable?

24 A. It looks like the patent owner is
25 describing the function that is available in this

1 interface.

2 It goes on to explain that it is
3 selectable icons for navigating to e-mail. So I
4 think that describes that the user using this
5 interface could use some kind of interaction device
6 to select that e-mail icon for navigating,
7 presumably to an e-mail function.

8 Q. How do you select it?

9 A. It doesn't specifically say here, at least
10 not in the part that I quoted, how to select it.
11 I'd have to go back to look at the final history
12 that this came from to see if it gave more detail
13 about how the user selects it.

14 Q. How would a person of ordinary skill in
15 the art understand how to select that box with
16 e-mail in it?

17 A. I think there's different ways that that
18 might happen. If it were on a device with a mouse,
19 a user might click on it. If it were on a device
20 with a touch screen, a user might touch it. If it
21 were on a device with some function buttons, they
22 might use those function buttons to access and then
23 select that icon.

24 Those are at least some ways that a user
25 might select that icon.

1 Q. Would a person of ordinary skill in the
2 art understand the oval with the Gap icon being
3 selectable by one or more of those methods that you
4 just described?

5 A. Again, I'd have to look at the file
6 history that this image came from to see if it gave
7 a specific description of how that can be selected.

8 I was just giving some general
9 understandings of how users can often select items
10 in the user interface.

11 So the three examples I just gave might
12 apply to the Gap icon example. Again, those are
13 sort of general answers that I would have to go to
14 see if it gave any specific description of that icon
15 and how a user could select it.

16 MR. HUDNELL: Why don't we take another
17 break?

18 MR. HORTON: Do you want to do ten minutes
19 again or five? What sounds good?

20 THE WITNESS: How about ten?

21 (Recess taken.)

22 BY MR. HUDNELL:

23 Q. Welcome back, Dr. Bederson.

24 If you could go to paragraph 44 of your
25 declaration at Exhibit 2.

1 A. Okay.

2 Q. And this paragraph begins under the
3 heading selectable icons on mobile devices.

4 Do you see that?

5 A. I do.

6 Q. Okay. And we kind of touched on this
7 before we left off before the break, but when you
8 say selectable icons, what do you mean by selectable
9 here?

10 A. I explained that in the sentence starting
11 page 32, where I say: Namely, as shown above, a
12 user could select address, calc, doc, et cetera, and
13 the Palm III would access a service or document
14 associated with that icon.

15 Q. How would the user select address, calc,
16 or doc?

17 A. On the Palm III, a user selects those
18 icons by touching them, using the touch screen of
19 the device.

20 Q. So if I wanted -- if a user wanted to
21 select address, where would he need to -- where
22 would he or she need to touch?

23 A. I would have to test the device to be
24 100 percent sure, but based on my experience using
25 that device at the time, my recollection is they

1 could touch anywhere in the region of the screen
2 that bounds the icon, which includes both that
3 graphical element as well as the textual element.

4 Q. And when you refer to the screen, are you
5 referring to the screen on the -- which screen are
6 you referring to, the one on the left or the one on
7 the right above the text that we're looking at?

8 A. I think in my previous answer, that would
9 apply equally to both the left and the right screen.

10 Q. And when you say the region of the screen
11 that bounds the icon, what are you referring to?

12 A. Exactly what I just described.

13 There's an icon include -- that includes
14 both graphics and text on each of those screens, so
15 I was referring to the region of the screen that
16 bounds those icons.

17 A POSITA, or a person of skill, usually
18 would use the term bounding box, but essentially the
19 rectangle that -- the smallest rectangle that
20 includes those elements.

21 There could also be a buffer of a couple
22 of pixels, so it might not actually be the smallest
23 rectangle. In practice it's often the smallest
24 rectangle, plus some small buffer.

25 Q. Does that area have a particular name in

1 the art, like active zone or something like that?

2 A. As I said, it's often referred to as the
3 bounding box or it could just be sometimes referred
4 to as the position and size of the element that
5 accepts user input.

6 Q. And the bounding box is not visible to the
7 user on the interface of the Palm Pilot; is that
8 right?

9 A. I think it's the Palm III, but I think
10 it's right. The bounding box is not visible on
11 these -- at least these two user interface screens.

12 Q. So there's some area -- it could be the
13 case, like, for example, if we look at the screen on
14 the right, it could be the case that a user inclined
15 to select address touches too far to the right of
16 the address bounding box that it wouldn't be able --
17 that the app -- the address icon wouldn't be
18 selected; is that fair?

19 A. I think it's certainly the case that
20 there's gonna be some area within which a user can
21 touch that would select the address icon and some
22 area beyond which it would -- a user touching would
23 not select the address icon.

24 Q. You say in paragraph 44 that the Palm III
25 uses a mixture of textual and graphical icons.

1 Are there any icons depicted in the
2 interfaces that you've shown from the Palm III that
3 are only textual?

4 A. I did not identify any at the time I wrote
5 this report, and I did not analyze Palm III
6 interfaces to determine if any -- if there are any
7 textual -- actually textual-only icons, if that was
8 your question.

9 Q. Do you see any in the examples that you've
10 provided in paragraph 44?

11 A. Just to clarify, I assume we're talking
12 about my opinion regarding the '058 Patent, so we're
13 talking about my analysis of the term icon, which is
14 how the patent owner would understand that term.

15 But the answer with that assumption is
16 that I did not analyze this, and I -- either at the
17 time I wrote this report or sitting here now, I
18 don't have an opinion about whether there are any
19 textual-only icons on the Palm III interfaces,
20 meaning as patent owner understands the term icon.

21 Q. Well, actually, I'm just talking about
22 your description of the prior art here and your
23 familiarity with the Palm III.

24 Do you see any textual-only icons here in
25 the screens that you provided from the Palm III?

1 A. I did not identify any at the time that I
2 wrote my report, and I'm not -- I haven't analyzed
3 that -- the Palm III under any understanding of
4 textual icon.

5 I don't have an opinion about that sitting
6 here right now.

7 Q. Do you see any sitting here right now?

8 A. I would want to spend some time thinking
9 about that, and I haven't done so. So don't have --
10 I can't answer that sitting here right now today.

11 Q. Are all the icons that you see and the
12 examples that you -- and the displays that you
13 provide from the Palm III, do all of them have both
14 graphical and textual elements?

15 A. I think all of the ones that identified
16 do.

17 Q. When you say identified, are you just
18 referring to address, calc, and docs or something
19 else?

20 A. So when I was referring to -- actually in
21 my report I referred to address, calc, doc,
22 et cetera.

23 Q. Uh-huh.

24 A. And so I think at the time I wrote this
25 report, I was thinking by et cetera all 12 icons on

1 the left image --

2 Q. Uh-huh.

3 A. -- where those are icons that include
4 address, calc, and doc as well as it looks like nine
5 others that are both graphics and text. I think I
6 was probably referring to the left image, but the
7 right image is -- you know, I think meets -- has the
8 same characteristic, so I think it applies to the
9 combined graphics and text icons on the right image
10 and the main portion of that interface, starting
11 with address on the top in the left column, going
12 downwards, and calc in the right column going
13 downwards.

14 Q. Do all icons have a bounding box,
15 regardless of whether they're graphics or text or
16 both?

17 A. That really depends how they are
18 implemented. I think in practice it is common
19 practice to include bounding boxes and the code that
20 defines an icon, but I can't say that it always
21 does.

22 I think they typically at least could be
23 calculated from the icon. But, again, I'm just
24 talking about common practice.

25 Q. A person of ordinary skill in the art in

1 1999 would be familiar with that common practice,
2 correct?

3 A. The common practice of using bounding
4 boxes in the implementation of selectable icons,
5 yes, they would be.

6 Q. In paragraph 45, you describe the
7 Nokia 7 -- 7110.

8 Do you see that?

9 A. I do.

10 Q. Okay. And the image at the top of
11 page 40 -- I'm sorry -- page 33 of Exhibit 2, is
12 that a display from the Nokia 7110?

13 A. Yes, it is.

14 Q. Have you used the 7110 -- Nokia 7110?

15 A. I did not.

16 Q. What are the --

17 A. Well, actually I should say, I don't -- I
18 did not for this case. It's possible that I have in
19 the past.

20 Q. What are the selectable icons shown here
21 in the figure at the top of page 33 of Exhibit 2?

22 A. So in this screen on the top of page 33 --

23 Q. 33. Sorry. Yep, you're right.

24 A. -- the selectable icons are the icon
25 including the text and corresponding image.

1 So the top one is the text games, and the
2 image on the right looks like it includes a ball.
3 And then the next icon is calculator, with the image
4 to the right of that that includes the image of a
5 calculator, and so on. So -- one, two, three, four,
6 five -- it looks like there's six of them.

7 Q. Does the Nokia 7110 have a bounding box
8 for each of these icons?

9 A. I do not know.

10 Q. Do you know if, for example, with the --
11 with the Item 6 games, do you know if that icon can
12 be selected by simply touching the text games?

13 A. I would have to look at the user's guide
14 that I cited. I don't remember if this device had a
15 touch screen or not.

16 Q. If the device doesn't have a touch screen,
17 would it still have a bounding box?

18 A. Again, I only described bounding box as a
19 common practice in the implementation of icons. I
20 think it is very common to have bounding boxes,
21 whether or not there is a touch screen. But I don't
22 have any particular knowledge of whether the
23 Nokia 7110 used the bounding boxes or not.

24 And to be clear, I don't have any
25 particular knowledge of whether the Palm III did or

1 not either. I was merely explaining how it was
2 common to implement such interfaces, and I was using
3 that to describe my recollection of how the Palm III
4 worked.

5 Q. Your recollection of the Palm III was that
6 it was a touch screen?

7 A. Yes, that's right.

8 Q. And for the Nokia 7110, you don't have a
9 recollection of how icons were selected. Is that
10 right?

11 A. Yes, that's right.

12 Q. In the image at the top of page 33 of
13 Exhibit 2, are there any icons that are text only?

14 A. I did not perform that analysis at the
15 time I wrote my report, and I don't have an opinion
16 about that sitting here today.

17 Q. Do you see any sitting here today?

18 A. I just don't have an opinion about that.
19 I didn't perform that analysis.

20 Q. In the text under the image on
21 paragraph -- on -- the text under the image on
22 page 33, you say: A user simply selects the icon
23 and the Nokia 7110 accesses the associated service
24 or application related to that icon.

25 Do you see that?

1 A. I do.

2 Q. So if I understand your previous answer,
3 you don't know -- for the 7110, you don't know how
4 that selecting takes place, whether it's touch or
5 some other method?

6 A. That's right. I don't recall.

7 Q. And your description here of -- when you
8 use the term -- in the same sentence when you use
9 the term icon, you're referring to the entirety of
10 what's depicted on each line. So the text games and
11 the image of the ball with the phone, you're
12 considering that -- those combined to be the icon,
13 correct?

14 A. So the first part of your question
15 referred to the entirety of something, so I don't
16 know what you're referring to for that.

17 But the second part of your question, I
18 agree, that I was referring to the text games and
19 the icon, including the ball to the right of
20 games -- sorry -- the image -- the text games and
21 the image to the right of that text with the ball,
22 together, to represent the icon.

23 Q. Besides bounding boxes, are you aware of
24 any other ways that icons can be implemented, to
25 make them selectable?

1 A. As I said, I think bounding boxes are one
2 part of an implementation that is common in
3 selectable icons. But a person of skill could
4 implement software however they want, so I think
5 there are lots of possible technologies and ways
6 they can choose to do that.

7 Many times there are underlying frameworks
8 provided by an operating system, so the person of
9 skill would not be involved with the details of how
10 a selectable icon was implemented. They would use
11 this underlying framework.

12 They often would display icons on
13 selectable elements such as buttons that could be
14 implemented or provided again by the operating
15 system or underlying interactive graphics framework.

16 So there are many different ways that a
17 POSITA would implement selectable icons, and it
18 often would depend on other libraries or frameworks
19 that might be part of the system that they were
20 using.

21 I do want to add on that I realize I did
22 describe in my report a little bit more about the
23 Nokia user interface, going back to your questions
24 about whether it had a touch screen or not.

25 I see in paragraph 43, it describes the

1 use of a Menu and Navi Roller. Those appear to be
2 hardware buttons. So if those are describing
3 hardware buttons, then that would be at least one
4 possible description of how a selection could occur.

5 So I'm referring in particular to the box
6 in the top of page 31 that's part of paragraph 43.

7 This is consistent with my previous
8 answers. I'm just giving you some additional
9 disclosure about the Nokia 7110 and how it describes
10 its user interface. It describes selection of items
11 in other contexts, but I would -- wouldn't be
12 surprised if that same selection mechanism also
13 worked to select the icons I described in
14 paragraph 45.

15 Q. The examples that you show for the
16 Palm III, the displays that we looked at, and on
17 page 32, and the ones displayed for the Nokia 7110
18 on the top of page 33 -- actually, strike that.

19 At the time of the '058 Patent, there were
20 icons that were -- were there icons that were only
21 graphical?

22 A. That were only graphical without text?

23 Q. Yes.

24 A. Yes, there were. I'm pretty confident
25 there were.

1 I don't know that I specifically described
2 that in my report, but I'm pretty sure there were.

3 Q. Were there icons that were only text?

4 A. There were the ones at least that --
5 sorry.

6 To the extent that patent owner's
7 understanding of icons is correct that they can
8 include only text, then that would -- the ones that
9 they pointed to are examples of text-only icons.

10 Q. And in preparing your declaration, did you
11 find any examples of selectable icons on mobile
12 devices -- putting the '058 Patent aside, did you
13 find any examples of selectable icons on mobile
14 devices that were only text?

15 A. I did not perform that analysis, so I
16 don't have an answer to that question.

17 Q. Did you look for any?

18 I mean -- well, I guess maybe I didn't
19 understand your last answer.

20 You said you didn't perform that analysis.
21 I guess -- I don't know if that means you didn't
22 look for any, or you just didn't -- you looked, but
23 you didn't do the analysis.

24 So my question is: Did you look for any?

25 A. Well, my analysis was based on patent

1 owner's interpretation.

2 So your question, I think, was did I do my
3 analysis without patent owner's interpretation. No,
4 I did not do that analysis.

5 Q. Well --

6 A. I didn't do any analysis of icon not
7 including patent owner's interpretation.

8 Q. Well, how did you find the examples that
9 you have here in -- under the heading selectable
10 icon on mobile devices? How did you find these?

11 A. I think those meet patent owner's
12 interpretation which means that they are icons that
13 can be text only.

14 My opinion is not that patent owner's
15 interpretation is only text icons, but that it must
16 include at least text-only icons.

17 Q. I'm wondering why you picked these two
18 examples to describe -- I'm wondering why did you
19 pick these two examples from the prior art to show
20 examples of selectable icons?

21 A. They were well-known examples of
22 selectable icons.

23 Q. So you just sort of knew that these were
24 examples off the top of your head, or did you have
25 to do some work to find these examples?

1 A. I was certainly familiar with the Palm III
2 and its general interface.

3 I don't remember how I came to include the
4 Nokia 7110 example.

5 Q. Were you familiar with any examples of
6 text-only icons from the prior art at the time you
7 prepared your declaration?

8 A. I think Rossmann that I described in many
9 places in my patent, for example, Figure 4 in
10 paragraph 78 on page 60, shows selectable text-only
11 icons.

12 Q. When did you first become aware of the
13 Rossmann reference?

14 A. I don't think I recall seeing it before I
15 worked on this IPR, on this declaration. So I think
16 it was part of my analysis.

17 Q. Before you began work on this IPR, were
18 you familiar with any examples of text-only icons
19 from the prior art?

20 A. I may have been. I did not think about
21 that. So I can't remember what I remembered at that
22 time.

23 Q. You were familiar with the Palm III at
24 that time, correct?

25 A. I was.

1 Q. If you were aware of -- if before you
2 began your work on this IPR, and you were aware of a
3 text-only example -- a text-only icon example from
4 the prior art, you would have included it in your
5 declaration, correct?

6 MR. HORTON: Object to form.

7 A. I was aware of many things that I did not
8 include in my declaration. So no, I don't see why I
9 necessarily would have.

10 BY MR. HUDNELL:

11 Q. Sitting here right now, can you identify
12 any text-only icons from the prior art that you were
13 aware of before you began work on this IPR?

14 MR. HORTON: Object to form.

15 A. I did not perform that analysis for this
16 report, and it's -- I'm -- don't know how to answer
17 that question, because I'm just not thinking now of
18 what I had been thinking of before I started this
19 report and what specifically I was aware of.

20 I would have to spend some time thinking
21 about all the numerous interfaces I was aware of and
22 how they worked and whether they had graphics or
23 not. I can't do that from memory sitting here
24 today.

25

1 BY MR. HUDNELL:

2 Q. Are you familiar with the term hyperlink?

3 A. Yes, I am generally.

4 Q. What's your understanding of what a
5 hyperlink is?

6 A. I don't think that's a term that comes up
7 in the claims of the '058 Patent, and I didn't offer
8 a construction or an analysis of it.

9 But generally I would say a hyperlink is a
10 link that a user can select to access a web page. I
11 think it's a broad word, can probably be used in a
12 number of different ways, but it often has those --
13 maybe I should say those are characteristics, not so
14 much as a -- certainly not a definition.

15 Q. Would a person of ordinary skill in the
16 art in 1999 understand what a hyperlink is?

17 A. Again, I think it's a term that can be
18 used in different ways, but I think certainly a
19 person of skill in the art in 1999 would have been
20 familiar with that term.

