

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

3 IPR 2024-00078 – Patent No. 8,473,478

4 IPR 2024-00079 – Patent No. 9,218,348

5 IPR 2024-00080 – Patent No. 10,585,850

6 DROPBOX INC. and MICROSOFT CORPORATION,

7 Petitioners,

8 v.

9 DATANET LLC,

10 Patent Owners.

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15 DEPOSITION UNDER ORAL EXAMINATION OF

16 DAVID MAIER, PH.D.

17 VOLUME II

18 DATE: November 19, 2024

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24 REPORTED BY: MICHAEL FRIEDMAN, CCR

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TRANSCRIPT of the deposition of the
DAVID MAIER, PH.D., called for Oral Examination in the
above-captioned matter, said deposition being taken
by and before MICHAEL FRIEDMAN, a Notary Public and
Certified Court Reporter of the State of New Jersey,
located at ZOOM VTC, all parties remote, on November
19, 2024, commencing at approximately 12:00 p.m. in
the afternoon.

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

2

3 KLARQUIST SPARKMAN
4 121 SW Salmon Street
5 Portland, OR 97204
6 BY: CAMERON CLAWSON, ESQ.
7 FRANK MORTON-PARK, ESQ.
8 SAM THACKER, ESQ.
9 Attorneys for Petitioner

6

7 LISTON ABRAMSON
8 405 Lexington Avenue
9 New York, NY 10174
10 BY: ARI JAFFESS, ESQ.
11 MICHAEL LEWIS, ESQ.
12 Attorneys for Patent Owner

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I N D E X

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EXHIBIT NO.	PAGE
(None marked.)	

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2	Deposition Support Index			
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5	Direction to witness not to answer			
6	Page Line	Page Line	Page Line	Page Line
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1 THE COURT REPORTER: My name is
2 Michael Friedman, a Certified Shorthand
3 Reporter. This deposition is being held
4 via videoconferencing equipment.

5 The witness and reporter are not in
6 the same room. The witness will be sworn
7 in remotely, pursuant to agreement of
8 all parties. The parties stipulate that
9 the testimony is being given as if the
10 witness was sworn in person.

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1 D A V I D M A I E R, P H . D . ,
2 called as a witness, having been first
3 duly sworn according to law, testifies as follows:
4
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6

7 EXAMINATION BY MR. JAFFESS:

8 Q Good morning, Dr. Maier.

9 A Hello again.

10 Q Hello again. My name again is Ari
11 Jaffess.

12 With me is Mike Lewis from my firm.
13 I don't think we need to go through all of
14 the typical setup that you do for a
15 deposition since we've been through this.

16 Just a couple questions to start.
17 Is there any reason why you can't give
18 truthful and accurate testimony today?

19 A None that I'm aware of.

20 Q Can I ask where you're located
21 physically?

22 A I am physically in what they call a
23 hotel office at Klarquist headquarters, in
24 Portland, Oregon.

25 Q Is there anybody in the room with

1 you?

2 A No, I'm here by myself. I can't
3 see anybody else at the moment.

4 Q Do you have any chat applications
5 or messaging applications open at the moment
6 on a computer or on the phone in front of
7 you?

8 A No. In fact, let me set me phone
9 aside, turn it off.

10 So now, the only thing on my screen
11 is Zoom, and then some folders that contain
12 my declarations and various exhibits.

13 Q So Dr. Maier, you said you had some
14 folders with some materials from the IPRs in,
15 and I wanted to confirm that those are
16 unannotated, there's no notes?

17 A You mean, I've not written anything
18 on them? They're clean copies.

19 Q Okay. We're going to start with
20 your declaration, your reply declaration in
21 the case IPR 2024 78.

22 If you can open up that document,
23 please?

24 A So I don't know the case numbers
25 very well. If you can refer to also which

1 patent it involves, that's easier for me.

2 Q Sure. It's the '478 patent, and
3 it's Exhibit 1024.

4 A Reply declaration of David Maier?

5 Q Yes, sir?

6 A I'm there.

7 Q Okay. And if you can go down to
8 paragraph 16?

9 A Okay. I'm at paragraph 16.

10 Q So you see that you reference
11 Schneider U.S. in paragraph 16 of your reply
12 declaration?

13 A (Witness reviewing.)

14 My apologies, I was in the '348
15 patent. Okay.

16 I'm now actually on the 748
17 declaration, paragraph 16. I do see the
18 Schneider U.S. reference.

19 Q Just to be clear, you said 748,
20 this is -- this is '478.

21 Correct?

22 A This is '478. Correct.

23 Q Okay. Is Schneider U.S., which is
24 Exhibit 1016, part of the combination in
25 Ground One?

1 MR. CLAWSON: Objection to form.

2 A (Witness reviewing.)

3 I'm presuming you're talking about
4 Ground One for '478?

5 Q Yes, sir.

6 A Schneider U.S. is not being offered
7 as part of the combination. It's being
8 offered to show what a person of skill in the
9 art would be aware of in terms of
10 applicability of methods of different
11 conceptual levels.

12 (Whereupon a discussion was held
13 off the record.)

14 Q So resuming, Dr. Maier, the
15 combination of Ground One, the '478 patent,
16 is Long and Kenley.

17 Correct?

18 A Yes, the combination is Long and
19 Kenley.

20 Q Which of those two is the primary
21 reference for the combination?

22 MR. CLAWSON: Objection to form.

23 A I've -- I haven't designated one or
24 the other as the primary reference. They
25 both contribute to the combination.

1 I was not aware that I had to
2 designate one as primary.

3 Q And Schneider, the WO publication,
4 which is Exhibit 1020, that's not part of the
5 combination of Ground One, either.

6 Correct?

7 MR. CLAWSON: Object to form.

8 A No, I'm not offering the other
9 Schneider reference as a ground in this for
10 the '478, for the first ground of this '478
11 patent.

12 Q And just to be clear, it's the same
13 combination in the first ground of the '348
14 patent.

15 Correct?

16 A (Witness reviewing.)

17 Yes, it's the same combination of
18 Kenley and Long for Ground One in the '348
19 patent.

20 Q Do you know Mr. Schneider? I'm
21 sorry, I didn't mean to cut you off. Do you
22 know Mr. Schneider?

23 A I don't believe so. There's only
24 one Schneider that I can think of that I know
25 on a technical basis.

1 Do you have his first name handy?

2 Q Sure. This comes from Exhibit
3 1016, which is Schneider U.S., it's Eric
4 Schneider?

5 A That does not ring any bells for
6 me.

7 Q Do you know Chuck Farrell?

8 A That does not ring any
9 recollection.

10 Q These are the co-inventors on the
11 Schneider references.

12 Do you know Doug Wheeler?

13 A That does not sound familiar to me.

14 Q Do you know Larry Schwartz?

15 A I have no recollection in this
16 moment of knowing him.

17 Q Do you know Edward Bruggeman,
18 B-R-U-G-G-E-M-A-N? Do you know him, Dr.
19 Maier?

20 A I'm thinking. The surname is a
21 little familiar.

22 Could you tell me what company
23 these people were with?

24 Q It's listed as Wildfile Inc. in
25 Plymouth, Minnesota?

1 A So, it seems unlikely that I know
2 Mr. Bruggeman.

3 Q These co-inventors on the Schneider
4 references, do you know their background,
5 education or experience?

6 MR. CLAWSON: Object to form.

7 A (Witness reviewing.)
8 I don't, for example, know their
9 levels of educational attainment. I infer
10 from the subject matter of the Schneider
11 patent that they are filled with -- they are
12 familiar with computer backup systems.

13 Q Is there anything in the record
14 that indicates their levels of education or
15 industry experience, other than the Schneider
16 reference, itself?

17 MR. CLAWSON: Objection, form.

18 MR. JAFFESS: Excuse me. I will
19 fix that.

20 Q Is there anything in the record in
21 the '478 IPR that indicates the co-inventors
22 on Schneider, their level of experience,
23 other than the two references that are of
24 record, Schneider U.S. Exhibit 1016, and the
25 Schneider WO publication, Exhibit 1020?

1 A (Witness reviewing.)

2 I'm not recalling anything
3 specifically that addressed their
4 backgrounds.

5 On the other hand, the file history
6 for those patents may have some information
7 about that.

8 There's introductory material in
9 the patent itself that indicates knowledge by
10 at least some of the inventors of background
11 in the area of the invention.

12 Q It doesn't tie it to the
13 individuals, though. Correct? It's just
14 disclosure about a selective matter.

15 Correct?

16 A (Witness reviewing.)

17 Not that I can recall offhand. I
18 don't know if there's something in the file
19 history that may be — maybe refers to them
20 by a time that would indicate educational
21 attainment. I have not looked for that.

22 Q Is file history of either Schneider
23 reference Exhibit 1020 or Exhibit 1016 of
24 record in this IPR, the '478 case?

25 MR. CLAWSON: Object to form.

1 A (Witness reviewing.)

2 I don't believe that it's been
3 entered as a -- an exhibit, but I do know
4 that prosecution histories are intrinsic
5 evidence when evaluating a patent.

