

1 UNITED STATES PATENT AND TRADEMARK OFFICE

2
3
4 BEFORE THE PATENT TRIAL AND APPEAL BOARD

5
6 CENTRALSQUARE TECHNOLOGIES, LLC,
7 Petitioner,

8 v.

9 CARBYNE, LTD.,
10 Patent Owner.

11 Case IPR2025-01179
12 U.S. Patent No. 11,689,383

13
14 DEPOSITION of STUART J. LIPOFF

15 - CONDUCTED BY VIDEOCONFERENCE -

16 Thursday, July 16, 2026

17 11:30 a.m. Eastern Daylight Time

18
19
20
21 Job No.: 2026-1031025

22 Pages: 1 - 74

Reported By: Michelle Keegan, RMR, CRR, CSR

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

COUNSEL FOR PETITIONER CENTRALSQUARE
TECHNOLOGIES, LLC

KIRKLAND & ELLIS LLP

By: Gianni Cutri P.C., Esq.
333 West Wolf Point Plaza
Chicago, Illinois 60654
Phone: (312) 862-2000
Email: gianni.cutri@kirkland.com

KIRKLAND & ELLIS LLP

By: Hermione Zhang, Esq.
2049 Century Park East, Suite 3700
Los Angeles, California 90067
Phone: (310) 552-4200
Email: hermione.zhang@kirkland.com

COUNSEL FOR PATENT OWNER CARBYNE, LTD.

ORRICK, HERRINGTON & SUTCLIFFE LLP

By: K. Patrick Herman, Esq.
51 West 52nd Street
New York, New York 10019-6142
Phone: (212) 506-5000
Email: pherman@orrick.com

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(Note: All quotations from exhibits are reflected in the manner they were read and do not denote an exact quote from the document.)

1 P R O C E E D I N G S

2 STUART J. LIPOFF,

3 having been satisfactorily identified and duly

4 sworn by the Notary Public, was examined and

5 testified as follows:

6 EXAMINATION BY COUNSEL FOR

7 PATENT OWNER CARBYNE, LTD.

8 BY MR. HERMAN:

9 Q. Good morning, Mr. Lipoff. While I
10 recognize that we previously talked a few months
11 ago, I'm going to briefly run through the same
12 basic set of ground rules we talked about before
13 to ensure things go smoothly here again today.

14 So first, it's important that we not talk
15 over each other so that there's a clear record.
16 I'll do my best to wait for you to finish before
17 asking another question. I also ask that you wait
18 until I'm done with my question before answering.
19 Is that okay?

20 A. That's okay with me. Yes.

21 Q. Next, you're entitled to a question you
22 understand. So if anything I ask is unclear,

1 please let me know. Is that okay?

2 A. Okay.

3 Q. I ask that you not look at anything during
4 the deposition besides the documents that I give
5 you or clean copies of your declaration, if you
6 happen to have it, and the prior art. If you do
7 look at any of those clean copies, I ask that you
8 tell me. Is that okay?

9 A. That's okay. Yes.

10 Q. Next, I'd ask that you don't have any side
11 conversations or use technology to chat or
12 communicate with anyone during the deposition. Is
13 that okay?

14 A. That's okay.

15 Q. Now, is there anything that would prevent
16 or interfere with your ability to testify today?

17 A. Nothing I'm aware of.

18 Q. So I'm going to start by putting into the
19 chat a copy of an exhibit that's been previously
20 marked as Exhibit 1011.

21 (Previously marked Exhibit 1011)

22 Q. Can you go ahead and open that for me.

1 A. I'm sorry. You want me to do that?

2 Q. Yeah.

3 A. That's the '383 patent. Correct?

4 Q. Exhibit 1011 is something else. It's not
5 the '383 patent.

6 A. Oh, it's my declaration. Right?

7 Q. Yes. Do you have a copy of that document
8 now?

9 A. Yeah, I do have a hard copy of it. I
10 think it's easier for me to see if I refer to the
11 hard copy because of the screen resolution.

12 Q. So that's fine.

13 Exhibit 1011 is entitled "Supplemental
14 Declaration of Stuart J. Lipoff." Is that right?

15 A. Correct.

16 Q. And it relates to IPR2025-01179. Correct?

17 A. 01179. Correct.

18 Q. And that IPR proceeding relates to the
19 '383 patent. Correct?

20 A. Correct.

21 Q. And that's the same '383 patent that you
22 addressed in your previous declaration in that

1 same IPR proceeding. Right?

2 A. Correct. Correct.

3 Q. Now, can you turn for me to Paragraph 104
4 in Exhibit 1011. And I'm going to refer to
5 Exhibit 1011 today as "your supplemental
6 declaration."

7 So if you could, turn to Paragraph 104 of
8 your supplemental declaration.

9 A. Okay.

10 Q. That's on page 43.

11 A. Yes, I see that.

12 Q. So Paragraph 104 begins a portion of your
13 declaration that discusses secondary
14 considerations or objective indicia of
15 nonobviousness. Right?

16 A. Correct.

17 Q. Now, if you could direct your attention to
18 Paragraph 105 on the next page.

19 A. Okay. I see that. Yes.

20 Q. In about the fourth line of that paragraph
21 you note, "Mr. Christiansen made no effort to
22 research, test, or use the Universe product to tie

1 it to Claim 1."

2 Do you see that?

3 A. I see that. Yes.

4 Q. Did you research, test, or use the
5 Universe product when drafting this particular
6 declaration?

7 A. No, I did not.

8 Q. Did you ask petitioner CentralSquare or
9 anyone associated with it to do that work for you?

10 A. I did not.

11 Q. Is it your opinion that researching,
12 testing, or using the Universe product is a
13 necessary prerequisite for being able to opine
14 regarding whether the product is or is not covered
15 by the '383 patent's claims?

16 A. I believe that in order for
17 Mr. Christiansen or anyone else to offer an
18 opinion as to whether or not features and
19 functions of the product are covered by the claim,
20 one would need to understand how it works.

21 And there could be alternative ways by
22 which you might be able to understand how it

1 works. One of them would be to test the product.
2 In the absence of actually testing it, you would
3 need to have some authoritative information
4 obtained, perhaps through research or by
5 discussions with the principals, the engineers
6 involved in designing the product or working it.

7 But it would be a requirement in order to
8 opine on whether or not the product does exercise
9 the features that are in the patent. You would
10 have to have some knowledge or understanding of
11 the details of how the product works.

12 Q. And did you do any work to determine how
13 the product works before offering your opinions in
14 this case?

15 A. My brief here was to respond to
16 Mr. Christiansen's representation of the secondary
17 considerations.

18 As I recall, there was no offering of any
19 of the secondary considerations prior to
20 Mr. Christiansen's declaration, so I had no need
21 or reason in any of the previous declarations I
22 offered prior to the supplemental to make any

1 comments regarding secondary considerations.

2 So the answer is, I did not -- I did not
3 make any particular attempt to determine which of
4 the Carbyne systems did or did not practice these
5 limitations.

6 Q. Now, in your supplemental declaration you
7 discuss and quote, in some cases, documents
8 discussing the operation of the Universe product.
9 Correct?

10 A. Are you asking -- I just want to make sure
11 I understand the question. Are you asking me if I
12 offered an opinion as to what the features were of
13 the Universe product?

14 And my answer is, I did not endeavor to
15 understand what the specific features of the
16 Universe product were or were not. I was simply
17 in my supplemental, I was responding to
18 Mr. Christiansen's positions with respect to
19 secondary considerations where he provided his
20 point of view and also offered some documents that
21 supported his understanding of how it worked.

22 Q. And the documents you discuss regarding

1 the operation of the Universe product in your
2 supplemental declaration are the same documents
3 that Mr. Christiansen cited. Correct?

4 A. Well, with respect to this particular
5 declaration, I don't think I offered or identified
6 any documents other than the ones identified by
7 Mr. Christiansen.