21 Q. Would a person of ordinary skill in the
22 art in 1999 have understood hyperlink to have the
23 characteristics that you described in your -- not in
24 your last answer, but your answer before that?

25 A. I haven't analyzed that term for this

1 case, so I really don't have a specific opinion. I
2 was giving you my general understanding of some of
3 the characteristics of the term.

4 I think it's likely that a person of skill
5 in the art would have thought about it similarly,
6 but I have not done that analysis.

7 Q. To hyperlink an icon?

8 MR. HORTON: Object to form.

9 A. I have not performed that analysis.

10 And I think a hyperlink can be displayed
11 in different ways.

12 BY MR. HUDNELL:

13 Q. Would a person of ordinary skill in the
14 art in 1999 consider a hyperlink to be an icon?

15 A. I did not perform that analysis. I don't
16 have an opinion.

17 A hyperlink can be displayed in different
18 ways. So at the very least, it probably depends.

19 Q. What ways could a hyperlink be displayed
20 in 1999?

21 A. Well, at least some of the ways that a
22 hyperlink could be displayed in 1999 are with an
23 image or with text or with an image and text.

24 Q. Can you give me an example of a hyperlink
25 from 1999 that was displayed as an image?

1 A. I'm pretty sure I had some on my web --
2 personal or professional web page at that time.

3 It was straightforward to implement that
4 in HTML.

5 Q. What web page?

6 A. Again, I'm not 100 percent sure, but I
7 think it's likely that I had such hyperlinks. It
8 would have been my professional web page at the
9 University of Maryland.

10 Q. Do you recall the URL for that web page?

11 A. I do.

12 Q. What was it?

13 A. www.cs.umd/~Bederson.

14 Q. Are you aware of -- can you give me an
15 example of a hyperlink from 1999 that was displayed
16 as an image and text?

17 A. Not off the top of my head.

18 I may have -- I won't be surprised if I
19 had used them myself, but I don't know if I can
20 recall a specific one off the top of my head.

21 Q. When I asked would a person of ordinary
22 skill in the art in 1999 consider an -- a hyperlink
23 to be an icon, you said a hyperlink can be
24 displayed -- part of your answer, I don't want to
25 mischaracterize -- part of your answer said a

1 hyperlink can be displayed in different ways. At
2 the very least it probably depends.

3 In what ways could a hyperlink be
4 displayed, such that a person of person of ordinary
5 skill in 1999 would consider a hyperlink to be an
6 icon?

7 MR. HORTON: Object to form.

8 A. I didn't perform that analysis, so I don't
9 have an opinion sitting here today.

10 BY MR. HUDNELL:

11 Q. Is there a difference between a hyperlink
12 and an icon that is just text?

13 MR. HORTON: Object to form.

14 A. I don't understand the question.

15 BY MR. HUDNELL:

16 Q. I'm wondering whether a hyperlink and an
17 icon that is just text are the same thing or two
18 different things?

19 MR. HORTON: Object to form.

20 A. Hyperlinks and icons are not the same
21 thing. They're two different words describing
22 different things.

23 BY MR. HUDNELL:

24 Q. How are they different?

25 A. Hyperlinks describe a function on a --

1 relating to the worldwide web and typically
2 navigating web pages.

3 That's not what icons -- icons by
4 themselves don't describe that, so they're not the
5 same thing.

6 Q. Any other differences?

7 MR. HORTON: Object to form.

8 A. That's a pretty big difference, so I don't
9 know. Maybe.

10 BY MR. HUDNELL:

11 Q. In your declaration, you use the term or
12 the phrase text-based link.

13 Are you aware of that?

14 A. Do you want to tell me -- point me to
15 where I referred to that in my --

16 Q. Sure.

17 So, for example, if you go to page 67, and
18 67 has the image from the file history that we were
19 looking at earlier at the top, in paragraph 85.

20 But in paragraph 86, you say:

21 Accordingly, a POSITA would have understood that
22 Rossmann's teachings, including text-based links,
23 for example -- and then you list them, and then for
24 example, satisfy the claimed icons.

25 Do you see that?

1 A. I do.

2 Q. What is a text-based link?

3 A. So I explain this in paragraph 86 through
4 paragraph 89.

5 And in it, I describe Rossmann's interface
6 for selecting items on the screen as text-based
7 links, because they are text-based, and they are
8 links that a user can select for navigating to
9 additional information.

10 And so I explain why that meets the plain
11 and ordinary meaning of the term icon as it would
12 have been understood in light of the '058 Patent's
13 description, as I've explained earlier is how the
14 patent owner understood the term.

15 Q. Is text-based link a term that you came up
16 with to describe what Rossmann is disclosing, or is
17 it a term that a person of ordinary skill in the art
18 would understand, or is it both?

19 MR. HORTON: Object to form.

20 A. I think I was using that term as a
21 descriptive term, but I think it's also something
22 that is understandable.

23 BY MR. HUDNELL:

24 Q. Are text-based links hyperlinks -- are
25 text-based links and hyperlinks the same thing or

1 something different?

2 A. Well, first of all, as I said, hyperlinks
3 can be displayed in different ways. They're not
4 necessarily text-based.

5 So for that reason, at least, they are not
6 the same since text-based links are text-based.

7 Q. Any other differences?

8 A. I think hyperlinks in the way I was
9 thinking about them are always used to access web
10 content.

11 Actually, that's probably even too strict
12 of a requirement, because you can have HTML-based
13 hyperlinks that actually access local content. So I
14 certainly don't think hyperlinks have to access the
15 web, but they are typically described to -- used to
16 describe web access often in HTML.

17 As I said, I don't have a specific set of
18 requirements around hyperlinks, only general
19 characteristics, but I think I was describing here
20 links as slightly more broadly, and that it is
21 something that a user can select to access other
22 information, in this case, other information within
23 Rossmann, which can include both other cards within
24 a deck as well as other decks over the Internet.

25 Q. So the sense that you're using text-based

1 links here does not equate to use of the term
2 hyperlink; is that fair?

3 A. I did not use the term hyperlink. I think
4 Rossmann's links have a lot of similar
5 characteristics to hyperlinks, but I did not use the
6 term hyperlink.

7 Q. In --

8 A. Sorry. I want to just go back a little
9 bit.

10 I was describing that specific use of
11 text-based links, but I think elsewhere in my report
12 I did describe Rossmann's links as hyperlinks.

13 So, for example, in paragraph 81, the last
14 sentence, I said: Indeed, Rossmann discloses choice
15 cards that are specifically designed to include
16 hyperlink icons for selection.

17 And then I cited to Rossmann.

18 And as I said, Rossmann does disclose its
19 links as being able to access decks over the
20 Internet.

21 And --

22 (Simultaneous cross-talk.)

23 BY MR. HUDNELL:

24 Q. Yeah, go ahead.

25 A. Yeah, sorry.

1 I additionally described Rossmann as
2 teaching hyperlinks. For example, in paragraph 91,
3 I explain that Rossmann teaches both local
4 hyperlinks to other stored cards and hyperlinks to a
5 server to download index -- again, this is just
6 additional disclosure. I think it's consistent with
7 my earlier answers.

8 Q. So in paragraph 81, you use the term
9 hyperlink icons.

10 In paragraph 91, you use the term
11 hyperlink.

12 And then in paragraph 176, you use the
13 term text-based hyperlink. All these terms you used
14 in describing what Rossmann discloses.

15 I'm wondering are these all the same
16 thing, or are they different things?

17 A. Well, I think Rossmann discloses what it
18 discloses. And I explained that I think a person of
19 skill would understand those disclosures to meet the
20 '058 Patent's requirements about icons for all the
21 reasons I explained within my declaration.

22 And those disclosures are -- they meet the
23 requirements of the icons, and I think they are
24 hyperlinks for the reasons I explained. And I think
25 they -- as such they are hyperlink icons, and they

1 are also text based. So they are all those things.
2 So I think Rossmann's disclosure discloses all of
3 those things.

4 I'm not saying that all those things are
5 necessarily always the same in all cases. I'm
6 saying that Rossmann discloses all of those things.

7 And I think it's probably been another
8 hour, if you're almost ready for a break.

9 MR. HUDNELL: Yeah. You wanted to take a
10 lunch break at this time?

11 THE WITNESS: Sure.

12 (Recess taken.)

13 BY MR. HUDNELL:

14 Q. Welcome back.

15 I hope you had a good lunch.

16 A. Thank you.

17 Q. If you could go to page -- in Exhibit 2,
18 page -- where is it -- 26 and 27.

19 A. Sorry. Pages or paragraph?

20 Q. Paragraph 35, to be specific. It spans 26
21 and 27.

22 A. Okay.

23 Q. And so you're aware that there was a claim
24 construction hearing in the district court
25 litigation between Allani and Apple; is that right?

1 A. I am aware there's a claim construction
2 dispute.

3 I don't think -- I'm not sure if I'm
4 familiar with the specific hearing or not.

5 Q. Okay. Do you know if the Court issued a
6 claim construction order?

7 A. I do not know.

8 Q. Do you know how the Court construed the
9 term icon?

10 A. Just to be clear, when you say Court,
11 you're talking about the Court in the district court
12 litigation?

13 Q. Yes.

14 A. I think at the time that I wrote my
15 report, there was no Court construction. If there
16 was since then, I don't think I know what the
17 outcome of that was.

18 Q. Are you aware of any instance where Allani
19 argued to the Court that the plain and ordinary
20 meaning of the term icon should include text-only
21 icons?

22 MR. HORTON: Object to form.

23 A. I know I cited to a number of litigation
24 documents in paragraph 17 of my declaration. I
25 would have to review those documents to see what

1 Allani specifically argued at that time.

2 I do know I did access and considered some
3 infringement contentions.

4 BY MR. HUDNELL:

5 Q. Do you know if Allani ever presented those
6 infringement contentions to the Court?

7 MR. HORTON: Object to form.

8 A. That sounds like a legal question.

9 My understanding is that infringement
10 contentions are part of the case that the Court has
11 access to. I don't know what you mean by presented
12 to.

13 BY MR. HUDNELL:

14 Q. Did you -- in performing your analysis,
15 did you undertake any effort to evaluate any
16 extrinsic evidence as to what the plain and ordinary
17 meaning of the term icon is?

18 A. Well, I did consider the infringement
19 contentions, so that might -- that's probably
20 considered extrinsic evidence. So that's at least
21 some.

22 I am not thinking of any other at the
23 moment.

24 Q. Did you review any dictionaries to
25 consider what the plain and ordinary meaning of the

1 term icon is in 1999?

2 A. I don't recall looking at any dictionary
3 definitions of icon in 1999 from my opinion in this
4 declaration.

5 Q. Looking at page 26, paragraph 35, the part
6 on page 26, in the table there where it lists icon,
7 you can see in the column for Apple's construction
8 that Apple proposed that icon be construed as a
9 symbol as a pictorial indication of command.

10 Do you see that?

11 A. I do.

12 Q. Would a POSITA understand the plain and
13 ordinary meaning of the term icon to be a symbol
14 that is a pictorial indication of command?

15 MR. HORTON: Object to form.

16 A. As I said earlier, I did not form my own
17 independent opinion of what the plain and ordinary
18 meaning of the term icon is for this declaration, so
19 I don't have an opinion on that.

20 I applied Allani's proposed construction
21 as they appeared to understand it, based on the
22 reasons that we've discussed earlier.

23 BY MR. HUDNELL:

24 Q. If you applied Apple's proposed
25 construction of icon, would Rossmann teach an icon?

1 MR. HORTON: Object to form.

2 A. I did not perform that analysis and don't
3 have an opinion about it.

4 BY MR. HUDNELL:

5 Q. Do you agree that Apple's construction of
6 the term icon [sic]?

7 MR. HORTON: Object to form.

8 A. I think I just answered that a couple
9 questions ago, that I did not form an opinion myself
10 about what the construction of icon should be.

11 Rather, I applied Allani's construction
12 as --

13 (Simultaneous cross-talk.)

14 BY MR. HUDNELL:

15 Q. Did you just --

16 A. Sorry. As I appear to understand it.

17 Q. Did you discuss Apple's construction with
18 Apple?

19 MR. HORTON: Object to form.

20 A. When you say --

21 MR. HORTON: I'll also caution the
22 witness, to the extent that includes any
23 attorney-client communications, obviously don't
24 disclose the substance of any of those
25 communications.

1 A. I'm not sure I understand your question.
2 When you say with Apple, do you mean Apple employees
3 or Apple's counsel or something else?

4 BY MR. HUDNELL:

5 Q. Anybody associated with Apple.

6 MR. HORTON: Same --

7 (Simultaneous cross-talk.)

8 BY MR. HUDNELL:

9 Q. You can answer yes or no. I'm not looking
10 for the content of what you discussed.

11 A. I don't know how to answer that question
12 without disclosing what I understand to be
13 privileged communications.

14 Q. I've introduced Exhibit 4, which is
15 defendant Apple's preliminary disclosure of
16 extrinsic evidence for claim constructions.
17 (Exhibit Number 4 was marked for identification.)

18 BY MR. HUDNELL:

19 Q. Do you see Exhibit 4 in the Steno Connect?

20 A. I do.

21 Q. Do you recognize Exhibit 4?

22 A. I do not recall seeing this.

23 Q. If you look on page 5 of Exhibit 4, you
24 see there's a column for the term icon?

25 A. I do.

1 Q. Okay. And then in the next column it says
2 extrinsic evidence?

3 A. I see that.

4 Q. And it lists several dictionaries.
5 Do you see that?

6 A. I see that.

7 Q. Are you familiar with any of these
8 dictionaries?

9 A. I'm familiar -- I guess the answer is yes.

10 Q. Which ones?

11 A. Actually, sorry, I know I've seen
12 Microsoft Computer Dictionary before. I'm not sure
13 whether I've specifically seen the fourth edition.
14 And I may well have seen some of the other
15 dictionaries, but I'm not specifically recalling
16 them.

17 Q. Do you own any of these dictionaries?

18 A. I may. I would have to check.

19 Q. Is the Microsoft Computer Dictionary a
20 reliable dictionary?

21 A. I'm not quite sure how to answer that. I
22 certainly have not done an independent analysis of
23 whether it's reliable. But I think I could say I
24 don't have any reason to think it's not reliable.

25 (Simultaneous cross-talk.)

1 BY MR. HUDNELL:

2 Q. Go ahead. Sorry.

3 A. From what I know about it. I have not --
4 and, again, I don't know if I've looked at this
5 particular edition, but my general familiarity with
6 at least some edition of
7 Microsoft Computer Dictionary is that to the extent
8 I have looked at it, I have not -- I don't recall
9 having any concerns with its definitions.

10 Q. Do you know if you've ever consulted the
11 Microsoft Computer Dictionary before, regardless of
12 the edition?

13 A. I -- I believe I have consulted with at
14 least some edition of this. I would have to
15 double-check, but I think so.

16 Q. Are there any others that you've
17 consulted, any other dictionaries that you recognize
18 that you have consulted?

19 A. I think I probably have, but I would have
20 to confirm. I'm just not 100 percent sure.

21 Q. I'm going to mark as Exhibit 5 the fourth
22 edition of the Microsoft Computer Dictionary that's
23 referenced in Exhibit 4.

24 (Exhibit Number 5 was marked for identification.)

25

1 BY MR. HUDNELL:

2 Q. If you can take a look at Exhibit 5. Let
3 me know if you recognize it.

4 A. So based on that cover, I am confident
5 that I have reviewed at least some edition of the
6 Microsoft Computer Dictionary, so that confirms my
7 recollection. But, again, I'm not sure if I've
8 reviewed the fourth edition or not.

9 Q. Okay. If you go to page -- it looks like
10 this is page 5 of the actual PDF, but the -- from
11 the dictionary it's page 227 at the bottom.

12 Do you see the definition of icon there on
13 the page?

14 A. I do see the definition of icon on printed
15 page 227.

16 I will say for me, that is page 4 of the
17 PDF.

18 Q. Page 4. Okay.

19 It says an icon is a small image displayed
20 on the screen to represent an object that can be
21 manipulated by the user.

22 Do you see that?

23 A. I do.

24 Q. Do you agree with that definition?

25 MR. HORTON: Object to form.

1 A. As I've said earlier today, I did not form
2 an opinion about the term icon, and I don't have one
3 sitting here today.

4 What I did was to apply patent owner's
5 understanding of the term as I -- as I've explained
6 my understanding to be.

7 BY MR. HUDNELL:

8 Q. Would a person of ordinary skill in the
9 art understand the term icon to mean what -- how the
10 Microsoft Computer Dictionary defined it?

11 MR. HORTON: Object to form.

12 BY MR. HUDNELL:

13 Q. A person of ordinary skill in the art in
14 19 -- sorry.

15 A person of ordinary skill in the art in
16 1999, would they have understood the term icon to
17 mean as the Microsoft dictionary here defines it?

18 MR. HORTON: Same objection.

19 A. Again, I just don't have an opinion about
20 that sitting here today.

21 BY MR. HUDNELL:

22 Q. Do you agree that dictionaries from 1999
23 are one way to determine the plain and ordinary
24 meaning of a patent claim term -- or can be
25 considered in determining the plain and ordinary

1 meaning of a patent claim term?

2 Do you agree with that?

3 A. My general understanding is, as extrinsic
4 evidence, dictionaries are less important to
5 understanding the meaning of the term compared to
6 the intrinsic evidence, including the file history
7 of a term.