6 Q Did you review the prosecution
7 history of either Schneider U.S. or the
8 Schneider WO publication?

9 MR. CLAWSON: Object to form.

10 A I don't have a recollection of
11 doing so.

12 Q Can you go, please, to paragraph 20
13 of your reply declaration? This is Exhibit
14 1024 in the '478 case.

15 For the record, it's IPR 2024 78?

16 A So I'm at paragraph 20.

17 Q You're stating that claim 31 of
18 Long is broader than the sectors disclosed in
19 the rest of Long.

20 Correct?

21 MR. CLAWSON: Objection, form.

22 A (Witness reviewing.)

23 I'm saying that in claim 31, for
24 example, Long recites a method that does not
25 mention sectors explicitly anywhere.

1 Q You're characterizing this as a
2 claim that's more broad.

3 Correct?

4 MR. CLAWSON: Objection, form.

5 Q You're free to refer to the first
6 and second lines of your declaration.

7 A I'm looking there.

8 (Witness reviewing.)

9 Yes, I say Long more broadly
10 claimed a method that did not invoke sectors.

11 Q Was claim 31 referenced in your
12 initial declaration in the case? It's
13 Exhibit 1003.

14 A (Witness reviewing.)

15 No, I don't believe we
16 referenced -- that I referenced claim 31 in
17 my original '478 declaration.

18 Q And claim 31, you quote it in
19 paragraph 20 of your reply declaration,
20 recites, quote, locations of the storage
21 device, end quote.

22 Is that correct?

23 A I quote, detecting access requests
24 to alter data on respective sets of one or
25 more said locations of the storage device.

1 Q Dr. Maier, focusing on the last
2 five words of that quote, locations of the
3 storage device, in the context of Long, your
4 argument is that those are not sectors?

5 MR. CLAWSON: Objection, form.

6 A I heard your question. I want to
7 review something.

8 (Witness reviewing.)

9 So in claim 31, I don't see
10 anything that says those locations have to be
11 sectors.

12 (Witness reviewing.)

13 Q Sir, is that the complete answer?
14 I don't want to cut you off.

15 A Give me another second.

16 (Witness reviewing.)

17 My opinion looking at claim 31 is
18 that the locations need not necessarily be
19 sectors.

20 Q I understand you're not an
21 attorney, patent attorney or patent agent,
22 but this declaration goes in some detail
23 about how you're supposed to interpret claims
24 of the patent in light of the specification.

25 Correct?

1 MR. CLAWSON: Objection to form.

2 A (Witness reviewing.)

3 That's not quite correct. My more
4 extensive description of my understanding of
5 how to interpret claims is actually in my
6 original declaration.

7 Q Okay. But you're stating that
8 claim 31 on its own doesn't reference
9 sectors, and that's why you do not read this
10 term as being sector.

11 Correct?

12 MR. CLAWSON: Objection, form.

13 A (Witness reviewing.)

14 So, it's not based solely on just
15 the claim language. It also -- my conclusion
16 there is also based on the abstract to the
17 patent that talks about the method without
18 saying that it's sector only method.

19 It's also based on that when I was
20 looking at the patent initially, when I saw
21 flow charts such as figure 5, I understood
22 that -- I did not see anything particular in
23 its description of part of the method that
24 seemed to depend on what was being -- that
25 the data being worked with had to be sectors.

1 Q Okay. Figure 5 helps inform you of
2 the breadth of this language.

3 If you can please go to column 7,
4 line 28 of Long, which is Exhibit 1004?

5 A Column 7, line 8?

6 Q Column 7, line 28.

7 A Oh, 28.

8 Q I can't tell if it's 27 or 28, but
9 there's a paragraph that starts, a quote,
10 modification request, end quote.

11 Do you see that paragraph, Dr.
12 Maier?

13 A I do see that paragraph.

14 Q This is the discussion of figure 5
15 in Long.

16 Correct?

17 A (Witness reviewing.)

18 This paragraph refers to figure 5,
19 but I believe we are talking in the context
20 of a specific embodiment of the invention.

21 Q Is there any other paragraph in the
22 disclosure of Long that discusses figure 5?

23 A (Witness reviewing.)

24 I do not believe there is.

25 Q And in this paragraph discussed in

1 figure 5 in Long, column 7, does it not
2 discuss sectors?

3 A (Witness reviewing.)

4 Q I point to you lines 37 through 42.
5 Column 7?

6 A It would be better if you phrased
7 your question in the positive.

8 Q Doesn't the discussion of figure 5
9 in Long discuss sectors, the data to be
10 modified as sectors?

11 A Questions that start with "does
12 not" or "doesn't" are a little bit ambiguous
13 because --

14 Q Sure. I can rephrase. We don't --
15 I'm happy to rephrase, whenever it makes
16 sense.

17 So the paragraph of Long that
18 discusses figure 5 discusses sectors and
19 modifications of sectors.

20 Correct?

21 A The paragraph referring to figure 5
22 is talking about sectors.

23 Q And this is, again, the only
24 paragraph in Long that discusses figure 5.

25 Correct?

1 A (Witness reviewing.)

2 MR. CLAWSON: Objection, form.

3 A As far as I can tell, it's the only
4 place that specifically calls out to elements
5 of figure 5, but, you know, the language of
6 claim 31 seems to be -- also match up with
7 what's going on in figure 5.

8 Q Why did you pick out claim 31 as
9 being broader than other claims of Long?

10 MR. CLAWSON: Objection.

11 Objection, form.

12 A (Witness reviewing.)

13 I am not saying in 20 that -- that
14 this claim is broader than other claims.

15 I'm saying that this claim is
16 broader than the sector based embodiment that
17 Long discloses.

18 Q But you call out this claim in
19 particular.

20 You don't say the claims of Long,
21 correct? You say claim 31 in paragraph 20 of
22 your reply declaration?

23 MR. CLAWSON: Objection, form.

24 A The reason I mention claim 31 here
25 was it was the claim I mentioned during my

1 deposition, my prior deposition.

2 Q And it's a method claim.

3 Correct?

4 MR. CLAWSON: Objection, form.

5 A I'm not really completely familiar
6 with the different flavors of claims. I do
7 see that the -- that claim 31 is claiming a
8 method.

9 Q It just appears to me that that is
10 why you called out claim 31 versus claim 16,
11 for example?

12 MR. CLAWSON: Objection, form.

13 A (Witness reviewing.)

14 I don't -- I can't say for certain
15 that that was why I called out that claim.

16 It may have also been because it
17 didn't mention processing circuitry, or it
18 didn't mention a storage device subsystem.

19 So those -- I mean, you're asking
20 me to create a mental state of, you know, a
21 point in a deposition that took place
22 previously.

23 I can't recall exactly what my
24 reasons were in the moment. All my reasons
25 were in the moment for the pointing to that

1 claim.

2 Q Okay. But it's not just something
3 that you said at deposition, it's something
4 in this reply declaration, correct?

5 Claim 31 being cited as an example
6 of Long, that's somehow broader than sectors.

7 Correct?

8 MR. CLAWSON: Objection, form.

9 A (Witness reviewing.)

10 In this reply, you know I cite to
11 claim 31 because previously, when I had
12 looked at it, I didn't see anything binding
13 it tightly to a sector based implementation.

14 Upon examining it further in the
15 process of preparing this reply declaration,
16 it also seemed to be an example of Long
17 describing a method that was working with
18 storage locations generally, and did not seem
19 to require anything specific that would only
20 be provided by sectors.

21 Q So claim 31's locations of the
22 storage device, are they the same as claim
23 16's locations of the storage device in Long?

24 A (Witness reviewing.)

25 MR. CLAWSON: Objection, form.

1 A I've not offered an opinion on that
2 point. I'm just opining that I believe that
3 claim 31 is describing a method that applies
4 more broadly than sectors.

5 Q Claim 16 of Long recites a
6 processing circuitry, it's line 20 of column
7 11?

8 A I see it reciting processing
9 circuitry.

10 Q And just underneath that, it
11 recites locations of the storage device.

12 Correct, on lines 23 to 24?

13 MR. CLAWSON: Objection, scope.

14 A (Witness reviewing.)

15 MR. JAFFESS: I can justify it if
16 you would like.

17 A It says one or more of said
18 locations.

19 Q Locations of the storage device.

20 Correct?

21 A Locations of the storage device.

22 Q That's the same term that's used in
23 claim 31.

24 Correct?

25 MR. CLAWSON: Objection, scope.

1 A (Witness reviewing.)

2 In claim 16 we're -- it talks about
3 in the context of a storage device subsystem.
4 That is not in the preamble of claim 31.

5 Q Which is merely a method.

6 Correct?

7 MR. CLAWSON: Objection to form.

8 A I don't know the import of saying
9 something is merely a method.

10 Q You don't know the import of saying
11 that a claim is to a method.

12 Correct?

13 A I didn't say that. I said I didn't
14 understand your use of the adjective merely,
15 that that would imply some kind of
16 relationship to some other kind of claim that
17 this one is inferior to.

18 Q You said earlier that the different
19 flavors of claims, you're not completely
20 familiar with the distinctions.

21 Correct?

22 MR. CLAWSON: Objection, form.

23 A I appreciate that there are
24 differences. I have worked on patent cases
25 where those differences were important and

1 was provided with information on how to --
2 the import of those differences.

