

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE
BEFORE THE PATENT TRIAL AND APPEAL BOARD
Case: IPR2024-00735, IPR2024-00777

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SAMSUNG ELECTRONICS CO., LTD. and
SAMSUNG ELECTRONICS AMERICA, INC.,
Petitioners,

- against -

MAXELL, LTD.,
Patent Owner.

-----x
January 17, 2025
8:57 a.m.

Deposition of BENJAMIN B. BEDERSON,
Ph.D., taken by Patent Owner, pursuant to
Notice, held at the offices of DLA Piper
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A P P E A R A N C E S :

DLA PIPER LLP (US)
One Fountain Square
11911 Freedom Drive
Suite 300

Reston, Virginia 20190

Attorneys for Petitioners

BY: JAMES N. HEINTZ, ESQ.

jim.heintz@us.dlapiper.com

MAYER BROWN LLP

71 South Wacker Drive

Chicago, Illinois 60606

Attorneys for Patent Owner

BY: ROBERT G. PLUTA, ESQ.

rpluta@mayerbrown.com

1 BEDERSON

2 B E N J A M I N B . B E D E R S O N ,

3 P h . D . ,

4 called as a witness, having been first duly

5 sworn, was examined and testified

6 as follows:

7 EXAMINATION BY MR. PLUTA:

8 Q. Good morning, Dr. Bederson.

9 A. Good morning.

10 MR. PLUTA: Just before we get

11 into substance, I wanted to put on the

12 record that this deposition is being taken

13 for use in IPR 2024-00735 and IPR

14 2024-00777. Any objections, Counsel?

15 MR. HEINTZ: No objection.

16 Q. So I know you are familiar with

17 the deposition process, so I'm not going to

18 go over any of that. The one thing that I

19 do want to remind you is during IPR

20 depositions you are not to speak about the

21 substance of your testimony with counsel

22 during breaks. Do you understand that?

23 A. Okay.

24 Q. Do you agree to that?

25 MR. HEINTZ: I'm going to put

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2 on the record according to PTAB rules
3 conversations can be held after the
4 cross and before direct.

5 MR. PLUTA: Understood.

6 Q. So I'm going to hand you two
7 documents, both labeled Exhibit 1003. The
8 one on your left is -- actually, well, the
9 one on your right is your declaration in
10 IPR 2024-00735. Can you confirm that for
11 me?

12 A. This does not seem to be the
13 signed version, but other than that, yes,
14 it does appear to be.

15 Q. And then the left is your
16 declaration in IPR 2024-00777; is that
17 correct?

18 A. Yes, it appears to be.

19 Q. Would you agree that the only
20 difference between those two documents with
21 respect to the substance is that the one
22 for the 777 matter has the 777 cover page
23 attached to it?

24 A. Yes, that's correct.

25 Q. So maybe we will refer to the

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2 one on your left that is signed today.
3 But, in essence, that declaration contains
4 your opinions in this case, correct?

5 A. Yes, it does, for both of my
6 declarations. They are the same.

7 Q. I'm trying to streamline
8 things, not prolong them.

9 MR. HEINTZ: Just for the
10 record, do you want to have him sign
11 the other one now just to avoid any
12 question about this?

13 MR. PLUTA: Yes, I don't know
14 what happened.

15 MR. HEINTZ: I don't know what
16 happened either.

17 MR. PLUTA: Let's take it up at
18 a break.

19 MR. HEINTZ: Okay.

20 Q. I'm going to hand you what has
21 been marked as Exhibit 1001. Do you
22 recognize that document?

23 A. I do. It is the '815 patent
24 that my opinions relate to.

25 Q. If you could turn to column 1

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2 of the '815 patent at line 46. The patent
3 at that point states "When digital data
4 already compressed in code rate is inputted
5 to a recording and reproducing device
6 having such a recording medium from outside
7 by broadcasting or communication, it is
8 also possible to record the digital data on
9 the recording medium intact."

10 Do you see that?

11 A. I do.

12 Q. In the 2004 timeframe would one
13 of skill in the art understand the term
14 "broadcasting" to include TV broadcasts?

15 A. I think in that timeframe
16 "broadcasting" could include a wide range
17 of things, including TV broadcasts.

18 Q. Please take a look at column 4
19 starting at line 43. I'm going to read
20 starting at line 45.

21 A. Okay.

22 Q. "A recording and reproducing
23 device capable of receiving digital
24 broadcast, recording the digital broadcast
25 on a recording medium, reproducing recorded

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2 data, and obtaining a reproduced output is
3 shown."

4 Do you see that?

5 A. I do.

6 Q. Now, in the 2004 timeframe
7 would one of skill in the art understand
8 the term "receiving digital broadcast" to
9 include digital TV broadcasts being
10 received?

11 A. I think that's fair in this
12 timeframe, "receiving digital broadcast"
13 could include receiving digital TV
14 broadcasts. I think that would clearly
15 include both encrypted and unencrypted
16 digital broadcasts.

17 Q. And would one of skill in the
18 art in the 2004 timeframe understand the
19 term "receiving digital broadcast" to
20 include receiving digital video?

21 A. Yes, I think that could include
22 digital video as well. Similarly, it might
23 be encrypted, it might not be encrypted.

24 Q. If we look two lines up at the
25 start of the paragraph there, it says

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2 "Figure 3 is a block diagram showing an
3 example of a recording and reproducing
4 device according to the present invention";
5 is that right?

6 A. Yes.

7 Q. If you jump to column 6, line
8 57 -- I'm sorry, I'm going to go to line 63
9 here. It says "In other words, the present
10 embodiment refers to data management on the
11 recording medium, and its input route is
12 not especially restricted."

13 Do you see that?

14 A. I see that.

15 Q. Given the statement that the
16 input route is not especially restricted,
17 does that suggest to one of skill in the
18 art reading the '815 patent that there
19 could be multiple input routes to ingest
20 and produce the digital data?

21 A. Well, I think the Figure 3 that
22 we were just looking at describes multiple
23 inputs. I see on the left of Figure 3
24 antenna input 301, digital input 3011,
25 analog video 3012, and analog audio 3013,

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2 so I think the patent does describe four
3 inputs.

4 Q. But do you understand the
5 specification that we were just discussing
6 which comes after the discussion of the
7 embodiment -- or embodied in the figures is
8 broader than perhaps the inputs described
9 in Figure 3?

10 A. Well, in looking at this whole
11 paragraph, and let's look at the first two
12 sentences as well, where at column 6,
13 starting at line 57 where it says "In the
14 embodiment heretofore described," which I
15 think is referring certainly to at least
16 include Figure 3, "the case where digital
17 broadcast is received and digital data is
18 recorded intact has been described."

19 Looking --

20 Q. What does it say in the next
21 sentence?

22 A. Oh, "However, this is not
23 restrictive."

24 So reading that in the context
25 of Figure 3, I see that, as I just

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2 mentioned, there is multiple inputs. There
3 is digital input, there is antenna input,
4 which may include digital, and then there
5 is analog input. So these two sentences
6 together says it is describing that there
7 are digital inputs and then there is
8 also -- that's not restricted to those
9 digital inputs, there is also other things,
10 and Figure 3 describes other things,
11 including analog input. So when I read
12 this, that's what it looks to me like it's
13 referring to.

14 Q. In the 2004 timeframe from a
15 technical perspective, would you agree that
16 a person of ordinary skill in the art would
17 understand that encryption is a process
18 typically applied to data before
19 transmission to a receiving device in order
20 to protect that data during transit?

21 A. I think it depends on the
22 context and what is being transmitted. For
23 pay TV programs, for example, I think it's
24 more likely to be encrypted. There are
25 many other kinds of broadcast -- digital

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2 broadcasts where I don't think that it
3 would be encrypted.

4 Q. And you described some of those
5 in your declaration, correct?

6 A. I did. I think I remember
7 specifically referring -- just thinking of
8 one document now, I think it was something
9 about ATSC if I remember it right, ATSC-1,
10 that describes very clearly unencrypted
11 digital broadcast.

12 Q. Why do you say for pay TV
13 programs it is more likely to be encrypted?

14 A. That's just based on my general
15 understanding and experience, that if it is
16 paid television, my understanding is that
17 there was a market-based motivation to make
18 it harder for people to access that
19 broadcast if they didn't actually pay their
20 money. So encrypting it would make it
21 harder for unpaying users to access it.

22 Q. Does the encryption also
23 provide extra security for the data that's
24 being transmitted?

25 MR. HEINTZ: Objection to form.

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2 A. I'm not sure what you mean by
3 "security."

4 Q. I mean, I guess maybe I'm
5 saying -- we are talking about restricting
6 access to the data that's incoming,
7 correct?

8 A. I think what I was just
9 describing or implying, so let me say it,
10 if a broadcast is encrypted, then it would
11 require decryption to access, so that would
12 require more effort at least than
13 unencrypted data.

14 Q. I'm handing you what has been
15 previously marked as Exhibit 1049. Do you
16 recognize this document?

17 A. Yes, it is a document that I
18 cited in my declaration.

19 Q. It's a U.S. Patent to James
20 Bonan filed January 29th, 2004; is that
21 right?

22 A. Yes, that's right.

23 Q. If you could take a look at
24 column 5, starting at line 54. It states
25 "Modern digital satellite and broadcast

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2 networks often use CA systems that fully
3 encrypt digital audio and video to make
4 programming inaccessible except to those
5 who have properly subscribed."

6 Do you see that?

7 A. I do.

8 Q. First, what is CA systems --
9 what are CA systems?

10 A. Well, I see at column 2, around
11 line 23 this patent describes the acronym
12 CA to mean conditional access.

13 Q. And is the Bonan patent
14 describing here known broadcast systems
15 around the time of the '815 priority date?

16 MR. HEINTZ: Objection to form.

17 A. I don't recall the details
18 enough to be able to characterize it
19 generally.

20 Q. Well, Exhibit 1049 was filed
21 January 29th, 2004. Do you see that?

22 A. Yes, that's right.

23 Q. You understand the 2004
24 timeframe was around the time the '815
25 patent was filed?

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2 A. Well, my understanding that the
3 '815 patent itself was filed in 2020.

4 Q. Okay. But as far as the
5 priority date, do you understand it is
6 earlier, at least our contention is that it
7 is earlier?

8 A. My understanding is that there
9 is a dispute as to what the priority date
10 is, but I think I understand that the
11 patent owner believes that the priority
12 date is somewhere in the 2004 or so
13 timeframe.

14 Q. So in light of the disclosure
15 in Bonan in column 5 that we were just
16 discussing, is that document describing
17 known broadcast systems around the time of
18 the '815 priority date?

19 MR. HEINTZ: Objection to form.

20 A. What I can tell you about this
21 sentence that you read is that it tells me
22 as I'm reading this -- actually, let me
23 just back up a little bit.

24 I think you started reading at
25 line 54; is that right? If we look at that

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2 paragraph as well as the one before it --

3 Q. Is this in answer to my
4 question?

5 A. Yes, this is a direct answer.
6 Sorry, yeah.

7 Q. I just couldn't tell.

8 A. The answer to your question is
9 this does describe, at least in this little
10 bit that I'm reading, some digital,
11 satellite and broadcast, and it describes
12 in the sentence that you read that they
13 often use systems that fully encrypt. So
14 that tells me as a reader that they don't
15 always encrypt, sometimes they don't, and
16 if I look at the paragraph before starting
17 at around line 46 it says "By allowing
18 simultaneous transmission of in-the-clear
19 and encrypted signals, encryption can be
20 required of broadcasters and receiving
21 equipment, by regulatory authorities (or
22 legislation) on a date certain, without
23 requiring cessation of in-the-clear
24 transmissions on the same date."

