

1 UNITED STATES PATENT AND TRADEMARK OFFICE

2
3 BEFORE THE PATENT TRIAL AND APPEAL BOARD

4
5 MOTOROLA SOLUTIONS, INC.,

6 PETITIONER,

7 v.

8 STA GROUP LLC,

9 PATENT OWNER.

10
11 CASE: IPR2024-00511

12 U.S. PATENT NO. 9,319,852

13
14
15 VIDEO-RECORDED DEPOSITION OF DR. SAYFE KIAEI

16 OCTOBER 11, 2024

17
18
19
20
21 JOB NO. 6950549

22
23 REPORTED STENOGRAPHICALLY BY:

STA Group Exhibit 2004

24 Motorola Solutions Inc. v. STA Group LLC

IPR2024-00511

25 MARY K. MEDLEY, CSR NO. 9557

Page 1

1 VIDEO-RECORDED DEPOSITION OF DR. SAYFE KIAEI, TAKEN
2 ON BEHALF OF THE PATENT OWNER, AT 9:07 A.M., FRIDAY,
3 OCTOBER 11, 2024, AT 4655 EXECUTIVE DRIVE, SAN
4 DIEGO, CALIFORNIA, BEFORE MARY K. MEDLEY, CSR NO.
5 9557.

6
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18
19 ALSO PRESENT: BENJAMIN ZICCARDI, VIDEOGRAPHER
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EXHIBITS		
NO.	PAGE	DESCRIPTION
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EXHIBIT 2	48	UNITED STATES PATENT APPLICATION PUBLICATION US 2004/0133683 A1
EXHIBIT 3	48	DANIEL COLLINS TEXT
EXHIBIT 4	48	UNITED STATES PATENT APPLICATION PUBLICATION US 2009/0298525 A1

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FRIDAY, OCTOBER 11, 2024: 9:07 A.M.

THE VIDEOGRAPHER: Good morning. 09:06:24

THE WITNESS: Good morning. 09:06:25

THE VIDEOGRAPHER: We are going on the record 09:06:26
the at 9:07 a.m. on October 11, 2024. Please note 09:06:29
that the microphones are sensitive and may pick up 09:06:34
whispering and private conversations please mute 09:06:41
your phones at this time. Audio and video recording 09:06:43
will continue to take place unless all parties agree 09:06:46
to go off the record. 09:06:48

This is media unit one of the 09:06:49
video-recorded deposition of Dr. Sayfe Kiaei taken 09:06:51
by counsel for patent owner in the matter of 09:06:55
Motorola Solutions versus STA Group LLC filed in the 09:07:00
United States Patent and Trademark Office, Case 09:07:05
Number IPR2024-00511. The location of the 09:07:10
deposition is 4655 Executive Drive, Suite 1500, 09:07:18
San Diego, California 92121. 09:07:23

My name is Benjamin Ziccardi representing 09:07:25
Veritext Legal Solutions and I'm the videographer. 09:07:30
The court reporter is Katie Medley from the firm 09:07:32
Veritext Legal Solutions. 09:07:36

I am not authorized to administer an oath, 09:07:36
I am not related to any party in this action nor am 09:07:40

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1	I financially interested in the outcome.	09:07:43
2	If there are any objections to proceeding,	09:07:44
3	please state them at the time of your appearance.	09:07:47
4	Counsel and all present will now state	09:07:49
5	their appearances and affiliations for the record	09:07:52
6	beginning with the noticing attorney.	09:07:55
7	THE REPORTER: We're going to go off the record	09:07:58
8	first.	09:08:00
9	THE VIDEOGRAPHER: This is the end of media	09:08:01
10	one. We are going off the record. The time is	09:08:03
11	9:08 a.m.	09:08:05
12	(Interruption in proceedings.)	09:08:06
13	THE VIDEOGRAPHER: The time is 9:13 a.m. We	09:12:36
14	are back on the record.	09:12:37
15	THE REPORTER: And we're going to introduce	09:12:42
16	ourselves on the record.	09:12:43
17	THE VIDEOGRAPHER: Yes.	09:12:46
18	Counsel and all present will now state	09:12:46
19	their appearances and affiliations for the record,	09:12:48
20	beginning with the noticing attorney.	09:12:50
21	MS. FREDERICK: This is Clare Frederick with	09:12:53
22	K&L Gates for patent owner.	09:12:55
23	MS. MISHAGA: This is Stephanie Mishaga from	09:12:59
24	Jones Day on behalf of Motorola Solutions, Inc. and	09:13:01
25	the witness.	09:13:04