3 If you asked me to write down right
4 now a precise statement of the differences of
5 the different kinds of claims, I would not be
6 confident of being able to capture every
7 aspect that's important for that
8 differentiation.

9 Q Okay. You also cite to the
10 abstract of Long as not being limited to
11 sectors.

12 Correct?

13 MR. CLAWSON: Objection, form.

14 A (Witness reviewing.)

15 Yes, I cited to it. It's not
16 mentioning sectors. I just confirmed by
17 rereading it that it does not mention
18 sectors.

19 Q It also mentions locations on
20 storage device.

21 Correct?

22 MR. CLAWSON: Objection, form.

23 A (Witness reviewing.)

24 I see locations of the storage
25 device there in the abstract.

1 Q You don't interpret this as being
2 sector.

3 Correct?

4 MR. CLAWSON: Objection, form.

5 A (Witness reviewing.)

6 I'm going to review something, so I
7 will respond to your question.

8 (Witness reviewing.)

9 I did not interpret those locations
10 in the abstract as being sectors.

11 For one reason is that at column 1,
12 line 60, when Long talks -- gives a summary
13 of the invention, that description does not
14 talk about -- does not specifically mention
15 sectors.

16 Sectors only start coming up, I
17 believe, later on in column 2 around line 38,
18 when the discussion turns to the preferred
19 embodiment.

20 Q Sir, you're reading the abstract,
21 the summary and claim 31, and ignoring the
22 preferred embodiment.

23 Is that correct?

24 MR. CLAWSON: Objection, form.

25 A I have not ignored the preferred

1 embodiment. It appears that the preferred
2 embodiment would practice the claims of 31.

3 But I believe that what is -- that
4 it's not unusual for a claim to be broader
5 than the preferred embodiment.

6 As I said, I'm not -- you know, I
7 haven't recently reviewed the different kinds
8 of claims.

9 But my recollection is that it's
10 the means plus function claims are -- or
11 means plus function claim is one where you
12 have to identify the claim with some more
13 detail in the specification.

14 But I don't -- I read the
15 embodiment that's described, I believe
16 practices the claim, but I don't -- it's my
17 opinion that there are other embodiments of
18 the invention that -- that don't necessarily
19 operate with sectors.

20 And -- you know, as I've offered in
21 other places, the Schneider U.S. reference,
22 talks about Long at the file level without
23 thinking that someone reading that patent
24 would have any need -- special coaching to
25 see how that method could deal with files or

1 pieces of files.

2 Q In paragraph 29 of your reply
3 declaration in this case, the 78 case, the
4 '478 patent?

5 A Could you tell me the paragraph
6 again, please?

7 Q Twenty-nine. You state that
8 Mr. Jawadi appears to refer to Long's
9 embodiment of processing circuitry.

10 Correct?

11 A (Witness reviewing.)

12 Yes, I stated Mr. Jawadi refers to
13 Long's embodiment of processing circuitry.

14 Q What are the different embodiments
15 disclosed in Long?

16 MR. CLAWSON: Objection, form.

17 A (Witness reviewing.)

18 I have not made an attempt to
19 catalogue all the particular embodiments that
20 Long uses to illustrate the invention, but
21 Long's teachings seem applicable and
22 combinable with file based backup systems.

23 Q You're saying Mr. Jawadi is
24 referring to one embodiment.

25 I'm trying to ask what the others

1 are. I understand you haven't catalogued
2 them all.

3 Can you give me any examples of
4 others?

5 A Okay.

6 MR. CLAWSON: Objection, form,
7 occasion scope.

8 A Give a moment.

9 Q Sure. Take your time, Dr. Maier, I
10 just --

11 MR. JAFFESS: I'm happy to always
12 answer a scope objection, but unless you
13 specifically ask I will refrain from
14 doing so. Is that fair?

15 MR. CLAWSON: Yeah. I mean, I'm
16 just preserving the objection for the
17 record.

18 A (Witness reviewing.)

19 There are -- I can --

20 (Witness reviewing.)

21 The other embodiments are ones, for
22 example, such as Schneider describes using
23 Long's method at the file level.

24 Q That's an embodiment of Long?

25 MR. CLAWSON: Objection to form.

1 A It's an embodiment of Long's
2 invention. Are you asking something else?

3 Q I'm asking for a disclosed
4 embodiment in Long that is distinct from what
5 you phrase as the processing circuitry
6 embodiment?

7 MR. CLAWSON: Objection, form.

8 A (Witness reviewing.)
9 Long does --
10 (Witness reviewing.)
11 -- discloses the one main
12 embodiment, but that description itself
13 encompasses more than one alternative.

14 For example, the use or not of the
15 memory buffer. Also in the summary of the
16 invention that I refer to, it says that one
17 embodiment of the present invention has a
18 partition with a -- the partition includes an
19 audit header region and an audit buffer
20 region.

21 This is saying this is one
22 embodiment that has this that would indicate
23 there are other embodiments.

24 The -- at the end of the
25 specification at line column 9, line 54, it

1 says the present invention is applicable to
2 any mass storage media wherein old data may
3 be overwritten with new data.

4 Further on at column 10, line 3,
5 although the present invention and its
6 advantages have been described in detail, it
7 should be understood that various changes,
8 substitutions and alterations can be made
9 herein without departing from the spirit and
10 scope of the invention as defined by the
11 appended claims.

12 So certainly seems to me that Long
13 contemplates other embodiments of the
14 invention beyond the particular one
15 described.

16 Q The particular one described is the
17 main embodiment.

18 Correct?

19 MR. CLAWSON: Objection, form.

20 A The one described is -- well,
21 column 2, line 40, it's considered the --
22 it's described as the preferred embodiment.

23 That embodiment itself is actually
24 at least two embodiments, one with the memory
25 buffer, one without.

1 Q And both of those, the memory
2 buffer and the one without, both of those are
3 the processing circuitry embodiment.

4 Correct?

5 MR. CLAWSON: Objection, form.

6 Objection, scope.

7 A (Witness reviewing.)

8 Mr. Jaffess, do you have any
9 objections if I use Post-it Notes to mark
10 places in these documents?

11 Q Without writing?

12 A Without writing.

13 Q Sure, if it will speed things up,
14 absolutely. Thank you for asking, I
15 appreciate that.

16 A (Witness reviewing.)

17 Q I can rephrase the question. I'm
18 trying to understand, you criticized
19 Mr. Jawadi for focusing on the processing
20 circuitry embodiment.

21 But it's unclear to me what other
22 embodiments there are. That's all I'm trying
23 to get at.

24 MR. CLAWSON: Objection, form.

25 Q I can rephrase the question. Other

1 than the processing circuitry embodiment,
2 what other embodiments are there -- what
3 other embodiments are there in Long?

4 MR. CLAWSON: Objection, scope.

5 A (Witness reviewing.)

6 MR. JAFFESS: I'm sorry, I believe
7 the scope is straight down the plate.

8 A (Witness reviewing.)

9 Well, what I'm trying to get across
10 here in my paragraph 29 is that -- it's my
11 belief that Long's method isn't necessarily
12 confined to --

13 (Witness reviewing.)

14 So the point I'm making here,
15 trying to make here, is that Long's method
16 isn't necessarily bound to implementation at
17 a particular low level of the system -- of a
18 system, though Long's preferred embodiment is
19 described as taking place at a low level.

20 So whenever comes for a natural
21 break to you --

22 Q Yeah, I was literally about to say,
23 is this a good time for a break for
24 everybody.

25 A Okay.

1 (Brief recess taken.)

2 Q Back on the record. Sticking with
3 paragraph 29 in your '478 declaration?

4 A Okay.

5 Q And this is at the bottom of page
6 21 going onto page 22. You say that
7 Mr. Jawadi focuses on Long's hardware level
8 fault tolerance.

9 Correct?

10 A (Witness reviewing.)

11 So there's -- the last sentence on
12 page 21, similarly, Mr. Jawadi also argues
13 that Long teaches operating the lowest level,
14 namely hardware level, and focuses on Long's
15 disclosure of hardware level fault tolerance
16 and hardware based error detection methods.

17 Q Can you please go to Exhibit 1004
18 in Long, first page?

19 What is the title of Long?

20 A The title of the Long patent is
21 fault tolerant computer with archival
22 rollback capabilities.

23 Q So Long is concerned with fault
24 tolerance.

25 Correct?

1 MR. CLAWSON: Objection, form.

2 A (Witness reviewing.)

3 Well, the title of Long mentions
4 the fault tolerant computer, with the
5 addition of archival rollback capabilities.

6 Q You distinguish the archival
7 rollback capabilities from the fault
8 tolerance?

9 MR. CLAWSON: Objection, form.

10 A (Witness reviewing.)

11 What I'm trying to distinguish in
12 this paragraph 29 is that -- is that Long
13 lists a number of elements of a fault
14 tolerance strategy in columns three and four.

15 Error detection and masking, error
16 containment, error recovery, diagnosis,
17 repair reconfiguration, and I believe it was
18 quoted by Mr. Jawadi, was referring to a
19 statement about where error detection should
20 take place.