25 This just tells me as I'm

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2 reading this at the moment that clearly --
3 this disclosure clearly understands that
4 there were in-the-clear unencrypted signals
5 that were well known as well as encrypted.

6 Q. Do you also understand at the
7 time in 2004 that systems were moving away
8 from in-the-clear transmissions and moving
9 towards wider use of encryption?

10 A. I didn't study for this
11 analysis the precise timeline of how things
12 shifted. I do know that ATSC-1 article
13 which I cited I think was in a similar
14 timeframe. It was very clear that that
15 described in-the-clear unencrypted
16 transmissions and it described that while
17 there was some discussion about having some
18 requirement that was not even about
19 encrypting transmissions, it was about some
20 later use of signals that in some cases
21 would require encryption, that legislation
22 never was passed.

23 So at least in that timeframe
24 the answer is -- at least based on that
25 document, I did not see there being

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2 required encryption of digital broadcasts.
3 I am aware that much later, now, for
4 example, many digital broadcasts are
5 encrypted. So clearly between then and now
6 there was less and now there is more. So
7 yes, I guess I could say that over a broad
8 timeframe there has been -- it seems likely
9 there has been an increase in digital
10 broadcasts, but, again, I didn't study how
11 much and when that was.

12 Actually, even as I say that,
13 I'm still not even sure that's -- I
14 shouldn't make any characterization of how
15 much there was. I'm aware that there is
16 some now. I'm also aware that there is
17 quite a lot of unencrypted broadcasts now
18 as well.

19 Q. In that answer you referred to
20 "that document." Were you referring to
21 Exhibit 1050 in your declaration relating
22 to the ATSC-1 digital TV broadcasts?

23 A. Yes, I believe that's the one.

24 Q. So if I understand your
25 testimony, around the time of 2004, January

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2 29th, 2004, your understanding is that some
3 information was encrypted, some was not; is
4 that fair? Digital broadcast information.

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

6 Q. So you don't agree that often
7 digital video information was encrypted
8 during the 2004 timeframe?

9 MR. HEINTZ: Objection, form.

10 A. What I said earlier today, and
11 I think I've said in the past, that is my
12 understanding that at least digital pay TV
13 broadcasts were typically encrypted. I
14 don't have any reason to believe that's
15 true of other -- I haven't seen evidence of
16 that being true for other kinds of digital
17 broadcasts. As I've said, I'm aware of
18 quite a bit of other digital broadcasts
19 that are not encrypted.

20 Q. Do you agree that in the 2004
21 timeframe encryption was a process
22 typically applied to data before
23 transmission to a receiving device?

24 MR. HEINTZ: Objection to form.

25 A. I think what I've said is that

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2 when digital data is encrypted, it would
3 typically be encrypted before transmission.

4 Q. Would one of skill in the art
5 understand that as of 2004 wireless
6 cellular systems could receive encrypted
7 digital video?

8 A. I think in that timeframe there
9 were wireless cellular systems that could
10 receive digital content. If you can
11 receive digital content then you can
12 receive any kind of digital content,
13 including encrypted video.

14 Q. Would one of skill in the art
15 understand that as of 2004 a wifi modem
16 could receive digital encrypted video?

17 A. My answer would be the same,
18 that my understanding that a wifi -- sorry,
19 can you repeat the question? I want to
20 make sure I get the term right.

21 Q. Would one of skill in the art
22 understand that as of 2004 a wifi modem
23 could receive digital encrypted video?

24 A. So, similarly, in that
25 timeframe my understanding is that a

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2 wireless modem could receive digital data
3 and it would not be restricted to what kind
4 of digital data it could receive, so that
5 would include encrypted video.

6 Q. If you could turn to the '815
7 patent and column 2, line 52.

8 A. Okay.

9 Q. Does the '815 patent disclose a
10 hierarchical data structure and
11 user-dedicated folders?

12 A. Can you repeat the question,
13 please?

14 Q. Sure. Does the '815 patent
15 disclose a hierarchical data structure and
16 user-dedicated folders?

17 A. Well, the '815 patent I believe
18 does disclose hierarchical data structures.
19 I'm not sure what you mean by
20 user-dedicated folders. I don't recall
21 using that specific term.

22 Q. Like in, for example, in
23 Figures 6 and 7.

24 A. So Figures 6 and 7 display user
25 interfaces with menu display tags. Figure

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2 6 shows a menu display tag labeled
3 "mother." Figure 7 shows a menu display
4 tag labeled "father." And they are
5 described, I'm looking at column 6, lines
6 19 through 40, and it describes that, this
7 is user-defined information, and it
8 describes the mother tag as being for user
9 number 1, and it describes father as being
10 for user number 2. So I think certainly
11 the '815 patent describes those things.

12 Q. The '815, according to your
13 understanding, further describes a
14 plurality of users where they can use
15 playlists that include some of the same
16 videos stored on a data storage medium
17 without interfering with each other?

18 MR. HEINTZ: Objection to form.

19 A. So I know that the '815 patent
20 describes multiple user profiles. If you
21 are referring to a specific disclosure of
22 multiple users, I'm not recalling that now.

23 Q. I will just point you to column
24 2, starting at line 63. I will also
25 restate my question so you have it in your

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2 mind.

3 According to your
4 understanding, does the '815 patent
5 describe a plurality of users where they
6 can use playlists that include some of the
7 same videos stored on a data storage medium
8 without interfering with each other?

9 MR. HEINTZ: Sorry, Rob, what
10 line are you directing him toward?

11 MR. PLUTA: Column 2, line 63,
12 et seq.

13 MR. HEINTZ: Objection to form.

14 A. So I agree the '815 patent
15 describes the possibility of having a
16 plurality of users sharing a single
17 recording medium, and I agree that it
18 describes the use of arbitrary playlists,
19 but I don't specifically see it disclosing
20 that those different users can use those
21 playlists without interfering with each
22 other.

23 Q. Let's go back to what we were
24 discussing a little earlier at column 6
25 related to Figure 6, perhaps at line 25 it

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2 says "The 'mother' can use the menu display
3 tag for mother 601 as a folder dedicated to
4 herself, and freely register and delete
5 data to be reproduced," and there is a
6 similar disclosure with respect to the
7 father.

8 A. I see those.

9 Q. Does that suggest to you that
10 they can each use their respective
11 information while not interfering with each
12 other?

13 MR. HEINTZ: Objection to form.

14 A. No, I don't see any disclosure
15 of the concept of different users not
16 interfering with each other. It describes
17 separately, for example, in the case of
18 mother, that the mother has the ability to
19 do some things, for example, register and
20 delete data to be reproduced.

21 Q. And staying in that section on
22 Figure 6, the structure allows a user to
23 select arbitrary playlists or reproduction
24 ranges and manage each user's audiovisual
25 data; is that fair?

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2 A. Can you repeat the question,
3 please?

4 Q. The section relating to Figure
5 6, the structure described allows a user to
6 select arbitrary playlists for reproduction
7 ranges and manage each user's audiovisual
8 data?

9 A. Well, I don't see any
10 description here of managing each user's
11 audiovisual data.

12 Q. So user 1's ability to register
13 and delete data doesn't connote to you
14 management of data?

15 A. Sure, I think registering and
16 deleting data is a form of management.

17 Q. Take a look at paragraph 95 of
18 your declaration, Exhibit 1003.

19 MR. HEINTZ: Did you say
20 paragraph or page?

21 MR. PLUTA: Paragraph 95. I
22 might have said page.

23 MR. HEINTZ: Just for the
24 record, I will note that I checked the
25 PTAB site, and the Exhibit 1003 on the

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2 site and as filed is signed by
3 Dr. Bederson. I don't know what was
4 going on.

5 MR. PLUTA: I didn't doubt it.

6 MR. HEINTZ: Just keeping the
7 record straight. I don't know what
8 happened either.

9 A. Okay.

10 Q. About midway down, well, the
11 second sentence of that paragraph you say
12 "While the three-level structures of
13 Exhibit 3 may enable this functionality and
14 make it obvious," I assume you meant by
15 that, "this 'no deletion' functionality is
16 not inherent."

17 Do you see that?

18 A. I do.

19 Q. We are talking about Term 2 in
20 your declaration, right, which is upon the
21 one video being removed term?

22 A. That's right.

23 Q. Is it still your opinion that
24 this no deletion functionality is not
25 inherent in the '815 patent?

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2 A. Yes, it still is my opinion.

3 Q. The next sentence you state
4 "Whether to configure a system to allow
5 video information to remain in other groups
6 when it is deleted from one group is a
7 design choice."

8 Is that still your opinion?

9 A. Yes, it is.

10 Q. Would you agree that a person
11 of ordinary skill in the art would have
12 recognized that design choice at the time
13 of the filing of the '815 patent?

14 A. I think they probably would
15 have.

16 Q. Would a person of ordinary
17 skill in the art recognize that as a design
18 choice in the 2004 timeframe?

19 A. Yes, I think they probably
20 would have.

21 Q. I think you discuss Term 2 in
22 paragraphs 95 and 96 of your declaration;
23 is that right?

24 A. In this context of my analysis
25 of written description, yes, that's right.

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2 Q. So do paragraphs 95 and 96
3 include the entirety of your opinions as to
4 why Term 2 has no written description
5 support?

6 A. I think paragraphs 95 and 96
7 clearly are the focus of my analysis. My
8 opinion is in my entire report. I can't
9 confirm that I don't have any relevant
10 comments or opinion about this anywhere
11 else in my report.

12 Q. Well, if you had any other
13 arguments for why there is no written
14 description of Term 2, you would have
15 probably put them in this section; is that
16 fair?

17 A. As I said, clearly this section
18 is where I focused my analysis of the
19 written description for Term 2.

20 Q. I guess for housekeeping, I
21 will ask the same question with respect to
22 Term 1. Term 1 is the encryption term; is
23 that fair?

24 A. Sure. We can talk about Term 1
25 as the encryption term.

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2 Q. And your opinion with respect
3 to Term 1 is in paragraphs 86 through 94;
4 is that correct?

5 A. That's my primary analysis of
6 Term 1 for written description, yes.

7 Q. Let's take a look at paragraphs
8 97 and 98, which is Term 3, which is the
9 user profile term; is that fair?

10 A. Sure, we can call it user
11 profile term.

12 Q. Similarly, do these paragraphs
13 include the entirety of your opinions as to
14 why Term 3 has no written description
15 support?

16 A. Paragraphs 97 and 98 are the
17 focus of my analysis of Term 3 for written
18 description support.

19 Q. Is it still your opinion that
20 Term 3 has no written description support?

21 A. Yes, it is.

22 Q. Let's look back at Figures 6
23 and 7 of the '815 patent. As we have been
24 discussing, these figures identify such
25 terms as "mother" and "father" for user

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2 number 1 and user number 2 respectively?

3 A. I think that's right.

4 Q. The specification discusses
5 these figures as the user mother and user
6 father, right?

7 A. I think that's right.

8 Q. And looking in the context of
9 Figures 6 and 7, do these figures provide
10 information associated with a user?

11 A. Well, to be clear, my analysis
12 is related to the claim language, so in
13 claim 1 at least some of the relevant claim
14 language is "wherein at least some of the
15 plurality of video information is
16 associated with a user profile."

17 So the other information in
18 Figure 6, I will say Figure 6 to make this
19 discussion a little bit easier, is video
20 information 402 and 502. So that's the
21 video information. And that needs to be
22 associated with a user profile, and I'm not
23 seeing a user profile, because the only
24 thing that I see that is relevant is the
25 word "mother."

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2 As I have said in my analysis,
3 I believe a user profile would need to
4 include multiple pieces, well, features or
5 characteristics under the words "kinds of
6 information," and I'm not seeing multiple
7 characteristics, I'm only seeing one, which
8 is the name "mother."