8 I just want to make sure I'm answering
9 your question correctly because there was a
10 subsequent declaration, short declaration,
11 regarding issues about the evidence. And in that
12 declaration, I did cite to some other documents
13 that were not cited by Mr. Christiansen.

14 But in this declaration, I don't believe I
15 cited to anything other than the documents he
16 identified.

17 Q. Now, if you could turn to Paragraph 106,
18 which is the next paragraph.

19 A. Okay.

20 Q. You mentioned Claim 1 of the '383 patent.
21 Right?

22 A. Let's see. Yeah, I see that. Yes.

1 Q. Do you identify any limitations of Claim 1
2 that are missing from the Universe product in this
3 paragraph or in any other paragraph of your
4 declaration?

5 A. As I said, I did not endeavor to
6 separately than what Mr. Christiansen offered
7 identify -- I did not undertake any effort to
8 understand the operation of the Universe product.

9 What I'm doing instead was, I'm providing
10 a rebuttal to what Mr. Christiansen has offered.
11 And neither -- I did not find anything in his
12 opinion or in any of the documents he offered that
13 showed that this product establishes all the
14 elements of Claim 1.

15 So I didn't do a separate undertaking of
16 that. I simply examined his evidence. And as I
17 say here in Paragraph 106, I think he has failed
18 to establish, based on the evidence that he
19 provided, that the elements of Claim 1 are met.

20 Q. And which elements are those that you
21 believe are not met?

22 A. I did not find the -- well, I didn't

1 enumerate them. But as I pointed out here, the
2 main feature that Carbyne and Mr. Christiansen
3 have offered as being the unique inventive aspects
4 were that voice and WebRTC -- the voice connection
5 was maintained on the original phone call at the
6 same time a WebRTC connection was being
7 established so that there was a multimodal
8 multimedia conversation taking place.

9 That's at least one of the claim elements
10 that Carbyne has indicated is important or was
11 inventive. I did not find that.

12 I didn't separately enumerate each and
13 every claim limitation of Claim 1, but neither did
14 Mr. Christiansen. So there was -- it was not a
15 specific portion of what Mr. Christiansen offered
16 where he went claim element by claim element where
17 I was given my brief to rebut.

18 I didn't rebut his analysis of claim
19 element, claim element. But he certainly did not
20 find at least one that Carbyne says is really
21 important, which is the simultaneous operation of
22 the original voice connection and WebRTC, which is

1 the -- I think it's referred to in this proceeding
2 often by Carbyne as the "while" word that exists
3 in Claim 1.

4 Q. So in Paragraph 106, I'm not seeing
5 reference to the absence of simultaneous audio and
6 real-time video communication in the Universe
7 products. Where is that in Paragraph 106?

8 A. That does not exist in Paragraph 106. But
9 that's not the question that you asked me, nor was
10 it the brief in my declaration.

11 What I said here in my declaration is
12 quite clear. I examined the evidence
13 Mr. Christiansen offered with respect to Claim 1,
14 and I failed to find where he went claim element
15 by claim element and showed that each and every
16 one of the claim elements are, in fact, being
17 practiced by the Universe product.

18 As I testified a moment ago, there's -- in
19 particular, I noticed that he did not address the
20 one aspect of this patent, or at least what I
21 think I understood Carbyne to believe is the
22 innovative aspect of this, that deals with this

1 "while" limitation in Claim 1.

2 In other words, I think it's the last
3 claim element, while audio content of the
4 emergency call is received through the first
5 connection and wherein the real-time video stream
6 is associated with the unique identifier.

7 So that's at least one of the claim
8 elements where I was looking to see whether
9 Mr. Christiansen specifically identified that.

10 I didn't find that, but I also didn't find
11 him going through all -- any of the other ones and
12 going claim element by claim element showing that
13 yes, in fact, the Universe product practices each
14 and every one of these other claim elements.

15 Q. So I'm going to put in the chat a copy of
16 Exhibit 2004, which is the declaration of
17 Mr. Christiansen.

18 (Previously marked Exhibit 2004)

19 Q. Let me know when you've got it.

20 A. That, I'm going to have to go to the chat
21 to open up because I don't have a hard copy of
22 that.

1 Okay. 2004?

2 Q. Yes.

3 A. Okay. Let's see. I guess it's -- the
4 easiest thing for me to do is to save that to my
5 desktop to open it. All right. I've got it on my
6 desktop. I'm opening it now.

7 Okay. I've got the -- I've got the
8 document opened on my computer.

9 Q. And if you could turn to page 63 of
10 Exhibit 2004.

11 A. Page 63. That's page 63 of the PDF?

12 Q. Yes.

13 A. Okay. Let me just look at what's on the
14 bottom of the page here. Yeah. Okay. It's same.

15 Q. And right in the middle of that page,
16 there's a bolded claim limitation that starts
17 "receiving the real-time video stream," and then
18 it continues on. And the word --

19 MR. CUTRI: I apologize. Can you just
20 tell me, Patrick, what page you're on in the 2004?

21 MR. HERMAN: 63.

22 MR. CUTRI: Is that -- oh, the PDF in

1 the --

2 MR. HERMAN: Same thing.

3 MR. CUTRI: Okay. Go ahead.

4 Q. And you see claim language in the middle
5 of the page. Right?

6 A. Yes, I see that.

7 Q. And this is the claim language that
8 includes the limitation that requires that the
9 real-time video stream is received through the
10 WebRTC session while audio content of the
11 emergency call is received through the first
12 connection. Correct?

13 A. Yes, I see that.

14 Q. And following that claim language,
15 Mr. Christiansen sets forth 1, 2, 3, 4, 5, 6, 7 --
16 seven paragraphs of text. Correct?

17 A. Let's see. Paragraph 256 through like
18 around 260, I guess. Right?

19 Q. Yes.

20 A. Yes, I see that.

21 Q. Now, you don't contest that anything that
22 Mr. Christiansen says in those paragraphs is

1 incorrect. Correct?

2 MR. CUTRI: Objection, form.

3 A. So as I explained, when I prepared my
4 original declaration, I did not understand that
5 Carbyne was offering any arguments about secondary
6 considerations of obviousness.

7 In preparing my supplemental, I responded
8 to the evidence that Mr. Christiansen offered in
9 his document.

10 And the evidence he provided did not
11 enumerate any of the limitations of Claim 1,
12 including this particular one.

13 I don't dispute that what you're showing
14 me here on the page in his declaration says that
15 he believes that to be the case, but it's based
16 upon what he says is documents he reviewed.

17 It doesn't identify what the documents
18 were, the documentation, and the documentation was
19 not provided to me other than some of the exhibits
20 or the attachments that he made to his
21 declaration.

22 Q. My question was a little different.

1 So you have not identified anywhere in
2 your supplemental declaration anything that's
3 wrong about the opinions offered in Paragraphs 256
4 through 262 of Mr. Christiansen's declaration.
5 Correct?

6 MR. CUTRI: Objection, form.

7 A. Yeah. I have not endeavored to determine
8 whether what he's offering is correct or not
9 correct.

10 What I'm simply saying is the evidence
11 that he provided to support that does not speak to
12 this particular issue. And moreover, it was not
13 presented in such a way where the evidence he
14 provided was matched up to each and every claim
15 limitation within the '383 patent.

16 So my supplemental declaration basically
17 said in reviewing the evidence that
18 Mr. Christiansen provided, he failed to provide a
19 mapping between specific features that are in the
20 Universe product and each of the claim
21 limitations, in particular this "while" limitation
22 that Carbyne believes to be the -- an inventive

1 aspect of the patent.

2 Q. So I'm still having trouble understanding
3 what your opinion is.

4 So looking at pages 60, 61, 62, 63, and 64
5 of Mr. Christiansen's declaration, every single
6 limitation of Claim 1 of the '383 patent is quoted
7 on those pages. Correct?