21 But I don't believe that that
22 statement that he is -- I can check, that he
23 is citing to, referred -- referred more
24 broadly than that.

25 Q In Long's system, the events and

1 the data backed up, if any, are handled all
2 together.

3 Correct?

4 MR. CLAWSON: Objection, form.

5 A (Witness reviewing.)

6 I wasn't actually done providing my
7 answer to the previous question.

8 Q I apologize. Strike my question.
9 I will allow you to finish.

10 A (Witness reviewing.)

11 So the point I'm making is, in the
12 latter half, latter part of paragraph 29, is
13 that Mr. Jawadi is citing something in the
14 error detection and masking section for the
15 assertion that Long -- that other sections of
16 Long necessarily would be bound at that
17 level, is his -- he refers to something
18 being -- errors being more easily --
19 errors -- so I'm at the top of column 3, are
20 more easily detected -- I'm trying to find
21 the place he cites.

22 (Witness reviewing.)

23 Anyway, I believe his assertion
24 about Long operating at the lowest level, the
25 hardware level, depends on citations from a

1 section that talks about an aspect of fault
2 tolerance different from recovery. Okay, now
3 I'm finished.

4 Q So my next question, Long stores
5 event data and backup data all together.

6 Correct?

7 MR. CLAWSON: Objection, form.

8 A (Witness reviewing.)

9 Long in the preferred embodiment
10 stores information segmented into distinct
11 markers.

12 Those markers may be audit markers,
13 that is, markers whose type is audit, which
14 then keep track of backup versions of
15 information.

16 But those markers can also store
17 information about other aspects of the
18 operation of his recovery system. I'm
19 finished with my answer.

20 Q Excuse me, I was muted. These two
21 types of markers are stored together.

22 Correct?

23 MR. CLAWSON: Objection, form.

24 A Table 4 in Long describes multiple,
25 more than two, event types, one of which is

1 audit in Long's -- in the embodiment Long
2 describes, that multiple markers may reside
3 in the memory buffer or in the audit
4 partition or in the archive.

5 But in my combination, I'm not
6 really relying on the need to store events
7 in -- in markers, or keep those with markers
8 containing audit information.

9 In the combination, what we are
10 relying upon is Long's detection of a
11 modification request, and then also the fact
12 that when Long places audit information in
13 different locations, it's accompanied by
14 various kinds of metadata that are
15 descriptive of it.

16 Q So you're not focused on the event
17 data in Long?

18 MR. CLAWSON: Objection, form.

19 A I'm -- I wouldn't characterize that
20 as my focus.

21 We were talking about events that
22 get captured in markers for purposes of
23 helping manage the audit system.

24 But there are other events in Long
25 such as, you know, detecting a modification

1 request.

2 So most essential things are Long
3 detects modification requests, that it has
4 this -- when it uses its memory buffer, it
5 has a three stage process of migrating backup
6 data across locations, and that that data is
7 encapsulated in these markers that have other
8 information, and that every time some of this
9 marked information is created or moved, that
10 that is reflected in an update in the audit
11 header.

12 And I think those are the main
13 aspects that -- of Long that I relied --
14 relied on in the combination Kenley-Long.

15 Q And in the embodiment disclosed in
16 Long, can you answer whether the event data
17 is stored in conjunction with the audit data?

18 MR. CLAWSON: Objection, form.

19 A (Witness reviewing.)

20 There -- a marker in Long can
21 contain information about different event
22 types such and audit, is one of the event
23 types.

24 My understanding is that those
25 markers can be -- are stored together in

1 various places, such as the memory buffer or
2 the audit buffer archival media.

3 There is certainly other event
4 information such as modification requests
5 that does not find its way into the audit
6 buffer, along with -- with these other
7 specific set of marked -- event types that a
8 marker can be.

9 Q Those event types are enumerated in
10 table 4 of Long.

11 Correct?

12 A Yes, table 4 enumerates those event
13 types.

14 Q Sorry, were you finished with the
15 answer?

16 A I am.

17 Q You referenced metadata being
18 stored in Long for audit markers.

19 Is that correct?

20 A I may well have used that term,
21 yes.

22 Q What sort of metadata does Long
23 store for its audit markers?

24 MR. CLAWSON: Objection, form.

25 A (Witness reviewing.)

1 So by metadata, I mean data in
2 addition to the particular data being backed
3 up, and so it -- the -- in the markers
4 themselves, there's several kinds of data as
5 delineated in table 2 and table 3 of Long.

6 There's also information about
7 markers in the fields of the audit header.

8 Q Is the MSG data field of table 2
9 metadata for an audit header -- sorry.
10 Strike that.

11 Let me ask it again. Is the MSG
12 data field of table 2 metadata for an audit
13 marker?

14 A (Witness reviewing.)

15 So MSG data, what we have here, it
16 says it's an optional text string associated
17 with the marker.

18 If the event is an audit event of
19 message length zero, this field is empty.

20 Well, I don't think its use is
21 discussed in detail elsewhere.

22 If the audit event doesn't have --
23 if it's an audit event, and it's -- the
24 message length is not zero, it would seem to
25 allow message data to be placed in a marker

1 header of -- of an audit event marker.

2 Q So one example it gives is message
3 length zero for an audit event?

4 A Correct.

5 (Witness reviewing.)

6 MR. CLAWSON: Objection, form.

7 A Well, it talks about one
8 eventuality, which is if the event is not an
9 event of message length zero, then the field
10 needs to be empty.

11 But that's not talking generally
12 about audit events. It's just talking about
13 ones that have length zero -- or have message
14 length zero.

15 Q Are there any examples where
16 message length would not be zero for an audit
17 event?

18 MR. CLAWSON: Objection, form.

19 A (Witness reviewing.)

20 Well, the way I understood these
21 fields is that message length is indicating
22 MSG len, is talking about the length of both
23 of MSG field and the sector data field
24 combined.

25 My basis for that belief is in the

1 marker trailer, we just have the MSG len
2 field.

3 And it would seem to me that that
4 would have to encompass all of the optional
5 data that might be placed in a marker,
6 because Long talks about being able to trace
7 back through a sequence of markers using the
8 marker trailer.

9 And so the marker trailer seems to
10 me would have to be giving the combined
11 length of message data and sector data for
12 any marker in order that the system could
13 figure out where the corresponding marker
14 header begins.

15 Q Examples given of an audit event
16 with message length equals zero.

17 Correct?

18 MR. CLAWSON: Objection, form.

19 A It's not an example, it's a
20 condition. If the event is audit event of
21 message length zero, you don't have a
22 specific example of what -- of an actual
23 marker of that format.

24 Q And the message length description
25 talks about the length of the optional text

1 stream associated with the marker.

2 Correct?

3 MR. CLAWSON: Objection, form.

4 A (Witness reviewing.)

5 So what I read this as saying, is
6 if the event type is audit event, and that
7 audit event is marked as having message
8 length zero, then there won't be message data
9 in that particular audit marker.

10 Q Would there be sector data?

11 MR. CLAWSON: Objection, form.

12 A (Witness reviewing.)

13 So in the embodiment that Long is
14 describing, there is a marker header field
15 called RCB.

16 I'm not totally certain what RCB
17 stands for, but it's talking about the
18 location of hard disk.

19 That data came from -- in the
20 context of this preferred embodiment, and the
21 context of the audit header, such a location
22 is presumably a physical or logical sector
23 identifier.

24 But in the preferred embodiment,
25 applying this at a file level, it would have

1 been obvious to someone of skill in the art
2 that applied at the file level, you would
3 want to use this to say something about the
4 location of where the file came from.

5 Q In paragraph 34 of your
6 declaration, you talked about marking
7 metadata.

8 I'm just trying to understand,
9 other than location, what sort of metadata
10 might be stored in the markers in Long?

11 MR. CLAWSON: Objection, form.

12 A (Witness reviewing.)

13 So, when I'm referring to audit
14 data here, or metadata -- among the -- that
15 metadata, I believe, a person -- a POSITA
16 would understand that there's information
17 saying that this is actually audit data.

18 There would be information about
19 the amount of data in the marker. There
20 would be information -- metadata about
21 what -- about the origin or where this audit
22 information came from.

23 Q You state in paragraph 34 that it
24 would -- the marker data would need to
25 identify the specific archive file as opposed

1 to another version of the file.

2 How would this marker data do that?

3 MR. CLAWSON: Objection, form.

4 A (Witness reviewing.)

5 So, I believe it would indicate --
6 in the combination, it could indicate which
7 archive file it is by saying which file it's
8 an archive file for.

9 We also have that there's a time
10 included, so -- you know, between saying what
11 file is this audit marker for, it's also
12 saying -- identifying that file as of a
13 particular time, so that could distinguish
14 this audit marker as applying to the file at
15 a particular instance of time, whereas
16 another audit marker might apply to the same
17 file, but at another point in time.

18 Q It says which file it's an archive
19 for, but the only way to do that in Long is
20 with the RCB, correct, the location on the
21 hard disk?

22 MR. CLAWSON: Objection, form.

23 A Sorry. But what we were discussing
24 is the Kenley-Long combination, which is
25 applying Long at the file level of the --

1 we're saying, you know, it would be obvious
2 to a POSITA that to include information along
3 with the actual copy of file contents, that
4 would help identify — you know, which file
5 this audit marker refers to.