9 Q. Okay. Maybe I misunderstood
10 your opinion. But I thought your opinion
11 was a little broader than that.

12 In paragraph 96 you say "There
13 is no written description support for Term
14 3 of claims 16 through 21 in any of the
15 four applications" --

16 A. Just to clarify, that is
17 paragraph 97, I think you may have said 96.

18 Q. Yes, thank you. The second
19 sentence says "'Profile' (let alone the
20 user term 'user profile') does not appear
21 anywhere in the specification of these
22 applications."

23 Is that still your opinion?

24 A. Yes, it is. So what I said was
25 true, and what I said in 97 is also true,

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2 "profile" is not in the specification, and
3 I was giving you my general understanding
4 of what the term "profile" would include,
5 and I was characterizing I believe the
6 construction I offered for the term
7 "profile," or it might have been "user
8 profile."

9 Q. Okay. So let's go back to my
10 original question here. Looking at Figure
11 6, just to simplify things, as you said,
12 does Figure 6 provide information
13 associated with a user?

14 A. So to clarify, you are not
15 asking about the claim language or about
16 the word "profile," you are asking me just
17 whether Figure 6 has information associated
18 with a user?

19 Q. I'm asking about your Term 3,
20 user profile, and I'm looking at parts of
21 the specification. So I'm looking at
22 specifically Figure 6 here asking you that
23 question. And my question was looking at
24 Figure 6, just to simplify things, does
25 Figure 6 provide information associated

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2 with a user?

3 A. I'm sorry for being confused,
4 but you said you are asking me about my
5 opinion about Term 3 and then you asked me
6 a question about user. My opinion about
7 Term 3 is not about user, it is about user
8 profile.

9 Q. Okay. But I'm going to ask
10 those questions too. I want to ask some
11 preceding questions.

12 So going back to my question,
13 looking at Figure 6, does it provide
14 information associated with a user?

15 A. Well, as I have described,
16 Figure 6 describes a user interface where
17 user number 1, the mother, has designated
18 thumbnails with program information, for
19 example, 402 and 502.

20 Q. So user number 1, the
21 information provided associated with user
22 number 1 is, for example, mother; would you
23 agree?

24 A. I think that's right. As I
25 said, user number 1 designates a menu

1 BEDERSON

2 display tag with the label "mother."

3 Q. And that's reference 601,
4 correct?

5 A. That's right.

6 Q. And this menu display tag is a
7 setting associated with the user mother?

8 A. I'm sorry, can you say that
9 again?

10 Q. Yes. The menu display tag, is
11 that a setting associated with the user
12 mother?

13 MR. HEINTZ: Objection, form.

14 A. I don't see it being described
15 as a setting, I just see it described as a
16 menu display tag.

17 Q. In reference numerals 402 and
18 502, those designate thumbnails indicating
19 the program information number 1 and
20 playlist information number 2; is that
21 fair?

22 A. Just to clarify, I think in
23 column 6, line 23 to 25 describes 402 and
24 502 designating thumbnails indicating the
25 program information number 1 and playlist

1 BEDERSON

2 information number 1, not number 2, I think
3 you had said number 2.

4 Q. Oh, I'm sorry. And in that
5 context, in the subsequent sentence in
6 column 6, mother can adjust the settings of
7 the information contained within the
8 folder; is that right?

9 A. Again, I don't see it describe
10 anything about settings, but it says the
11 mother can register and delete data to be
12 reproduced.

13 Q. So registering data and
14 deleting data to be reproduced wouldn't be
15 adjusting the information contained within
16 the folder?

17 A. Maybe I misheard you. I
18 thought you had used the word "settings"
19 earlier.

20 Q. I did.

21 A. Oh, okay. So I do think that
22 user could add or remove program
23 information or playlist information, which
24 would be a form of adjusting the
25 information in that folder.

1 BEDERSON

2 Q. Similarly, in Figure 7,
3 reference numeral 701 in Figure 7
4 designates a menu display tag for father;
5 is that right?

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

7 Q. And reference numerals 502 and
8 503 designate thumbnails indicating the
9 playlist information number 1 and playlist
10 information number 2?

11 A. Yes, that's right.

12 Q. And, similarly, father can
13 adjust the settings of the information
14 contained within that folder?

15 A. So, again, I don't see this
16 describing these as settings, but I do
17 think that the father could add or remove
18 program information or playlist information
19 from this folder.

20 Q. Take a look at paragraph 97 in
21 your declaration. You state halfway down
22 "While the '815 patent discusses terms such
23 as 'mother' and 'father' that appear on the
24 file tabs in Figures 6 and 7 these terms
25 are simply user names and a person of

1 BEDERSON

2 ordinary skill in the art would understand
3 a profile to include more than a user
4 name."

5 Is that still your opinion?

6 A. Yes, it is.

7 Q. In your declaration you
8 interpret the term "user profile" to mean
9 requiring data representing distinctive
10 features and characteristics of a user; is
11 that correct? Paragraph 78.

12 A. So in paragraph 78 I did say
13 that I believe that user profile requires
14 data representing distinctive features and
15 characteristics of a user.

16 Q. In light of your interpretation
17 of that term, do you still maintain your
18 opinion that a user such as mother would
19 not be interpreted by a POSITA as a user
20 profile?

21 A. Yes, that's right.

22 Q. Do you understand that the
23 Board in its institution decision
24 interpreted this term as requiring data
25 representing distinctive features or

1 BEDERSON

2 characteristics of the user?

3 A. I don't remember the precise
4 language, but that sounds about right.

5 Q. Do you agree with the Board's
6 interpretation of that term?

7 A. I do. It is what I had meant,
8 and if my language was not clear, I think
9 that is consistent with what I had
10 written.

11 Q. So the changing of the
12 conjunctive doesn't change your opinion
13 with respect to whether a user such as
14 mother would be interpreted by a person of
15 ordinary skill in the art as a user
16 profile?

17 A. That's right.

18 MR. PLUTA: Why don't we take a
19 break.

20 (Recess taken.)

21 BY MR. PLUTA:

22 Q. I would like to switch gears
23 and look at your opinions as to Horn and
24 Baumgartner now. Grounds 1 through 3 and 6
25 through 8 relate to Horn and Baumgartner;

1 BEDERSON

2 is that right?

3 A. Yes, that's right.

4 Q. I will give you Exhibit 1005
5 which is Horn. Just take a look at column
6 3 starting at line 10 of Horn. In this
7 column Horn discloses a truly open computer
8 system having data structures, input
9 interfaces, displays and operational
10 systems that permits the organization of
11 information as data objects. It also
12 discloses faster archiving, retrieval and
13 viewing of the information.

14 Do you see that?

15 A. I do.

16 Q. And those goals are described
17 by Horn as a long-felt need, correct, in
18 column 3, line 10?

19 A. I don't see it using the term
20 "goal," but it does describe these as a
21 long-felt need in the art.

22 Q. That's probably a bad question.
23 I agree with your characterization.

24 And if you will jump down to
25 line 19, Horn proposes a computer data

1 BEDERSON

2 processing system that has a simple to use
3 data structure and operating mechanism to
4 link information together in a dynamic
5 memory and space-efficient manner.

6 Do you see that?

7 A. I do.

8 Q. Would you agree that's one of
9 the achievements of Horn's invention
10 described in the Horn patent?

11 MR. HEINTZ: Objection to form.

12 A. I didn't specifically analyze
13 Horn to see whether it met those
14 statements, but it may.

15 Q. I'm going to reference your
16 declaration now as well in conjunction with
17 Horn. If you could turn to paragraph 133.
18 Not specifically related to this paragraph,
19 but would you agree that Horn discloses an
20 internet connection?

21 A. Yes, I believe it does.

22 Q. And you agree that Horn does
23 not provide any implementation details for
24 that internet connection?

25 A. I think that's right. A person

1 BEDERSON

2 of skill in the art was very familiar with
3 many different implementation details of
4 internet connections, but I would agree
5 that Horn doesn't specifically describe
6 them.

7 Q. Would you agree that Horn does
8 not disclose receiving digital video
9 information wirelessly?

10 A. Well, Horn does disclose
11 receiving video information, and I think
12 given Horn's general description of an
13 internet connection that a person of skill
14 in the art would understand could certainly
15 include wireless internet connections, I
16 think a person of skill in the art reading
17 Horn would understand that it applies to
18 wireless receiving of video information.

19 Q. Go to paragraph 283 of your
20 declaration. Do you agree that Horn does
21 not expressly disclose receiving digital
22 video information wirelessly?

23 A. Yes, I think that's right. But
24 as I said, a person of skill in the art
25 would have been abundantly familiar with

1 BEDERSON

2 wireless internet connections, as I was
3 myself in this timeframe. I know in this
4 timeframe I had certainly installed,
5 configured and recommended specific
6 wireless connections, setups and hardware.

7 Q. Take a look at column 12, line
8 5, "The e-mail domain is linked through a
9 network through the communication of files,
10 music and images to and from a network
11 link, e.g. the Internet."

12 Do you see that?

13 A. I see that.

14 Q. And you would agree that those
15 three lines do not disclose receiving
16 video, correct?

17 A. Those three lines don't, but
18 the next paragraph describing the inventive
19 system does.

20 Q. In the form of movies, correct?

21 A. That's right.

22 Q. Does the next paragraph
23 describe receiving those movies via the
24 internet?

25 A. I think a person of skill in

1 BEDERSON

2 the --

3 Q. My question was does that next
4 paragraph describe receiving the movies via
5 the internet?

6 MR. HEINTZ: I'm going to
7 object. I will instruct the witness to
8 complete his answer that was
9 interrupted, and then you can answer
10 the next question from Mr. Pluta.

11 A. So I believe a person of skill
12 in the art would understand, this next
13 paragraph, column 12, lines 8 through 18,
14 which expressly describe the inventive
15 system to include receiving movies.

16 Q. But you would agree that Horn
17 does not expressly disclose receiving
18 movies via the internet; is that right?

19 A. It doesn't use that language,
20 but this paragraph is describing movies as
21 part of the inventive system, and the
22 inventive system includes the receipt of
23 media. So I agree it doesn't use that
24 language, but I think it is very clear to a
25 POSITA reading this that it describes

1 BEDERSON

2 receiving movies over the internet.

3 Q. The paragraph you just read
4 from starting at line 9 talks about
5 organizing all types of text and image
6 information; is that right?

7 A. This paragraph does describe
8 the MFS in part as being for organizing all
9 types of text, and it goes on, other media.
10 But this is also, again, describing the
11 inventive system, and this is part of the
12 section of the patent describing Figure 1,
13 and Figure 1, MFS is the entire section
14 outlined in a dashed box, and that is
15 connected by a network to 114. So I think
16 that when a person of skill reads this,
17 even though I agree it describes the
18 organizing of information, it is the
19 inventive system where the MFS receives
20 that information over the internet.

21 Q. Let's take a look further at
22 your paragraph 283. You state "A POSITA
23 would have understood that a LAN is often
24 implemented as a wireless LAN and a POSITA
25 would have found it obvious to implement

1 BEDERSON

2 Horn's LAN with a wireless LAN because they
3 were often cheaper and easier to install
4 than a wired LAN due to elimination of the
5 need to run wires to all of the endpoint
6 computers in the network. Additionally,
7 the wireless LANs can be more convenient
8 for users."

9 Did I read that correctly?

10 A. Yes, you did.

11 Q. And those are still your
12 opinions today?

13 A. Yes.

14 Q. Let's take a look at each of
15 those.

16 In your declaration, when you
17 state "A POSITA would have found it obvious
18 to implement Horn's LAN with a wireless LAN
19 because they were often cheaper," you don't
20 cite any evidence to support that claim, do
21 you?