8 MR. CUTRI: Objection.

9 I'm sorry. Hold on.

10 (Off the record, 11:52 a.m. to 11:58 a.m.)

11 BY MR. HERMAN:

12 Q. I'll reask my question.

13 Now, looking, Mr. Lipoff, at Exhibit 2004,
14 across pages 60 through 64, Mr. Christiansen
15 quoted the entirety of Claim 1 of the '383 patent.
16 Correct?

17 A. Yeah. Sorry. Let me get back to
18 page 60 -- starting at page 63?

19 Q. Starting at page 60 and then continuing
20 all the way onto page 64.

21 A. I'm sorry. I'm just not getting it. The
22 starting one was page 60. Is that correct?

1 Q. 60, six zero, yes.

2 A. Six zero. I got it.

3 So Paragraph 240 he starts with the
4 preamble, the phone number. Transforming,
5 wherein, page, Paragraph 249.

6 Let's see. Is that the last limitation
7 associated with the phone number for the mobile
8 device? Yes, that appears to be each of the
9 limitations.

10 Q. So across pages 60 through 64, the
11 entirety of Claim 1 is quoted. Correct?

12 A. I believe that's correct. Yes.

13 Q. And following the quoted claim
14 limitations, Mr. Christiansen has discussion of
15 why he believes each limitation is satisfied.
16 Correct?

17 A. Yes, I believe that's correct.

18 But if you go back to the beginning of
19 that section, which is Paragraph 236, he indicates
20 what his basis for that opinion is, which is what
21 I was rebutting.

22 In Paragraph 236, he refers to two

1 documents that he says describes the operation of
2 the system. And that is -- what he says in
3 Paragraph 236 and 237 is the basis for his
4 understanding of the Universe product.

5 One of them is Exhibit 213 -- 2013, and
6 the other one is Exhibit 2014. And I examined
7 each of those documents, which are his evidence
8 for his opinions that follow. And I could not
9 find in either of those documents identification
10 of those particular claim limitations.

11 Moreover, those two documents are Carbyne
12 documents. They're not -- he says it was
13 published by the Washoe County Sheriff's Office,
14 but in fact it was written by Carbyne.

15 The second one he says is public
16 documentation by Miami-Dade. But again, looking
17 at that document, these are documents that were
18 written or created by Carbyne.

19 So I don't see any independent third-party
20 verification that the content of those documents
21 are correct.

22 Moreover, even examining those documents,

1 I could not find those limitations enumerated or
2 in any other direct or indirect respect shown in
3 those two documents that Mr. Christiansen relied
4 upon in Paragraph 237 of his declaration.

5 Q. You were looking for the '383 patent claim
6 limitations in the documents that Mr. Christiansen
7 cited?

8 A. I was looking to see whether or not there
9 was support for his opinion that the Universe
10 product practiced each of those limitations.

11 And I could not find -- in my review of
12 those documents which he identifies as the basis
13 for his opinion, I could not find support for his
14 subsequent statements that follow about the
15 Universe practicing each of those claims.

16 Q. Now, in Paragraph 106 of your declaration,
17 you state that "Given that Mr. Christiansen
18 admitted he has not tested the Universe product,
19 or spoken with anyone at Patent Owner about how
20 Universe works, Mr. Christiansen has failed to
21 establish that all of the elements of Claim 1 are
22 met."

1 Do you see that?

2 A. Let me just look back at my -- yes, I see
3 that. That's the opening sentence in
4 Paragraph 106.

5 Q. And you don't identify any specific claim
6 limitations in that sentence of Paragraph 106.
7 Correct?

8 A. Well, so in the first sentence that you
9 read, in Paragraph 106, I don't say anything about
10 any particular claim limitation. But the
11 remainder of Paragraph 106 does deal with the
12 unique identifier limitation.

13 Q. So the next sentence in Paragraph 106
14 states that "At deposition, Mr. Christiansen
15 insisted that to meet the 'unique identifier'
16 limitation of element" 1 -- I think that's an L or
17 maybe it's an I, 1L or I -- "the URL being
18 transmitted to the user 'encapsulates a unique
19 identifier that could be a telephone number.'"

20 Do you see that?

21 A. Yeah, I do see that. Let me get some
22 context here. That's -- Exhibit 1012 is

1 Mr. Christiansen's deposition transcript. Is that
2 correct?

3 Q. I believe so.

4 A. Yeah. Yup. Okay. Yes.

5 Q. So in that sentence you do reference a
6 limitation of Claim 1. Correct?

7 A. So the next sentence you're talking about
8 is "Mr. Christiansen admitted he had not seen any
9 either."

10 Is that what you're referring to?

11 Q. No. At deposition Mr. Christiansen
12 insisted that to meet the unique identifier
13 limitation of element 1, 11, that sentence.

14 A. Oh, okay. Hold on. Let me just look at
15 the page 44 here too. "At deposition,
16 Mr. Christiansen insisted that to meet the 'unique
17 identifier' limitation" . . . "the URL being
18 transmitted to the user 'encapsulates a unique
19 identifier that could be a telephone number.'"

20 Yes, I see that.

21 Q. So that sentence does identify the '383
22 patent claim limitation. Correct?

1 A. Yes. But that sentence continues, "but
2 there is no evidence" that the "Patent Owner's
3 products" actually "do so."

4 So again, my brief was to review
5 Mr. Christiansen's declaration and the evidence he
6 provided. And as I say, I have not found any
7 evidence that he relied upon or that he presented
8 that supports this limitation.

9 Q. So by "this limitation," the sentence
10 references the limitation of element 11. Correct?

11 A. Yeah, I'll have to go back and look and
12 see whether it's 11. But there was a -- let me
13 just look at the Claim 1. Let's see. "Unique
14 identifier that could be a telephone number."

15 So the claim limitation actually reads
16 "wherein the URL link is associated with the phone
17 number of the mobile device."

18 I think it's paraphrasing that limitation,
19 but I'd have to go back and look and see how we
20 actually map the claim to see whether that is 11.
21 But I believe that is what it's referring to.

22 Q. So if it helps, why don't I put a copy of

1 your opening declaration in the chat, which is
2 Exhibit 1003.

3 (Previously marked Exhibit 1003)

4 A. Okay. That was my opening declaration?

5 Q. I believe so.

6 A. Yeah. So I have a hard copy of that. I'd
7 prefer to look at that, if I can.

8 Q. Why don't you look at the hard copy, and
9 in particular, the table of contents has the claim
10 with the associated number letter labeling.

11 A. Okay.

12 Q. And in particular, please take a look at
13 page 3 of that declaration.

14 A. Yeah. I see that. Yeah. 11, "wherein
15 the real-time video stream is associated with a
16 unique identifier." Okay. So that does match
17 what 11 says. Yup.

18 Q. So that's the limitation that you're
19 referring to in the second sentence of
20 Paragraph 106. Correct?

21 A. 11. Correct.

22 Q. You don't reference any of the other

1 limitations of Claim 1 in Paragraph 106. Correct?

2 A. I don't believe I do. No. Not in
3 Paragraph 106.

4 Q. Now, what does it mean for a URL to
5 encapsulate a unique identifier?

6 MR. CUTRI: Objection, form.

7 A. Well, I didn't attempt to do any
8 construction of anything in this particular
9 proceedings. I adopted the plain and ordinary
10 meaning of what that means. And as the patent and
11 the various references describe, they show that
12 there is an association between the phone number
13 and the URL that's transmitted.

14 Q. Now, that limitation 11 that we've been
15 referring to reads "wherein the real-time video
16 stream is associated with a unique identifier for
17 the mobile device."