6 And also at which point of time —
7 you know, it would be obvious to a person of
8 skill in the art that in applying Long, they
9 were not constrained to those exact data
10 labels as in the preferred embodiment in
11 Long, but rather would — would make — use
12 analogous information that would be
13 accomplishing the same purpose as the file
14 level.

15 Q Okay. In paragraph 34, you refer
16 back to your original declaration, paragraphs
17 67 to 68.

18 Correct?

19 A I don't have memorized the exact
20 number of my declaration. Is it 1003?

21 Q Yes, sir.

22 A Okay. Then I do cite there to
23 paragraph 67 and 68 of my original '478
24 declaration.

25 Q My question, Dr. Maier, is where in

1 your original declaration do you outline
2 these extra fields that would be added in the
3 Kenley-Long combination?

4 MR. CLAWSON: Objection, form.

5 A Give me a moment. I'm going to
6 review that declaration.

7 Q Okay.

8 A (Witness reviewing.)

9 So in my paragraph 55, I first
10 describe his combination of Kenley's database
11 held system catalogue with my -- by
12 augmenting it with information from the audit
13 header taught by Long.

14 Kenley is -- in order to give
15 transparent access to files, Long -- or
16 Kenley is tracking where they are, where
17 various backup copies are.

18 Kenley's markers -- or Long's
19 markers have information identifying which
20 original information is being backed up.

21 His markers also have information
22 so that you can recognize the extent of a
23 marker within the memory buffer or audit
24 buffer or archive.

25 Q Is that your full answer, sir?

1 A Yes.

2 Q And where do you outline the extra
3 data that you spoke about being added to
4 identify the file?

5 MR. CLAWSON: Objection, form.

6 A (Witness reviewing.)

7 I don't go into detail here about
8 exactly what the additional elements would be
9 that would be added to Kenley's system
10 catalogue database.

11 I will point out that one
12 possibility for that, although it might not
13 be the best one, is to actually use an
14 identification of a sector where the file
15 resides because its file system knows the
16 mapping between files and sectors.

17 And so it could -- if we chose just
18 to put a sector in literally as it is in the
19 marker header into the system catalogue,
20 that's enough information to figure out what
21 file is being discussed.

22 But I believe it would have been
23 more natural for a POSITA to use
24 identification of a file -- of a file to
25 which the audit marker pertains. That is

1 more easily used at the file level.

2 Q I think this is my last question on
3 Long, maybe a couple more, but returning to
4 Long, Exhibit 1004, column 5, table 3.

5 The marker trailer, do you think
6 this MSG len field and its description are an
7 error?

8 MR. CLAWSON: Objection scope.
9 Objection, form.

10 A (Witness reviewing.)

11 In table 3 --

12 (Witness reviewing.)

13 My assumption is that what has been
14 labeled as MSG len is a value that can be
15 used to locate the marker header, which is
16 what is described in the paragraph just above
17 table 3.

18 It's possible that the description
19 given there for that field is not the best
20 possible one.

21 But given the purpose of the marker
22 trailer -- you know, someone of ordinary
23 skill in the art would understand that that
24 marker trailer had to contain information
25 reflective of the total length of the marker

1 it was in.

2 Otherwise, it wouldn't be suitable
3 for locating the marker header.

4 Q And there's no description in table
5 3 itself of a field that specifies this total
6 length of the marker.

7 Correct?

8 MR. CLAWSON: Objection, form.

9 A Reading this, I believe that this
10 wouldn't make any sense unless this marker
11 header did somehow indicate -- could be used
12 to determine the length of the full marker.

13 (Witness reviewing.)

14 However, I will note that the
15 combination I'm describing is taking --
16 proposing that -- well, let me start again.

17 (Witness reviewing.)

18 No, that's the wrong one. So in my
19 paragraph 55 of my original declaration, I
20 talk about augmenting the catalogue database
21 of Kenley to store relevant information from
22 the audit header taught by Long.

23 Now, the audit header, every time a
24 new marker is added to the memory buffer,
25 or -- the audit header contains a copy of

1 that added marker as the last marker in the
2 buffer.

3 Every time we move around markers,
4 either by adding them to the memory buffer,
5 moving them to the audit buffer, moving them
6 to archive, that audit header is updated.

7 It would be obvious for a POSITA
8 who was in this combination needing to track
9 where a particular piece of backup
10 information is in order to, you know, be able
11 to access it when needed, to augment that
12 database every time the audit marker changed.

13 So if we look at the audit header
14 fields in table 1 of Long, it has the last
15 marker location in the audit buffer.

16 And so from there, even without
17 having to access the marker trailer, it has
18 information there where that audit marker is
19 in the audit buffer.

20 So seems like at that point it
21 could, if it needed to -- if somehow that --
22 the MSG Len in the marker trailer was
23 defective in determining the length of an
24 audit marker, that the information is
25 explicitly updated in the audit header, and

1 it's in the proposed combination.

2 It's the audit header we're
3 tracking. Whenever it's updated we're
4 capturing relevant information to augment the
5 catalogue of system catalogue database of
6 Kenley.

7 Q Where is it stated in your original
8 declaration that this would be how the
9 combination operates --

10 MR. CLAWSON: Objection, form.

11 Q -- whenever it's updated? How
12 would I know that from your original
13 declaration, sir?

14 MR. CLAWSON: Same objection.

15 A (Witness reviewing.)
16 I'm reviewing that declaration.
17 (Witness reviewing.)

18 So in paragraph 77 of my original
19 declaration, in the first sentence, I say
20 Long in turn teaches an audit header that is
21 updated to reflect changes in the data
22 storage location.

23 So there I'm talking about the
24 audit header being updated to reflect storage
25 locations.

1 I've previously described how
2 Kenley's catalogue system catalogue database
3 is tracking locations of backup copies.

4 So I think to a person -- to a
5 POSITA, these updates to the audit header can
6 reflect arrival or movement of marker
7 information.

8 And since the purpose of the system
9 catalogue database in Kenley is to keep track
10 of locations of backup copies, it would be
11 obvious that whenever the audit header
12 changes, that would -- you would want to
13 capture that information, because if you had
14 not done that, you could lose track of this
15 backup information.

16 Q Is there anywhere further that you
17 can point in your original declaration that
18 outlines this?

19 MR. CLAWSON: Objection, form.

20 Q You're adding to it, and I'm not
21 seeing the details in your original
22 declaration. I'm trying to understand it.

23 MR. CLAWSON: Same objection.

24 A (Witness reviewing.)

25 So in paragraph 78 of my original

1 declaration, I say, thus in view of these
2 complementary teachings — I will start over.

3 Paragraph 78, thus in view of these
4 complementary teachings, a POSITA would have
5 been motivated with a reasonable expectation
6 of success to implement Kenley-Long such as
7 information on current locations of different
8 backup files, including relevant audit header
9 information taught by Long, was stored in the
10 relational database catalogue taught by
11 Kenley.

12 So that sentence talks about
13 current locations of different backup files.
14 To a POSITA, as I've said, the audit header
15 is updated to reflect information about
16 locations of markers in order to get — to
17 know about current locations.

18 They would need to capture marker
19 location information from the audit header
20 whenever there was movement of that —
21 creation or movement of that information.

22 So the fact that I say current
23 locations, I believe, would indicate to
24 someone of the ordinary skill in the art that
25 they needed to reflect information in updates

1 to the audit header into the database because
2 that -- that -- those changes were revealing
3 changes in locations of audit markers.

4 MR. JAFFESS: Off the record.

5 (Whereupon a discussion was held
6 off the record.)

7 (Brief recess taken.)

8 Q Back on the record. In your reply
9 declaration in the '478 case, Exhibit 1024,
10 can I direct you to paragraph 22?

11 A Okay. So paragraph 22 that starts,
12 Mr. Jawadi argues?

13 Q Yes, sir.

14 A Okay. I am there.

15 Q In paragraph 22, you refer to
16 Exhibit 1025.

17 Correct?

18 A (Witness reviewing.)

19 Yes, I do.

20 Q This is the M-A-T-Z-E patent?

21 A (Witness reviewing.)

22 Yes, that's the Matze patent.

23 MR. JAFFESS: Off the record.

24 (Whereupon a discussion was held
25 off the record.)

1 Q So Matze, Exhibit 1025, discusses
2 hardware and software backup techniques.

3 Correct?

4 MR. CLAWSON: Objection to form.

5 A (Witness reviewing.)

6 So for this paragraph, I'm largely
7 relying on Matze for his descriptions in the
8 background of the invention, and a bit in the
9 summary of the invention that I'm citing to
10 because they are indicative of backup
11 techniques as of the time of that patent.

12 I'm not --

13 (Witness reviewing.)