22 A. No, I don't. I base that on my
23 experience and knowledge, and that includes
24 the cost of running wires, often requiring
25 tearing out walls and doing significant

1 BEDERSON

2 construction.

3 Q. When making that statement in
4 your declaration, were you considering it
5 from the perspective of a person of
6 ordinary skill in the art in December of
7 2004?

8 A. Yes, I was. So, for example, I
9 had looked at my e-mail and found a 2004
10 e-mail from a non-technical friend, so
11 someone that had less experience than a
12 POSITA, asking me for my advice in helping
13 them set up a wireless network in their
14 home, and I pointed them to a device for
15 sale at the time, which was both an access
16 point and a PC plug-in wireless card for a
17 laptop, and in that e-mail I had said that
18 it was \$85, and she thanked me, and as far
19 as I know she purchased it and set it up
20 herself.

21 Q. You didn't utilize that
22 evidence when you were putting in your
23 declaration for this proceeding, did you?

24 MR. HEINTZ: Objection, form.

25 A. No, I did not, because I didn't

1 BEDERSON

2 need to, because I was very familiar with
3 both wireless LANs, setting them up, what
4 POSITAs would be familiar with, and while I
5 did find a particular price for a
6 particular device, in my mind that still is
7 tiny compared to the cost of running wires
8 through walls, which is often how wired
9 networks would be set up, and the cost is
10 only one part of my analysis. So, again, I
11 didn't feel like, while that evidence is
12 true, I was aware of it, I didn't feel it
13 was necessary to support my opinion.

14 Q. And you, again, you were
15 talking about easier to install, in
16 paragraph 283, again, you cite no evidence
17 to support your opinion that wireless LAN
18 was easier to install than LAN; is that
19 right?

20 A. That's right, for the reasons
21 that I just explained.

22 Another example is I had
23 written a paper, I can't remember if it was
24 2003 or 2004 -- actually, I can tell you, I
25 can look it up, on technology probes. My

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1
2 CV is in the back of my declaration. Here
3 it is, so on page 270, as described on the
4 bottom of Exhibit 1003, item 22 is a paper
5 that I am a co-author on published in 2003
6 titled "Technology Probes: Inspiring Design
7 for and with Families." I happen to know
8 that this is my most cited paper of
9 all-time. I think it has almost 2,000
10 citations and has been downloaded about
11 12,000 times.

12 That describes setting up for
13 use in a family environment, we were doing
14 some research with setting up computer
15 systems in families to help them
16 communicate, and we set up a wireless
17 network in their house with some readily
18 available retail wireless network device.
19 So I recall one of the reasons we chose
20 that was because it was easier and more
21 convenient. We didn't have to run wires.
22 We didn't have to make any permanent
23 modifications to the house. We just bought
24 a couple of small devices and plugged them
25 in.

1 BEDERSON

2 So, again, I didn't cite that
3 because this was completely common
4 knowledge to a POSITA using readily
5 available, inexpensive, retail,
6 off-the-shelf, commercial off-the-shelf
7 devices.

8 Q. In 2004 what was the maximum
9 speed of a wireless LAN?

10 A. I don't recall.

11 Q. Does 54 megabytes per second
12 sound about right?

13 A. I really didn't analyze it for
14 that, and I think at least the way you
15 framed your question it would depend
16 entirely on which kind of wireless network
17 you are using. There may well have been
18 research or more advanced wireless networks
19 that were significantly faster. I didn't
20 analyze that for this.

21 Q. In the description you
22 described in your last answer setting up
23 that home wireless network, what was the
24 speed of that wireless LAN in 2003?

25 A. I do not recall.

1 BEDERSON

2 Q. Do you know in 2004 whether
3 real-world wireless LAN speeds were lower
4 or higher than the theoretical maximums?

5 A. Than the theoretical maximums
6 of what?

7 Q. Whatever the advertised speed
8 is of the product at the time.

9 A. I think most networks in
10 practice run a little bit slower than the
11 theoretical maximum of that network.

12 Q. Why?

13 A. It is just the nature of the
14 technology. There can be various
15 interference or loss. It is true of wired
16 networks too. There can be overhead.

17 Q. And in 2004 do you know what
18 the maximum speed of a wired LAN was?

19 A. I do not know.

20 Q. Would a person of ordinary
21 skill in the art in December of 2004
22 understand the speed of wireless
23 communications was much slower than that of
24 wired LAN?

25 MR. HEINTZ: Objection to form.

1 BEDERSON

2 A. I think it entirely depends on
3 which wireless and which wired network that
4 is.

5 Q. What about in the context of
6 home use, would wired LAN be faster than
7 wireless LAN?

8 MR. HEINTZ: Objection, form.

9 A. I think it entirely depends.
10 For example, you might have a wired LAN
11 which was dial-up modem, which would be
12 relatively slow, and you might have a
13 wireless -- you might have a wireless LAN
14 within a subset of that LAN which was quite
15 a bit faster than that dial-up modem
16 connection. So it really just depends.

17 Q. Were dial-up modems still
18 prevalent in December of 2004?

19 A. Again, I didn't analyze how
20 many of them there were at that point. I
21 know my computer science department
22 maintained a dial-up modem bank for a very
23 long time. It was very convenient and
24 reliable, especially when faculty were
25 traveling, for example, and could not

1 BEDERSON

2 necessarily rely on some other available
3 network.

4 So, again, I didn't analyze it,
5 but I do recall them being available for
6 quite a while after they became less
7 common. They did not disappear.

8 Q. Would a person of ordinary
9 skill in the art in December 2004 have
10 understood the bandwidth of wireless
11 communications to be much slower than that
12 of wired LAN?

13 A. My answers for bandwidth would
14 be the same for speed.

15 Q. In 2004 was the reliability of
16 wireless LAN equivalent to that of wired
17 LAN?

18 MR. HEINTZ: Objection, form.

19 A. That's not something I
20 specifically analyzed for this report.

21 Q. If you had a computer system
22 whose goal is to permit faster archiving,
23 retrieval and viewing of information, would
24 it be better to have the data transferred
25 at higher speeds or lower speeds?

1 BEDERSON

2 A. If your goal was faster
3 communication, then I would think faster
4 communication speeds probably would help
5 you address that goal more readily. I will
6 note there is nothing about any speed
7 requirement in the claims of the '815
8 patent though.

9 Q. In Horn's system, Exhibit 1005,
10 does Horn store user data?

11 A. Yes, I believe it does.

12 Q. Does Horn's system host
13 websites?

14 A. I don't recall if it does.

15 Q. Just take a look at column 5,
16 line 47, and the subsequent sentences.

17 A. Okay.

18 (Witness perusing document.)

19 A. Okay, I see that, and I do see
20 that Horn discloses hosting internet pages.

21 Q. So in 2004, in a system such as
22 Horn's, would data security be important to
23 one of skill in the art?

24 A. Well, I think in 2004, data
25 security was certainly less important, less

1 BEDERSON

2 top of mind than it is today. But I think
3 a person of skill in the art would at least
4 have some awareness of data security.

5 Q. In 2004 were there any
6 differences in the security vulnerabilities
7 between wireless LAN and wired LAN?

8 A. That's not something I studied
9 for this report. I don't have an opinion
10 about that.

11 Q. Let's take a look at paragraph
12 286 through 288. This is your analysis of
13 claim element 16b I believe. Are you at
14 paragraph 286?

15 A. Okay.

16 Q. In your declaration as a whole,
17 do you set forth an opinion that Horn
18 discloses a user profile?

19 A. Yes, I do. For example, in
20 paragraph 146, second sentence, I say that
21 "Horn discloses that at least some of the
22 plurality of information is associated with
23 a user profile," and I then go on to
24 explain it.

25 Q. So your citations of Horn

1 BEDERSON

2 immediately below that is your contention
3 of what the user profile is in Horn?

4 A. That's certainly what I point
5 to in this paragraph. There may be others.
6 I also go on to show that Baumgartner also
7 discloses a user profile.

8 Q. Right. I just wanted to focus
9 on what you are saying, if anything, is the
10 user profile in Horn. So paragraph 146,
11 and anywhere else?

12 A. I would have to look at my
13 other portions of analysis, but it looks
14 like that's what I cite to in Horn for at
15 least this limitation regarding user
16 profile.

17 Q. Do you set forth an opinion in
18 your declaration that Horn discloses
19 multiple user profiles?

20 A. I don't recall doing so, but it
21 may be in here, I just don't remember.

22 Q. In paragraph 288 you contend
23 that Baumgartner discloses an embodiment in
24 which a user selects his or her profile
25 from among a plurality of profiles by

1 BEDERSON

2 pressing a button assigned to them; is that
3 right?

4 A. I see that.

5 Q. You can see, though, that
6 Baumgartner does not provide additional
7 detail as to how to implement such user
8 profile buttons?

9 A. That's right. As I go on to
10 say in that same sentence, buttons and
11 graphical user interfaces were extremely
12 well known.

13 Q. I'm going to give you
14 Baumgartner, Exhibit 1016, just so you have
15 it. So kind of continuing on with
16 paragraph 288, back to Horn, Horn's
17 workspace is shown in Figure 26; is that
18 correct?

19 A. That's right.

20 Q. And Horn discloses one
21 workspace, is that right, Figure 26?

22 MR. HEINTZ: Objection to form.

23 A. Well, Horn has quite a lengthy
24 disclosure, including 37 figures, many of
25 which disclose aspects of the workspace,

1 BEDERSON

2 including Figure 26, but also several
3 others. I don't recall if those are
4 reflecting different variations of a single
5 workspace or if they may be disclosing
6 different workspaces.

7 Q. So they could be part of the
8 same workspace or they could be different?

9 A. I just don't recall right now.

10 Q. The workspace as characterized
11 by Figure 26 in column 19 makes visible
12 certain information in four separate panes.
13 Is that a fair characterization of Horn?

14 A. I think that's right. There is
15 four main panes here.

16 Q. And in your opinion in
17 paragraph 288 you rely on modifications to
18 panes 2601 and 2602; is that right?

19 A. That's right, specifically for
20 supporting multiple user profiles.

21 Q. And those modifications would
22 include, as you wrote, including soft
23 buttons labeled with user names for
24 selecting user profiles in the collections
25 pane 2602 and/or the folder pane 2601?

1 BEDERSON

2 A. That's right.

3 Q. So basically you are proposing
4 adding user names for selecting profiles to
5 Horn's workspace?

6 A. That's right.

7 Q. And you would agree that
8 neither Horn nor Baumgartner provide any
9 detail as to how to implement those
10 modifications?

11 A. Well, to be clear, I think they
12 both are describing in quite a bit of
13 detail graphical user interfaces using
14 completely standard components that a
15 person of skill in the art would be
16 abundantly familiar with such as panes,
17 tabs, menus, hierarchies, thumbnails,
18 folders, and so on.

19 As I described, they both
20 describe user profiles. Baumgartner
21 describes multiple user profiles. So this
22 modification is really a tweak to a
23 particular user interface, that is which
24 content goes in which location, but I
25 agree, this was a modification, this was

1 BEDERSON

2 not relying on an existing description of
3 that particular user interface that I'm
4 describing.

5 Q. Okay. With respect to claim
6 element 16b, that opinion is expressed in
7 paragraphs 286 through 288; is that right?
8 I should include, you also refer back to
9 Section XI.A as well.

10 A. That looks right.

11 Q. So do paragraphs 286 through
12 288 and the citations therein set forth the
13 entirety of your opinions as to claim 16b
14 for ground 6?