8 Q. But they can be considered?

9 A. Yes, that's right. They can be
10 considered.

11 Q. Are you aware of any dictionaries from
12 1999 -- well, let me back up a step.

13 Would you agree that this definition does
14 not say that an icon can be -- you don't interpret
15 this definition to say that an icon can be
16 text-only, do you?

17 MR. HORTON: Object to form.

18 A. I mean, sitting here today, I can see what
19 it says, a small image. I don't see it describing
20 an icon without text. But that's not something that
21 I've analyzed for my opinion in this matter.

22 BY MR. HUDNELL:

23 Q. Are you aware of any dictionaries from
24 1999 that describe an icon as being text-only?

25 A. As I said, I did not look at any extrinsic

1 evidence beyond the patent owner's infringement
2 contentions that I can think of, including
3 dictionaries for my analysis in this declaration.

4 Q. Are you aware of any dictionaries from
5 1999 that define icon as including a hyperlink?

6 A. My answer's the same. I did not look at
7 dictionary definitions for my work for this
8 declaration.

9 Q. Go back to Exhibit 2, your declaration.
10 And I'm looking at paragraph 74 on
11 page 57.

12 A. Okay.

13 Q. And in this paragraph, you have an image
14 of Figures A through -- 4A through 4G from Rossmann.
15 Do you see that?

16 A. I do.

17 Q. And do you see in Figure 4A -- I'm sorry,
18 4 -- well, let's look at Figure 4B.

19 Do you see the item marked 310?

20 A. I do.

21 Q. Is that an icon?

22 A. I did not for an opinion about that arrow
23 310.

24 I did describe in paragraph 88 that it is
25 not my opinion that the pointer, which is, I

1 believe, referring to 310, itself is a selection or
2 direct access icon as those terms are used in the
3 '058 Patent.

4 My opinion is that the pointer indicates
5 to the user that the selection or direct access
6 icons are selectable, such that they navigate to
7 another page, so another local page, a selection
8 icon, or to a web page, a direct access icon.

9 Q. You see on -- also in that box on the --
10 to the bottom right-hand corner, there's an arrow,
11 downward arrow.

12 Do you see that?

13 A. I do.

14 Q. Okay. And in the next box, in 4C, it's
15 actually labeled 312.

16 Do you see that?

17 A. I do.

18 Q. Okay. Is that arrow an icon?

19 A. So I addressed my opinion about that
20 indicator 312 in paragraph 369 regarding Claim 16.
21 And I described how that element 312 works, and I
22 cited to Rossmann as describing it as an indicator.
23 But I did not myself form an opinion about whether
24 it itself is an icon.

25 I also want to clarify an earlier answer

1 where you had asked me if I considered any extrinsic
2 evidence, and I think I had said no -- sorry.

3 I gave some examples of extrinsic
4 evidence, including infringement contentions, but I
5 think I had said that I did not consider any
6 dictionary definitions.

7 And I'm now remembering that that is not
8 correct. I actually did consider some dictionary
9 definitions. They are cited in paragraph 17 as
10 items -- item P, a
11 Dictionary of Computer and Internet Terms.

12 And it looks like I had -- well, I'd have
13 to check my report to see where I had cited to that,
14 but I think I did -- anyway, so I just wanted to
15 clarify that answer.

16 Q. Did you consider any dictionaries from
17 1999?

18 A. It looks like this dictionary that I cited
19 in paragraph 17 is from 2009.

20 I also, at item V, cited to a dictionary
21 from 1996.

22 And item W cited to a dictionary in 1993.

23 Looking at this section here, I'm not
24 seeing any dictionary specifically from 1999.

25 Q. Going back to paragraph 116.

1 Actually maybe I misunderstood what you
2 said.

3 Hold on a second.

4 You said you addressed it in -- oh, sorry.
5 Claim 16. I'm sorry. Paragraph 369 is what you
6 said.

7 Oh, wait. No.

8 Claim 16, paragraph 169. Okay.

9 Let's go there, back to my questions about
10 the arrow 312.

11 So my question is: Do you know if
12 Rossmann calls arrow 312 an icon?

13 A. I don't have Rossmann in front of me, so I
14 can't answer that question.

15 Q. Okay.

16 A. I would -- sitting here right now, the
17 only thing I can tell you for sure is that Rossmann
18 in column 10 describes 312 as an indicator.

19 Q. Okay. Let's introduce Rossmann, which is
20 U.S. Patent Number 6,119,155. It's marked as
21 Exhibit 6.

22 (Exhibit Number 6 was marked for identification.)

23 BY MR. HUDNELL:

24 Q. If you can let me know if you recognize
25 Exhibit 6.

1 A. This appears to be the prior art that I
2 described as Rossmann.

3 Q. Okay. So I have the -- now that you have
4 Rossmann, I guess I have the same question I had
5 before.

6 Do you know if Rossmann describes arrow
7 312 as an icon?

8 A. It appears to, in column 10, starting at
9 around line 7. It first describes the multi-display
10 screen card indicator 312 that we've been talking
11 about it -- that we've been talking about.

12 Then it goes on to explain what happens if
13 it displays an upward arrow, if you had scrolled, it
14 might display an upward arrow.

15 But then it goes on at line 13, starting
16 at line 13, to say: If the menu requires more than
17 two screen displays, the second screen display of
18 the menu would have two icons, one with the upward
19 arrow and another with the downward arrow.

20 So that appears to be referring back to
21 the same downward arrow 312 and describes it as an
22 icon.

23 Q. Are you aware of any other discussions
24 of -- are you aware of any use of the term icon in
25 Rossmann besides what's in column 10?

1 A. I don't recall it using the term icon
2 elsewhere.

3 Q. Would a POSITA reviewing Rossmann consider
4 the up and down arrows described in column 10 to be
5 icons?

6 A. Certainly, given the expressed
7 discloser -- disclosure by Rossmann that they are
8 icons, then I think a person of skill in the art
9 reading this would understand them to disclose
10 icons.

11 Q. Would the POSITA consider things that are
12 not described as icons when reviewing Rossmann --
13 would a POSITA reviewing Rossmann consider things
14 that are not described as icons as being icons?

15 MR. HORTON: Object to form.

16 A. Well, as I explained throughout my
17 declaration, I think a person of skill in the art
18 would understand the selectable elements throughout
19 Figure 4 to be icons under patent owner's
20 understanding of the term icon.

21 And I disagree with the characterization
22 of your question that implies that those are not
23 described as icons, because I think they are
24 described as icons through the figures, at least, as
25 I said, under patent owner's understanding of the

1 term.

2 BY MR. HUDNELL:

3 Q. Rossmann refers to the items in the
4 list -- Rossmann refers to the items shown in
5 Figures 4A -- I'm sorry -- 4B through 4E, refers to
6 those as menu items, right?

7 A. I don't see the patent -- I don't see
8 Rossmann specifically describing the selectable
9 elements in Figure 4 as menu items.

10 But I do agree generally Rossmann
11 describes its operation as including menu items,
12 which I think probably includes the selectable items
13 in Figure 4 that I've explained meet the '058
14 requirements of icons as patent owner appears to
15 understand the term.

16 Q. Do those menu items in Figure 4, do they
17 have bounding boxes associated with them?

18 A. I don't see Rossmann using the term
19 bounding box in its description of how a person of
20 skill might implement this.

21 Q. What's your understanding of how the menu
22 items in Figure 4 are selected?

23 A. So in my report, my declaration in
24 paragraph 91, at the bottom of that page, I cite to
25 Rossmann, column 10, lines 51, through column 11,

1 line 14, I characterize it as describing how a user
2 selection sends a request to a server device for
3 download of a new deck.

4 That section more generally describes at
5 least one way that Rossmann envisions selecting an
6 icon.

7 So it describes, in that section of
8 Rossmann in column 10, the user can move the
9 arrow 310 downward to the second item, and then
10 after a predetermined button is pressed, i.e.,
11 either the soft key okay or the numbered button 2 is
12 pressed, the resource locator for the selection is
13 transmitted to the server device.

14 So it goes on to describe additional
15 details. But at least based on that, I could say
16 that at least one disclosure of Rossmann is to use
17 keys on the key pad to either navigate up and down
18 and pressing okay or pressing a number key to
19 directly access one of those menu items or icons.

20 Q. The arrow that points to the menu items in
21 Figure 4 -- or 4A through 4E, is that considered
22 part of the menu item?

23 A. I think I already discussed that issue. I
24 addressed this in paragraph 88 of my declaration
25 where I explained that pointer itself is a

1 selection -- sorry.

2 It is not my opinion that that pointer
3 itself is a selection or direct access icon as those
4 terms are used in the '058 patent as understood by
5 the patent owner.

6 My opinion is that that pointer indicates
7 to the user that the selection or direct access
8 icons are selectable, so it's such that they
9 navigate to another local page or to a web page.

10 So, no, I have not identified that arrow
11 310 as part of the disclosure of the icons in
12 Rossmann.

13 Q. Therefore these, what -- in your opinion,
14 these menu items that -- in Rossmann that you're
15 calling icon, they have no graphical element,
16 they're purely text; is that correct?

17 A. Yes, that's right.

18 Q. Does Rossmann disclose -- in your opinion,
19 does Rossmann disclose what the claims refer to as
20 direct access icons on its own?

21 A. I didn't form a specific opinion about
22 that.

23 I did explain many things that Rossmann
24 does disclose, including these links to URLs to
25 download text. But I relied on Himmel -- the

1 combination of Rossmann with Himmel for the
2 disclosure of the direct access icon.

3 So my summary of that is the first
4 sentence of paragraph 91, where I explained that
5 Rossmann's cache case embodiment does not expressly
6 teach a single-selection page comprising both
7 selection icons and direct access icons.

8 And then I guess I'll say I summarize my
9 opinion about the combination where at the last
10 sentence of paragraph 93, I explained that Himmel's
11 hot list hyperlinks are direct access icons under
12 patent owner's construction and in line with the
13 intrinsic record.

14 MR. HUDNELL: Why don't we take another
15 break.

16 THE WITNESS: Okay.

17 (Recess taken.)

18 BY MR. HUDNELL:

19 Q. Welcome back, Dr. Bederson.

20 To go back to Exhibit 4, page 5 that we
21 were looking at in Exhibit 4, and this shows the
22 list of dictionaries that Apple offered as extrinsic
23 evidence for term icon in the litigation.

24 Do you see that?

25 A. I do.

1 Q. And you see the first item on that list is
2 the Dictionary of Computer and Internet Terms?

3 A. I do.

4 Q. Okay. And it's the seventh edition from
5 2000?

6 A. That's what it says here, yes.

7 Q. Do you recognize that as a another version
8 of the computer and Internet dictionaries you have
9 listed in your declaration on page 15 and 16?

10 A. It does appear to be a different edition
11 of the dictionary that I cited as item P,
12 Dictionary of Computer and Internet Terms, tenth
13 edition.

14 Q. And what about item V on page 16?

15 A. Yes, item V like victor?

16 Q. Yes.

17 A. It looks like a different edition of that
18 same dictionary,
19 Dictionary of Computer and Internet Terms, fifth
20 edition.

21 Q. Okay. Do you consider those dictionaries
22 to be reliable?

23 A. As far as I know.

24 Q. So I've uploaded to the Steno Connect as
25 Exhibit 7, the version that's listed in the --

1 that's listed in Exhibit 4.

2 (Exhibit Number 7 was marked for identification.)

3 BY MR. HUDNELL:

4 Q. Take a look at Exhibit 7, and let me know
5 if you recognize it.

6 A. I've seen the cover.

7 I do recognize this cover. I don't know
8 that I've seen this particular edition. As I said,
9 I've certainly cited to different editions of this,
10 in this declaration.

11 Q. If you look on page -- of the dictionary
12 page, so Exhibit 7, the page in the dictionary 232.

13 A. I see that.

14 Q. It has the definition of icon.

15 Do you see that?

16 A. I do.

17 Q. It says it's a small picture on a computer
18 screen that represents a particular object,
19 operation, or a group of files.

20 Do you see that?

21 A. I do.

22 Q. Do you agree with that definition?

23 A. For this declaration, I did not consider
24 this definition. I don't have -- so I didn't form
25 an opinion at the time I wrote this declaration for

1 whether or not I agree with this definition.

2 And sitting here today, I don't have one
3 as it relates to my analysis for this patent, the
4 '058 Patent.

5 Q. Do you know if the versions of the
6 Computer and Internet Term --
7 Dictionary of Computer and Internet Terms that you
8 did rely on, do you know if they had the same
9 definition of icon?

10 A. I do not know.

11 Q. Would a POSITA in 1999 understand an icon
12 to be as defined in Exhibit 7?

13 A. Again, I did not form an analysis for
14 my -- did not do -- sorry.

15 I did not do an analysis or form an
16 opinion for my declaration in this case about what a
17 POSITA would have understood the term icon to be.
18 Rather, as I've explained, I applied the patent
19 owner's apparent understanding of the term.

20 Q. Would the menu items in Rossmann meet this
21 definition in Exhibit 7?

22 MR. HORTON: Object to form.

23 A. I did not perform that analysis, so I
24 don't have an opinion.

25

1 BY MR. HUDNELL:

2 Q. Would the hyperlinks in Himmel meet this
3 definition?

4 MR. HORTON: Object to form.

5 A. Again, I didn't perform that analysis, so
6 I don't have an opinion.

7 BY MR. HUDNELL:

8 Q. Is there anything in this definition that
9 would suggest that an icon could be text-only?

10 MR. HORTON: Object to form.

11 A. Again, I didn't perform an analysis of
12 this definition at the time I wrote my declaration
13 for this -- for my analysis of the '05 [sic] patent,
14 so I just don't have an opinion regarding it.

15 BY MR. HUDNELL:

16 Q. Is there anything in this definition that
17 would suggest an icon could be a hyperlink?

18 MR. HORTON: Same objection.

19 A. Again, I just didn't perform an analysis
20 of this term -- sorry -- of this definition for my
21 analysis for the '058 patent, so I just don't have
22 an opinion about it.

23 BY MR. HUDNELL:

24 Q. Does Himmel ever use the term icon?

25 A. I don't have Himmel in front of me, so I

1 can't use that -- I can't answer that question.

2 I don't know how to answer that question
3 from memory.

4 Q. Then let's introduce Himmel U.S. Patent
5 Number 6,037,934 as Exhibit 8.

6 (Exhibit Number 8 was marked for identification.)

7 BY MR. HUDNELL:

8 Q. If you could look at Exhibit 8 and let me
9 know if you recognize it.

10 A. This does appear to be the prior art
11 reference I analyzed that I call Himmel.

12 Q. If you could review Himmel and let me know
13 if you -- if you find any discussions of -- if you
14 find if Himmel ever uses the term icon.

15 A. It does at least one time in column 8, in
16 the paragraph starting at line 51.

17 Q. And you're referring to the sentence in
18 that paragraph where it says: Those password
19 protected may be marked by some indicia, e.g., an
20 icon or coloration, correct?

21 A. Yes, that's what I was referring to.

22 Q. Okay. Any other instances of the use of
23 the term icon that you were able to find in Himmel?

24 A. Not sitting here today, no.

25 Q. Okay. That reference to the term icon in

1 column 8 is not a reference to the Himmel
2 hyperlinks; is that right?

3 A. I think -- yes, that's right. It's in
4 reference to hyperlinks for the bookmarks that are
5 password protected.

6 Q. It's in reference to the indication that
7 those bookmarks are password protected but not the
8 hyperlinks themselves; is that right?

9 A. I think that's probably right, that it's
10 referencing the bookmark sets themselves that could
11 be marked as being password protected.

12 Q. Would a POSITA in 1999 reading just Himmel
13 understand that Himmel's hyperlinks are not icons?

14 MR. HORTON: Object to form.

15 A. Well, to be clear, my analysis was about
16 Himmel under patent owner's apparent understanding
17 of the term icon.

18 And so with that understanding, then I
19 think the answer is yes, Himmel's hyperlinks are
20 icons.

21 BY MR. HUDNELL:

22 Q. What if the POSITA just had Himmel?

23 MR. HORTON: Object to form.

24 A. Well, to be clear, I am talking about how
25 a POSITA would understand just Himmel, but with

1 their understanding of what an icon is, as I've
2 explained. So that was what my analysis was.

3 Where an icon is, an icon as understood by
4 the patent owner, which could be just a textual
5 icon.

6 I guess I'll further add that there's no
7 disclosure in -- further disclosure in Himmel about
8 what the characteristics of its icon are, the one
9 that we talked about in column 8.

10 I guess I should say except to distinguish
11 it from only coloration.

12 BY MR. HUDNELL:

13 Q. I'm a little confused by your last answer.

14 Is it your understanding that when
15 evaluating the validity of the claims of the
16 '058 Patent that a POSITA can use what it thinks is
17 the patent owner's understanding of the claims?

18 MR. HORTON: Object to form.

19 A. That sounds a legal question, which I've
20 already explained I don't have any opinions about.

21 My opinion in my declaration is pretty
22 clear. We've been talking about it for much of the
23 day, and I made -- described in paragraph 82 that
24 I've applied patent owner's interpretation of the
25 term icon for my opinions in this declaration.

1 BY MR. HUDNELL:

2 Q. Right. I understand that you've applied
3 patent -- what you say is patent owner's
4 interpretation to formulate your opinions, but I'm
5 wondering what's your understanding of what the law
6 requires you to do.

7 MR. HORTON: Object to form.

8 A. Again, we've already discussed this.

9 I'd be happy to go over my -- what I was
10 provided as a legal framework again, but I don't
11 think I have anything more to add than what I -- how
12 I answered this when you asked this question
13 earlier.