14 I'm not relying on his specific
15 claimed invention in citing to that.

16 Q Matze is not used in any
17 combination in these IPRs.

18 Correct?

19 A (Witness reviewing.)

20 I have not used Matze in any
21 combination.

22 Q Can you go to column 5, line 15 of
23 Matze? Do you see the paragraph that starts,
24 thus?

25 A (Witness reviewing.)

1 Okay. I see that paragraph that
2 starts "thus".

3 Q Can you read the first three lines
4 of paragraph, please?

5 A Thus, there are two well-known
6 backup -- thus, there are two well-known
7 backup strategies, file by file, which has
8 well accepted usability characteristics but
9 whose performance is proving extremely
10 difficult to maintain.

11 As technology and image whose
12 performance can keep up with technology --
13 whose performance can keep up with
14 technology, but which has met with almost
15 universal rejection in the market for reasons
16 discussed above.

17 Q So Matze says that file by file
18 backups have performance issues. Correct,
19 they are extremely difficult to maintain.

20 Correct?

21 MR. CLAWSON: Objection to form.

22 A So he says that the performance is
23 proving extremely difficult to maintain.

24 Q On file by file backups.

25 Correct?

1 A For file by file backups.

2 Q Paragraph 23 of your reply
3 declaration, Exhibit 1024 in the '478 case,
4 you said that Kenley teaches image recovery
5 about halfway through.

6 A I see that, yes.

7 Q Kenley teaches image recovery by
8 copying files.

9 Is that correct?

10 MR. CLAWSON: Objection to form.

11 A I'm just going to consult Kenley.
12 (Witness reviewing.)

13 So in the paragraph that contains
14 the passage I cite from Kenley, it starts
15 out --

16 Q Did you cut out? I thought there
17 was an audio issue.

18 A Sorry. The paragraph starts out,
19 the preceding discussion describes the steps
20 the recovery processor 12 takes when
21 performing file recovery i.e., a recovery
22 process where the system operator desires to
23 retrieve named files from the backup volumes.

24 According to one practice of the
25 invention, the recovery processor also

1 performs image recovery, which reconstructs
2 an exact image of a directory or file system
3 or disk as of the time of a particular past
4 backup.

5 So what I understand Kenley to be
6 describing there is saying that -- to this
7 point, I have been talking about recovery of
8 individual files.

9 But that -- that the invention
10 would also include performing image recovery,
11 which is reconstructing an image of a
12 directory or file system or a disk.

13 Q Your reply declaration talks about
14 this using a file based system to perform
15 image recovery.

16 Correct?

17 MR. CLAWSON: Objection, form.

18 A (Witness reviewing.)

19 So my declaration talks about,
20 Kenley teaches a file based backup archiving
21 system.

22 I don't say that's the only thing
23 Kenley teaches. I point out here that Kenley
24 talks about the invention also being
25 applicable to a image recovery, including

1 image recovery of a disk.

2 Q If you go to column 12, lines 6 and
3 forward of Kenley, it talks further about the
4 image recovery.

5 MR. CLAWSON: Objection, form.

6 Q Your understanding of Kenley's
7 image recovery system is that it copies files
8 or it goes to lower level functionality?

9 MR. CLAWSON: Objection, form.

10 A (Witness reviewing.)

11 My point here is that Kenley points
12 out that the invention could be applied to
13 disk image recovery, which I would understand
14 would be talking about having the same
15 information in the same places on the disk.

16 So it seems to be talking about
17 a -- you know, a hardware level image
18 restore.

19 Kenley may accomplish that by
20 having information used to restore the disk
21 organized in files, but it's still talking
22 about recreating a disk image.

23 Q If you look at the preferred
24 sequence at the above of column 11 of Kenley,
25 and going to column 12, it talks about file

1 names, renaming, deleting.

2 Do you maintain that this is a
3 hardware operation?

4 MR. CLAWSON: Objection, form.

5 A (Witness reviewing.)

6 My point here is that Kenley
7 describes a system that can perform disk
8 image recovery. He is using files to manage
9 that backup process.

10 Q Let's move to paragraph 36 of your
11 reply declaration. The '478 case.

12 A Paragraph 47?

13 Q Sorry, 36?

14 A Thirty-six. Paragraph starts, Long
15 specifically explains?

16 Q Correct. If you can go to the
17 start of the next page, the first sentence,
18 you talk about Long teaching selectively
19 flushing the contents of the memory buffer.

20 Do you see that?

21 A (Witness reviewing.)

22 I see that.

23 Q Your point here is that Long
24 flushes the markers and not the audit header.

25 Correct?

1 MR. CLAWSON: Objection, form.

2 A (Witness reviewing.)

3 One moment. One of the points I'm
4 making is that -- that Long is not flushing
5 the audit header from the memory buffer, but
6 there's another point here I would like to
7 address.

8 (Witness reviewing.)

9 I'm also relying here, the
10 description of the S-E-M-A-P-H-O-R-E, that
11 there's a semaphore on the memory buffer, and
12 it talks about, will flush the memory buffer
13 that contains audit markers physical disk.

14 So that I thought was perhaps
15 indicative that the semaphore was saying, are
16 there audit markers here.

17 Those are really the things that
18 need to be -- make it to -- make it to disk
19 storage before the -- before the memory --
20 memory buffer might be reused.

21 But mostly -- yeah, mostly what I
22 am referring to is that -- that in flushing
23 the audit markers, it does not appear that
24 Long would necessarily remove the audit
25 header from the memory buffer.

1 Q It's primarily what you mean by
2 selectively flushing.

3 Correct?

4 MR. CLAWSON: Objection, form.

5 A (Witness reviewing.)

6 Q Strike that. Let's move on to the
7 next paragraph.

8 A Okay.

9 Q Paragraph 37 of your reply
10 declaration, still Exhibit 1024 in the '478
11 case.

12 You can go towards the very bottom
13 of page 29. The sentence that starts
14 "typically".

15 Do you see that?

16 A The sentence that starts, typically
17 files are selected?

18 Q Correct. You state that,
19 typically, files are selected for migration
20 from a storage location to a different
21 storage location, and as such the system must
22 search the storage location for files to move
23 them.

24 Correct?

25 A (Witness reviewing.)

1 Well, I'm speaking here in the
2 context of the Kenley-Long combination, where
3 files are stored in the memory buffer, and
4 it's talking about selecting files for
5 migrating a storage location to a different
6 storage location.

7 And in order to carry out that
8 movement, the system has to find those files
9 in order move them.

10 Q You cite to Kenley, column 3, lines
11 five to eight.

12 Correct?

13 A Yes, that's the citation.

14 Q This argument of citation, is it
15 anywhere in your original declaration?

16 MR. CLAWSON: Objection to form.

17 A (Witness reviewing.)

18 I don't remember whether or not it
19 is cited there.

20 You know, this paragraph is
21 particularly responding to some of
22 Mr. Jawadi's arguments that talk just about
23 implementing Long, and that the point is, if
24 we're using -- using Long with files, then
25 it's not sectors we're looking for in Long to

1 move them, it's files we're looking for in
2 Long to move them.

3 Q This was not referenced in your
4 original declaration, Exhibit 1003, in the
5 '478 case.

6 Correct?

7 MR. CLAWSON: Objection, form.

8 A I can't give you -- I'm not -- I
9 cannot -- I do not have in my memory
10 everything that was mentioned in my original
11 report.

12 If you want me to look through the
13 obvious places and see if I cite it, but I --
14 I don't remember whether or not I did.

15 Q Yeah, I would like a clear record
16 on this. So yeah, you can look back at your
17 original declaration.

18 A (Witness reviewing.)

19 Q The closest I came is paragraph 52
20 of your original declaration?

21 A Okay.

22 (Witness reviewing.)

23 I see in paragraph 52 of my
24 original declaration, I cite a range in
25 column 3, 1 to 47, that includes the cited

1 phrase, talking about selecting files to be
2 migrated.

3 But at that point at least I don't
4 quote the particular phrase from lines five
5 to eight in column 3. I --

6 (Witness reviewing.)

7 Q We can move on.

8 A It appears that I -- I do not quote
9 that particular phrase from column 3, lines
10 five to eight of Kenley.

11 But, you know, if I discover later
12 that I was incorrect on that assumption, I
13 reserve the right to clarify.

14 Q Okay. Also, the argument about
15 selection and searching.

16 MR. CLAWSON: Objection, form.

17 Q Can we go now to paragraph 38 of
18 your reply declaration in the '478 case?

19 A The paragraph that starts,
20 regarding the memory buffer?

21 Q Correct. You're arguing that
22 Long's semiconductor memory is RAM, as is
23 Kenley's storage element.

24 Correct?

25 MR. CLAWSON: Objection, form.

1 A (Witness reviewing.)

2 My understanding of Long's
3 semiconductor memory buffer is that I've -- I
4 mean, without other qualifications on memory,
5 I -- a semiconductor memory, that indicates
6 to me that it is some form of random access
7 memory because I don't know of other forms of
8 semiconductor memory that are not random
9 access. I don't believe I do.

10 Q This argument from paragraph 38, is
11 this anywhere in your original declaration?

12 MR. CLAWSON: Objection to form.

13 A (Witness reviewing.)

14 Are you asking about my conclusion
15 that the memory buffer is random access
16 memory?

17 Q The relation of the two together,
18 or the argument here, correct, is it anywhere
19 in your original declaration?

20 MR. CLAWSON: Objection to form.

21 A (Witness reviewing.)

22 In paragraph 54 of my original
23 declaration, I talk about the two references
24 being complementary in teaching tiers of
25 storage, including primary storage, e.g. RAM

1 or semiconductor memory buffer.