15 A. That's certainly the focus of
16 my description of 16b, but really my entire
17 report is relevant because it describes my
18 understanding of various terms, of claims,
19 of the Horn and Baumgartner art more
20 generally. So really, again, my entire
21 declaration is relevant, but the focus of
22 my analysis of claim limitation 16b for
23 this ground is in the portions you have
24 described.

25 Q. If you could take a look at

1 BEDERSON

2 paragraph 296, which relates to claim
3 element 16d.

4 A. Okay.

5 Q. This is the claim element
6 receiving a selection of the first user
7 profile, and your citation there is Section
8 XI.B.3. Can you point me to that section
9 in your report? I couldn't find it.

10 A. I also don't see that specific
11 citation, so it is clearly a typo. I'm not
12 100 percent sure what I was intending to
13 refer to, but it looks like it may have
14 been just the previous section around
15 limitation 16c, which includes selecting a
16 first user profile from a plurality of user
17 profiles.

18 Q. You are talking about
19 paragraphs 289 to 295?

20 A. Yes.

21 Q. Let's take a look at paragraph
22 297, which is your opinion with respect to
23 16e I believe. You contend that the
24 Horn/Baumgartner combination renders this
25 limitation obvious; is that right?

1 BEDERSON

2 A. That's right.

3 Q. And does paragraph 297 and the
4 citations therein set forth your opinions
5 as to why claim 16e for ground 6 is met by
6 Horn and Baumgartner?

7 A. Yes, similarly to my other
8 answers, this certainly is my primary
9 analysis of this, but the rest of my report
10 is relevant.

11 Q. I understand that. But what
12 I'm trying to get at is if there was some
13 salient citation from Horn and Baumgartner
14 relative to the 16e you probably would have
15 put it here, wouldn't you?

16 A. I probably would have, but,
17 again, I describe the combination in quite
18 a lot of detail. I would certainly want to
19 look at the other sections in my analysis
20 to see if there is anything else that might
21 be relevant. For example, I have a long
22 section describing the motivation to
23 combine Horn and Baumgartner, and that may
24 well have additional relevant information.

25 Q. Let's take a look at the next

1 BEDERSON

2 section, paragraph 298. Actually, let me
3 go back to 297, I'm sorry.

4 Does Horn expressly disclose
5 displaying in response to a selection a
6 second user interface?

7 A. Yes, I think it does. For
8 example, Figure 26 that I cite to here, and
9 I have been using, and cited to elsewhere,
10 in this annotated version it shows that in
11 the first area that I have annotated in
12 red, there is a number of folders, and if
13 you select one of those, then the second
14 area displays content relevant, or a user
15 interface associated with the folder you
16 clicked on, and if you click on a different
17 folder then a second user interface will be
18 displayed in a second area showing content
19 associated with that second folder.

20 Q. Okay. So just to take that
21 example, you point to the green, I can't
22 really read it, but something like "today"
23 or --

24 A. It is the one labeled "second
25 character."

1 BEDERSON

2 Q. So if you would click on that,
3 information would show up in the screen to
4 the right and you are saying that is the
5 first interface?

6 A. Right.

7 Q. Okay. And then if you click on
8 the first character, information then would
9 show up in the pane to the right and that
10 would be the second user interface?

11 A. That's right.

12 Q. Paragraph 298, this is your
13 opinion with respect to claim element 16f,
14 in the context of limitation 16f is it your
15 opinion that the first group of video
16 information is associated with the first
17 user profile?

18 MR. HEINTZ: Objection, form.

19 A. So in paragraph 298 I explain
20 my analysis which shows -- explains the
21 Horn/Baumgartner combination that renders
22 this limitation obvious, and in that
23 combination then the answer to your
24 question is yes in that.

25 Q. And just to be clear, your

1 BEDERSON

2 opinion is that in Horn's Figure 26, which
3 is conveniently just above, content pane
4 2603 and the metadata pane 2604 together
5 are the claimed second user interface?

6 A. That's right.

7 Q. And in the second user
8 interface, is it your opinion that user
9 selectable content corresponding to the
10 user profile that's selected by the user is
11 displayed in the content pane 2603 and the
12 metadata pane 2604?

13 A. I think so, but that was a long
14 question, so I'm going to have to ask you
15 to repeat it.

16 Q. I was reading from your
17 declaration.

18 A. Point me to my declaration and
19 then it will be easier for me to answer.

20 Q. I will repeat the question.

21 In paragraph 297, that's what
22 I'm referring to, so I want to clarify that
23 it's your opinion that user selectable
24 content corresponding to the user profile
25 that was selected by the user is displayed

1 BEDERSON

2 in the content pane 2603 and the metadata
3 pane 2604?

4 A. That's right.

5 Q. Going forward to paragraph 298,
6 for 16f you state that a POSITA would have
7 found it obvious to include the user name
8 in the metadata pane 2604 as disclosed in
9 Horn at column 15, lines 55 through 57. Is
10 that your opinion?

11 A. Yes.

12 Q. So is it possible in your
13 combination of Horn and Baumgartner that we
14 have been discussing that user selectable
15 content displayed in the content pane 2603
16 could be associated with multiple user
17 profiles?

18 MR. HEINTZ: Objection to form.

19 A. So in my combination that I
20 describe, when you select a particular user
21 or user profile on the left, then
22 information associated with that user
23 profile is displayed on the right. So that
24 would include, for example, videos
25 associated with that user.

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2 So in the example that I'm
3 describing, this combination meets this set
4 of limitations, because if you click on one
5 user profile, you would see information
6 associated -- video information associated
7 with that user profile. If you clicked on
8 a different user profile, you would see
9 information associated with that second
10 user profile.

11 Q. And could some of the same
12 information be associated with both the
13 user profiles you have just described?

14 A. Well, it would meet the claim
15 limitation, because at least some of the
16 times that would not be the case. So I
17 don't think I formed a specific opinion
18 about whether it would be possible for one
19 video information element to be associated
20 with multiple user profiles, although they
21 may be.

22 Q. Well, for example, just for
23 ease of reference, looking at Figure 26 on
24 the top of page 169, let's just assume, I
25 don't know if there is any detail on this,

1 BEDERSON

2 but let's just assume first character, you
3 have clicked on it and it shows the first
4 user interface to the right, okay?

5 A. Uh-huh.

6 Q. And whatever that is, a picture
7 on the upper left. Do you see where I am?

8 A. Yes, I see the upper left-most
9 thumbnail in the second area.

10 Q. And you would agree that photo
11 or thumbnail is associated with the first
12 character user?

13 A. Yes, in this scenario, I think
14 that's right.

15 Q. So is it possible in the
16 Horn/Baumgartner combination that then if
17 we click on the second character and it
18 shows a second user interface, that that
19 same thumbnail would be in the second
20 user's profile?

21 A. So I think this is just a
22 specific example of the same question you
23 asked a minute ago, so my answer is the
24 same, which is I think this combination
25 meets the claim limitations because, for

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2 the reasons I said, there would be examples
3 where all of the video items in the second
4 area would be associated only with the
5 first character or one user profile, when
6 you clicked on one user profile, and if you
7 clicked on the second user profile you
8 would see information associated only with
9 that second user profile. I didn't analyze
10 this to see whether it would be possible to
11 have the same element appear in two user
12 profiles, at least in this scenario, I'm
13 not thinking of it at the moment, but it
14 may be possible.

15 Q. So if it was possible, let's
16 take an example, the first user, you
17 contend that the metadata pane is part of
18 that user interface, correct?

19 A. That's right.

20 Q. Would the user profile appear
21 in the metadata pane according to your
22 opinion?

23 A. I mean, I have described that
24 metadata pane would include user profile
25 information for the specific video

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2 information item that you clicked on. So I
3 guess if that item were associated with
4 multiple user profiles, then information
5 about both user profiles could be displayed
6 in the metadata. That is fairly common in
7 user interfaces.

8 Q. Let's skip ahead to paragraph
9 301 which relates to claim element 16h. In
10 the context of limitation 16h, is it your
11 opinion that the second group of video
12 information is associated with the second
13 user profile?

14 A. So as I explained in paragraph
15 301, it would have been obvious to display
16 a second group of thumbnails associated
17 with a second user profile when the second
18 profile is selected.

19 Q. And that second group of
20 thumbnails is what corresponds with second
21 group of video information?

22 A. Yes, that's right.

23 MR. PLUTA: Let's take a break.
24 We have been going about an hour or
25 thereabouts.

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2 (Recess taken.)

3 BY MR. PLUTA:

4 Q. If you could take a look at
5 paragraphs 306 to 308 of your declaration.
6 It is your opinions, I believe, with
7 respect to claim element 16j and 16k.

8 A. Yes.

9 Q. You contend for those elements
10 that Horn and Baumgartner combination
11 renders the limitations obvious?

12 A. That's right.

13 Q. And in these paragraphs you
14 cite some sections from Horn, right?

15 A. I do.

16 Q. Do these paragraphs, 306 to
17 308, and those citations contain the
18 entirety of your opinions with respect to
19 claim elements 16j and 16k?

20 A. So similar to some other
21 questions, paragraphs 306 to 308 describe
22 my primary analysis of these limitations,
23 but the rest of my report is relevant,
24 specifically including the motivation to
25 combine section.

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2 Q. But if there was some
3 particular section of Baumgartner that was
4 important to you with respect to 16j and
5 16k you would have probably put it in these
6 paragraphs?

7 A. I probably would have.

8 Q. If you would skip ahead to
9 paragraph 345. Again, you cite some
10 sections there that I had trouble finding,
11 and, again, these aren't like a gotcha
12 question, but could you point me to the
13 reference that supports your analysis for
14 claim 27?

15 A. So I agree that those are
16 typos. I'm not 100 percent sure sitting
17 here today, but it looks like I probably
18 intended to refer to my analysis of claim
19 20 in paragraphs 337 through 339.

20 Q. Let's talk a little bit about
21 Kaplan and Bryant. I'm just going to give
22 you them both. So Kaplan is Exhibit 1014 I
23 believe and Bryant is Exhibit 1015. I will
24 direct you to your declaration at paragraph
25 357 as well.

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2 So you provide, it is my
3 understanding, a section on Kaplan and
4 Bryant's motivation to combine, but for
5 ground 9 you are also now adding the Wong
6 reference; is that right?

7 A. That's right, as well as
8 Candelore.

9 Q. Do you agree that -- well, let
10 me ask, does Kaplan teach multiple user
11 profiles?

12 A. So, first of all, I note that
13 there are some citations that may also be
14 unclear. So I started looking at my
15 analysis of claim 21, starting at paragraph
16 402. So that refers to Section XIV.B.2,
17 but it seems that Section XIV.B starts at
18 paragraph 364, which starts at number 7.
19 So I think there is a chance that all of
20 these citations are off.

21 But I think the intent, again,
22 I'm not 100 percent sure, but I think the
23 intention was that my analysis of claim 21
24 was intended to refer to my analysis of
25 claim 16 in paragraphs 364 through 396.

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2 But since that's a lot of information, if I
3 didn't get it right, I apologize, and it
4 may require some clarification if I didn't
5 say that right.

6 Q. Thank you for that. The
7 pending question was --

8 A. I recognized that as I was
9 trying to answer your question.

10 Q. Understood.

11 A. So I believe your question was
12 whether Kaplan discloses multiple user
13 profiles?

14 Q. Correct, yes.

15 A. My answer is sitting here today
16 I don't recall that it does. I believe I
17 focused on my analysis of Wong to show the
18 disclosure of multiple user profiles.

19 Q. So, similarly, you would
20 agree -- or, well, does Bryant teach
21 multiple user profiles?

22 A. My answer would be the same.

23 Q. Okay. You reference in
24 paragraph 358 Bryant's affective
25 information.

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2 MR. HEINTZ: For the record,
3 that is "affective."