14 BY MR. HUDNELL:

15 Q. Let's go to paragraph -- back to
16 Exhibit 2, paragraph 50, which is on page 35.

17 A. Okay.

18 Q. It says under the heading titled accessing
19 search engines.

20 Do you see that?

21 A. I do.

22 Q. What's a search engine?

23 A. I described that in paragraph 50 where I
24 say that search engines were popular sites, often
25 included in user's bookmarking programs, to allow

1 quick and easy access to queried web searches.

2 And I go on in this and other sections of
3 my report to give any examples of search engines,
4 including the ability to search within a site.

5 I think I described some of my own work of
6 search engines in my background and qualification
7 section as well where I described my work on the
8 International Children's Digital Library.

9 Q. In paragraph 50, on page 36, you have a
10 couple figures pulled from the Khan reference,
11 U.S. Patent 6,546,393.

12 Do you see that?

13 A. I do.

14 Q. Okay. And in the left-hand figure,
15 Figure 8, you've drawn a box around several items,
16 in the list are Excite, Infoseek, Lycos, Thomas
17 Register, and Yahoo!.

18 Do you see that?

19 A. I do.

20 Q. Are all of those search engines?

21 A. I believe they are.

22 Q. Are they search engines on the web?

23 A. I believe they are.

24 Q. Same question regarding the -- the
25 Figure 29, the box in Figure 29.

1 You've got a box around items that it says
2 Looksmart, Yahoo!, Excite, I think that says
3 Jayde.com, Mamma.com, Ask Jeeves, Northern Light,
4 and Dogpile.

5 Do you see that?

6 A. I do.

7 Q. Those are all search engines?

8 A. I believe they are.

9 Q. They're search engines on the web?

10 A. I think that's right.

11 Q. Is there a difference between a search
12 engine and a search engine on the web?

13 A. If you have a search engine that's not on
14 the web, then that's probably different than a
15 search engine that is on the web.

16 Q. Is the ability to search within a given
17 website a search engine on the web?

18 A. I don't think I defined search engine on
19 the web. I don't know that I can tell you exactly
20 what its characteristics are.

21 But these are examples of links to web
22 pages that from my understanding of these
23 disclosures and my own personal experience, these
24 are websites on the web that allow you to search for
25 other websites on the web. So I think I would

1 characterize these as being search engines on the
2 web.

3 And --

4 Q. Yeah.

5 A. I guess I was referring to -- my
6 understanding of that term in regards to these
7 disclosures, I am now remembering there is a claim
8 requirement of search engine on the web.

9 Just give me a second to fully answer this
10 question.

11 All right. I think your question was
12 about the search engines that I pointed to on the
13 Khan reference, so I think my answer is right, that
14 they are search engines on the web.

15 Q. Can you explain how a search function
16 within a given website is a search engine on the
17 web?

18 A. Well, I don't think search engine on the
19 web is a construed term, so I don't think there's a
20 definition of it.

21 So my analysis of that term comes from my
22 description of how the prior art meets those
23 requirements; for example, in Claim 25 and Claim 1.

24 And so I think for each of those, I could
25 explain to you how the prior art meets the

1 requirements for search engine on the web.

2 I think both cases at a high level, they
3 provide links to websites, which allow you to search
4 for content on the web. So I think that meets the
5 requirements of search engine on the web.

6 I give quite a bit more detail in my
7 declaration regarding those -- my analysis of those
8 claims.

9 If that term search engine on the web is
10 additionally in other claims, then I'm sure we can
11 look at those as well.

12 So looking further, I see it's also in
13 Claim 27.

14 Q. So I think the first -- correct me if I'm
15 wrong, but I think the first explanation that you
16 provide is -- starts at paragraph 202 on page 136;
17 is that right? At least as it's applied to the
18 claims of the '058 Patent?

19 A. I see a reference to it regarding
20 Claim 25, starting on paragraph 108.

21 Q. 108?

22 A. Specifically we refer to that term in
23 paragraph 110.

24 Q. 108.

25 A. Well, I first use that term in

1 paragraph 110.

2 Q. 110.

3 110.

4 Okay. 110.

5 So I see in 110 that you say that it would
6 have been obvious based on Himmel's disclosure to
7 download a search engine icon along with the rest of
8 the hot list icons.

9 I guess maybe I should stop there and ask
10 you, what do you mean by download a search engine
11 icon?

12 A. Well, Himmel discloses icons for all kinds
13 of hot links that are in its bookmarks -- or hot
14 lists, I think it calls them, and it gives examples
15 of some of those destinations, which include search
16 engines for the reasons that I've explained.

17 And I've explained in my combination how a
18 person of skill in the art would download Himmel's
19 bookmark sets or hot lists, including their icons,
20 along with the destination URLs to the search
21 engines that Himmel discloses.

22 First sentence, paragraph 111, describes
23 that more succinctly where I say a POSITA would have
24 been motivated and found it obvious to download a
25 searched bookmarked web action for a particular

1 website to quickly navigate to the search menu.

2 And to be clear, search menu of that
3 website.

4 Q. Maybe this is where I'm unclear. This is
5 I guess why I'm asking the question.

6 So are you saying that the -- that what is
7 downloaded is the -- is, for example, one of the --
8 one of the search engines that we've looked at back
9 in paragraph 50?

10 A. No. What I'm saying is that you would
11 download the bookmarked web action, that is the URL
12 and destination, such that the URL of the web page
13 that includes the search engine. So that in a
14 combination, there would be an icon that a user
15 would select, and when that icon was selected, it
16 would take you to the search engine on the web.

17 Q. Let's use a concrete example, because I'm
18 still confused as to what you're saying.

19 So, for example, in paragraph 50, you --
20 in both boxes on paragraph 50 in Figure 8 and
21 Figure 29, you have Yahoo!, which I think of as a
22 search engine.

23 And I think you would agree is a search
24 engine, right?

25 A. Yes.

1 Q. Okay. So let's say when we're talking
2 about paragraph 110 and 111, are you saying -- can
3 you explain what you're describing with reference to
4 Yahoo!? And maybe Yahoo! doesn't even apply here,
5 but I just want to give, like, a concrete example so
6 that I understand what you're saying.

7 A. Sure.

8 Well, Himmel actually does disclose a
9 bookmark, including Yahoo!, so I don't know that I
10 referenced that -- maybe I did -- I don't remember
11 if I referenced that in this section of my report,
12 but that's a fine example.

13 Q. Uh-huh.

14 A. So in this combination, a person of skill
15 in the art would download Himmel's bookmarks,
16 including, for example, a link to Yahoo!. And as I
17 explained earlier in my report, the combination
18 would allow the icons of Rossmann to be direct links
19 to the URLs that Himmel described, and some of those
20 URLs or destinations would be search engines on the
21 web, such as Yahoo.

22 Q. So, for example, if we were looking at --
23 if I understand what you're saying correctly, if
24 we're looking at -- to go back to paragraph 96,
25 where you've graphically depicted adding Himmel's

1 bookmarks to Rossmann, if I understand you
2 correctly, you're saying that Yahoo! could appear in
3 this list as one of the boxes outlined in green; is
4 that accurate?

5 A. At a high level, I think that's right.

6 Again, I don't think I gave an example of
7 Yahoo! --

8 Q. Uh-huh.

9 A. -- in my analysis of Claim 25.

10 I think I gave examples that were -- I
11 gave different examples --

12 Q. Uh-huh.

13 A. -- and I explained what some of those
14 were. And I explained that in claim -- this section
15 of my analysis, I was referring to some of the
16 common features that Himmel teaches, such as a
17 search that allowed you to search, for example,
18 within a website.

19 And then it was in different ground that I
20 added a combination with, I believe it was Adar,
21 that added additional disclosure of links to search
22 engines.

23 Q. So in the examples where you could search
24 within a website, how is that a search engine on the
25 web?

1 A. Because that allows a user to search for
2 web pages and content on the web. I don't think any
3 search engine is comprehensive and can search every
4 single page on the web. I don't think there's a
5 particular -- I don't believe a person of skill in
6 the art would understand search engine on the web to
7 have a particular requirement about which pages one
8 could search.

9 And so I think that Himmel's disclosure of
10 being able to search content on websites meets this
11 requirement.

12 And, of course, as I said, I have an
13 additional ground with Adar that provides additional
14 disclosure of search engines.

15 And as I also mentioned, Himmel itself
16 mentions Yahoo!.

17 Q. So if I understand the first part of your
18 answer correctly, it's your view that if you are
19 searching within a single website that's on the web,
20 that's a search engine on the web?

21 A. Again, I didn't offer construction, so I
22 don't have a definition for you, but I was
23 explaining why, in my opinion, a person of skill
24 reading Himmel would understand it to disclose a
25 search engine.

1 And Himmel does disclose search of web
2 pages on the web at URLs.

3 Q. What would a POSITA in 1999 understand the
4 phrase search engine on the web to mean?

5 A. I think I've -- the answers I've just been
6 giving you apply to 1999.

7 Q. Is there any disclosure in the '058 Patent
8 that disclosed searching an individual page?

9 A. To be clear, my opinion was, I believe I
10 said searching a website, which can include multiple
11 pages.

12 And I think the '058 Patent's
13 descriptions, to the extent it has any, of search
14 engine is consistent with that. It certainly does
15 give an example of a search engine as Yahoo!. But
16 it also does not limit it to Yahoo!. Or really
17 provide any limitations on what search engine on the
18 web requires.

19 Q. Does the '058 Patent disclose any search
20 engines that are search engines for a particular
21 website?

22 A. Again, it does not provide much
23 description at all of search engines, but I don't
24 see it limiting its use of search engine to have any
25 particular characteristics. I also don't see it

1 described besides giving two examples, Yahoo! and
2 Voilà. I don't see it providing any other details
3 about what it means by search engine or search
4 engine on the web.

5 Q. Are you familiar with Voilà?

6 A. Sounds vaguely familiar, but I don't think
7 I have a lot of familiarity with it.

8 Q. Yahoo! and Voilà are not search engines
9 for a particular website, are they?

10 A. I don't think Yahoo! is. I don't think I
11 know about Voilà.

12 Q. Does Himmel disclose any page that
13 includes a search engine icon as part of its
14 original design?

15 A. So I think a person of skill reading
16 Himmel would understand that its disclosure in
17 Figure 6A of a user interface of bookmarks to be
18 icons as patent owner seems to understand that term.

19 And I think the list of bookmarks here are
20 exemplary, but certainly would include the search
21 engine bookmarks that Himmel describes. So I think
22 a person of skill reading Himmel would understand
23 that it does disclose search engine icons for that
24 reason.

25 Q. Where does Himmel disclose search engine

1 bookmarks?

2 A. I think in my previous answer, I explained
3 that Figure 6A described exemplary bookmarks, and
4 that Himmel discloses that -- supports common
5 interfaces with features including search.

6 And in my declaration, I explained how the
7 URLs that Himmel discloses would offer URLs or
8 bookmarks for search, which meets the requirement of
9 search engine.

10 Just to be clear, I don't know that I
11 specifically pointed to Himmel's user interface as
12 disclosing icons.

13 My opinion in my report is I was relying
14 on Rossmann's disclosure of icons with Himmel's
15 bookmarks. But at least sitting here today, I do
16 see that Himmel's interface of Figure 6A certainly
17 looks very similar to the textual icons of Rossmann.

18 So to be clear, my intent is not to expand
19 my opinion about the disclosure. My opinion is what
20 is in my report. So I was just noting that
21 Himmel -- just in direct response to your question,
22 that Himmel does disclose visual textual bookmarks
23 that I think a person of skill would understand to
24 include search engines.

25 MR. HUDNELL: Okay. Why don't we take a

1 break.

2 MR. HORTON: Perfect.

3 (Recess taken.)

4 BY MR. HUDNELL:

5 Q. Dr. Bederson, have you -- does Exhibit 2
6 contain all of your opinions regarding this IPR
7 involving the '058 Patent?

8 A. Yes, it does.

9 Q. Have you formed any new opinions since
10 preparing Exhibit 2?

11 A. I have not.

12 Q. Do you have any plans to supplement
13 Exhibit 2?

14 A. I do not have any current such plans.

15 Q. Did you use your best efforts to put all
16 your opinions that you have regarding the
17 '058 Patent in Exhibit 2?

18 A. I did.

19 Q. Have you reviewed the institution decision
20 regarding the '058 Patent?

21 A. I did.

22 Q. And you're aware that the PTAB only found
23 a reasonable likelihood of success on Claims 24
24 through 26; is that right?

25 A. That sounds right.

1 Q. Are you aware that the PTAB offered a
2 construction of the phrase beforehand locally
3 stored?

4 COURT REPORTER: Sorry, the phrase,
5 beforehand?

6 MR. HUDNELL: Locally stored.

7 COURT REPORTER: Thank you.

8 A. I think that's right.

9 BY MR. HUDNELL:

10 Q. Do you recall what that construction was?

11 A. No, not its precise language.

12 Q. Do you recall anything about what the PTAB
13 said about beforehand locally stored?

14 A. I think I recall at a high level they
15 agreed with patent owner about that term.

16 Q. Agreed with what about that term?

17 A. I think patent owner expressed some
18 opinions about what that term requires, and my
19 recollection is that in the institution decision the
20 PTAB at least partially agreed with patent owner's
21 argument there.

22 And I guess in my previous answer, I think
23 you had asked the question about their construction.
24 I actually don't remember in the institution's
25 decision they offered a construction of that term or

1 some other analysis of it. I just don't remember if
2 they characterized it as a construction.

3 Q. Was the PTAB's analysis of beforehand
4 locally stored consistent or -- consistent or
5 inconsistent with your analysis of that term as used
6 in the '058 Patent?

7 MR. HORTON: Object to form.

8 A. I didn't perform that analysis. I didn't
9 perform any analysis of the PTAB's institution
10 decision, so I don't have an opinion sitting here
11 today.

12 BY MR. HUDNELL:

13 Q. Do you have any opinion of whether the
14 PTAB's analysis was correct or incorrect of
15 beforehand locally stored?

16 A. Not specifically.

17 I mean, I believe my opinion and my
18 declaration is correct. So to the extent they
19 disagree with my opinion, then I probably disagree
20 with their opinion.

21 Q. Any particular reason you have right now
22 that you disagree with their opinion?

23 MR. HORTON: Object to form.

24 A. Not beyond what I just said.

25 MR. HUDNELL: Okay. I pass the witness.

1 MR. HORTON: Can we take a -- let's just
2 do a five-minute break, and I'll look through
3 my notes and see if I have any questions.

4 MR. HUDNELL: Sure.

5 MR. HORTON: Perfect. Thank you.

6 (Recess taken.)

7 MR. HORTON: No questions on behalf of
8 petitioner Apple.

9 I think we can go back off the record,
10 then.

11 MR. HUDNELL: Yep. Thank you, sir.

12 COURT REPORTER: As far as the transcript
13 goes, delivery for when?

14 MR. HUDNELL: We requested a rough and an
15 expedited copy, delivery for Monday.

16 MR. HORTON: On our end, it was just
17 standard, no need for expedited or rough.

18 (Deposition concluded at 4:05 p.m.)

19 - - - - -

20

21

22

23

24

25

REMOTE DECLARATION

STATE OF FLORIDA
COUNTY OF FLAGLER

I, Vanese Killingbeck, RPR, CRR,
Registered Professional Reporter, Certified Realtime
Reporter, and Notary Public of the State of Florida,
certify that DR. BENJAMIN BEDERSON declared his
testimony in this matter is under penalty of
perjury, before the giving of his deposition.

Signed this 19th day of February 2026.

Vanese Killingbeck, RPR, CRR
Notary Public, State of Florida
Commission No: HH 345922
Commission Expires: January 13, 2027

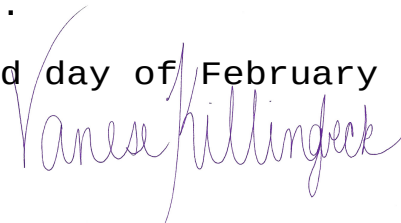
REPORTER'S DEPOSITION CERTIFICATE

STATE OF FLORIDA
COUNTY OF FLAGLER

I, Vanese Killingbeck, RPR, CRR,
Registered Professional Reporter and Certified
Realtime Reporter and Notary Public, certify that I
was authorized to and did stenographically report
the deposition of DR. BENJAMIN BEDERSON, pages 5
through 132, that a review of the transcript was not
requested; pursuant to Federal Rules of Civil
Procedure 29, and that the transcript is a true
record of my stenographic notes.

I further certify that the deposition was
taken remotely within the State of Florida at the
time and place specified herein above and that I am
not a relative, employee, attorney, or counsel of
any of the parties, nor am I a relative or employee
of any of the parties' attorneys or counsel
connected with the action, nor am I financially
interested in the action.

Dated this 23rd day of February 2026.