18 Does that require that the caller's
19 telephone number actually be in the URL link?

20 A. I didn't take a position one way or the
21 other as to whether it actually is contained
22 within the URL link.

1 The plain and ordinary meaning, to me,
2 means that there is some type of association. And
3 since the caller's phone number, in the patent as
4 well as in the references, is used to send the
5 SMS, which contains the URL, there is a type of
6 association.

7 As to whether there may be other
8 information in the -- in that SMS was not relevant
9 to me making some determination as to whether or
10 not the reference is read on this limitation.

11 Q. So in your view, sending a URL to a
12 particular caller is enough to associate the
13 real-time video stream with a unique identifier
14 for the mobile device?

15 A. No, I would not agree with that statement.
16 You mischaracterized what I said.

17 I said sending a URL via an SMS where the
18 SMS uses the phone number of the caller is the
19 nature of the association.

20 It's because the phone number is required
21 in order to send the SMS and the SMS then contains
22 the URL, the association is with respect to that

1 use of the phone number to send that URL.

2 There could be additional stuff as well,
3 but that was enough for me to believe that the
4 references identified read on that particular
5 limitation in the patent.

6 Q. So if an SMS service sends a URL to a
7 particular caller, that, in your view, is
8 sufficient?

9 A. I would mischaracterize [sic] what you
10 said about what the SMS does. The SMS message is
11 a message that is addressed to a recipient, using
12 the phone number of the caller. The phone number
13 of the caller is a recipient of the SMS message.

14 And the SMS message is a text message.
15 And included in the SMS message, according to the
16 references in the '383 patent, is a URL.

17 And that URL is then subsequently used by
18 the recipient, in this case the caller who is
19 calling from their cell phone, to open up a
20 multimodal connection.

21 Q. So what you've just described in your view
22 is sufficient to satisfy that "wherein the

1 real-time video stream is associated with a unique
2 identifier for the mobile device." Correct?

3 A. Okay. So to be clear about what I
4 recited, so we're talking about the same thing,
5 what I'm saying is, the phone number that's used
6 to send the SMS that contains the URL is what I'm
7 relying upon for the association.

8 Q. You don't need to actually include the
9 phone number in the URL itself. Correct?

10 A. It could be or could not be. It's
11 sufficient simply that the phone number which was
12 used to send the SMS results in an SMS being sent
13 where the content of the SMS message includes text
14 that represents the URL. That's what I'm relying
15 upon.

16 And any additional content of the SMS,
17 which may or may not be in there, is not
18 relevant -- was not relevant to my offering an
19 opinion.

20 Q. Now I'm going to put a copy of
21 Exhibit 1001, which is the '383 patent, into the
22 chat. But feel free to use your paper copy if

1 you've got one.

2 A. I do. Give me a second to find it.

3 (Previously marked Exhibit 1001)

4 A. It's got to be here somewhere.

5 And I'm sorry, what's the exhibit number?

6 Q. 1001. The '383 patent.

7 A. I must have a hard copy of that. Excuse
8 me just a second while I look through the binder
9 here. Yeah, I do have a copy. Sorry. Give me a
10 second. Let me get that out of the binder. Okay.
11 Yes, I've got it in front of me.

12 Q. Now, if you could turn to the claims,
13 which begin on page 10 of the PDF or the hard
14 copy.

15 A. Okay. I'm there.

16 Q. Now, Claim 1 references both the audio and
17 real-time video communication. Right?

18 A. I do see real-time video stream. Let me
19 just -- I don't know if it says real-time audio.
20 Yeah, I don't think it ever uses the term
21 "real-time audio," unless I'm missing it.

22 It says "while" the "audio content of the

1 emergency call is received through the first
2 connection."

3 I think that's all that it says about the
4 audio. Let me just reread it again and make sure
5 I'm not missing something.

6 So I believe in your question you used the
7 term "real-time audio." I don't think that's in
8 this claim.

9 Q. So if I said that, that's not what I
10 intended. So let me rephrase.

11 So in Claim 1 there's reference to both
12 audio content and real-time video. Correct?

13 A. Yes. The last limitation of Claim 1
14 reads, "While audio content of the emergency call
15 is received through the first connection, and
16 wherein the real-time video stream is associated
17 with a unique identifier."

18 So yes, it does in that -- it does mention
19 audio with respect to having a real-time video
20 stream.

21 Q. Now, Claim 7 depends on Claim 1. Right?

22 A. Claim 7 is dependent upon Claim 1. Yes.

1 Correct.

2 Q. And Claim 7 further specifies that the
3 method of Claim 1 can entail the transmission of
4 GPS location data or one or more photographs taken
5 on the mobile device. Right?

6 A. You read that correctly. Yes.

7 Q. Now, the Universe product also facilitates
8 the transmission of GPS locations or photographs.
9 Correct?

10 MR. CUTRI: Objection, form.

11 A. So Mr. Christiansen indicated that that is
12 the case. I don't recall whether or not I was
13 able to find that feature in the evidence that he
14 provided, which are those two documents. Perhaps
15 it does. I don't know.

16 Q. Now, if you could go back to your
17 declaration, your supplemental declaration, which
18 is Exhibit 1011.

19 A. Okay.

20 Q. And if you could turn to Paragraph 111 for
21 me, which is on page 48.

22 A. Okay. Yes, I see that.

1 Q. At the beginning of that paragraph, you
2 note that "Mr. Christiansen made no effort to
3 identify which features are the key innovative
4 features that drive any success of the product."
5 Right?

6 A. Yes, I see that quoting from his
7 deposition transcript.

8 Q. What efforts did you take to determine
9 which features of Universe are key in driving
10 success?

11 A. I did not take it to be part of my brief
12 to perform that analysis as I was rebutting
13 Mr. Christiansen's evidence that he provided. And
14 as he has indicated here in his deposition
15 transcript, he did not either.

16 Q. Now, as part of your work over the course
17 of your career, have you published papers?

18 A. I have. Yes.

19 Q. Can you give me an estimate, kind of an
20 order of magnitude estimate of how many?

21 A. Oh, I don't know. I'm a working engineer,
22 not an academic, so I don't work to achieve tenure

1 by publishing large numbers of papers. Perhaps a
2 dozen maybe, or so, that have been in
3 peer-reviewed journals.

4 Q. Can you turn down to Paragraph 114 of your
5 supplemental declaration.

6 A. Okay. I'm there.

7 Q. In that paragraph, you cite Exhibits 1015,
8 1016, and 1017. Is that right?

9 A. Yes, I do.

10 Q. I'm going to put copies of each of those
11 in the chat for you. Again, if you've got paper
12 copies, you're free to look at those.

13 A. Yeah. I'm not sure I do. Let me take a
14 look. Let's see. Which ones are these? 15 and
15 16. Right?

16 Q. And 17.

17 A. I don't know if that's in my book. No.
18 The last one I have is 2014, so I'll go to your
19 chat. Okay. Hold on. I have to close a PDF I
20 have here and go back to the chat. Okay.

21 So there are three documents here, 15, 16,
22 and 17. Correct?

1 (Previously marked Exhibits 1015, 1016,
2 and 1017)

3 Q. Yes.

4 A. I'm going to open these one at a time. Do
5 you want me to start with 15?

6 Q. Yeah, let's start with 15.

7 A. Okay. It wants me to -- when I click on
8 it, it wants me to download it. I guess I might
9 as well download 16 as well, as long as I'm at the
10 chat here. Let me do that. That's downloading.
11 And I'll do 17, which is going to -- okay. Now
12 I'm going to go to the desktop, see if it can find
13 them.

14 All right. 15. I'm opening up 15. Okay.
15 I see that. That's a Wikipedia article. Correct?
16 Yes. Okay.

17 Q. Now, have you ever cited Wikipedia in any
18 of the papers that you have authored?

19 A. I don't know. I probably have. I may
20 have. I think generally the way I've used
21 Wikipedia is, Wikipedia includes at the end of
22 each of their articles, it includes a bunch of

1 references.