4 A. I see that.

5 Q. What is Bryant's affective
6 information, is that metadata disclosed by
7 Bryant or something else?

8 A. So Bryant describes this in
9 part in paragraphs 32 through 35. In
10 paragraph 33 it says "The affective
11 information and user identifier are types
12 of image metadata, which is a term used for
13 any information relating to an image. So I
14 do think that the affective information is
15 metadata."

16 Then in paragraph 34 it
17 explains some examples of affective
18 information, such as whether an image is
19 classified as a favorite, and I believe it
20 goes on to explain, actually in paragraph
21 31, that favorites can have different
22 levels, for example, in the range of minus
23 10 to plus 10.

24 Q. Let's take a looks at Section
25 16b, paragraphs 369 through 372. You start

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2 off paragraph 371 "To the extent not
3 disclosed by Kaplan/Bryant, Wong discloses
4 displaying a first user interface for a
5 user to select a user profile," etc., etc.

6 Is it your contention that
7 Kaplan discloses a first user interface
8 according to limitation 16b?

9 A. So Kaplan, regarding this
10 issue, works in a way similar to the way I
11 described Horn. So, for example, in
12 Kaplan, Figure 4, which I show at the top
13 of page 210, there are a number of menu --
14 buttons on the left, such as favorites and
15 history, and if you click those menu
16 buttons on the left, such as favorites and
17 history, highlighted in blue, then the
18 interface on the right, highlighted in red,
19 will change and show different items.

20 Q. And where do you -- I see the
21 figure that you pointed me to, but where do
22 you describe that process in your report?

23 A. Well, I think I describe Kaplan
24 multiple places, but, for example, in
25 paragraph 380, I describe the favorites and

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2 history buttons. In the second sentence I
3 say "'Favorites' is a classification for a
4 first group of object such as videos that
5 are represented by thumbnails because they
6 were marked as a favorite of the user."
7 Then I go on to explain the history button
8 that uses a different icon and is
9 associated with a second group of objects,
10 such as videos, that is different from the
11 first group, based on access of those
12 objects by the user.

13 Q. So in your opinion, then, is
14 the blue outlined portion of Kaplan's
15 figure a first user interface according to
16 claim 16?

17 A. So starting in paragraph 371 is
18 where I initially describe my combination.
19 Just now I was answering your question
20 about what Kaplan discloses, and so I do
21 think that Kaplan discloses the thing that
22 I just described, which is a first user
23 interface on the left where a user can
24 select items that, when selected, would
25 result in a second user interface on the

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2 right displaying additional information. I
3 think that Kaplan does disclose that.

4 My analysis in this section,
5 additionally, relies on a combination with
6 Wong, which shows additional user interface
7 details about selecting multiple user
8 profiles that I describe, for example, in
9 paragraph 371 associated with Wong's Figure
10 3 on the next page.

11 Q. Okay. So you are saying Wong's
12 Figure 3 is the first user interface per
13 claim element 16b?

14 A. My analysis is that this
15 combination teaches these elements. It was
16 not providing an engineered final solution,
17 and I was showing you just now multiple
18 examples of, well, in this case Kaplan and
19 Wong, but Bryant shows something similar
20 where one option can be selected that
21 results in a first user interface that
22 shows associated video information
23 associated with that first user interface,
24 and that while I think Kaplan includes
25 information about user profile, my full

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2 analysis includes Wong for further detail
3 about selecting among multiple user
4 profiles.

5 Q. Take a look at paragraph 377
6 and 378. Those are your opinions relating
7 to claim element 16e. I will just ask,
8 again, do paragraphs 377 and 378 and the
9 citations therein set forth your opinions
10 as to claim element 16e for this ground?

11 A. So similarly to my previous
12 answers, these paragraphs describe my
13 primary analysis of these limitations, but
14 they are in the context of the rest of my
15 declaration, certainly at least including
16 an earlier section where I describe the
17 motivation to combine Kaplan, Bryant and
18 Wong.

19 Q. The same process for paragraphs
20 379 through 381, these are your opinions
21 with respect to claim element 16f; is that
22 right?

23 A. Also similarly paragraphs 379
24 through 381 do describe my analysis of 16f
25 and they are in the context of the rest of

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2 my declaration, including the earlier
3 sections describing the motivation to
4 combine Kaplan, Bryant and Wong.

5 Q. But if you wanted to point the
6 board specifically to a section in Kaplan,
7 Bryant and Wong relating to 16f and the
8 requirements thereof, you would have put it
9 in this section; is that fair?

10 A. I certainly intended to
11 describe my analysis here, but, as I said,
12 of this limitation, but it is in the
13 context of the rest of my report.

14 MR. PLUTA: I will pass the
15 witness.

16 MR. HEINTZ: Why don't we take
17 a break, let's say 15 minutes or so,
18 and then I will have some follow-up.

19 (Recess taken.)

20 EXAMINATION BY MR. HEINTZ:

21 Q. Dr. Bederson, I'm going to
22 direct you to your declaration, in
23 particular paragraph 345.

24 A. Okay.

25 Q. Paragraph 345 pertains to claim

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2 27, and in particular to claim limitation
3 27a, which is the preamble of claim 27,
4 correct?

5 A. Yes.

6 Q. So if you look right above
7 paragraph 345 and the header, it reads
8 D. Claim 27. Do you see that?

9 A. Yes.

10 Q. Below D. Claim 27 we see the
11 number 7, and that's the first item below
12 heading D, correct?

13 A. That's right.

14 Q. I think what has happened with
15 some of these paragraph numbers is that for
16 some reason the automatic numbering system
17 worked improperly and instead of what's
18 immediately beneath heading D being number
19 1, it has turned it into a number 7, it is
20 starting at number 7. Do you see that?

21 A. I do.

22 Q. And so normally one would
23 expect to see the number 1 as the first
24 section under subheading D, correct?

25 A. That was what I would have

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2 expected, and that's what my intention was.

3 Q. So there is a numbering issue
4 in this declaration, for some reason some
5 of the numbering of the subheadings start
6 at 7 rather than 1, correct?

7 A. They may start at numbers that
8 are not 1. For example, in this case it
9 starts with 7 when it should start at 1.

10 Q. So I want to first look in
11 paragraph 345, you refer to, as your second
12 cross-reference, Section XII.B.1; is that
13 correct?

14 A. That's right.

15 Q. I think you testified earlier
16 your intent was that would refer to claim
17 20, correct?

18 A. That sounds right.

19 Q. So if we go to claim 20, which
20 is I believe on page 184.

21 A. That's right.

22 Q. This is in Section XII of your
23 declaration, correct? I will represent to
24 you in your table of contents, Section XII
25 begins at page 182.

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2 A. That's right. On page 182 I
3 see Section XII starting with Ground 7.

4 Q. When you get to the top of page
5 184, we have XII.B, and that's the analysis
6 of claim 20, right?

7 A. That's right.

8 Q. The first subheading under
9 XII.B again begins with the number 7 for
10 some reason rather than number 1, correct?

11 A. That's right, and that's an
12 error.

13 Q. We would expect the preamble
14 for claim 20 in Section XII.B to be
15 XII.B.1, not XII.B.7, correct?

16 A. That's right.

17 Q. With that understanding, the
18 cross-reference in paragraph 345 to XII.B.1
19 makes sense, and that was your intent; is
20 that correct?

21 A. That's right. Just to clarify,
22 in paragraph 345, the cross-reference is
23 correct. The error, typographical error,
24 is in the numbering of the section itself,
25 where it is number 7 instead of number 1.

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2 Q. Okay. And, again, referring to
3 paragraph 345, the preamble for claim 27,
4 that preamble refers to claim 21, correct?

5 A. That's right.

6 Q. And then in paragraph 345, the
7 first cross-reference is to Section XI.F,
8 right?

9 A. That's right.

10 Q. And does Section XI.F refer to
11 claim 21, the claim from which claim 27
12 depends? And I will tell you that Section
13 XI begins on 154.

14 A. That's right. So on page 154,
15 that's where Section XI, Ground 6, starts.
16 If we go to page 177, that's where Section
17 F for claim 21 is, so that's now Section
18 XI.F. Then claim 21 preamble in error is
19 labeled Section 7, where, again, that
20 should be Section 1 -- actually, that is
21 fine because the cross-reference is to
22 XI.F. that cross-section is correct, but
23 there is still an error in this heading to
24 paragraph 317 where it is labeled Section 7
25 and it should be Section 1.

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2 Q. This starting with the number 7
3 seems to be some problem that occurs
4 throughout this document for some reason.
5 Does that seem right based on what you are
6 seeing so far?

7 A. Yes, that seems correct;
8 correct in that that is a correct
9 description of the error.

10 Q. We have talked about 345. I
11 want to talk about paragraph 296 now. That
12 is in your declaration on page 167.

13 A. I see that.

14 Q. So this concerns limitation
15 16d, correct?

16 A. That's right.

17 Q. And 296 refers to XI.B.3,
18 correct?

19 A. That's right.

20 Q. So let's go to Section XI,
21 which, again, starts on 154, and then we
22 will try to get to Section XI.B, which I
23 believe starts on page 155; is that
24 correct?

25 A. That's right.

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2 Q. And, again, under the heading
3 XI.B, that is Claim 16, correct?

4 A. That's right.

5 Q. We see the first thing, that
6 the first subheading under B begins with
7 the number 7 rather than the number 1; is
8 that right?

9 A. That's correct.

10 Q. Was it your intent that the
11 analysis for 16pre in subheading B should
12 have begun with the number 1 instead of the
13 number 7?

14 A. Yes, that was my intent. That
15 was a typographical error.

16 Q. Would that also mean that on
17 page 156, the limitation 16a should have
18 been B.2?

19 A. That's right.

20 Q. If we continue in order, would
21 that also mean that the limitation B.3 on
22 page 169 -- I'm sorry, let me rephrase
23 that.

24 On page 161, the analysis for
25 limitation 16d should have been labeled B.3

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2 rather than B.9, that's what's there,
3 right?

4 A. I may have misheard you, so I'm
5 just going to state it again. On page 161,
6 the limitation 16b should have a section
7 number of 3 rather than 9, which would make
8 it XI.B.3, and thus the cross-reference on
9 paragraph 296 to XI.B.3 would then properly
10 refer to this limitation 16b.

11 Q. Thank you, Dr. Bederson.

12 I would like you to take out
13 your copy of the '815 patent which, for the
14 record, is Exhibit 1001. I would like you
15 to take a look at column 6, lines 57
16 through 65. Let me know when you are
17 there.

18 A. Okay.

19 Q. Do you remember some earlier
20 discussion about this passage in response
21 to questions from Mr. Pluta?

22 A. I do.

23 Q. So let me read the first line
24 in this passage, which, again, is column 6,
25 line 57. That first sentence reads "In the

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2 embodiment heretofore described, the case
3 where the digital broadcast is received and
4 digital data is recorded intact has been
5 described."

6 Do you see that?

7 A. I do.

8 Q. Now, "the embodiment heretofore
9 described" is the embodiment of Figure 3,
10 at least as referenced in this passage,
11 correct?

12 MR. PLUTA: I object to form,
13 also leading.

14 MR. HEINTZ: Let me withdraw
15 that.

16 Q. What is your understanding of
17 the words "the embodiment heretofore
18 described" in the passage I just read?

19 A. I believe it is describing the
20 architecture of the system, which is shown
21 in Figure 3.

22 Q. Let me direct your attention to
23 column 5, the passage that starts at line 7
24 and goes through line 46 of column 5.

25 A. Okay.

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2 Q. Do you have an understanding as
3 to what figure this passage refers?