2 So at that point I am -- I
3 believe -- I'm outlining a correspondence in
4 this paragraph between the different storage
5 locations in Kenley and Long in that they
6 seem to contemplate, at least in some cases,
7 using the same kind of storage at -- in the
8 same -- each of the same one of the three
9 storage locations.

10 Q Moving onto paragraph 55 of your
11 reply declaration, now on Cabrera.

12 A The paragraph starting, Mr. Jawadi
13 argues?

14 Q Yes, sir. Do you see a few lines
15 down, you say that, my first declaration
16 explained that without the expressed term
17 database, Cabrera discloses a master file
18 table.

19 Do you see that?

20 A I see that Cabrera discloses a
21 master file table.

22 Q You say that the master file table
23 stores location information for files?

24 A Yes, I say it stores location
25 information for files.

1 Q Now, if you go back, it references
2 paragraph 130 in your original declaration.

3 Can you go there, please, it's
4 Exhibit 1003?

5 A I'm looking at paragraph 135 of my
6 original '478 declaration.

7 Q Here, you say that the master file
8 stores attributes of a file, but you don't
9 say anything about location.

10 Is that correct?

11 MR. CLAWSON: Objection, form.

12 A (Witness reviewing.)

13 So, I do talk here about the master
14 file table storing resident -- all resident
15 attributes of a file, referring to Cabrera.

16 Q You don't say it stores location
17 data.

18 Correct?

19 A (Witness reviewing.)

20 MR. CLAWSON: Objection, form.

21 A (Witness reviewing.)

22 So at this point, I indicate that
23 Cabrera is not expressly -- is not
24 expressly -- Cabrera does not expressly
25 discuss using a database to track the

1 location of a file as it is migrated through
2 different storage locations.

3 However, as disclosed in Whiting, a
4 POSITA knew that the main purpose of HSM,
5 hierarchal storage management, is to save on
6 storage costs for very large storage systems
7 by providing the management tools that allow
8 the migration to be transparent to the
9 system, except for the delay, in accessing
10 some files.

11 So my combination that I propose of
12 Cabrera, Schneider, Whiting looks to Whiting
13 for the notion of tracking locations of
14 archive copies, and saying that in the
15 combination to have transparent access or to
16 make this migration transparent.

17 To me that means that the user of
18 the system doesn't have to track locations,
19 but rather that the system itself is going to
20 track those locations so the user doesn't
21 have to.

22 And so, stating the obvious, to a
23 POSITA, in light of the teachings of Cabrera
24 and Whiting, to be keeping file location
25 information in a database.

1 Q Okay. But your reply declaration,
2 in paragraph 55 says that Cabrera's master
3 file table stores location information, and
4 that this disclosure alone renders the
5 database elements of the challenged claims
6 obvious.

7 Do you see that?

8 MR. CLAWSON: Objection, form.

9 A (Witness reviewing.)

10 Okay. I will acknowledge that
11 paragraph 55 of my reply declaration is not
12 completely consistent with my original
13 declaration.

14 My original declaration, I was
15 relying on Cabrera and Whiting together to
16 indicate — or to suggest keeping location
17 information in a master file table in a
18 database.

19 Q And would you admit that the master
20 file table of Cabrera does not store location
21 information for files?

22 MR. CLAWSON: Objection, form.

23 A (Witness reviewing.)

24 So this section of Cabrera talks
25 about the NTFS filing system of MS DOS. It's

1 been a while since I studied that file
2 system.

3 I do not remember offhand if it
4 stores particular kinds of location data.
5 But it does disclose in this paragraph that a
6 data attribute is location, where data can be
7 stored.

8 To give an example, a document
9 of -- a word processing document is typically
10 stored in the data attribute of a file.

11 I'm seeing that as saying the
12 document -- I'm reading there as being the
13 document name.

14 One could construe that as part of
15 the file, and it's being stored in the -- and
16 that the data attributes specify a location
17 where that information about the file is
18 stored.

19 I have not had lunch yet. So at
20 some point I would like to have a break for
21 that.

22 Q I understand. I would just like to
23 briefly finish this line.

24 I mean, you're in column 9 of
25 Cabrera?

1 A Right.

2 Q It does not list of location of the
3 file as being stored in the master file
4 table.

5 Correct?

6 A That paragraph in column 9 of
7 Cabrera, starting at line 4, does not list
8 the location of the file as one of -- the
9 location of the file contents as one of the
10 attributes being stored in the master file
11 directory.

12 It does talk about the other
13 aspects of the file, such as the name. The
14 paragraph does not explicitly list a content
15 location attribute for the file, but I am
16 unwilling to say without further study that
17 the NTFS does not store a file location.

18 Q Okay. In your declaration, your
19 reply declaration of paragraph 55, you say
20 that it does, and now you're saying -- you
21 just won't admit that it doesn't, but you
22 moved off of it does.

23 Correct?

24 MR. CLAWSON: Objection, form.

25 A (Witness reviewing.)

1 Okay. What I will express at this
2 point is that when I say in my reply
3 declaration that Cabrera discloses a master
4 file table storing location information for
5 files, that I have not demonstrated -- I did
6 not demonstrate or support that point in my
7 original declaration.

8 Rather, in my original declaration
9 I talked about how the Cabrera in combination
10 with Whiting would have motivated a POSITA to
11 store location information.

12 Q The last question, you also did not
13 support that point in this reply declaration
14 in paragraph 55. Correct?

15 There's not a citation to Cabrera
16 that shows this. Correct?

17 MR. CLAWSON: Objection, form.

18 A (Witness reviewing.)

19 I did not offer evidence of that in
20 this reply declaration.

21 MR. JAFFESS: We can break for
22 lunch.

23 (Lunch recess taken.)

24 Q Back on the record. Sticking with
25 your reply declaration in the '478 case,

1 Exhibit 1024, can you please go to paragraph
2 56?

3 A I'm at paragraph 56.

4 Q Can I confirm that you didn't talk
5 substance with anybody at the breaks for this
6 deposition?

7 A That's correct. I have not talked
8 anything of substance.

9 Q Paragraph 56 of your reply
10 declaration, do you see the sentence starting
11 with further?

12 A Further, the determination?

13 Q Correct. This is talking about
14 storage based allocated or allocable in
15 Cabrera.

16 Correct?

17 A (Witness reviewing.)

18 Yes. This is talking about in the
19 context of Cabrera.

20 Q And you state that this depends on
21 what files are already stored in the staging
22 area.

23 Do you see that?

24 MR. CLAWSON: Objection, form.

25 A Yes. Further on in that sentence I

1 talk about how much storage space is
2 allocated or allocable for the staging area
3 depends on what files are already stored in
4 the staging area.

5 Q This depends on the amount of space
6 and the amount of space taken up by the
7 files, correct, not with actual files that
8 are there.

9 Correct?

10 MR. CLAWSON: Objection, form.

11 A (Witness reviewing.)

12 This depends on --

13 (Witness reviewing.)

14 -- knowing what archive file
15 that -- the currently present archive files,
16 what space they consume.

17 And in some cases it might require
18 knowing whether any archive file is present,
19 because perhaps the system wanted to store
20 information that would use up all the space
21 available in the staging area.

22 Q I just want to confirm that this
23 argument in paragraph 56 of your reply
24 declaration is an argument under the
25 petitioners proposed construction of

1 searching, it's not an argument under the
2 patent owner's proposed construction?

3 MR. CLAWSON: Objection, form.

4 A (Witness reviewing.)

5 What I'm consulting here further in
6 that paragraph I talk about under the proper
7 construction as discussed supra section A,
8 and looking back to see if that is referring
9 to the petitioner's construction or the
10 patent owner's construction.

11 Q Understood.

12 A (Witness reviewing.)

13 Q I'm not asking you to admit that
14 our construction is proper.

15 I'm just trying to make sure that
16 you're not trying to argue under both
17 constructions, here.

18 A (Witness reviewing.)

19 Sorry, I was looking in the wrong
20 place, which is why I wasn't finding it.

21 (Witness reviewing.)

22 I'm sorry, I'm confused by my own
23 cross reference.

24 Q That's fine.

25 A (Witness reviewing.)

1 Q I can help. The claim construction
2 sections on page 7, to either 11 or 12?

3 A Okay.

4 Q Up to 12?

5 A (Witness reviewing.)

6 Q If it's any help, on pages, 24 to
7 25 in Ground One, you argue both
8 constructions.

9 I'm just trying to confirm that
10 you're only arguing under one construction.

11 A (Witness reviewing.)

12 Here, I'm arguing under the proper
13 construction, which is the petitioner's
14 construction.

15 Q You're not arguing under the other
16 construction, the patent owner's.

17 Correct?

18 A Not in this, no.

19 Q Do you argue -- I'm just trying to
20 confirm, do you argue under Ground Two under
21 patent owner's construction anywhere in this
22 reply declaration on the '478 patent?

23 MR. CLAWSON: Objection, form.

24 A (Witness reviewing.)

25 I don't believe I argue under the

1 patent owner's construction of searching
2 in -- in Ground Two.