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1 THE VIDEOGRAPHER: Will the court reporter 09:13:09
2 please swear in the witness and then counsel may 09:13:10
3 proceed. 09:13:12
4 09:13:13
5 SAYFE KIAEI, Ph.D.
6 having been first duly sworn by the reporter,
7 was examined and testified as follow:
8
9 EXAMINATION
10 BY MS. FREDERICK:
11 Q. Good morning, Mr. Kiaei. 09:13:25
12 A. Good morning, Counsel. 09:13:27
13 Q. Did I pronounce that correctly, Kiaei? 09:13:28
14 A. Yes, yes, you did. Thank you. 09:13:30
15 MS. MISHAGA: And Counsel, before we get 09:13:32
16 started, just for the record, I just noticed that 09:13:33
17 you're not on the mandatory notice in this case. 09:13:36
18 Have you made an appearance? 09:13:38
19 MS. FREDERICK: I'm not sure if we have but we 09:13:41
20 will take care of it. 09:13:43
21 MS. MISHAGA: So you intend to -- 09:13:44
22 MS. FREDERICK: Yes. 09:13:45
23 MS. MISHAGA: -- appear in the case. 09:13:45
24 MS. FREDERICK: Uh-huh. 09:13:47
25 MS. MISHAGA: Thank you. 09:13:47

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1	MS. FREDERICK: Yep.	09:13:48
2	Q. Okay. Mr. Kiaei, want to go over a few	09:13:55
3	brief ground rules. The deposition is being	09:13:58
4	videotaped and the court reporter's writing down	09:14:00
5	everything we both say. So if you could please	09:14:03
6	answer questions verbally and not with physical	09:14:06
7	movements, like a nod or a shrug --	09:14:09
8	A. Yes, I will.	09:14:11
9	Q. -- that would be great.	09:14:12
10	And then at some point, there's a chance	09:14:13
11	that we'll be talking over each other, and it can be	09:14:16
12	difficult for the court reporter to document what	09:14:19
13	we're saying. So I'll do my best to wait for you to	09:14:20
14	finish your answers and if you could -- I'd	09:14:23
15	appreciate it if you could do your best to wait 'til	09:14:26
16	I finish my questions. Does --	09:14:28
17	A. Yes, I will.	09:14:31
18	Q. -- that sound fair?	09:14:31
19	And if you can't understand a question,	09:14:34
20	please ask me to rephrase it. I want you to	09:14:36
21	understand my questions and I want to understand	09:14:38
22	your answers. And unless you ask me to clarify a	09:14:40
23	question, I'll assume that you understand the	09:14:44
24	question.	09:14:45
25	And then, of course, feel free to ask for a	09:14:47

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1	break whenever you need. We'll be breaking about	09:14:50
2	every hour. I just ask that you answer whatever	09:14:52
3	question is pending before we break. Sound good?	09:14:57
4	A. Sounds good to me, yes.	09:14:59
5	Q. Okay. Is there any reason that you cannot	09:15:01
6	give your best and most truthful testimony today?	09:15:05
7	A. No.	09:15:08
8	Q. Mr. Kiaei, what did you do to prepare for	09:15:16
9	today's deposition?	09:15:17
10	A. I reviewed my declaration and the exhibits,	09:15:21
11	as well as I met with the counsel, and that was the	09:15:24
12	most of the preparation.	09:15:33
13	Q. With whom did you meet?	09:15:36
14	A. I met with the Counsel Stephanie here as	09:15:38
15	well as online with Josh Nightingale.	09:15:41
16	Q. Josh?	09:15:47
17	A. Nightingale.	09:15:48
18	Q. Thank you.	09:15:49
19	A. Yeah.	09:15:49
20	Q. And what documents did you review?	09:15:53
21	A. As I said, my declaration and the exhibits	09:15:58
22	that are in my declaration for the IPR and the	09:16:04
23	institutional -- U.S. patent office institutional	09:16:13
24	decision document.	09:16:18
25	Q. Did you bring any notes with you today?	09:16:19