4 A. I believe this also refers to
5 Figure 3.

6 Q. And you testified earlier today
7 that Figure 3 has different inputs on the
8 left-hand side, including the antenna input
9 301, the digital input 3011, the analog
10 video input 3012, and the analog audio
11 input 3013, correct?

12 A. Yes, I see that.

13 Q. If you look at the passage from
14 column 5, line 7 through 46, do you have an
15 understanding as to what of those inputs,
16 if any, the passage is describing?

17 A. I see in that first paragraph
18 in column 5, lines 7 through 26, it refers
19 to all four of those inputs that you just
20 mentioned.

21 Q. And if we look at, for
22 instance, the first part of the passage
23 that refers to the demodulation circuit
24 302, is that referring to the input via
25 301, 3011, 3012 or 3013?

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2 A. That looks like that's
3 referring to the input from 301.

4 Q. Now, the input from 301 in
5 Figure 3 goes into demodulation circuit
6 302, correct?

7 A. That's right.

8 Q. And from there it passes
9 through the separation circuit 330,
10 correct?

11 A. That's right.

12 Q. And then out of separation
13 circuit 330 it may go to either the
14 recording unit signal processing 303 and/or
15 what I will call the multiplexer 307; is
16 that correct?

17 A. Those are two options. I
18 believe it also can go up to the bus 318.

19 Q. And 307 is described as a
20 switchover circuit in column 5, line 35.
21 Do you see that?

22 A. I see that.

23 Q. So in the case where the
24 switchover circuit 307 is in the position
25 shown in Figure 3, that would mean that the

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2 input from the antenna 301 bypasses any
3 recording and goes through to the
4 separation circuit 308 where it is
5 eventually output to a television set?

6 MR. PLUTA: Objection, leading.

7 Q. Is that right?

8 A. That looks like that's at least
9 one way this circuit works.

10 Q. So if the digital broadcast
11 were being input at 301 through the antenna
12 input and then passed through demodulation
13 circuit 302, separation circuit 330,
14 switchover circuit 307, separation circuit
15 308, and then the video went to decoding
16 309 and D/A 310 and was displayed on the TV
17 315, would you expect that video signal to
18 be encrypted or unencrypted when it was
19 received?

20 MR. PLUTA: Objection to form.

21 A. I would expect that to be
22 unencrypted in that situation.

23 Q. Why would that be,
24 Dr. Bederson?

25 A. Well, in this clear straight

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2 pathway, the video signal is in fact
3 displayed on the television, and in fact on
4 an analog television, and that wouldn't be
5 possible if it came in encrypted because
6 there is no decryption route in the pathway
7 we just discussed.

8 Q. You talked earlier in response
9 to one of Mr. Pluta's questions that it is
10 known to encrypt pay television signals,
11 correct?

12 A. That's right. That was known.

13 Q. Is there anything in Figure 3
14 that indicates to you one way or another as
15 to whether the circuit of Figure 3 was
16 intended to receive encrypted pay
17 television signals?

18 A. Well, yes, there is. Based on
19 the analysis that I just described and is
20 in my declaration, it has no way to process
21 encrypted incoming signals in a reasonable
22 way, because it doesn't have a mechanism to
23 decrypt them.

24 Q. What about the decryption
25 circuit 332 in Figure 3?

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2 A. The decryption circuit 332 is
3 only used in the situation where incoming
4 data has been encrypted for the purposes of
5 recording, and at that point it is
6 decrypted.

7 Q. I'm going to hand the witness
8 what has been marked as Exhibit 1050.
9 Dr. Bederson, I will ask you if you
10 recognize Exhibit 1050?

11 A. I do.

12 Q. This is one of the exhibits for
13 which you opined in your declaration,
14 correct?

15 A. That's right.

16 Q. Is this also the document you
17 referred to earlier in response to one of
18 the questions from Mr. Pluta?

19 A. Yes, it is.

20 Q. I will ask you to take a look
21 at page 1, under the heading The Backstory.
22 Do you see that?

23 A. I do.

24 Q. First, let me ask you, what was
25 the publication date of this exhibit?

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2 A. It looks like it was March 5th,
3 2020.

4 Q. Do you have any reason to
5 believe that's not an accurate publication
6 date?

7 A. No, that seems consistent with
8 the document itself.

9 Q. So going back to the heading
10 The Backstory, the second sentence reads
11 "Arguably, this mistake was made with the
12 original ATSC digital service (now
13 retrospectively referred to as ATSC-1)
14 which was standardized in the mid 1990s,
15 then launched as a totally in-the-clear
16 service in the late 1990s and remains so
17 today."

18 Do you see that?

19 A. I do.

20 Q. So let me ask you, what's your
21 understanding of the word "today" at the
22 end of that sentence?

23 A. I believe that refers to the
24 time that this article was written in March
25 2020.

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2 Q. And the part of the sentence
3 that reads "totally in-the-clear service,"
4 what, if anything, is your understanding of
5 that?

6 A. That means not encrypted.

7 Q. So putting that together, what
8 does this sentence tell you as to whether
9 digital TV service under the ATSC standard
10 was encrypted as of March 5th, 2020?

11 A. I think it was not encrypted at
12 least using the ATSC-1 standard.

13 Q. Do you have an understanding as
14 to which broadcasters in the United States
15 were using the ATSC-1 service?

16 MR. PLUTA: Objection, lack of
17 foundation.

18 A. I do not know.

19 Q. When they talk -- when this
20 document talks about -- let me rephrase
21 that.

22 You mentioned earlier in one of
23 your responses to Mr. Pluta that this
24 document was referring to FCC regulations
25 that involved encryption but was not

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2 referring to broadcast; is that correct?

3 A. That's right. The relevant
4 portion of encryption here is only
5 referring to after the unencrypted
6 broadcast data has been received and then
7 in some circumstances might be encrypted
8 when being sent to an HDMI port on a
9 device.

10 Q. Can you give me an example of
11 what this is referring to?

12 A. Sure. You have a receiver, it
13 would receive unencrypted broadcast digital
14 TV data, and then to display that data in
15 this unenforced, you know, unapproved FCC
16 possible considered action, it is described
17 actually in the second -- well, the first
18 full paragraph on page 2, that there were
19 multiple options.

20 One was that the device could
21 output signals to protected outputs such as
22 HDMI ports with HDCP encryption. So, in
23 other words, you have your device, you plug
24 it into a more modern digital HD
25 television, and you would, had this been

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2 enforced, been required to encrypt the data
3 in the small distance from the output of
4 your device into the television. But even
5 that encryption wasn't required because the
6 next clause describes that it was also
7 allowed to output in lower resolution to
8 other digital or analog outputs where it
9 does not describe any encryption
10 requirement.

11 Q. Let me ask you to turn now to
12 what's been previously marked as Exhibit
13 1049. This is the patent you discussed
14 earlier with Mr. Pluta referred to as the
15 Bonan patent.

16 A. Okay.

17 Q. On the first page of that, we
18 see the application was filed on January
19 29th, 2004, correct?

20 A. That's right.

21 Q. And that was before the
22 priority date of the '815 patent, even to
23 the Japanese priority claim to December
24 2004, correct?

25 MR. PLUTA: I object to form,

1 BEDERSON

2 leading.

3 A. That's my understanding based
4 on the front page of the '815 patent.

5 Q. Okay. Mr. Pluta directed you
6 to a passage at column 5 starting at line
7 54. Do you see that?

8 A. I do.

9 Q. And that passage discusses
10 modern digital, satellite and broadcast
11 networks often use CA systems, and it goes
12 on; is that right?

13 A. That's correct.

14 Q. Let me direct your attention to
15 the next passage in the '692 patent
16 starting at column 5, line 61.

17 A. Okay.

18 Q. The first sentence there reads
19 "However, terrestrial broadcasts are not
20 currently scrambling their streams."

21 Do you see that?

22 A. I do.

23 Q. "As terrestrial broadcasters
24 wish to protect their content, they are
25 frustrated by the need to support the

1 BEDERSON

2 legacy TVs that are unable to handle
3 scrambled content."

4 Do you see that?

5 A. I do.

6 Q. Then it says "Transmitting
7 multiple copies of a single program in the
8 clear and encrypted uses too much bandwidth
9 to be a practical solution as described
10 earlier."

11 Do you see that?

12 A. I do.

13 Q. What, if anything, does this
14 passage tell you as to whether terrestrial
15 broadcasters in 2004, when this application
16 was filed, were encrypting their
17 broadcasts?

18 A. This paragraph is describing
19 that terrestrial broadcasters it looks like
20 did not commonly encrypt their broadcasts.

21 Q. When they are discussing
22 terrestrial broadcasts here, do you have an
23 understanding as to what is being referred
24 to?

25 A. I think generally this is

1 BEDERSON

2 broadcasting from the earth rather than,
3 for example, from a satellite.

4 Q. What kind of broadcasts are
5 being discussed in this Bonan patent and in
6 this passage that you just described?

7 A. TV broadcasts.

8 Q. So is it your opinion, then,
9 that in 2004 broadcasters broadcasting from
10 the earth stations television content were
11 doing so in unencrypted form?

12 MR. PLUTA: Objection, form.

13 A. That's my understanding from
14 this disclosure.

15 Q. Do you know how many
16 broadcasters there were in 2004 who were
17 broadcasting television content using
18 terrestrial broadcast methods?

19 A. I don't have a count, but my
20 general understanding is that essentially
21 every city in the United States had
22 multiple broadcasters.

23 Q. In other words, what they are
24 talking about here is the local CBS
25 station, the local NBC station, things like

1 BEDERSON

2 that, correct?

3 MR. PLUTA: I object to form.

4 A. That's my general
5 understanding, of which there would be
6 many.

7 Q. Let's talk about digital
8 satellite pay television broadcasters.
9 Have you ever heard of DISH Network?

10 A. I have.

11 Q. Is that a satellite pay
12 television company that broadcasts
13 encrypted signals?

14 A. That's my understanding.

15 Q. Have you ever heard of DirecTV?

16 A. I have.

17 Q. Is that another example of one
18 of those?

19 A. Yes, it is.

20 Q. How many more of those do you
21 think were in existence and broadcasting
22 satellite signals in 2004?

23 A. There may have been a few
24 others, but I don't think there were many.
25 I'm not aware of others by name.

1 BEDERSON

2 Q. Do you think there is any --
3 well, if you were to compare the number of
4 terrestrial broadcasters broadcasting
5 television signals for TV for free in the
6 clear as compared to the number of pay
7 television satellite broadcasters, which
8 number do you think would be larger?

9 A. My expectation is --

10 MR. PLUTA: Sorry, objection,
11 calls for speculation.

12 A. My expectation, based on what I
13 just said, is that the number of
14 unencrypted terrestrial TV broadcasters
15 would be much larger than the number of
16 encrypted paid satellite TV broadcasters.

17 Q. Dr. Bederson, do you own your
18 own home?

19 A. I do.

20 Q. Did you own your own home in
21 the 2004 timeframe?

22 A. I did.

23 Q. Are you generally aware of what
24 it costs to have an electrician or a
25 handyman come to your house to do work in

1 BEDERSON

2 that timeframe?

3 A. Generally, yes, I did a fair
4 amount of renovation in that timeframe.

5 Q. I think you testified earlier
6 that you had a sense for what it cost to
7 set up a wireless LAN in 2004 and purchase
8 the components for it, correct?

9 A. That's right. I was aware in
10 2004 of a wireless access point and PC
11 wireless card available for \$85.

12 Q. What would have been the
13 relevant cost of having a handyman or an
14 electrician come to your home in 2004 and
15 run wires for a wired LAN as opposed to
16 going out and purchasing the components
17 necessary to have a wireless LAN setup, in
18 other words, which one would have been
19 larger?