2 I don't know that I've ever cited a naked
3 Wikipedia article. I usually have used it to
4 identify additional references which are usually
5 the primary ones that I cite.

6 So like if you look at this particular
7 exhibit that you just asked me to look at, 1015,
8 and if I scroll down to the bottom, you can see
9 that there are a whole bunch of references.
10 Reference 1 is our offices, which is a Frost &
11 Sullivan document.

12 I believe that generally in anything I've
13 published I've generally looked to those
14 references as opposed to the raw Wikipedia
15 article.

16 Q. But in your declaration you cited the raw
17 Wikipedia article. Correct?

18 A. My declaration. Well, yes. So I don't
19 remember now where this -- I just want to be clear
20 what this was an exhibit to.

21 Was this an exhibit to my declaration of
22 June 9th, '26, or was this an exhibit to my

1 declaration of June 30th, which was regarding the
2 evidence? I think this was an exhibit to the --
3 Exhibit 1021, wasn't it?

4 Q. It's cited in Paragraph 114 of
5 Exhibit 1011, your supplemental declaration.
6 Correct?

7 A. Oh, all right. Excuse me, then. Let me
8 find that.

9 Which paragraph in my supplemental?

10 Q. 114.

11 A. 114. Okay. Yes, you're correct. It is
12 cited in my supplemental declaration of June 9th.
13 You're correct.

14 Q. And you cited the Wikipedia article
15 itself, correct, in your supplemental declaration.
16 True?

17 A. I did. That's correct.

18 Q. Now, can you take a look at Exhibit 1016.

19 A. I'm looking at it on my screen. Yes.

20 Q. This appears to be an article on the
21 website ipvm.com. Is that right?

22 A. I can't tell. Let me just look here. So

1 it is a Wikipedia posting. I don't see -- it's
2 Wikipedia describing what Frost & Sullivan is
3 about. And then in the sidebar they appear to
4 have something that they identify as actually from
5 the Frost website, frost.com in the sidebar.

6 But the Wikipedia article is not
7 identified as I can see as coming from some
8 particular organization.

9 Typically Wikipedia postings are something
10 that third parties edit and create. It's kind of
11 a community-sourced document that multiple people
12 contribute to and edit.

13 So someone put this together. Some group
14 of people put this together, and they seem to be
15 relying upon the references that are at the bottom
16 of this, which are references -- Footnotes 1
17 through 8 seems to be the basis for supporting
18 what's in here.

19 Q. So my question was about Exhibit 1016, and
20 it sounds like you're looking at Exhibit 1015
21 instead. If you could get 1016 out for me.

22 A. Yeah, 1015 is the Wikipedia article.

1 Correct?

2 Q. Yes. So please get out 1016.

3 A. Oh, I'm sorry. I misunderstood you. Let
4 me go to 1016, then. 1016. Yes. That's
5 something from ipvm.com, and it's some journal.

6 Q. Have you ever cited ipvm.com in any of the
7 papers that you've authored?

8 A. I don't recognize that organization. No.

9 Q. Now, could you get out Exhibit 1017.

10 A. All right. Hold on. Okay. I've got that
11 open.

12 Q. That appears to be commentary that was
13 posted on LinkedIn. Correct?

14 A. Yes, that appears to be the case. That's
15 correct.

16 Q. Have you ever cited LinkedIn as a source
17 in any of the papers that you have published?

18 A. Offhand, I don't know whether I have one
19 way or the other. It doesn't immediately come to
20 mind.

21 Q. Have you ever been involved with a product
22 or service that won a Frost & Sullivan award?

1 A. Perhaps. I'm not -- I've been involved
2 with a large number of products and services. I
3 haven't tracked one way or the other as to whether
4 or not they've received Frost & Sullivan awards,
5 although I think the whole point of these
6 citations was in rebuttal to Mr. Christiansen's
7 opinion that they received an award.

8 And even Mr. Christiansen described --
9 supported the content of these articles because
10 Mr. Christiansen admitted it's a pay-to-play
11 model, as he indicated in his deposition
12 transcript that I cited in my Paragraph 114 of my
13 supplemental report.

14 So in his Exhibit 112, 175 colon 16 to 19,
15 Mr. Christiansen admitted that this is a
16 pay-to-play model, which is consistent with the
17 representations in these three exhibits you just
18 had me go through.

19 Q. Now, I'd like to turn your attention to
20 Exhibit 1005, which is one of the prior art
21 references that you reviewed.

22 A. Okay. That's the Ramanujaiaha reference.

1 Is that correct?

2 Q. Yes, that's right.

3 (Previously marked Exhibit 1005)

4 A. Okay. I've got that.

5 Q. If you could turn to Column 9 for me.

6 A. Okay. Hold on just a moment. I see that.

7 Yes.

8 Q. And at about line 52, there's reference to

9 "WebRTC calls."

10 Do you see that?

11 A. Yeah. Let me just read the whole
12 paragraph here. Yes. It's including -- they
13 mention the communications and interactions would
14 include telephone calls as well as other things
15 and also WebRTC. Yes. Correct.

16 Q. Now, can a WebRTC call entail both audio
17 and video communication occurring via WebRTC?

18 A. Yes. I believe you asked me that during
19 my previous deposition examination. And I
20 indicated that, yes, WebRTC supports three
21 modalities that can be invoked in any combination:
22 video, data, and audio.

1 Q. I'm going to put another exhibit in the
2 chat, which has been marked as 2007.

3 (Previously marked Exhibit 2007)

4 Q. Let me know when you've got that.

5 A. Let's see if I have that, 2007. Okay.

6 I've got the hard copy of that. That is the
7 Eriksson patent. Correct?

8 Q. Yes.

9 A. Okay. I have that.

10 Q. If you could turn for me to Paragraph 73.

11 A. Okay. Give me just a minute here. Okay.

12 I see that.

13 Q. Paragraph 73 references a WebRTC API.
14 Correct?

15 A. Yes, it does.

16 Q. And then turning down to Paragraph 75,
17 Exhibit 2007 states that "By using the above
18 described method," and then it continues on.
19 Correct?

20 A. Paragraph 75, let me just read that. Yes,
21 I see that.

22 Q. And the above described method employs the

1 WebRTC API. Correct?

2 A. "Using the above described method," yes, I
3 believe that's referring to the API we looked at.

4 Q. And then the sentence states that "the
5 first user, which is connected to the service, is
6 enabled to select a type of service, i.e. user
7 communication, e.g. video and audio or
8 audio-only." Correct?

9 A. You read that correctly. Yes.

10 Q. That sentence I just read did not
11 reference video only. Correct?

12 A. It does not specifically say in that
13 sentence "video only."

14 However, I'm familiar with the WebRTC
15 standard, and there is an API for opening a video,
16 audio, and data. And they can be opened in any
17 combination.

18 So this particular exhibit, this Eriksson
19 patent, in that particular paragraph does not say
20 that. But I do know as a fact that you can open
21 video only.

22 Moreover, nothing in my opinion would

1 change even if the API were to open the video and
2 audio. I had never denied that WebRTC is capable
3 of carrying audio. That was not factoring into my
4 opinion.

5 My opinion was based upon clear and
6 affirmative disclosures in Ramanujaiaha that
7 there's two modalities, audio over the original
8 phone call and real-time video over WebRTC.

9 The fact that WebRTC is capable of also
10 carrying audio does not mean that the -- that it
11 does not read on the claim language because
12 Ramanujaiaha clearly says simultaneous two
13 modalities, audio and video, video over WebRTC and
14 the audio over the original phone call.

15 Q. Now, Exhibit 1005, the prior art reference
16 that you're referring to, references types of
17 communication besides WebRTC. Correct?