Vanese Killingbeck, RPR, CRR
Registered Professional Reporter
Certified Realtime Reporter

1 ERRATA SHEET
2 CHANGES IN TESTIMONY
3 APPLE INC. v FERID ALLANI
4 BENJAMIN B. BEDERSON, PH.D.
5 February 19, 2026

6 Page Line From To

7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				

23
24 SIGNATURE: _____ DATE: _____

25 BENJAMIN B. BEDERSON, PH.D.

IPR2025-00857
Allani Ex. 2019

Exhibits	20 54:15,19 55:1,16 56:13,20 57:24,25 58:1, 2,3 120:23	2	35 33:14 89:20 92:5 117:16
Exhibit 1 3:9 13:12, 13,14,16	1's 49:20 58:3	2 22:12,13,15 35:16 44:13 47:7,10,19 48:6, 24 49:3,14 50:7 51:10 52:16 53:11,15 54:3,18, 25 56:17,23 63:25 70:11,21 72:13 89:17 100:9 107:11 117:16 130:5,10,13,17	36 118:9
Exhibit 2 3:11 22:12, 13,15 35:16 44:13 56:23 63:25 70:11,21 72:13 89:17 100:9 117:16 130:5,10,13,17	10 103:18 104:8,25 105:4 106:25 107:8	20 56:25 57:15,17,18, 21,24 58:9,14 59:3,5	369 101:20 103:5
Exhibit 3 3:12 46:10, 11,16,19	10,943,058 14:1 46:17	2000 110:5	3rd 32:18
Exhibit 4 3:14 94:14, 17,19,21,23 96:23 109:20,21 111:1	100 64:24 82:6 96:20	2009 102:19	4
Exhibit 5 3:16 96:21, 24 97:2	1035 32:22	202 121:16	4 45:24 47:3,4 50:9,22 78:9 94:14,17,19,21,23 96:23 97:16,18 100:18 105:19 106:9,13,16,22 107:21 109:20,21 111:1
Exhibit 6 3:18 103:21,22,25	108 121:20,21,24	2024 32:18	40 70:11
Exhibit 7 3:19 110:25 111:2,4,12 112:12,21	11 106:25	2025 33:15	43 74:25 75:6
Exhibit 8 3:21 114:5, 6,8	110 121:23 122:1,2,3, 4,5 124:2	2026 40:17	44 63:24 66:24 67:10
0	111 122:22 124:2	227 97:11,15	45 70:6 75:14
05 113:13	116 102:25	232 111:12	4:05 133:18
058 14:3,6,9,12,13,18, 22,25 15:9,19,23,24 16:2,8,10,18,25 17:1 18:10,11 19:4,16,18 20:21 22:3,21 23:6 24:6 25:12,22,23 26:9,17 29:22 30:3,20 40:9,18, 19 41:14 45:14,16 46:6, 9,19,24 47:12 48:16,20 52:1 56:25 67:12 75:19 76:12 80:7 85:12 88:20 101:3 106:13 108:4 112:4 113:21 116:16 121:18 127:7,12,19 130:7,17,20 132:6	12 68:25	24 130:23	4A 100:14,17 106:5 107:21
1	13 47:9 104:15,16	25 120:23 121:20 125:9	4B 100:18 106:5
	136 121:16	26 89:18,20 92:5,6 130:24	4C 101:14
	14 51:9,21 107:1	27 47:4 89:18,21 121:13	4E 106:5 107:21
	15 110:9	29 4:15 26:13 118:25 123:21	4G 100:14
	16 32:11,17 101:20 103:5,8 110:9,14	3	5
	169 103:8	3 45:24 46:10,11,16,19 52:20 53:14 54:12 55:13	5 94:23 96:21,24 97:2, 10 109:20
	17 32:9,17 90:24 102:9, 19	31 75:6	50 117:16,23 118:9 123:9,19,20
	176 88:12	310 100:19,23 101:1 107:9 108:11	51 106:25 114:16
	18 26:13	312 101:15,20,21 103:10,12,18 104:7,10, 21	57 100:11
	19 26:20 28:1 98:14	32 64:11 75:17	6
	1993 102:22	33 70:11,21,22,23 72:12,22 75:18	6 23:18 71:11 103:21, 22,25
	1996 102:21		6,037,934 114:5
	1999 20:14,23 29:22, 24 30:8 31:16,20 32:4 34:15,19,21 70:1 80:16, 19,22 81:14,20,22,25 82:15,22 83:5 92:1,3 98:16,22 99:12,24 100:5 102:17,24 112:11 115:12 127:3,6		6,119,155 103:20
	1st 46:2		6,546,393 118:11

60 78:10

61 54:12

63 52:20 55:13

64 24:12 32:22

67 23:25 35:17 84:17,
18

6A 128:17 129:3,16

7

7 70:7 104:9 110:25
111:2,4,12 112:12,21

70 10:21

7110 70:7,12,14 71:7,
23 72:8,23 73:3 75:9,17
78:4

74 100:10

78 78:10

8

8 114:5,6,8,15 115:1
116:9 118:15 123:20

81 87:13 88:8

82 18:18,19 22:6,19,22,
25 23:16 28:10,15
116:23

83 24:11 28:9 32:2,21
34:8

84 23:18 30:2 45:15,23,
24 46:23 56:24

85 23:24 35:16,24
44:13 59:17,18 60:5,9,
24 61:17 84:19

86 84:20 85:3

877 23:19

88 100:24 107:24

89 18:18 23:16 85:4

9

9 47:4 50:10,23

91 88:2,10 106:24
109:4

93 109:10

96 124:24

A

ability 118:4 119:16

accepts 66:5

access 13:8 24:15
30:5 31:14 42:23 43:3,
8,13 45:18 62:22 64:13
80:10 86:9,13,14,16,21
87:19 91:2,11 101:2,5,8
107:19 108:3,7,20
109:2,7,11 118:1

accesses 72:23

accessing 23:20
51:22 117:18

accurate 125:4

accused 24:13

acknowledge 4:7

action 122:25 123:11

actions 33:6

active 66:1

activities 8:6,7

actual 97:10

AD12 46:2

Adar 125:20 126:13

add 74:21 116:6
117:11

added 17:24 125:20,
21

adding 124:25

addition 49:19

additional 24:20
37:5 46:1 49:5,8 75:8
85:9 88:6 107:14
125:21 126:13

additionally 24:8
53:16 88:1 121:10

address 6:4 64:12,
15,21 66:15,16,17,21,

23 68:18,21 69:4,11

addressed 18:16
101:19 103:4 107:24

administer 4:10

advanced 27:6 28:3

affect 49:22

affirm 4:23

agree 4:13 48:5 51:3
73:18 93:5 97:24 98:22
99:2,13 106:10 111:22
112:1 123:23

agreed 131:15,16,20

ahead 87:24 96:2

Allani 5:11 29:11,15,
21 89:25 90:18 91:1,5

Allani's 13:25 92:20
93:11

allegations 24:9
31:13

allowed 125:17

amount 8:10

analyses 27:8

analysis 15:4,5,13,
15,20 16:14,22 19:7,12
21:15,16,18,19 24:4,5
25:24 26:4,12 31:11
34:24 38:22,24 39:4,5,
10,12 41:4 42:17 43:22
60:4 67:13 72:14,19
76:15,20,23,25 77:3,4,6
78:16 79:15 80:8 81:6,
9,15 83:8 91:14 93:2
95:22 100:3 112:3,13,
15,23 113:5,11,13,19,
21 115:15 116:2 120:21
121:7 125:9,15 132:1,3,
5,8,9,14

analyze 44:16,17
67:5,16

analyzed 68:2 80:25
99:21 114:11

annotated 44:20

answer's 15:11
100:6

answers 10:25 36:5
42:8 63:13 75:8 88:7

127:5

app 13:11 66:17

apparatus 47:6
50:12,23

apparent 25:20
39:22 112:19 115:16

appeared 92:21

appearing 4:6

appears 22:17 31:14
46:20 104:1,8,20
106:14

Apple 9:14,17,20
40:5,23 41:5,15,24 42:9
44:2 89:25 92:8 93:18
94:2,5 109:22 133:8

Apple's 92:7,24 93:5,
17 94:3,15

applicable 27:1

application 72:24

applied 18:8,20
19:11 20:3 23:3 24:4
27:8,9,12 37:13 92:20,
24 93:11 112:18 116:24
117:2 121:17

applies 69:8

apply 26:15 27:5 28:2
63:12 65:9 98:4 124:4
127:6

approximate 8:3
10:1

approximately
9:25 13:3 16:5,9 18:17

April 33:15

area 65:25 66:12,20,
22

argued 90:19 91:1

argument 131:21

arrow 100:22 101:10,
11,18 103:10,12 104:6,
13,14,19,21 107:9,20
108:10

arrows 105:4

art 17:15 19:4,9,15,17
20:14 22:3,7,20 23:10

25:3,6,13 26:16,23
34:15 48:16,21 49:7,20
52:9 53:5 62:15 63:2
66:1 67:22 69:25 77:19
78:6,19 79:4,12 80:16,
19,22 81:5,14 82:22
85:17 98:9,13,15 104:1
105:8,17 114:10
120:22,25 122:18
124:15 126:6

art's 25:25

articulate 19:23

assess 26:17

assessing 25:21,23
26:8

assume 11:8 67:11

assumption 67:15

attachment 35:25
61:1

attorney-client
93:23

attorneys 4:6

aware 34:2 73:23
78:12 79:1,2,7,13,19,21
82:14 84:13 89:23 90:1,
18 99:11,23 100:4
104:23,24 130:22 131:1

B

back 28:9,10 35:14
44:12 51:17,25 55:11
56:22 58:1 59:18 62:11
63:23 74:23 87:8 89:14
99:12 100:9 102:25
103:9 104:20 109:19,20
117:15 123:8 124:24
133:9

background 21:4
36:11,14,23 118:6

ball 71:2 73:11,19,21

based 23:5 33:13
39:5 64:24 76:25 89:1
92:21 97:4 107:15
122:6

bearing 40:18

Bederson 4:21 5:3,
15,18 7:13 13:17,18
22:12 35:14 63:23
109:19 130:5

began 78:17 79:2,13

begin 22:19

begins 64:2

behalf 133:7

benefit 39:20

Benjamin 5:3,15
13:17 22:12

big 84:8

bit 74:22 87:9 121:6

bookmark 115:10
122:19 124:9

bookmarked
122:25 123:11

bookmarking
117:25

bookmarks 115:4,7
122:13 124:15 125:1
128:17,19,21 129:1,3,8,
15,22

bottom 61:13 97:11
101:10 106:24

bounding 65:18
66:3,6,10,16 69:14,19
70:3 71:7,17,18,20,23
73:23 74:1 106:17,19

bounds 65:2,11,16

box 44:15 47:11 51:11,
12 53:11,16,21,23 54:6,
17,18 61:14,22 62:15
65:18 66:3,6,10,16
69:14 71:7,17,18 75:5
101:9,14 106:19
118:15,25 119:1

boxes 69:19 70:4
71:20,23 73:23 74:1
106:17 123:20 125:3

boy 5:16

brand 36:1 61:2

break 35:10 63:17
64:7 89:8,10 109:15
130:1 133:2

broad 28:16 34:11
55:20 56:10 58:25
80:11

broadly 86:20

broke 48:10

broken 8:5,7

buffer 65:21,24

button 43:16,18,20,
25 107:10,11

buttons 44:6,9,10
62:21,22 74:13 75:2,3

C

cache 109:5

calc 64:12,15 68:18,21
69:4,12

calculated 69:23

calculator 71:3,5

calendar 46:2

call 6:19 7:19 38:6,8,
14 39:14,17 40:14
42:14 43:24 44:2,7
114:11

calling 43:25 45:12
54:20,22,25 108:15

calls 103:12 122:14

capable 60:3

card 104:10

cards 86:23 87:15
88:4

case 9:10 18:5 25:12
33:6 37:9 51:13 52:18
66:13,14,19 70:18 81:1
86:22 91:10 109:5
112:16

cases 9:18 89:5 121:2

caution 93:21

cell 7:10 40:1,4

Certified 4:2

cetera 64:12 68:22,25

change 34:13

characteristic 69:8

characteristics
80:13,23 81:3 86:19
87:5 116:8 119:20
127:25

characterization
105:21

characterize 9:18
107:1 120:1

characterized
132:2

charged 11:19

chat 7:8

check 9:3 30:22 95:18
102:13

Children's 118:8

choice 87:14

choose 74:6

cite 106:24

cited 12:5 71:14 87:17
90:23 101:22 102:9,13,
18,20,22 110:11 111:9

Civil 4:15

claim 17:5,16,18 18:2
23:11,18 26:21 27:9
33:2,16,17 39:5 56:25
57:15,17,18,21,24,25
58:1,2,3,9,13,14 59:3,5
89:23 90:1,6 94:16
98:24 99:1 101:20
103:5,8 120:7,23
121:13,20 125:9,14

claimed 21:14 22:8
30:13 34:21 40:9 57:18
84:24

claims 14:17,21,24
15:1,6,9,18,23 16:7,10,
18,21,24 17:2,9,16
18:11 25:12,22,23 26:8,
16 31:20 57:1 58:3 80:7
108:19 116:15,17
121:8,10,18 130:23

clarify 20:6 50:21
67:11 101:25 102:15

clarity 23:15 39:11

clear 12:10 23:2 24:19
36:10 40:16 51:2 71:24
90:10 115:15,24 116:22
123:2 127:9 129:10,18

click 51:5,19,24 62:19

clicked 51:14,16

clicks 50:25

clothing 36:2 61:3

code 69:19

coloration 114:20
116:11

column 47:4 50:9,22
52:20 53:14 54:11,12
55:11,13 69:11,12 92:7
94:24 95:1 103:18
104:8,25 105:4 106:25
107:8 114:15 115:1
116:9

combination 109:1,
9 122:17 123:14
124:14,17 125:20

combined 69:9
73:12

command 92:9,14

common 69:18,24
70:1,3 71:19,20 72:2
74:2 125:16 129:4

communication
21:5

communications
93:23,25 94:13

compared 99:5

complete 11:14
50:21,22

comprehensive
126:3

comprise 57:12,13,
23 58:3,9 59:4

comprises 57:13
59:10

comprising 57:1,5,
7 58:7,15 109:6

computer 5:24 7:2,
5,16 95:12,19 96:7,11,
22 97:6 98:10 102:11
110:2,8,12,19 111:17

112:6,7

concerns 13:25 96:9

concluded 133:18

concrete 123:17
124:5

conducted 33:2

confident 40:23
75:24 97:4

confirm 96:20

confirms 97:6

confused 116:13
123:18

connect 13:10,11
22:11 94:19 110:24

consideration
26:24

considered 32:9
34:24 41:24 45:6,8
91:2,20 98:25 99:8,10
102:1 107:21

consistent 51:7
53:13,20 59:3 75:7 88:6
127:14 132:4

construction 18:6
27:20,23 28:3,5,19
33:3,10 58:22 80:8
89:24 90:1,6,15 92:7,
20,25 93:5,10,11,17
109:12 126:21 131:2,
10,23,25 132:2

constructions
27:6,7 33:19 94:16

construe 58:14,18

construed 17:19
18:5,9 58:19 90:8 92:8
120:19

consultant 7:18

consulted 96:10,13,
17,18

consulting 7:22,25
8:4,8

content 86:10,13
94:10 121:4 126:2,10

contention 32:3

contentions 32:4,6,
13,14,20,23,24 33:1,9,
22,25 34:13,18,23 91:3,
6,10,19 100:2 102:4

context 21:3 39:20
41:13

contexts 75:11

copy 6:22 7:1 133:15

corner 101:10

correct 11:1 12:13
19:16 20:23 21:1,8
27:21 31:16 32:4 33:23
34:1,7,25 40:2 59:21
70:2 73:13 76:7 78:24
79:5 102:8 108:16
114:20 121:14 132:14,
18

correctly 124:23
125:2 126:18

correspond 54:14,
17,18 55:1

counsel 4:12 11:24
26:11 35:6 48:9 94:3

count 8:1 9:9 10:20

couple 12:14 65:21
93:8 118:10

court 4:6 32:12,15
33:1,2,11 48:9 89:24
90:5,8,10,11,15,19
91:6,10 131:4,7 133:12

cover 97:4 111:6,7

crime 11:19

cross-talk 36:18
87:22 93:13 94:7 95:25

CRR 4:2

current 130:14

CV 6:25

D

date 32:18

David 5:16

day 116:23

days 13:3

decades 21:23

decision 33:18
130:19 131:19,25
132:10

deck 86:24 107:3

decks 86:24 87:19

declaration 6:23,25
7:5 12:4,5 15:5 18:8,17
19:8 20:2,12 22:6,12,15
23:2,13 26:13 31:23
32:9,16 33:15,20 34:9
35:16 41:14 44:12,13
46:23 49:25 56:23
63:25 76:10 78:7,15
79:5,8 84:11 88:21
90:24 92:4,18 100:3,8,9
105:17 106:23 107:24
110:9 111:10,23,25
112:16 113:12 116:21,
25 121:7 129:6 132:18

dedicated 51:1,22

defendant 94:15

define 100:5

defined 98:10 112:12
119:18

defines 69:20 98:17

definition 21:13,24
29:7 34:1,3 80:14
97:12,14,24 99:13,15
111:14,22,24 112:1,9,
21 113:3,8,12,16,20
120:20 126:22

definitions 27:2
92:3 96:9 100:7 102:6,9

definitively 46:7

delivery 133:13,15

depend 39:17 74:18

dependent 57:24

depends 21:7 69:17
81:18 83:2

depicted 35:25 61:1
67:1 73:10 124:25

depiction 51:11

deposed 10:19

deposition 4:1,7,8,
9,16 6:16 7:6 11:22
12:12 13:5,9,17 133:18

describe 29:1 32:11
40:24 41:6,16,17,25
45:19 55:24 56:8 61:9
70:6 72:3 74:22 77:18
83:25 84:4 85:5,16
86:16 87:12 99:24
100:24 107:14

describes 47:10
49:13 50:4 51:3,13
52:15 54:12 55:22 59:4
62:4 74:25 75:9,10
103:18 104:6,9,21
106:11 107:4,7 122:22
128:21

describing 51:4
52:14 55:19 58:2 60:17,
23 61:25 75:2 83:21
86:19 87:10 88:14
99:19 101:22 106:8
107:1 124:3

description 16:25
19:23 51:18 52:21,22
53:13,18 55:20 56:9
63:7,14 67:22 73:7 75:4
85:13 106:19 120:22
127:23

descriptions 51:8
55:7 127:13

descriptive 85:21

design 128:14

designed 87:15

destination 122:20
123:12

destinations
122:15 124:20

detail 61:10 62:12
121:6

details 74:9 107:15
128:2

determine 38:19
39:14 48:8,11 60:1 67:6
98:23

determining 98:25

develop 19:22

device 61:11 62:5,18,
19,21 64:19,23,25
71:14,16 107:2,13

devices 64:3 76:12,
14 77:10

dictionaries 91:24
95:4,8,15,17 96:17
98:22 99:4,11,23 100:3,
4 102:16 109:22 110:8,
21

dictionary 27:1 92:2
95:12,19,20 96:7,11,22
97:6,11 98:10,17 100:7
102:6,8,11,18,20,22,24
110:2,11,12,18,19
111:11,12 112:7

difference 31:8 45:1
55:2,4 83:11 84:8
119:11

differences 84:6
86:7

differently 55:6

difficulty 14:25 15:8

Digital 118:8

direct 5:6 24:15 31:14
101:2,5,8 108:3,7,20
109:2,7,11 124:18
129:21

directly 107:19

disagree 105:21
132:19,22

disclose 87:18 93:24
105:9 108:18,19,24
124:8 126:24 127:1,19
128:12,23,25 129:22

disclosed 127:8

discloser 105:7

discloses 49:12,18
87:14 88:14,17,18 89:2,
6 122:12,21 129:4,7

disclosing 85:16
94:12 129:12

disclosure 49:21,23
51:2 75:9 88:6 89:2
94:15 105:7 107:16
108:11 109:2 116:7
122:6 125:21 126:9,14