20 A. I would expect that running
21 wires would be much more expensive.

22 Q. Let me direct your attention
23 back to your opinion in paragraph 283, I'm
24 sorry, your declaration. I'm going to
25 direct your attention to the last sentence

1 BEDERSON

2 in paragraph 283, which reads

3 "Additionally, wireless LANs can be more
4 convenient for users."

5 Do you see that?

6 A. I do.

7 Q. In which way would a wireless
8 LAN be more convenient for users?

9 A. Well, in a number of ways. I
10 can think of two off the top of my head, or
11 I'm thinking of two right now. One is that
12 the user wouldn't be restricted in using a
13 mobile device such as a laptop only where
14 you can connect a wire to a wired port in a
15 wall. More generally, that gives a user
16 mobility not only in which room they can
17 use a device but also allows them to move
18 within a room and be able to work in the
19 middle of the room, for example, where they
20 may not have ready access to a wired port.

21 Q. Or, for instance, you could
22 move from your desk where the wired port
23 may be and lay down on a bed in the bedroom
24 if you wanted to?

25 A. That's right.

1 BEDERSON

2 Q. Was that concept of user
3 convenience part of your analysis and
4 reasoning in explaining why wireless LANs
5 would have been obvious?

6 A. Yes, it was.

7 Q. I'm going to ask you to go back
8 to the '815 patent, which, again, was
9 Exhibit 1001. Do you recall questions from
10 Mr. Pluta earlier today regarding Figures 6
11 and 7 and a description of those figures at
12 column 6, lines 19 to 40?

13 A. I do.

14 Q. There was particular discussion
15 today I believe regarding the passage at
16 column 6, lines 37 to 40, which reads --
17 I'm sorry, let me rephrase that.

18 There was discussion today
19 about column 6, lines 25 through 27, which
20 reads "The mother can use the menu display
21 tag for mother 601 as a folder dedicated to
22 herself, and freely register and delete
23 data to be reproduced."

24 Do you see that?

25 A. I do.

1 BEDERSON

2 Q. Now, that passage says the
3 mother can use this folder as something
4 dedicated to herself, correct?

5 A. That's right.

6 Q. Is there anything that says one
7 way or the other in the '815 patent whether
8 the restriction, sorry, whether the '815
9 patent device restricts access to that
10 folder to only mother?

11 A. No, it does not.

12 Q. So does the '815 patent say one
13 way or the other whether other users can
14 see the mother folder?

15 A. It does not say anything about
16 that.

17 Q. Does it say one way or the
18 other whether other users could go into the
19 mother folder and delete things from the
20 mother folder?

21 MR. PLUTA: I object to form.

22 A. No, I don't recall it saying
23 anything about that.

24 Q. Is there anything in the '815
25 patent describing any necessity for the

1 BEDERSON

2 mother to authenticate herself to the
3 system described in that patent?

4 MR. PLUTA: I object to form.

5 A. I don't recall any such
6 disclosure.

7 Q. And I will ask you the same
8 series of questions with respect to the
9 father folder. Would any of your answers
10 be any different?

11 A. No, they would not.

12 Q. So is it possible that a person
13 of ordinary skill in the art reading this
14 description would understand that while a
15 mother may choose to treat that folder as
16 dedicated to herself, the folder may not in
17 fact be dedicated to herself, at least in
18 terms of how the system is configured?

19 MR. PLUTA: I object to form.

20 A. Given the lack of detail
21 describing this and the lack of any
22 requirements or description of
23 authentication, I think it is reasonable
24 that a person of skill would understand
25 this dedicated language to merely mean that

1 BEDERSON

2 is how a mother chose to use this folder
3 rather than technical requirements about
4 it.

5 Q. Okay. Earlier today Mr. Pluta
6 asked you a question about whether Horn
7 discloses multiple user profiles. Do you
8 happen to recall that question?

9 A. I believe I do.

10 Q. Let's look at paragraph 146 of
11 your report, I'm sorry, your declaration,
12 and that's on page 84 of Exhibit 1003. Let
13 me know when you're there.

14 A. Okay.

15 Q. So this passage starting at
16 paragraph 146 is discussing the Horn
17 patent, correct?

18 A. That's right.

19 Q. I would like to direct your
20 attention to the bolded sentence in
21 paragraph 146 that reads "Including
22 information organization personalized for
23 each individual user based on preferences
24 selected by the user."

25 Do you see that?

1 BEDERSON

2 A. I do.

3 Q. So that passage discusses each
4 individual user, correct?

5 A. It does.

6 Q. And a little below that in the
7 cited section at Horn 8:58 through 67,
8 there is a passage you reproduced there in
9 part which reads "Collections: ... allow
10 users to categorize objects in ways that
11 most clearly reflect different approaches
12 and ways of using the same information."

13 Do you see that?

14 A. I do.

15 Q. And the next sentence begins
16 "Users can select predetermined
17 collections," and continues.

18 Do you see that?

19 A. I do.

20 Q. Does this information indicate
21 to you one way or another whether Horn
22 discloses multiple user profiles?

23 MR. PLUTA: I object to form.

24 A. Yes, I think this actually is a
25 disclosure of Horn disclosing multiple user

1 BEDERSON

2 profiles.

3 Q. And would a POSITA understand
4 it that way?

5 A. Yes.

6 MR. HEINTZ: No further
7 questions. I pass the witness.

8 EXAMINATION BY MR. PLUTA:

9 Q. Dr. Bederson, if you could take
10 a look at the '815 patent. Is there any
11 evidence in the '815 patent that the
12 disclosed digital broadcast signals are
13 limited only to ATSC-1 broadcast signals?

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

15 Q. Let's take a look at Figure 3.
16 You were previously discussing the path
17 coming in to element 301; is that right?

18 A. That's right.

19 Q. And a reference was made to
20 element 302, demodulation. Do you recall
21 that?

22 A. I do.

23 Q. Do you understand that to be a
24 demodulation circuit?

25 A. That's probably right.

1 BEDERSON

2 Q. Do you have any understanding
3 as to whether a demodulation circuit can
4 have an encryption element to it?

5 MR. HEINTZ: Objection to form.

6 A. I don't think a person of skill
7 reading this Figure 3 would think that
8 demodulation is decrypting, especially
9 given that it specifically describes
10 decrypting in 332 when it actually means
11 decrypting.

12 Q. My question was a little
13 different. Do you have any understanding
14 as to whether a demodulation circuit can
15 have an encryption element to it?

16 MR. HEINTZ: Objection to form.

17 A. My analysis based upon what
18 Figure 3 actually describes, it describes
19 302 as a demodulation circuit, not a
20 decryption circuit. I don't think there is
21 anything preventing an engineer from adding
22 extra features anywhere they want, but
23 that's not disclosed here, it is disclosed
24 as demodulation.

25 Q. If you can go back to paragraph

1 BEDERSON

2 146 of your declaration. You were asked as
3 to whether Horn discloses multiple user
4 profiles. Do you recall that just now?

5 A. Okay.

6 Q. And you pointed to Horn's
7 collections as an example of a user
8 profile, if I'm recalling your testimony?

9 A. That's right.

10 Q. How does Horn's collections set
11 forth data representing distinctive
12 features and characteristics of a user?

13 A. I think there is numerous
14 examples in Horn of profile information,
15 including distinctive features and
16 characteristics.

17 So, for example, looking at
18 Figure 18, I see at the top, 1801, a
19 screen, which looks like it is a contact
20 user interface for Bruce Horn, and that
21 includes a number of fields, including
22 name, title, company, address, phone
23 numbers, e-mail, web page, birthday, those
24 all look like multiple distinct features
25 and characteristics for a user or

1 BEDERSON

2 associated with a user.

3 I also see in Figure 23 some
4 examples of collections, and these include
5 things, for example, ratings and payees
6 related to finance domain. I think those
7 would at least be examples of distinct
8 features and characteristics associated
9 with the user.

10 MR. PLUTA: No further
11 questions.

12 MR. HEINTZ: I think we're
13 done.

14
15 [TIME NOTED: 12:50 p.m.]
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25

1 SAMSUNG ELECTRONICS CO., LTD., et al.
vs. MAXELL, LTD.

2 1/17/2025 - BENJAMIN B. BEDERSON, Ph.D.

3 ACKNOWLEDGEMENT OF DEPONENT

4 I, BENJAMIN B. BEDERSON, Ph.D. , do hereby
5 declare that I have read the foregoing
6 transcript, I have made any corrections,
7 additions, or changes I deemed necessary as
8 noted on the Errata to be appended hereto,
9 and that the same is a true, correct and
10 complete transcript of the testimony given
11 by me.
12

13 _____
BENJAMIN B. BEDERSON, Ph.D. Date

14 *If notary is required
15

16 SUBSCRIBED AND SWORN TO BEFORE ME THIS
17 _____ DAY OF _____, 20____.
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I N D E X

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E X H I B I T S

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EXHIBIT	DESCRIPTION	PAGE
Exhibit 1001	U.S. Patent 11,017,815	5
Exhibit 1003	Declaration of Dr. Benjamin Bederson in IPR IPR2024-00777 and IPR2024-00735	4
Exhibit 1005	U.S. Patent 7,275,063	38
Exhibit 1014	U.S. Patent Application Publication No. 2001/0056434 A1	70
Exhibit 1015	U.S. Patent Application Publication No. 2004/0201691 A1	70
Exhibit 1016	U.S. Patent Application Publication No. 2005/0160458 A1	55
Exhibit 1049	U.S. Patent 7,292,692 B2	12
Exhibit 1050	Document from ATSC	91

DIRECTIONS NOT TO ANSWER

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REQUESTS

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CERTIFICATION

I, TODD DeSIMONE, a Notary Public for
and within the State of New York, do hereby
certify:

That the witness whose testimony as
herein set forth, was duly sworn by me; and
that the within transcript is a true record
of the testimony given by said witness.

I further certify that I am not related
to any of the parties to this action by
blood or marriage, and that I am in no way
interested in the outcome of this matter.

IN WITNESS WHEREOF, I have hereunto set
my hand this 17th day of January, 2025.



TODD DESIMONE

* * *

1 SAMSUNG ELECTRONICS CO., LTD., et al.
vs. MAXELL, LTD.

2 1/17/2025 - BENJAMIN B. BEDERSON, Ph.D.

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

(1) Review; Statement of Changes. On request by the deponent or a party before the deposition is completed, the deponent must be allowed 30 days after being notified by the officer that the transcript or recording is available in which:

(A) to review the transcript or recording; and
(B) if there are changes in form or substance, to sign a statement listing the changes and the reasons for making them.

(2) Changes Indicated in the Officer's Certificate. The officer must note in the certificate prescribed by Rule 30(f)(1) whether a review was requested and, if so, must attach any changes the deponent makes during the 30-day period.

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

VERITEXT LEGAL SOLUTIONS

COMPANY CERTIFICATE AND DISCLOSURE STATEMENT

Veritext Legal Solutions represents that the foregoing transcript is a true, correct and complete transcript of the colloquies, questions and answers as submitted by the court reporter. Veritext Legal Solutions further represents that the attached exhibits, if any, are true, correct and complete documents as submitted by the court reporter and/or attorneys in relation to this deposition and that the documents were processed in accordance with our litigation support and production standards.

Veritext Legal Solutions is committed to maintaining the confidentiality of client and witness information, in accordance with the regulations promulgated under the Health Insurance Portability and Accountability Act (HIPAA), as amended with respect to protected health information and the Gramm-Leach-Bliley Act, as amended, with respect to Personally Identifiable Information (PII). Physical transcripts and exhibits are managed under strict facility and personnel access controls. Electronic files of documents are stored in encrypted form and are transmitted in an encrypted

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