18 A. Sorry. I'm just orienting myself. 1005
19 is Ramanujaiaha?

20 Q. Yes.

21 A. Okay. Ask me the question again. I'm
22 now . . .

1 Q. That prior art reference references types
2 of communication besides WebRTC. Correct?

3 A. Does it mention -- does Ramanujaiaha
4 mention multiple different types of
5 communications? Yes, it does. It mentions what
6 we were looking at before -- I think in Column 9
7 of Ramanujaiaha, it mentions telephone calls,
8 voicemails, video chat, screen sharing, text
9 messages, social media, and WebRTC.

10 Q. Now, if you'd also look at Column 4 at
11 about line 65.

12 A. Column 4, line 65. Yes, I see that.

13 Q. There's reference to "online (web)."
14 Right?

15 A. Let's see. What is this? This is under
16 "Detailed Description," contact centers around
17 line 65, while telephone --

18 (Reporter interrupted)

19 A. So Column 4 is under the section "Detailed
20 Description." And starting around line 64, it
21 says, "while telephonic communications are still
22 dominant for customer engagement, customers are

1 increasingly engaging via online (web), digital
2 (chat, email, video, SMS, Apple Messages, Viber,
3 Skype, WhatsApp, etc.)."

4 Q. And then after that it references social
5 media channels. Correct?

6 A. Yes. And it continues "social media" as
7 well on top of Column 5.

8 Q. And the top of Column 5 also references
9 "screen sharing and virtual assistants." Correct?

10 A. Yes, it does.

11 Q. So those are all other examples of types
12 of communication references referenced in this
13 prior art reference?

14 A. Yes, it does indicate that generic types
15 of content -- contact centers may do all these
16 sorts of things.

17 Of course, the embodiment in Ramanujaiaha
18 that I relied upon is where the contact center is,
19 emergency services contact center.

20 An emergency services contact center would
21 not be equipped or have it make sense to do these
22 full set of modalities.

1 The embodiment that I pointed to was one
2 where the contact center was enabled to receive
3 voice phone calls and to engage in a WebRTC
4 session.

5 I did -- I'm sorry. Just to finish,
6 Ramanujaiaha is -- reference is one that generally
7 covers multiple embodiments, some of which relate
8 to retail types of contact centers or financial
9 services companies and that sort of thing.

10 It specifically mentions emergency
11 services contact centers as one of the examples.

12 And everything that I relied upon from
13 Ramanujaiaha were the embodiments that relate
14 to -- that would be compatible with what an
15 emergency services contact center would have. It
16 would not include, for example, Facebook.

17 Q. The word "emergency" appears only once in
18 the prior art reference. Correct?

19 A. Maybe. It clearly indicates that it is
20 one of the types of contact centers that
21 Ramanujaiaha was dealing with.

22 Let's see. I think it's in -- it's in

1 Column 6. Yeah, Column 6, starting around line 12
2 or so, "the contact centers" and then it goes on
3 to indicate, like on line 16, "services may vary"
4 based "on the type of contact center, and" . . .
5 "range from" . . . "help desk, emergency response,
6 telemarketing" . . . "and the like."

7 So as I said, as indicated here in
8 Column 6, Ramanujaiaha's various embodiments are
9 designed to support a range of different types of
10 contact centers, which would have very different
11 needs and capabilities. Some of the embodiments
12 were more or less compatible with the different
13 types of contact centers.

14 Given the subject matter that I was
15 opining upon was the emergency response contact
16 center, that's what I relied upon as a disclosure
17 in Ramanujaiaha.

18 Q. And this is the --

19 MR. CUTRI: Patrick, sorry, we've been
20 going for an hour and 15. Is it okay if we take a
21 break?

22 MR. HERMAN: Sure. Why don't we take --

1 is ten minutes okay?

2 MR. CUTRI: That's fine with me.

3 (Recess, 12:45 p.m. to 1:00 p.m.)

4 BY MR. HERMAN:

5 Q. So if you could get Exhibit 1005 out again
6 and turn to Column 8 for me.

7 A. Okay. That's Ramanujaiaha, Column 8.
8 Right?

9 Q. Yes.

10 A. Okay. I'm there.

11 Q. And there's a paragraph that begins at
12 line 28.

13 A. Okay. Let me go down. Line 28,
14 "According to the one exemplary embodiment." Is
15 that the one?

16 Q. Yes. And there, there's reference to
17 real-time interactions. Right?

18 A. Yeah. Let me just read the paragraph here
19 so I get the context. Yes, I've read the
20 paragraph that begins at line 28. Yes.

21 Q. So there's reference in that paragraph to
22 real-time interactions. Right?

1 A. Yeah. Well, what it says, "in addition to
2 real-time interactions," and then the rest of it
3 describes things that are not real-time
4 interactions.

5 Q. And those things include letters,
6 attending training seminars, or any other activity
7 that does not entail real-time communication with
8 a customer. Right?

9 A. Yes. Yeah, it does mention -- yes, you
10 read that correctly. Yes.

11 Q. So one of the things that Ramanujaiaha
12 would embrace would be a customer calling the
13 contact center and then later receiving a letter.
14 Correct?

15 A. Yeah. It says, "responding to letters."
16 Yes.

17 Q. So that would be an example of multimodal
18 communication. True?

19 A. I don't think it's -- no, it's not the
20 multimodal communications that Ramanujaiaha
21 identifies. Because Ramanujaiaha, in the sections
22 that I quoted, always modifies the multimodal

1 communications with concurrent. I don't know if
2 it does it in every instance, but certainly in the
3 portions of Ramanujaiaha that I cited to, for
4 example, in Column 12, it indicates that the
5 multimodal communications is concurrent.

6 So sending a letter sometime after you had
7 a phone call would not be the multimodal
8 communications that I relied upon in forming my
9 opinion because it's not concurrent.

10 Q. But there are embodiments in this
11 particular prior art reference where the second
12 communication is not concurrent. True?

13 A. You're pointing to a -- one of the many
14 embodiments in Ramanujaiaha that I did not rely
15 upon because those embodiments were not compatible
16 with the emergency call center.

17 Q. Now, one type of concurrent communication
18 that this reference contemplates would be starting
19 with a social media message and proceeding to
20 screen sharing. Correct?

21 A. I believe there is something like that in
22 there. It would be helpful if you want to

1 actually point me to that section so, you know, I
2 know what I'm talking about here.

3 Q. Well, social media messages and screen
4 sharing are two types of communication that this
5 reference contemplates. True?

6 A. It does mention social media. But in your
7 question you had some additional context to that,
8 which is you said it starts with social media. So
9 that may or may not be in there. It's not
10 something that I relied upon.

11 If you want me to answer whether there's
12 something that -- in here that says it starts with
13 social media, if you want to point me to that
14 section of Ramanujaiaha, I'll be happy to answer
15 it.

16 But to the extent that may be something
17 that's in here, it is not something I relied upon
18 in forming my opinion.

19 Q. Another thing that this particular
20 reference contemplates would be starting with the
21 telephone call and proceeding to a text message.
22 Correct?

1 A. The reference does describe and I relied
2 upon an embodiment where you start with a phone
3 call. The emergency contact center receives the
4 phone number associated with that phone call,
5 generates an SMS text message to that phone
6 number.

7 So yes, that is one of the things that is
8 described in Ramanujaiaha. And it is -- that
9 aspect of it is something that I did rely upon as
10 something -- part of forming my opinion.

11 Q. And another thing that you could do is,
12 you could start with a regular telephone call and
13 proceed to a voice-over-IP call. Correct?

14 A. I don't recall whether or not that -- I
15 don't recall whether that's disclosed in
16 Ramanujaiaha. If it is, I'd be happy to respond
17 to something you might want to point me to. But I
18 don't -- it's not something I relied upon.

19 I do believe that voice over IP is
20 mentioned. I don't remember anything in
21 Ramanujaiaha that said you start with a regular
22 phone call to 911 and then you transition to voice

1 over IP. I just think voice over IP was one of
2 the other modalities that was mentioned in
3 Ramanujaiaha.