127:7 128:16 129:14,19

disclosures 30:6
48:22 88:19,22 119:23
120:7

discuss 93:17

discussed 92:22
94:10 107:23 117:8

discussions
104:23 114:13

display 70:12 74:12
104:14,17

displayed 51:1
75:17 81:10,17,19,22,
25 82:15,24 83:1,4 86:3
97:19

displays 68:12 75:16
104:13,17

dispute 90:2

disputing 60:22

distinction 37:25
45:4

distinguish 116:10

distinguished
53:23

distinguishing
31:11

district 32:12,15
33:2,11 89:24 90:11

division 46:2

doc 64:12,16 68:21
69:4

docs 68:18

document 64:13

documents 11:23,
25 12:2,4 13:1,2 23:8
32:8,11,18 33:5 90:24,
25

Dogpile 119:4

dot 53:12

double-check
96:15

download 88:5
107:3 108:25 122:7,10,
18,24 123:11 124:15

downloaded 123:7

downward 101:11
104:19,21 107:9

drawn 118:15

draws 56:21

duly 5:4

E

e-mail 61:14,22 62:3,
6,7,16

E-R-S-O-N 5:17

e.g. 27:1 114:19

earlier 25:9 84:19
85:13 88:7 92:16,22
98:1 101:25 117:13
124:17

easy 118:1

edition 95:13 96:5,6,
12,14,22 97:5,8 110:4,
10,13,17,20 111:8

editions 111:9

effort 91:15

efforts 130:15

electronic 6:22 7:1

element 42:14,19
49:5,8 59:13 60:11,12
65:3 66:4 101:21
108:15

elements 29:2 30:18
40:24,25 41:2,6,17,21,
22,25 42:9,11 43:2
44:18 53:12,17 57:2,6,
8,14,15,16,19,20,23
58:4,5,7,10,15 59:2,4,7,
10,14 65:20 68:14
74:13 105:18 106:9

embodiment 109:5

emeritus 7:17

employees 94:2

end 6:25 30:5 32:10
133:16

engine 117:22
119:12,13,15,17,18

120:8,16,18 121:1,5,9 122:7,10 123:13,16,22, 24 125:24 126:3,6,20, 25 127:4,14,15,17,24 128:3,4,13,21,23,25 129:9	exhibit 13:12,13,14, 16,19,22 22:12,13,15 32:22 35:16 44:13 46:10,11,16,19 56:23 63:25 70:11,21 72:13 89:17 94:14,17,19,21, 23 96:21,23,24 97:2 100:9 103:21,22,25 109:20,21 110:25 111:1,2,4,12 112:12,21 114:5,6,8 117:16 130:5, 10,13,17	extent 76:6 93:22 96:7 127:13 132:18	final 62:11
engines 117:19,24 118:3,6,20,22 119:7,9 120:1,12,14 122:16,21 123:8 124:20 125:22 126:14 127:20,23 128:8 129:24	exists 13:8,11	extrinsic 27:1 91:16, 20 94:16 95:2 99:3,25 102:1,3 109:22	find 16:25 45:11 76:11,13 77:8,10,25 114:13,14,23
English 17:2	expand 129:18	<hr/> F <hr/>	fine 124:12
entirety 73:9,15	expedited 133:15,17	fact 37:9 52:7 56:11,13	five-minute 133:2
entrepreneur 7:18	experience 64:24 119:23	fair 8:22 11:9 14:15 55:16 66:18 87:2	Florida 4:4
envisions 107:5	expert 8:5,8,13,19 9:2,5,13,17 38:13	false 11:16	focus 12:4
equally 65:9	explain 15:14 23:4 27:3,14 29:5,8 30:6 35:3 36:2 62:2 85:3,10 88:3 104:12 108:23 120:15,25 124:3	familiar 70:1 78:1,5, 18,23 80:2,20 90:4 95:7,9 128:5,6	follow-up 46:21
equate 87:1	explained 15:5 18:7, 19 22:5,9 23:18 26:19 28:14,24 29:23 30:2 34:8 35:23 37:4 49:24 56:17 58:21,23 60:8 64:10 85:13 88:18,21, 24 98:5 105:16 106:13 107:25 109:4,10 112:18 116:2,20 122:16,17 124:17 125:13,14 129:2,6	familiarity 67:23 96:5 128:7	form 15:2 20:9,16 25:4 26:1,18 29:12 31:17 33:4,12 34:16 35:1 37:2,24 39:10 40:7,15 41:12 42:6,16,25 43:19 44:3 45:13 48:19 52:12 58:16 59:22 79:6,14 81:8 83:7,13,19 84:7 85:19 90:22 91:7 92:15, 16 93:1,7,9,19 97:25 98:1,11 99:17 101:23 105:15 108:21 111:24 112:13,15,22 113:4,10 115:14,23 116:18 117:7 132:7,23
essentially 52:13 65:18	explaining 23:3 72:1 126:23	feature 43:8,17 55:23 56:4,7	formed 130:9
evaluate 91:15	explains 30:3 45:16 56:2	features 40:13 42:22 43:12 125:16 129:5	formulate 117:4
evaluating 116:15	explanation 22:19 24:21 121:15	featuring 55:25	found 122:24 130:22
everyday 43:7	express 20:9,10	Federal 4:15	fourth 95:13 96:21 97:8
evidence 24:10 27:1 31:15,22 34:23 35:4 45:11 91:16,20 94:16 95:2 99:4,6 100:1 102:2,4 109:23	expressed 105:6 131:17	Ferid 5:11	framework 26:10 74:11,15 117:10
EXAMINATION 5:6	expressly 35:24 109:5	field 38:14	frameworks 74:7, 18
examined 5:4		figure 23:24 47:7,10, 12,19,21 48:3,6,16,24, 25 49:3,14,20 50:1,5,7 51:10,25 52:16,17,21, 22 53:9,11,15,20 54:3, 15,18,19,25 55:1,16 56:12,13,17,20 59:17 60:22 70:21 78:9 100:17,18 105:19 106:9,13,16,22 107:21 118:14,15,25 123:20,21 128:17 129:3,16	front 41:3 45:15 103:13 113:25
examples 23:14,25 24:2,20 28:25 31:24 36:21 37:5,6 46:1 47:3 56:3,6 59:15 63:11 67:9 68:12 75:15 76:9,11,13 77:8,18,19,20,21,24,25 78:5,18 102:3 118:3 119:21 122:14 125:10, 11,23 128:1		figures 100:14 105:24 106:5 118:10	full 11:13
Excite 118:16 119:2		file 23:25 24:2,6 25:14 26:25 31:23 39:6,21 45:9,10 63:5 84:18 99:6	fully 120:9
exclude 58:4 59:6		filed 6:23 12:3 20:21	function 61:8,25 62:7,21,22 83:25 120:15
excluding 55:24 56:9		files 111:19	<hr/> G <hr/>
exemplary 128:20 129:3		filing 19:4,15,18 29:22	games 46:2 71:1,11, 12 73:10,18,20

Gap 35:19 36:3,7,16,
23,24 37:15 38:14
59:19,20 60:6,9,12,17
61:3,4,5,12 63:2,12

gave 52:14 62:12
63:6,11,14 102:3 125:6,
10,11

general 42:8 53:18
63:8,13 78:2 81:2 86:18
96:5 99:3

generally 18:2 42:10
44:8 80:3,9 106:10
107:4

give 4:24 9:23 10:2,5
11:7,13 21:25 31:24
43:15 81:24 82:14
118:3 120:9 121:6
124:5 127:15

giving 28:25 63:8
75:8 81:2 127:6 128:1

God 5:1

good 5:8,9 35:11
63:19 89:15

graphical 41:7,21
65:3 66:25 68:14 75:21,
22 108:15

graphically 124:25

graphics 65:14 69:5,
9,15 74:15 79:22

green 44:20 125:3

ground 125:19
126:13

group 111:19

guess 25:1 31:7
33:13 41:10 45:25
46:21 50:10 55:9 76:18,
21 95:9 104:4 109:8
116:6,10 120:5 122:9
123:5 131:22

guide 71:13

H

half 8:2

hand 4:22

happen 62:18

happy 117:9

hard 53:21

Harding 12:8

hardware 75:2,3

head 8:17 9:23 19:2
77:24 82:17,20

heading 64:3 77:9
117:18

heard 20:23 29:17

hearing 4:20 89:24
90:4

high 17:14 42:1 121:2
125:5 131:14

highlighted 24:14
44:19

Himmel 108:25 109:1
113:2,24,25 114:4,11,
12,14,23 115:1,12,16,
22,25 116:7 122:12,21
124:8,19 125:16
126:15,24 127:1
128:12,16,21,22,25
129:4,7,21,22

Himmel's 109:10
115:13,19 122:6,18
124:15,25 126:9
129:11,14,16

history 23:5,7,8,25
24:3,6 25:14 26:25
31:23 39:7,21 45:9,10
62:11 63:6 84:18 99:6

Hold 103:3

home 6:9,11 43:16

hope 89:15

Horton 12:7 15:2,10
20:16 25:4 26:1,18
29:12 31:17 33:4,12
34:16 35:1,6,9 37:24
38:7 40:7,15 41:12
42:6,16,25 43:11,19
44:3 45:13 48:19 52:12
58:16 63:18 79:6,14
81:8 83:7,13,19 84:7
85:19 90:22 91:7 92:15
93:1,7,19,21 94:6 97:25
98:11,18 99:17 105:15

112:22 113:4,10,18
115:14,23 116:18 117:7
130:2 132:7,23 133:1,5,
7,16

hot 109:11 122:8,13,19

hour 12:23 35:7 89:8

hours 8:1 12:24

HTML 82:4 86:16

HTML-BASED
86:12

Hudnell 5:7,10 13:15
15:7,17 20:22 22:14
25:16 26:6 27:19 29:14
32:1 33:7,21 34:22
35:8,11,13 36:19 38:5,
11 40:11,20 41:19
42:12,21 43:6,14,23
44:5 45:21 46:12 48:12,
14 49:6 52:19 59:8
63:16,22 79:10 80:1
81:12 83:10,15,23
84:10 85:23 87:23 89:9,
13 91:4,13 92:23 93:4,
14 94:4,8,18 96:1 97:1
98:7,12,21 99:22
103:23 106:2 109:14,18
111:3 113:1,7,15,23
114:7 115:21 116:12
117:1,14 129:25 130:4
131:6,9 132:12,25
133:4,11,14

Hunter 12:7

hyperlink 80:2,5,9,
16,22 81:7,10,14,17,19,
22,24 82:15,22,23 83:1,
3,5,11,16 87:2,3,6,16
88:9,11,13,25 100:5
113:17

hyperlinks 82:7
83:20,25 85:24,25 86:2,
8,13,14,18 87:5,12
88:2,4,24 109:11 113:2
115:2,4,8,13,19

hypothetical 59:23

hypotheticals 37:1

I

i.e. 107:10

icon 18:11,15,17,21,
23 19:5,21,25 20:12,15,
25 21:8,18,21,22 22:4,
8,21 23:20,22 24:15
25:3,7 27:12,14,25
28:13,16 29:1,21 30:11,
21 31:2,3,5,9,14,16
33:10,17 34:1,12,14
35:22 36:3,6,10,15,25
37:3,7,8,10,11,16,23
38:4,6,8,10,15,20
39:15,17 40:10,24 41:6,
15,17,25 42:3,15,20
43:2,18,21,24 44:1,2,7
45:2,5,12,20 47:6,10,25
48:23 49:1,2,3,9,12,14,
21 50:4,5,13,18,24,25
51:4,6,9,11,13,14,18,
21,24 52:10,15,16,18
56:18 57:5,7,13,17,18,
22 58:6,9,12,14,18,19,
22 59:21,24 60:2,7,10,
13 61:11,18 62:6,23,25
63:2,12,14 64:14 65:2,
11,13 66:17,21,23
67:13,20 68:4 69:20,23
70:24 71:3,11 72:22,24
73:9,12,19,22 74:10
77:6,10 79:3 81:7,14
82:23 83:6,12,17 85:11
90:9,20 91:17 92:1,3,6,
8,13,18,25 93:6,10
94:24 97:12,14,19 98:2,
9,16 99:14,15,20,24
100:5,21 101:2,8,18,24
103:12 104:7,22,24
105:1,20 107:6 108:3,
15 109:2,23 111:14
112:9,11,17 113:9,17,
24 114:14,20,23,25
115:17 116:1,3,5,8,25
122:7,11 123:14,15
128:13

icons 20:23 24:1,7
28:17 29:25 30:4,9,10,
12,14,15,17 31:24 36:1,
22 37:5,6 40:6,14 41:1,
8,9,11 42:4 44:10,14,
19,22 45:17 46:1,4,24
49:18,24 51:8 52:25
55:13,15,25 56:2,4,10,
11,13,20 57:1,18 58:1,3
59:1,4,5,7,9,12 61:1
62:3 64:3,8,18 65:16
66:25 67:1,7,19,24
68:11,25 69:3,9,14

70:4,20,24 71:8,19
72:9,13 73:24 74:3,12,
17 75:13,20 76:3,7,9,
11,13 77:12,15,16,20,
22 78:6,11,18 79:12
83:20 84:3,24 87:16
88:9,20,23,25 90:21
101:6 104:18 105:5,8,
10,12,14,19,23,24
106:14 107:19 108:8,
11,20 109:7,11 115:13,
20 122:8,12,19 124:18
128:18,23 129:12,14,17

identification

13:14 22:13 46:11
94:17 96:24 103:22
111:2 114:6

identified 37:7 44:18
60:20 68:15,17 108:10

identifies 60:9

identify 31:13 44:22
67:4 68:1 79:11

Ill 64:13,17 66:9,24
67:2,5,19,23,25 68:3,13
71:25 72:3,5 75:16
78:1,23

image 31:6 35:15
44:13,14,20 45:10
59:18,20 60:5 61:13
63:6 69:1,6,7,9 70:10,
25 71:2,3,4 72:12,20,21
73:11,20,21 81:23,25
82:16 84:18 97:19
99:19 100:13

images 30:18

implement 72:2
74:4,17 82:3 106:20

implementation
70:4 71:19 74:2

implemented 69:18
73:24 74:10,14

implies 105:22

implying 58:22

important 99:4

inclined 66:14

include 24:7 28:17
29:2,25 30:1,4,9,10
31:6 34:11 36:22 43:21

45:17 46:4,25 48:23
53:5,7 55:21 56:10
57:19 58:25 59:1,7,13
65:13 69:3,19 76:8
77:16 78:3 79:8 86:23
87:15 90:20 122:15
127:10 128:20 129:24

included 35:15
39:23 44:21 79:4
117:25

includes 23:19,20,24
24:15 30:8,16,17 31:4
36:3,6,11,15 45:2 57:8,
18,25 61:12 65:2,13,20
71:2,4 93:22 106:12
123:13 128:13

including 23:7 28:25
33:17 39:12 49:14
57:20 59:6,14 70:25
73:19 77:7 84:22 99:6
100:2,5 102:4 106:11
108:24 118:4 122:19
124:9,16 129:5

inclusion 30:18

inconsistent 132:5

incorrect 132:14

independent 92:17
95:22

index 88:5

indicating 48:18

indication 50:18
92:9,14 115:6

indicator 101:20,22
103:18 104:10

indicators 41:22

indicia 114:19

individual 127:8

inform 34:19 39:24

information 8:17
23:9 39:8,12,18,23 85:9
86:22

informed 16:20
26:21

informs 35:4

Infoseek 118:16

infringement 24:9
31:12 32:3,22 91:3,6,9,
18 100:1 102:4

input 66:5

insight 34:4

instance 90:18

instances 114:22

institution 130:19
131:19 132:9

institution's 131:24

instructed 27:10

intended 23:1

intent 129:18

interaction 62:5

interactive 74:15

interface 29:2 40:13,
25 41:1,7,8,18 42:9,11,
14,19,23 43:3,9,13 44:6
61:11 62:1,5 63:10
66:7,11 69:10 74:23
75:10 78:2 85:5 128:17
129:11,16

interfaces 67:2,6,19
72:2 79:21 129:5

International 118:8

Internet 86:24 87:20
102:11 110:2,8,12,19
112:6,7

interpret 99:14

interpretation
18:20 19:12 20:4 23:4,5
24:5 27:13,15 28:15,18,
23 34:18 77:1,3,7,12,15
116:24 117:4

interpretations
37:14

interpreted 17:3

interpreting 31:20

intrinsic 99:6 109:13

introduce 13:8
22:11 46:16 103:19
114:4

introduced 94:14

invention 26:24

inventor 35:24

involved 74:9

involving 130:7

iphone 40:5,13 42:5,
9,19,22 43:8,9 44:7

IPR 8:25 12:2,3 13:25
22:16 41:14 78:15,17
79:2,13 130:6

IPRS 8:14,18 9:4,6,20

issue 107:23

issued 90:5

item 30:4 45:17 71:11
100:19 102:10,20,22
107:9,22 110:1,11,14,
15

items 32:10 63:9
75:10 85:6 102:10
106:3,4,6,9,11,12,16,22
107:19,20 108:14
112:20 118:15 119:1