3 Q In Ground Two, Cabrera Schneider
4 Whiting, do you know which is the primary
5 reference of the combination?

6 MR. CLAWSON: Objection, form.

7 A (Witness reviewing.)

8 I've not designated one reference
9 as the primary reference. They all
10 contribute teachings to the combination.

11 I wasn't aware that I needed to
12 designate one as the primary reference.

13 Q Switching gears now, going to the
14 '850 patent case, which the IPR 2024 80, can
15 you please open your reply declaration in
16 that case again, Exhibit 24?

17 A Okay. I'm -- give me a moment
18 while I swap binders. Okay.

19 You were asking about the reply
20 declaration?

21 Q Yes, the '850 case. If you can go
22 to paragraph 18, please.

23 A So I'm at paragraph 18 in my '850
24 reply.

25 Q So in paragraph 18, you give an

1 example of a previous version, quote/unquote,
2 one of a file backed up remotely and a
3 current version, quote/unquote, to the file
4 stored locally.

5 You state that a system can
6 retrieve and store to local storage the
7 previous version, one, without changing its
8 designation number or replacing the current
9 version, two.

10 Do you see that?

11 A I see that language.

12 Q Would the retrieve version one of
13 this file stored locally have a file name
14 that is identical in all respects to that of
15 the version two?

16 MR. CLAWSON: Objection, form.

17 A (Witness reviewing.)

18 So as to whether version one and
19 version 2 have identical file names, that
20 might depend on the details of the local
21 storage arrangement, and also in the details
22 of how the system is designating versions.

23 Q You state that, to satisfy the
24 term, quote, as the current version, and,
25 quote, however, the restored version one

1 would need to be de-designated as the current
2 version.

3 Do you see that?

4 A I see that.

5 Q What does this de-designation
6 process do to establish restored version one
7 as the now current version?

8 A (Witness reviewing.)

9 I believe that this may be a
10 typographic error, and that I intended either
11 to say that -- that it needed to be
12 redesignated as the current version, the
13 process there.

14 Again, might depend on how the
15 system is making the user of local storage
16 aware of what it has on the current version.

17 One way that might happen is that
18 local storage has a primary directory where
19 current versions are of files where the user
20 expects to find current versions of files.

21 There could be another directory
22 for alternative versions. So to
23 redesignate -- so, version one might have
24 been copied over into this directory for
25 alternative file contents.

1 And then in order to make it now
2 the current version, it would need to be
3 replaced version two in the primary
4 directory.

5 That's one possibility for how
6 the -- what I think I should have said,
7 redesignated, redesignation process should
8 happen.

9 Q Referring to claim 1 of the '850
10 patent, if you have that handy?

11 A I should.

12 Q It's Exhibit 10001.

13 A So yeah, claim 1, which begins in
14 column 8 of the '850.

15 Q What's been termed limitation 1.4,
16 begins on line 21 of column 9, starting with
17 the parenthetical letter C.

18 Do you see that?

19 A Yes.

20 Q Responsive to a selection to
21 restore the selected previous version,
22 retrieving the restorable representation of
23 the selected previous version from the remote
24 storage location, and storing the selected
25 previous version by the computational machine

1 as the current version on the local storage
2 location, the selected previous version
3 available from the restorable representation
4 of the selected previous version.

5 Do you see that?

6 A I do.

7 Q Would a person of ordinary skill in
8 the art understand that the recited
9 retrieving action in this limitation occurs
10 after the recited selection action?

11 A (Witness reviewing.)

12 I think a POSITA would have
13 understood retrieving as coming after
14 selection, because of the word responsive --
15 or the phrase, responsive to a selection, at
16 the beginning of that paragraph.

17 MR. JAFFESS: Can we go off the
18 record for just a minute or two, please?

19 (Brief recess taken.)

20 Q Back on the record. No further
21 questions, Dr. Maier.

22 A Okay. I believe that we would like
23 a short break at this time for our counsel to
24 consider whether there's any questions from
25 our side.

1 Q Sure.

2 (Brief recess taken.)

3
4 EXAMINATION BY MR. CLAWSON:

5 Q Dr. Maier, I have just a few short
6 questions for you.

7 I will ask you to turn back to
8 Exhibit 1025. Sorry, this is for the '478
9 patent proceeding.

10 A Okay. Sorry, I'm a little bit
11 tethered here by this headphone set. Exhibit
12 1025, is that what you said?

13 Q Correct. For the record this is
14 the Matze patent.

15 A Okay. I am looking at the Matze
16 patent again.

17 Q I will ask you to turn to column 5,
18 and the paragraph starting on line 15?

19 A The paragraph that starts, an
20 alternate backup method, is that correct?

21 Q It should start, thus, there are
22 two well-known backup strategies, column
23 five, line 15?

24 A Sorry, I was in column 3. I --
25 okay. That starts, thus, there are two

1 well-known backup strategies.

2 Q Correct. I believe in your earlier
3 testimony you were asked to read into the
4 record the first three lines of this
5 paragraph.

6 I would like you to go ahead and
7 read the paragraph in full.

8 A Okay. Thus, there are two
9 well-known backup strategies, colon, file by
10 file, which has well accepted usability
11 characteristics, but whose performance is
12 proving extremely difficult to maintain as
13 technology advances, and image, whose
14 performance can keep up with technology, but
15 which has met with almost universal rejection
16 in the market for the reasons discussed
17 above.

18 Q And in this last two lines, where
19 it says the reasons discussed above, do you
20 understand that to be talking about the
21 preceding paragraphs of this background of
22 the invention section?

23 MR. JAFFESS: Objection to form.

24 A (Witness reviewing.)

25 Well, I believe that those reasons

1 discussed above include at least what is
2 described in column four, talking about an
3 image backup system called snapback.

4 So one limitation it talks about
5 there is that in line 48, it mentions that --
6 for the system, the operating system must be
7 entirely shut down during the backup process.

8 That's unacceptable to many users.
9 And then starting at -- I would guess it's
10 line 66 of column four, and carrying over
11 onto the next page, is a description of a
12 problem that if a file volume is actually
13 split across multiple physical disks, then
14 you can't restore it, such a split up volume,
15 unless you have physically identical disks.

16 So the previous paragraphs do
17 disclose issues with image based reasons for
18 people -- for rejection of image based
19 backup. I don't know that those are all the
20 reasons, but those are at least two.

21 Q And does Matze recognize those
22 reasons as disadvantages of image based
23 backup relative to file based backup?

24 MR. JAFFESS: Objection, form.

25 A (Witness reviewing.)

1 He describes them as reasons that
2 image based is rejected. I assume that --
3 one might well conclude that he thinks they
4 are -- have disadvantages relative to file
5 based systems relative to those specific
6 reasons.

7 In particular, he -- when he goes
8 on to talk about his invention, he talks
9 about a method that will over -- that intends
10 to overcome those disadvantages that he
11 pointed out above.

12 Q Okay.

13 MR. CLAWSON: Thank you, Dr. Maier,
14 no further questions.

15 MR. JAFFESS: No recross.

16 THE COURT REPORTER: Just to
17 confirm, rough and 5 day expedite, both
18 sides?

19 MR. JAFFESS: Yes.

20 MR. CLAWSON: Yes.

21 (Whereupon the deposition was
22 concluded at 5:10 p.m.)

23 (Witness was excused.)
24
25

1 C E R T I F I C A T E

2 I, MICHAEL FRIEDMAN, a Certified Court
3 Reporter and Notary Public, qualified in and for
4 the State of New Jersey do hereby certify that
5 prior to the commencement of the examination DAVID
6 MAIER, PH.D. was duly sworn by me to testify to the
7 truth the whole truth and nothing but the truth.

8 I DO FURTHER CERTIFY that the foregoing
9 is a true and accurate transcript of the testimony
10 as taken stenographically by and before me at the
11 time, place and on the date hereinbefore set forth.

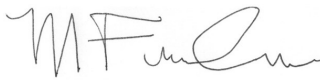
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Date: November 22, 2024

ERRATA SHEET

CASE NAME: Dropbox Inc., et al., v. Datnet LLC, IPRs 2024-00078, 2024-00079, 2024-00080

DATE OF DEPOSITION: November 19, 2024

DEPONENT NAME: David Maier, Ph.D.

<u>PAGE</u> <u>#</u>	<u>LINE</u> <u>#</u>	<u>CORRECTION FROM</u>	<u>CORRECTION TO</u>	<u>REASON</u>
18	18	It's sector only	It's a sector only	Mistranscription
22	24	All	What all	Mistranscription
36	17	I believe it was	I believe what was	Mistranscription
41	2	audit buffer archival media	audit buffer or archival media	Mistranscription
43	4	A Correct.	Q Correct?	Mistranscription (incorrectly identified part of attorney's question as answer)
59	10 & 11	difficult to maintain. As technology and image whose	difficult to maintain as technology advances and image whose	Mistranscription
84	2 & 3	need to be replaced	need to replace	Mistranscription

I DECLARE UNDER PENALTY OF PERJURY THAT THE FOREGOING IS TRUE AND CORRECT.

David Maier
Name

12/2/2024
DATE