4 But if I'm incorrect, point me to where it
5 says you start with a regular phone call and
6 transition to voice over IP, and I'll be happy to
7 either say that that is something that
8 Ramanujaiaha discloses. I don't think it does.

9 Q. You don't disagree that those
10 communication methods -- and those communication
11 methods being regular telephone calls, screen
12 sharing, voice over IP, video, social media
13 messages, texts, emails, and letters -- are all
14 communications that are referenced in this prior
15 art reference. True?

16 A. As I think I've said, Ramanujaiaha
17 indicates in many different modalities supporting
18 multiple different types of communications. Yes,
19 it does.

20 But the one that I relied upon is the
21 particular one where you start with a voice call,
22 you send an SMS message that has a URL. And when

1 you click on the URL you invoke a WebRTC real-time
2 session. That's the particular modality that I
3 referred to.

4 Q. Now, I'm going to give you a copy of
5 another prior art reference, Exhibit 1006.

6 A. That's the Krishnan reference. Correct?

7 Q. Yes.

8 A. I've got that here.

9 (Previously marked Exhibit 1006)

10 Q. The Krishnan reference, if you could turn
11 to Column 1 of that reference for me.

12 A. Hold on just a minute here. I've just got
13 to find that here in my binder. Okay. Sorry.
14 It's taking me just a second to put the other one
15 back. So I've got it. Krishnan. Okay. I'm
16 sorry for the delay. I've got it.

17 Q. And if you could take a look at Column 1
18 of Krishnan.

19 A. Okay. All right. I'm there.

20 Q. And Column 1 includes a summary of
21 Krishnan's disclosure. Right?

22 A. Column 1 has the background and it has a

1 summary. Yes.

2 Q. And there's a paragraph in that "Summary"
3 section that begins at line 38.

4 A. Yes, I see, "In one embodiment, a
5 secondary channel."

6 Q. It goes on to say "is utilized as a
7 mechanism for merging multiple calls, managing
8 multiple calls simultaneously, and/or prioritizing
9 calls in a contact center." Right?

10 A. Yes, it does say that. Yes.

11 Q. So that's saying that Krishnan relates to
12 a system where a contact center receives multiple
13 calls, each from different callers. Correct?

14 A. That is one of the embodiments of Krishnan
15 where you can have what I think they identify as a
16 third party who will enter the conversation. So
17 that is one of the embodiments, yes.

18 Q. That sentence is referencing multiple
19 calls. Correct?

20 A. Let me just see. So it says "In one
21 embodiment."

22 So there is an embodiment in Krishnan

1 where there is, in addition to the first caller,
2 there can be an additional caller.

3 Q. And Krishnan's design did not circumstance
4 to merge multiple calls, manage multiple calls
5 simultaneously, and/or prioritize calls in a
6 contact center. Correct?

7 A. Yes. So I just want to be clear about
8 whether we're talking about the same thing. So
9 let me just read this again.

10 There are a couple different embodiments
11 in Krishnan. In one -- there's two different
12 things in that first sentence. It says "as a
13 mechanism for merging multiple calls" is one
14 aspect of the embodiment.

15 And then separately after it says, "for
16 merging multiple calls," comma, it then says,
17 "managing multiple calls simultaneously" or
18 "prioritizing calls in a contact center."

19 So I think there are three different
20 aspects of Krishnan's embodiments. There's one of
21 them where you're merging multiple calls, where it
22 describes later on -- it talks about a third party

1 who would be calling in at the same time. You
2 have the original conversation you're merging
3 together.

4 But then it goes on to talk about
5 something differently. It says it's "managing
6 multiple calls simultaneously, and/or prioritizing
7 calls." So that's -- those are different than
8 merging.

9 So Krishnan apparently has got the
10 capabilities or features through multiple
11 different embodiments to allow different types of
12 multiple parties.

13 In addition, it also discloses a single
14 party calling in as well. It does describe these
15 different mechanisms for merging or managing or
16 prioritizing.

17 Q. And by "multiple calls," Krishnan is
18 referring to multiple emergency callers. Correct?

19 A. The Krishnan reference is in the context
20 of a public safety answering point. And it says,
21 "Public Safety Answering Points" . . . "and
22 similar types of call centers."

1 I assume everything in here is about E911
2 emergency call centers.

3 Q. So the sentence that I read is discussing
4 use of the secondary channel for purposes of
5 merging multiple emergency calls, managing
6 multiple emergency calls simultaneously, or
7 prioritizing multiple emergency calls in the
8 contact center. Correct?

9 A. It is correct that there is one embodiment
10 of Christiansen -- Krishnan where there are
11 multiple calls either merging, managing, or
12 prioritizing.

13 But that's, again, one of several
14 different embodiments in Krishnan. It's not the
15 portion of Krishnan that I relied upon in the
16 combination with Ramanujaiaha.

17 MR. HERMAN: I don't have any further
18 questions.

19 MR. CUTRI: Okay. I might have -- why
20 don't we go off the record and come back on.

21 (Recess, 1:15 p.m. to 1:22 p.m.)
22

1 EXAMINATION BY COUNSEL FOR PETITIONER

2 CENTRALSQUARE TECHNOLOGIES, LLC

3 BY MR. CUTRI:

4 Q. So, Mr. Lipoff, could you please find
5 Mr. Christiansen's declaration, which was
6 Exhibit 2004.

7 A. Okay. I think I've got that. Yes, I've
8 got that. I'm just taking it out of the binder
9 here.

10 Q. Go ahead and turn to page -- printed
11 page 59.

12 A. 59. Okay. I think that's the same -- I
13 think that's the same page number at the bottom of
14 the page, 59.

15 Q. That's correct.

16 A. Okay. I've got it.

17 Q. And that should be Paragraph 235 is in the
18 middle of that page. Is that what you have?

19 A. Yes. I'm there.

20 Q. And below Paragraph 235 there's a letter A
21 and in bold it says, "Carbyne Sells Products That
22 Embody the Claimed Subject Matter."

1 Do you see that?

2 A. I see that. Yes.

3 Q. And then on the next page, on page 60,
4 below Paragraph 240, you can see that there is a
5 excerpt of Claim 1 of the '383 patent.

6 Do you see that?

7 A. I see that. Yes.

8 Q. And then there is some additional quoting
9 in italics in bold on page 60 of Claim 1, and then
10 there's additional quoting of Claim 1 on page 61
11 and additional quoting of Claim 1 on page 62 and
12 additional quoting of Claim 1 on page 63.

13 Do you see that?

14 A. I see that. Yes.

15 Q. And then after page -- and then on page 64
16 there's no quoting of any claims. And then do you
17 see at the top of page 65 Mr. Christiansen turns
18 to a different topic, which is industry accolades.

19 Do you see that?

20 A. I see that. Yes.

21 Q. And you would agree with me that other
22 than Claim 1, Mr. Christiansen did not attempt to

1 map any of the challenged claims to any of
2 Carbyne's products? Do you agree with that?

3 A. The only portion that we just looked at
4 was related to Claim 1.

5 Q. And so, for example, Mr. Christiansen did
6 not try to establish that Claims 4 or 7 or any
7 other claim other than Claim 1 are practiced by
8 any of Carbyne's products. Is that your
9 understanding?

10 A. That's my understanding. Yes.

11 Q. Okay. So let's put in Exhibit -- let's
12 put into the chat Exhibit 1021.

13 (Previously marked Exhibit 1021)

14 A. That's my declaration -- the last
15 declaration I filed about evidence. Is that
16 correct?

17 Q. That's correct. Let me know when you have
18 that.

19 MR. HERMAN: For the record, I object to
20 making this an exhibit. The only purpose you can
21 use supplemental evidence in an IPR is not for
22 substantive purposes. It's responding to a motion

1 to exclude. So introducing it as an exhibit here
2 is contrary to the board's rules.