J

Jayde.com 119:3

Jeeves 119:3

Josie 12:8

jumping 56:22

June 32:18

K

key 107:11,17,18

keys 107:17

Khan 118:10 120:13

Killingbeck 4:1

kind 10:17 39:24 62:5
64:6

kinds 7:14 39:7,11
57:20 122:12

knew 77:23

knowledge 71:22,
25

<hr/> L <hr/>	labeled 47:11 51:12 53:11,16,17 54:6,17,18 101:15	listed 110:9,25 111:1	make 13:7 42:3 73:25 107:19,20,22 108:14 112:20 123:1,2
	language 17:5 23:7 27:9 50:9 131:11	lists 32:17 92:6 95:4 122:14,19	makes 37:8 41:11 61:5,22
Large 4:4	law 27:18 117:5	litigation 27:7 28:4 33:2,11 89:25 90:12,23 109:23	Mamma.com 119:3
largely 12:1	lawsuit 32:12,15,18	live 5:25 6:1	manipulated 97:21
law 27:18 117:5	lawyer 26:3	LO 52:25 53:22 55:4	manner 4:18
left 24:12 47:13 53:21 64:7 65:6,9 69:1,6,11	legal 26:2,3,7,10 31:18 34:17 35:2 91:8 116:19 117:10	LO1 52:25 53:12,18,21 54:3 55:13,15 56:12,18, 19	mark 46:9 96:21
left-hand 118:14	level 17:14 42:1 121:2 125:5 131:14	LO2 53:12,18,21 55:15 56:12,18,19	marked 13:14 22:13 46:11 94:17 96:24 100:19 103:20,22 111:2 114:6,19 115:11
Lewis 5:10	libraries 74:18	local 86:13 88:3 101:7 108:9	Maryland 7:17 82:9
Library 118:8	light 17:9,20,24 18:3 39:6 85:12 119:3	locally 131:2,6,13 132:4,15	Massachusetts 6:1
likelihood 130:23	limit 127:16	locator 107:12	material 45:6,7
limitations 127:17	limited 57:8,12,14	location 24:18	materials 6:18
limiting 127:24	lines 47:4 106:25	LOI 53:1,12,19,22 54:4 55:14,15 56:12,18,20	matter 7:21 10:7,8 20:19 21:17 99:21
link 80:10 84:12 85:2, 15 124:16	links 84:22 85:7,8,24, 25 86:6,20 87:1,4,11, 12,19 108:24 119:21 121:3 122:13 124:18 125:21	long 12:22 13:1	meaning 17:4,12,20 18:3,9,14,23 19:5,8,25 20:11 23:11 24:25 25:7 26:16,22 27:10,14,16, 21 28:6,12,16 31:15 34:3,14 58:23,25 67:20 85:11 90:20 91:17,25 92:13,18 98:24 99:1,5
list 32:10 47:2 53:7 84:23 106:4 109:11,22 110:1 118:16 122:8 125:3 128:19		looked 75:16 76:22 96:4,8 123:8	means 10:24 76:21 77:12 128:3
		Looksmart 119:2	meant 21:1
		lot 21:4 61:9 87:4 128:7	measure 8:21
		lots 74:5	mechanism 75:12
		lower 51:12 53:15	meet 12:6,22 40:9 77:11 88:19,22 106:13 112:20 113:2
		LOX 47:10,11 51:9,11, 15,21 52:5,7,15,16,18 53:5,8,17,24	meetings 12:17,19
		LOY 53:17,24	meets 69:7 85:10 120:22,25 121:4 126:10 129:8
		lunch 89:10,15	memory 9:19 10:6 79:23 114:3
		Lycos 118:16	mentioned 126:15
			mentions 126:16
		<hr/> M <hr/>	menu 75:1 104:16,18 106:6,9,11,16,21
		made 23:2 116:23	
		main 69:10	<hr/> N <hr/>
		majority 8:11,23 9:11,12	Navi 75:1
			navigate 13:21 101:6 107:17 108:9 123:1
			navigating 62:3,6 84:2 85:8
			necessarily 79:9 86:4 89:5

Nokia 70:7,12,14
71:7,23 72:8,23 74:23
75:9,17 78:4

nonprofit 7:19

nontextual 59:14

Northern 119:3

notary 4:3,14

note 51:7

notes 133:3

notice 13:16

noting 129:20

number 7:14,19 9:17,
24 10:2,4 13:14 22:13
23:14 32:8,11 46:11
56:3 80:12 90:23 94:17
96:24 103:20,22 107:18
111:2 114:5,6

numbered 107:11

numerous 28:25
29:23 59:15 79:21

O

oath 4:10 10:9,14,15,
18,22 11:17

object 15:2 20:16
25:4 26:1,18 29:12
31:17 33:4,12 34:16
35:1 37:24 40:7,15
41:12 42:6,16,25 43:19
44:3 45:13 48:19 52:12
58:16 79:6,14 81:8
83:7,13,19 84:7 85:19
90:22 91:7 92:15 93:1,
7,19 97:20,25 98:11
99:17 105:15 111:18
112:22 113:4,10
115:14,23 116:18 117:7
132:7,23

objection 4:17 15:10
38:7 43:11 98:18
113:18

obvious 122:6,24

occur 75:4

offer 18:21,25 21:13
25:5 29:7 37:17 38:2

45:3 80:7 126:21 129:7
offered 20:2 21:15
33:16 109:22 131:1,25

offering 42:2

offers 51:7

oops 28:8

open 7:6,8 46:13

opening 30:5 45:18

opens 43:17

operating 74:8,14

operation 106:11
111:19

opinion 18:8,15,22,
24,25 20:1,9,10 22:2,5,
10 24:21,22 25:2,5,17,
19 27:18 28:22 30:7
35:4,5 37:15,17,20,22
38:1,2,3,16 39:24 40:17
42:18 45:3,4 49:11,17,
23 59:22,25 67:12,18
68:5 72:15,18 77:14
81:1,16 83:9 92:3,17,19
93:3,9 98:2,19 99:21
100:22,25 101:4,19,23
108:2,6,13,18,21 109:9
111:25 112:16,24
113:6,14,22 116:21
126:23 127:9 129:13,19
132:10,13,17,19,20,22

opinions 18:16,21
26:3 37:1,2 116:20,25
117:4 130:6,9,16
131:18

opposed 41:11
50:18

option 13:10

order 8:2 26:17 39:10,
13 90:6

ordinary 17:4,12,20
18:3,9,14,22 19:3,5,8,
15,17,24 20:11,14 22:3,
7,20 23:9 24:24 25:2,7,
24 26:15,23 27:13,16,
21 28:6,12,16 34:3,14,
15 43:7 48:15 49:7 52:8
53:4 58:23,24 62:14
63:1 69:25 80:15,21
81:13 82:21 83:4 85:11,

17 90:19 91:16,25
92:13,17 98:8,13,15,23,
25

original 128:14

outcome 90:17

outlined 125:3

oval 35:19 36:7,24,25
37:16 38:14 47:14,16,
20,21,23 48:2,4,5,7,17
49:1,2,4,22 50:1,6,8
52:5,8,17,18 56:14,18,
21 59:20 60:6,13,17,21
61:5 63:2

ovals 55:4

owner 5:11 22:9 29:1,
8 30:13 31:20 33:9
34:4,20 37:7,10 38:13
44:17,22 45:5,7,9,12
59:12,15 60:8,14,23,24,
25 61:18,24 67:14,20
85:14 106:14 108:5
116:4 128:18 131:15,17

owner's 18:20 19:11
20:3 23:3,5 24:5,9,23,
24 25:20 27:6,13,15,20,
23 28:3,11,15,19,20,23
29:4 31:12 32:3 34:9,10
37:13 38:9 39:9,22
58:22 60:16 76:6 77:1,
3,7,11,14 98:4 100:1
105:19,25 109:12
112:19 115:16 116:17,
24 117:3 131:20

owners 9:1,3

P

p.m. 133:18

P0 53:11 54:4,6,9,13,
14 55:4,16

P1 47:11 51:12 53:16,
23 54:17,19,21,23,25
55:1,4

pad 107:17

pages 84:2 89:19
119:22 126:2,7 127:2,
11

Palm 64:13,17 66:7,9,
24 67:2,5,19,23,25
68:3,13 71:25 72:3,5
75:16 78:1,23

paper 6:24

paragraph 18:19
22:6,19,22,25 23:13,18,
24 24:11 26:20 28:1,9,
10,15 30:2,24 32:2,9,
17,21 33:14 34:8 35:16,
24 44:13 45:15,23,24
46:23 47:3 56:22,23,24
59:17,18 60:5,9,24
61:17 63:24 64:2 66:24
67:10 70:6 72:21 74:25
75:6,14 78:10 84:19,20
85:3,4 87:13 88:2,8,10,
12 89:19,20 90:24 92:5
100:10,13,24 101:20
102:9,19,25 103:5,8
106:24 107:24 109:4,10
114:16,18 116:23
117:15,16,23 118:9
121:16,20,23 122:1,22
123:9,19,20 124:2,24

paragraphs 18:18
23:16 26:13 28:14

parallel 27:6 28:3

part 7:21 12:3 26:20
32:17 36:11 37:9 49:2,3
50:11 52:21 53:18
60:13 61:4 62:10 73:14,
17 74:2,19 75:6 78:16
82:24,25 91:10 92:5
107:22 108:11 126:17
128:13

partially 131:20

participate 12:16

parties 4:12 33:16

party 4:17

pass 132:25

password 114:18
115:5,7,11

past 70:19

patent 5:11 9:1,3
14:1,3,6,9,18,22,25
15:9,19,23,24 16:2,8,
10,18,25 17:1,16,20
18:11,20 19:4,11,16,18

20:1,3,21 21:14 22:3,9,
21 23:3,4,6,19 24:5,6,8,
23,24 25:12,13,20,22,
23 26:9,17,25 27:5,12,
15,20,23 28:2,11,15,19,
20,22,25 29:3,8,22
30:3,8,13,20 31:12,19,
23 32:3 33:9 34:4,9,10,
20 37:7,10,13 38:8,13
39:5,8,20,21 40:18,19
41:14 44:17,22 45:5,7,
8,11,14,16,19 46:6,9,
17,19,24 47:5,12 48:16,
20 49:12,17,23 50:4
52:1,15 57:1 58:22
59:12,15 60:8,14,16,23,
24,25 61:18,24 67:12,
14,20 75:19 76:6,12,25
77:3,7,11,14 78:9 80:7
85:14 98:4,24 99:1
100:1 101:3 103:20
105:19,25 106:7,14
108:4,5 109:12 112:3,4,
18 113:13,21 114:4
115:16 116:4,16,17,24
117:3 118:11 121:18
127:7,19 128:18 130:7,
17,20 131:15,17,20
132:6

patent's 39:21 40:9
85:12 88:20 127:12

patents 8:20,24

PDF 97:10,17

percent 64:24 82:6
96:20

percentage 9:8

Perfect 130:2 133:5

perform 15:4,13
16:22 19:7 38:23 41:4
72:14,19 76:15,20
79:15 81:15 83:8 93:2
112:23 113:5,11,19
132:8,9

performed 26:12
31:10 38:21 43:21 81:9

performing 15:20
16:13 39:4 91:14

person 17:15 19:3,9,
14,17 20:13 22:2,7,20
23:9 25:2,6,13,24
26:15,23 34:14 48:15,

21 49:7,19 52:8 53:4
62:14 63:1 65:17 69:25
74:3,8 80:15,19,21
81:4,13 82:21 83:4
85:17 88:18 98:8,13,15
105:8,17 106:19 122:18
124:14 126:5,23
128:15,22 129:23

personal 82:2
119:23

personally 20:15
39:14,16

petition 27:8

petitioner 27:5
133:8

petitioners 9:1,6
28:2

Ph.d. 5:21,23

Phillips 26:21 27:10
34:24

phone 7:10 40:1,4
73:11

phrase 17:11 36:5
84:12 127:4 131:2,4

physically 4:8

PI 50:25

pick 77:19

picked 77:17

pictorial 92:9,14

picture 111:17

Pilot 66:7

pixels 65:22

place 12:19 73:4

places 78:9

plain 17:3,12,19 18:3,
9,14,22 19:5,8,24 20:11
24:24 25:7 27:10,13,16,
20 28:5,12,16 34:3,13
58:23,24 85:10 90:19
91:16,25 92:12,17
98:23,25

plans 130:12,14

plurality 51:22

point 8:12 24:8 31:12
45:15 46:22 47:2,3
84:14

pointed 24:14 76:9
120:12 129:11

pointer 100:25 101:4
107:25 108:2,6

points 47:6 50:12,24
107:20

popular 117:24

portals 55:23 56:7,8

portion 69:10

POSITA 65:17 74:17
84:21 92:12 105:3,11,
13 112:11,17 115:12,
22,25 116:16 122:23
127:3

position 66:4

potential 45:4

practice 65:23 69:18,
19,24 70:1,3 71:19

precise 8:21 131:11

predetermined
107:10

preferably 30:4
45:17

preliminary 32:19,
24 94:15

preparation 12:11
13:4 20:19

prepare 11:21

prepared 33:1,9,22
78:7

preparing 76:10
130:10

present 4:8

presented 91:5,11

press 43:17

pressed 107:10,12

pressing 107:18

pretty 40:23 58:21
75:24 76:2 82:1 84:8
116:21

prevented 15:19
16:13,17

previous 17:23
22:18,24 36:5 42:7
46:22 65:8 73:2 75:7
129:2 131:22

Primarily 38:25

primary 49:11

printed 97:14

printout 6:24

prior 67:22 77:19
78:6,19 79:4,12 104:1
114:10 120:22,25

privileged 94:13

Procedure 4:15

proceed 4:20

proceeding 5:11
27:4 29:18

product 24:13 41:3

professional 4:2
5:19 82:2,8

professor 7:16,17

programs 117:25

projects 7:19,20

proposals 33:16

propose 28:2

proposed 27:5
33:10 92:8,20,24

prosecution 23:8

protected 114:19
115:5,7,11

provide 24:9 33:25
34:4 68:13 121:3,16
127:17,22

provided 26:10
67:10,25 74:8,14
117:10

providing 34:2
128:2

PTAB 27:5 28:2
130:22 131:1,12,20

PTAB's 132:3,9,14

Public 4:3
pulled 118:10
purely 108:16
purposes 25:21,23
27:4
pursuant 4:14
put 6:5 130:15
putting 76:12

Q

qualification 118:6
queried 118:1
question 8:16 9:16
10:5,12 11:4,6,7,8,11
14:11 16:7 17:8 18:1
19:13 20:7 21:6 22:1
25:1,10 26:2,19 27:22
31:18 35:2 40:8 43:1,4
46:7,22 48:10,13 53:25
54:2 55:9 58:8,18 59:11
67:8 73:14,17 76:16,24
77:2 79:17 83:14 91:8
94:1,11 103:11,14
104:4 105:22 114:1,2
116:19 117:12 118:24
120:10,11 123:5 129:21
131:23
questions 10:25
11:12 74:23 93:9 103:9
133:3,7
quick 35:10 118:1
quickly 123:1
quote 30:3,5 60:9
quoted 62:10

R

raise 4:21
re-ask 43:4
read 28:2 47:5 50:9,
11,13,20,22 51:8 53:14,
22
reading 45:22 105:9
115:12 126:24 128:15,

22
ready 89:8
realize 74:21
Realtime 4:3
reason 11:13 41:16
86:5 95:24 128:24
132:21
reasonable 130:23
reasons 29:24 37:4
41:20,23 49:24,25
52:14 56:16 88:21,24
92:22 122:16
recall 30:22 43:25
44:25 46:8 73:6 78:14
82:10,20 92:2 94:22
96:8 105:1 131:10,12,
14
recalling 95:15
recess 35:12 63:21
89:12 109:17 130:3
133:6
recognize 46:18
94:21 96:17 97:3
103:24 110:7 111:5,7
114:9
recollection 41:5,
15 44:9 64:25 72:3,5,9
97:7 131:19
record 5:13 6:5
109:13 133:9
records 9:3
rectangle 47:13 52:2
53:9 61:14 65:19,23,24
rectangular 37:5
refer 14:3 32:8 44:8
65:4 108:19 121:22
reference 55:15
56:24 78:13 114:11,25
115:1,4,6 118:10
120:13 121:19 124:3
referenced 59:19
96:23 124:10,11
references 46:4,22,
24
referencing 115:10

referred 44:10 66:2,3
68:21 73:15 84:15
referring 10:13
22:22 23:17 25:10
27:24 42:7 51:17 56:19
61:7 65:5,6,11,15
68:18,20 69:6 73:9,16,
18 75:5 101:1 104:20
114:17,21 120:5 125:15
refers 52:25 58:1
106:3,4,5
region 65:1,10,15
Register 118:17
Registered 4:2
related 8:14,20,23
12:2 23:19 72:24
relates 112:3
relating 84:1
relevant 15:14
reliable 95:20,23,24
110:22
relied 108:25
rely 112:8
relying 129:13
remember 71:14
78:3,21 124:10 131:24
132:1
remembered 78:21
remembering
102:7 120:7
remotely 4:9,11
rendered 36:11
report 28:24 44:21
67:5,17 68:2,21,25
72:15 74:22 76:2 79:16,
19 87:11 90:15 102:13
106:23 118:3 124:11,17
129:13,20
Reporter 4:2,3,6
48:9 131:4,7 133:12
reporting 4:9,18
represent 5:10 55:3
73:22 97:20

representing
47:17,22,23 52:10
represents 111:18
request 107:2
requested 133:14
require 26:14 30:17
34:17 57:16
required 27:18
requirement 26:8
86:12 120:8 126:7,11
129:8
requirements
26:11 39:3 42:2 86:18
88:20,23 106:14 120:23
121:1,5
requires 25:24 57:21
104:16 117:6 127:18
131:18
resource 107:12
respect 8:25
response 129:21
rest 122:7
restrict 59:5
return 46:3
review 11:25 15:22
90:25 91:24 114:12
reviewed 11:23 13:1
14:6,17 27:7 97:5,8
130:19
reviewing 13:1 14:8,
21,24 16:1 48:16 105:3,
12,13
right-hand 101:10
Roller 75:1
room 4:8 7:6
Rossmann 78:8,13
85:16 86:23 87:14,17,
18 88:1,3,14,17 89:6
92:25 100:14 101:22
103:12,13,17,19 104:2,
4,6,25 105:3,7,12,13
106:3,4,8,10,18,25
107:5,8,16 108:12,14,
18,19,23 109:1 112:20
124:18 125:1 129:17

Rossmann's 84:22
85:5 87:4,12 89:2 109:5
129:14

rough 133:14,17

RPR 4:1

Rule 4:15

S

satisfy 84:24

science 5:24 7:16

scope 15:9,12,14,15
20:16 40:15,17

scratch 48:12

screen 13:10 35:25
43:16 60:25 62:20
64:18 65:1,4,5,9,10,15
66:13 70:22 71:15,16,
21 72:6 74:24 85:6
97:20 104:10,17 111:18

screens 65:14 66:11
67:25

screenshot 24:12

scrolled 104:13

search 117:19,22,24
118:3,4,6,20,22 119:7,
9,11,12,13,15,16,17,18,
24 120:1,8,12,14,15,16,
18 121:1,3,5,9 122:7,
10,15,20 123:1,2,8,13,
16,22,23 124:20
125:17,21,23,24 126:1,
3,6,8,10,14,20,25
127:1,4,13,15,17,19,20,
23,24 128:3,8,13,20,23,
25 129:5,8,9,24

searched 122:25

searches 118:1

searching 126:19
127:8,10

secondarily 26:25

section 23:15 24:20
28:24 29:23 102:23
107:4,7 118:7 124:11
125:14

sections 118:2

select 61:11 62:6,8,
10,15,23,25 63:9,15
64:12,15,21 66:15,21,
23 75:13 80:10 85:8
86:21 123:15

selectable 35:25
60:10 61:1,6,9,11,19,23
62:3 63:3 64:3,8 70:4,
20,24 73:25 74:3,10,13,
17 76:11,13 77:9,20,22
78:10 101:6 105:18
106:8,12 108:8

selected 63:7 66:18
71:12 72:9 106:22
123:15

selecting 73:4 85:6
107:5

selection 23:20 30:3
45:17,20 75:4,10,12
87:16 101:1,5,7 107:2,
12 108:1,3,7 109:7

selects 62:13 64:17
72:22

sell 36:1 61:2

sends 107:2

sense 9:8 14:20 86:25

sentence 46:1
50:21,22 56:25 64:10
73:8 87:14 109:4,10
114:17 122:22

separate 38:12

served 32:15

server 88:5 107:2,13

service 64:13 72:23

set 42:2 86:17

sets 115:10 122:19

settings 5:19 43:17,
18

seventh 110:4

shape 44:15,23

share 46:13

shortly 21:19

show 24:4 32:2 75:15

77:19

shown 56:12,13
64:11 67:2 70:20 106:4

shows 23:25 24:7
35:25 37:11 48:25 49:3,
14,23 50:5,7 52:16,17
56:17 57:17 60:22 61:1
78:10 109:21

sic 93:6 113:13

side 47:13

significant 8:23
9:11

silent 7:11

similar 87:4 129:17

similarly 51:10 81:5
simply 20:12 71:12
72:22

simultaneous
36:18 87:22 93:13 94:7
95:25

single 126:4,19

single-selection
109:6

sir 133:11

site 51:22 118:4

sites 55:23 56:1,7,8
117:24

sitting 6:19 9:15 19:2,
13 20:5,18 32:23 37:18
38:17 67:17 68:5,7,10
72:16,17 79:11,23 83:9
98:3,20 99:18 103:16
112:2 114:24 129:15
132:10

size 66:4

skill 17:15 19:3,9,15,
17 20:14 22:3,7,20 23:9
25:2,6,13,25 26:16,23
34:15 48:15,21 49:7,20
52:8 53:4 62:14 63:1
65:17 69:25 74:3,9
80:15,19,21 81:4,13
82:22 83:5 85:17 88:19
98:8,13,15 105:8,17
106:20 122:18 124:14
126:5,23 128:15,22
129:23

slightly 25:10 51:11
86:20

small 65:24 97:19
99:19 111:17

smallest 65:19,22,23

soft 107:11

software 74:4

sort 20:6 63:13 77:23

sounds 11:2 26:2
31:18 34:17 35:2 63:19
91:8 116:19 128:6
130:25

spans 89:20

spec 55:7

specific 8:10 9:15,24
10:4,20 17:6 18:1 21:5,
24,25 36:1 39:2 42:2,
11,14,18 44:9 61:2
63:7,14 81:1 82:20
86:17 87:10 89:20 90:4
108:21

specifically 10:13
12:11 17:4 23:12 31:11
44:18 51:23 54:20,22,
24 62:9 76:1 79:19
87:15 91:1 95:13,15
102:24 106:8 121:22
129:11 132:16

specification 15:22
16:2,13,17,20 17:1,6,
10,21,25 18:4 39:6,21
45:8,9 54:24 55:18

spell 5:12

spelled 5:16

spend 7:24 13:1 16:1
68:8 79:20

spent 14:8,21 16:10

sport 50:25 51:1

sports 51:23

standard 26:21
133:17

started 79:18

starting 22:6,25
28:14 50:10,22 51:9
64:10 69:10 104:8,15
114:16 121:20

starts 121:16	sworn 5:4	88:13 101:2 102:11	thing 83:17,21 84:5
state 4:4,13,19 5:12	symbol 92:9,13	108:4 110:2,12,19	85:25 88:16 103:17
stated 4:18	system 74:8,15,19	112:7	things 56:3,6 57:12,
states 35:24		test 64:23	21,25 59:6 79:7 83:18,
Steno 13:11 22:11		testified 5:5	22 88:16 89:1,3,4,6
94:19 110:24		testimony 4:23 10:9,	105:11,13 108:23
step 28:10 99:12		14,15,17,18 11:14,16	thinking 15:21 42:8,
stipulate 4:14	table 92:6	text 24:15 28:17 29:2	10 60:3 68:8,25 79:17,
stop 122:9	takes 73:4	30:1,9,10,11,17 31:4,9,	18,20 86:9 91:22
stored 88:4 131:3,6,	taking 26:24	14 35:23 36:6,16 44:15,	thinks 116:16
13 132:4,15	talked 11:23 29:11	19,23 45:1,2,12 46:2,5,	Thomas 118:16
stores 36:1 61:2	116:9	8,25 47:1,8,11,17,22,24	thought 19:24 20:20
straightforward	talking 27:11 38:12	48:1,18 49:10,15 50:2	25:7 29:21 81:5
82:3	67:11,13,21 69:24	52:10 55:19,21,24 56:9,	time 7:24 11:3 12:22,
strict 86:11	90:11 104:10,11 115:24	15 57:6,8,9,13,19 58:6,	23 14:8,20 16:1,9 17:15
strike 75:18	116:22 124:1	7,13,14,15,18,20 59:9	19:4,15,17,20,25 20:15,
string 53:7	teach 92:25 109:6	61:12 65:7,14 69:5,9,15	20 26:24 29:21 33:14,
studying 16:10	teaches 88:3 125:16	70:25 71:1,12 72:13,20,	19,23 38:25 64:25 67:4,
submitted 22:15	teaching 88:2	21 73:10,18,20,21	17 68:1,8,24 72:15
substance 93:24	teachings 84:22	75:22 76:3,8,14 77:13,	75:19 78:6,22,24 79:20
success 130:23	technologies 74:5	15 81:23 82:16 83:12,	82:2 89:10 90:14 91:1
succinctly 122:23	ten 63:18,20	17 89:1 99:20 108:16,	111:25 113:12 114:15
suggest 56:15 113:9,	tenth 110:12	25	times 10:11,19,21
17	term 18:11,15,16,20,	text-based 84:12,22	74:7
summarize 109:8	23 19:1,25 20:4,11,20	85:2,6,7,15,24,25 86:4,	timing 33:5
summary 109:3	21:8,14,18,21,24 22:8	6,25 87:11 88:13	title 7:16 23:21 30:4
supplement 130:12	23:11 24:10 25:15,20	text-only 49:12,18,	45:18,20
support 17:6 25:14	27:12,14 28:23 29:1,9,	21,24 51:8,10 56:10,20	titled 117:18
30:7 49:16	25 30:16,20 31:16	76:9 77:16 78:6,10,18	today 9:16 11:14
supports 129:4	33:10,17 34:5,11,14,20	79:3,12 90:20 99:16,24	19:2,13 20:5,18,19
suppose 50:20	39:9,22,25 40:9,24	113:9	31:21 32:23 34:20
surprised 75:12	41:6,25 43:2 45:5 59:16	textual 23:22 24:1,7	37:18,20 38:4,17 41:4
82:18	65:18 67:13,14,20 73:8,	30:14,21 31:1,2,3,5,9,	42:19 43:22 68:10
surrounded 49:1,21	9 80:2,6,17,20,25 81:3	24 34:11 36:6 37:6	72:16,17 79:24 83:9
50:5 52:7	84:11 85:11,14,15,17,	41:22 46:1 49:1 57:1,5,	98:1,3,20 99:18 112:2
surrounding 52:17,	20,21 87:1,3,6 88:8,10,	7,14,15,16,19,23 58:3,	114:24 129:15 132:11
18	13 90:9,20 91:17 92:1,	4,7,9,15,25 59:1,2,4,7,	top 8:17 9:23 19:2
swear 4:23	13,18 93:6 94:24 98:2,	10,13 60:11,12 65:3	23:24 24:12 32:21
swearing 10:25	5,9,16,24 99:1,5,7	66:25 67:3,7 68:4,14	36:11 52:1 53:8,9,11
	104:24 105:1,20 106:1,	116:4 129:17,22	69:11 70:10,21,22 71:1
	15,18 109:23 112:6,17,	textual-only 48:23	72:12 75:6,18 77:24
	19 113:20,24 114:14,	67:7,19,24	82:17,20 84:19
	23,25 115:17 116:25	TH1 47:6,7,14,16,19,	total 13:3
	120:6,19,21 121:9,22,	25 48:6,17,22 49:13,14,	touch 62:20 64:18,22
	25 128:18 131:15,16,	21 50:4,5,6,7,13,16,17,	65:1 66:21 71:15,16,21
	18,25 132:5	24 51:3,5,10,18 52:14	72:6 73:4 74:24
	terms 17:17,18 18:2,	thematic 23:21 30:4	touched 64:6
	4,9,10 26:22 33:16 55:3	45:18,19	
		theme 47:6 50:13,19,	
		24,25 51:1,3,4,14	

touches 66:15
touching 64:18
66:22 71:12
track 9:12 16:3
tracked 14:11
transcript 133:12
transmitted 107:13
true 11:1
truth 4:24,25
turned 7:11
type 40:4
typically 69:22 84:1
86:15

U

U.S. 14:1 46:17 103:20
114:4 118:11
Uh-huh 36:13 51:20
56:5 68:23 69:2 124:13
125:8,12
unclear 15:18 16:12,
16 123:4
underlying 74:7,11,
15
understand 10:12,
22,24 11:3,6,11,12
13:24 14:4,14 15:3,23
16:21 19:5 20:8,10 21:1
22:4,21 24:22 25:3,11
26:11 27:4,22 31:8,19
34:9 37:25 38:1 39:8
48:17 49:20 50:17 51:5
52:9 53:5 54:9 55:14,18
58:8,17,24 59:11 62:15
63:2 67:14 73:2 76:19
80:16 83:14 85:18
88:19 92:12,21 93:16
94:1,12 98:9 105:9,18
106:15 112:11 115:13,
25 117:2 124:6,23
125:1 126:6,17,24
127:3 128:16,18,22
129:23

understandable
85:22

understanding
15:1,8 16:17 17:18
19:21 23:10 24:10,23,
24 25:15,18,20,25 26:7,
14,15 28:12,20 29:4,6,
8,9,20 30:9,16 32:25
33:8,17 34:7,10 37:11,
12 38:9 39:3,9,22 40:22
48:20 49:17 57:11 68:3
76:7 80:4 81:2 91:9
98:5,6 99:3,5 105:20,25
106:21 112:19 115:16,
18 116:1,14,17 117:5
119:22 120:6

understandings
63:9

understands 34:20
59:13,16 67:20

understood 11:8
15:6,12,16 16:19 17:8,
16 18:2,5 19:10 20:15
21:17 22:8 27:15 29:25
30:13 34:5 39:5 43:5
45:5 48:22 58:12 80:22
84:21 85:12,14 98:16
108:4 112:17 116:3

undertake 91:15
University 7:17 82:9

uploaded 110:24
upward 104:13,14,18

URL 82:10 123:11,12

URLS 108:24 122:20
124:19,20 127:2 129:7

user 29:1 40:24 41:1,7
47:5 50:12,23 61:10
62:4,13,19,20,24 63:10,
15 64:12,15,17,20 66:5,
7,11,14,20,22 72:22
74:23 75:10 80:10 85:8
86:21 97:21 101:5
107:1,8 108:7 123:14
126:1 128:17 129:11

user's 71:13 117:25

users 63:9

V

vaguely 128:6

validity 25:22 26:8,
12,17 116:15
Vanese 4:1
version 44:20 110:7,
25
versions 112:5
versus 18:9 55:4
victor 110:15
view 126:18
virtual 6:15 12:20,21
visible 66:6,10
visual 41:22 129:22
Voilà 128:2,5,8,11
volunteer 7:20

W

wait 103:7
wanted 64:20 89:9
102:14
ways 62:17,24 73:24
74:5,16 80:12,18 81:11,
18,19,21 83:1,3 86:3
web 36:12 80:10 82:1,
2,5,8,10 84:1,2 86:9,15,
16 101:8 108:9 118:1,
22 119:9,12,14,15,17,
19,21,24,25 120:2,8,14,
17,19 121:1,4,5,9
122:25 123:11,12,16
124:21 125:25 126:2,4,
6,19,20 127:1,2,4,18
128:4

website 119:17
120:16 123:1,3 125:18,
24 126:19 127:10,21
128:9

websites 119:24,25
121:3 126:10

weeks 12:14

well-known 77:21

windows 7:8

Windsor 6:1,11

women's 36:2 61:2
wondering 36:7
37:22 42:13 77:17,18
83:16 88:15 117:5
word 17:5 21:12,22
36:3,12,16 41:15,17
57:11 80:11
words 17:2 57:17
60:17 83:21
work 7:13,15,20,21,
22,25 8:4,5,8,9,13,14,
17,18,19,25 9:1,2,5,13
42:9 77:25 78:17 79:2,
13 100:7 118:5,7
worked 9:17,20 72:4
75:13 78:15 79:22

works 101:21

worldwide 84:1

written 17:9 19:23
30:8 34:2 35:20 38:14

wrong 24:17 121:15

wrote 33:14,15,19
67:4,17 68:2,24 72:15
90:14 111:25 113:12

**www.cs.umd/~
bederson.** 82:13

Y

Yahoo 118:17 119:2
123:21 124:4,9,16,21
125:2,7 126:16 127:15,
16 128:1,8,10

yesterday 12:15,24

Z

zone 66:1

Zoom 6:19 7:5,9