3 MR. CUTRI: Okay. I disagree, but let's
4 just see --

5 MR. HERMAN: What rule do you believe
6 allows you to use this for substantive purposes in
7 an IPR?

8 MR. CUTRI: I think once my questioning
9 is -- once I've done my questioning, Mr. Herman,
10 you'll understand.

11 MR. HERMAN: What rule do you believe
12 allows you to use supplemental evidence for
13 substantive purposes in an IPR?

14 MR. CUTRI: Mr. Herman, there are clear
15 rules about what you can and can't --

16 MR. HERMAN: What rules? Cite the rule,
17 please. If I have to file a motion to strike this
18 exhibit, I'm going to move for my costs because
19 you are not permitted to use supplemental evidence
20 for any purpose other than responding to a motion
21 to exclude.

22 MR. CUTRI: I understand your objection,

1 Mr. Herman. I understand your objection,

2 Mr. Herman.

3 MR. HERMAN: Also I instruct the court
4 reporter not to include this exhibit along with
5 the transcript because I do not intend to file it.

6 MR. CUTRI: Mr. Herman, this is being
7 marked as an exhibit to this deposition.

8 MR. HERMAN: I instruct the reporter not
9 to include this exhibit as part of that --

10 MR. CUTRI: That isn't how it works.

11 MR. HERMAN: It is.

12 MR. CUTRI: You don't get to decide what
13 goes into the record.

14 MR. HERMAN: The Patent Office has rules
15 to decide what goes into the record. The Patent
16 Office's rules unambiguously say that you may not
17 use supplemental evidence for substantive
18 purposes.

19 MR. CUTRI: I understand what you're
20 saying, Mr. Herman. And why don't we just let me
21 ask my questions and then we'll see if you can
22 maintain your position. I don't think you'll be

1 able to, but let's go ahead and just see.

2 BY MR. CUTRI:

3 Q. So, Mr. Lipoff, do you have your
4 Exhibit 1021, which is an exhibit in this
5 proceeding?

6 A. I do.

7 Q. And you can see here at Paragraph -- this
8 is the discussion of the exhibits that
9 Mr. Herman -- this exhibit, this declaration,
10 discusses, among other things, Exhibits 1015,
11 1016, and 1017. Is that your understanding?

12 MR. HERMAN: Objection to form. I also
13 maintain my objection to this entire line of
14 questioning as inappropriate.

15 Q. Mr. Lipoff, do you see that?

16 A. Yes, I see in the Paragraph 8 exhibit
17 references to 1015, 16, and 17.

18 Q. Right. And then on Paragraph 9 it says --
19 Paragraph 9 of Exhibit 1021 says, "Paragraph 114
20 of my supplemental declaration does quote from
21 Exhibits 1016" -- sorry -- "1015, 1016, and 1017."

22 Do you see that?

1 A. Yes, I see that.

2 Q. And it says, "However, my consideration of
3 Exhibits 1015, 1016, and 1017 is in response to
4 and in disagreement with Mr. Christiansen's
5 opinions concerning industry praise of patent
6 owner's Universe products. See Exhibit 204 at
7 Paragraphs 266, 267." Right?

8 Do you see that?

9 A. Yes, I see that.

10 Q. And then you say, "As an expert
11 consultant, it is common to stay abreast of market
12 research of third-party firms that perform
13 analytics and criticisms of much market research
14 and third-party firms, which is what
15 Exhibits 1015, 1016, and 1017 are."

16 That was your testimony in your
17 Exhibit 1021. Correct?

18 MR. HERMAN: Objection.

19 A. Correct.

20 Q. And you also said, "Given that
21 Mr. Christiansen relied on a 2025 product leader
22 award, Frost & Sullivan, Exhibit 212, it is common

1 practice for me as an expert consultant to
2 consider critiques including public web articles
3 of such an award."

4 That was your testimony in Exhibit 1021.
5 Right?

6 MR. HERMAN: Objection to form.

7 A. Yes, that's correct.

8 Q. And do you stand by the testimony that you
9 gave in Exhibit 1021 at Paragraph 9?

10 A. Yes --

11 MR. HERMAN: Same objection.

12 A. Yes, I do.

13 Q. Do you agree with me that it's common
14 practice for you, as an expert, to consider and
15 rely on Exhibits 1015, 1016, and 1017,
16 notwithstanding the fact that you may not have
17 cited materials like Exhibit 1015, 1016, and 1017
18 in published papers?

19 MR. HERMAN: Objection, form.

20 A. Yes, I would agree.

21 Q. And the reason it's common practice for
22 you to rely on Exhibits 1015 and 1016 and 1017 is

1 because it's common to stay abreast of market
2 research of third-party firms that perform such
3 market research and analytics and criticisms of
4 such market research and third-party firms.

5 Correct?

6 MR. HERMAN: Objection, form.

7 A. Yes. I try and maintain currency reading
8 material that relates to all those subjects. Yes.

9 Q. Okay.

10 MR. CUTRI: Those are all my questions.

11 MR. HERMAN: Just again, for the record, I
12 intend to submit only the deposition transcript
13 and none of the exhibits because the board's rules
14 prohibit me from doing anything other than that,
15 as they prohibit you, unfortunately, from doing
16 anything other than that.

17 MR. CUTRI: Well, the deposition, if it's
18 going to include the exhibits that you marked --
19 you're saying you're not going to include any
20 exhibits?

21 MR. HERMAN: Any exhibits at all. Just
22 the testimony.

1 MR. CUTRI: Okay. If you're not going to
2 include any exhibits, I'll leave it to you to
3 interpret the rules how you think they're supposed
4 to be interpreted.

5 Those are all my questions. Thanks,
6 everyone.

7 (Recess from 1:33 p.m. to 1:35 p.m.)

8 MR. CUTRI: So during a break Mr. Herman
9 and I had a discussion. And my understanding of
10 what Mr. Herman is going to do is, there will be a
11 transcript of this deposition. The transcript
12 will not include as exhibits to the transcript any
13 of the exhibits that were discussed, and that
14 Mr. Herman is going to file only the transcript
15 with no exhibits attached.

16 Is that correct, Mr. Herman?

17 MR. HERMAN: That's right. It is my
18 understanding that the board's rule is that a
19 patent owner's surreply can only be accompanied by
20 the cross-examination testimony of your witness
21 and no other further evidence, which would include
22 other exhibits.

1 So what we will be filing will be only
2 today's transcript and nothing else.

3 MR. CUTRI: Okay. Thank you for that.
4 Thanks, everyone. We can go off the record.

5 (Off the record at 1:36 p.m.)
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CERTIFICATE OF SHORTHAND REPORTER - NOTARY PUBLIC

I, Michelle Keegan, Registered Merit Reporter and Notary Public within and for the Commonwealth of Massachusetts, do hereby certify:

That STUART J. LIPOFF, the witness whose deposition is hereinbefore set forth, was duly sworn by me before the commencement of such deposition and that such deposition was taken before me and is a true record of the testimony given by such witness.

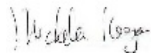
I further certify that the adverse party was represented by counsel at the deposition.

I further certify that the deposition of STUART J. LIPOFF occurred via Zoom videoconferencing on Thursday, July 16, 2026, commencing at 11:30 a.m. to 1:36 p.m.

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

I declare under penalty of perjury that the foregoing is true and correct, executed on the 20th day of July, 2026.

My commission expires May 6, 2033



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E R R A T A S H E E T

I, STUART J. LIPOFF, do hereby certify that I
have read the foregoing transcript of my
testimony, and further certify that said
transcript is a true and accurate record of my
testimony (with the exception of the following
corrections listed below):

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Signed under the pains and penalties of perjury
this day of , 2026.

STUART J. LIPOFF

Stuart Lipoff - July 16, 2026

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