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1	A. (Indicating.)	09:16:20
2	Q. I don't see any with you.	09:16:21
3	Great. I'd like to submit the first	09:16:26
4	exhibit. Let's get this.	09:16:33
5	(Interruption in proceedings.)	09:16:34
6	THE VIDEOGRAPHER: This is the end of media	09:17:26
7	two. We are going off the record. The time is	09:17:27
8	9:18 a.m.	09:17:30
9	(Interruption in proceedings.)	09:17:30
10	THE VIDEOGRAPHER: The time is 9:20 a.m. We	09:19:10
11	are back on the record.	09:19:11
12	MS. FREDERICK:	09:19:16
13	Q. You're able to see Exhibit 1?	09:19:16
14	And for the record, this is Dr. Kiaei's	09:19:18
15	declaration.	09:19:20
16	A. Yes, I downloaded, yes.	09:19:21
17	Q. Perfect.	09:19:23
18	A. Sorry, I interrupted you.	09:19:24
19	Q. So this is the declaration that you	09:19:25
20	prepared for this proceeding; correct?	09:19:26
21	A. Yes, ma'am.	09:19:30
22	Q. Okay. How much time did you spend	09:19:30
23	preparing the declaration?	09:19:34
24	A. Oh, gosh. That was almost a year ago. I'm	09:19:38
25	guessing about somewhere between 20 and 40 hours.	09:19:44

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1 Q. And when preparing it, you were -- I -- did 09:19:52
2 you prepare with counsel -- or did you prepare it 09:19:54
3 with counsel? 09:19:59
4 A. Yes, I prepared it with the previous 09:20:00
5 counsel because another firm was doing the IPR and I 09:20:04
6 prepared it with them, yes. 09:20:11
7 Q. And were you able to make any edits and 09:20:13
8 write anything that you -- whatever you wanted? 09:20:17
9 MS. MISHAGA: Objection. 09:20:19
10 I counsel the witness -- Objection based on 09:20:21
11 privilege. 09:20:23
12 I'll counsel the witness not to disclose 09:20:24
13 any communications you may have had with counsel in 09:20:26
14 drafting the petition -- or excuse me, the 09:20:28
15 declaration. 09:20:31
16 THE WITNESS: Yes. 09:20:36
17 This was a -- drafts going back and forth 09:20:36
18 and I made edits and changes and so on. 09:20:40
19 MS. FREDERICK: 09:20:42
20 Q. And the opinions in the declaration are 09:20:42
21 yours? 09:20:45
22 A. They are mine and I agree with them and 09:20:45
23 those are my opinions. 09:20:47
24 Q. Are there any changes that you want to make 09:20:48
25 today, anything to add or remove? 09:20:50

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1	A. No, not at this point, no.	09:20:55
2	If something comes up as we are going	09:21:00
3	through it and I see a minor error, I can tell you.	09:21:02
4	I did find a couple of quotations which were wrong	09:21:05
5	paragraphs, but I don't remember which ones.	09:21:08
6	Q. And nothing substantive?	09:21:10
7	A. The substance is -- nothing substantive.	09:21:11
8	Q. Okay. Great.	09:21:14
9	Dr. Kiaei, are you familiar with the	09:21:17
10	session initiation protocol?	09:21:19
11	MS. MISHAGA: Objection. Form.	09:21:21
12	THE WITNESS: Yes, I am. It is a protocol also	09:21:29
13	known as SIP.	09:21:34
14	MS. FREDERICK:	09:21:35
15	Q. Yes. What -- what is SIP?	09:21:35
16	A. SIP is a well-known protocol. It's a term	09:21:46
17	of art in the art and it's a protocol for --	09:21:48
18	communication protocol between two blocks in	09:21:56
19	communication systems.	09:21:59
20	Q. What types of -- you said two blocks in a	09:22:00
21	communication system? What do you mean by blocks?	09:22:04
22	A. Between various different communication	09:22:10
23	systems. It may not just be two, it could be	09:22:11
24	between many different communication systems.	09:22:13
25	Q. Are you referring to like a user device --	09:22:15

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1 an end user device? Or not necessarily? 09:22:16

2 A. Not necessarily. 09:22:25

3 It's a protocol that's used in the 09:22:26

4 communications for communicating various signaling 09:22:28

5 together between the communication blocks, between 09:22:33

6 communication systems. 09:22:36

7 Q. Okay. What types of devices -- or you 09:22:37

8 said, "communication systems." What types of 09:22:45

9 components communicate using SIP? 09:22:48

10 MS. MISHAGA: Objection. Form. 09:22:52

11 THE WITNESS: It really is a broad question 09:23:09

12 because depends on the communication systems. It is 09:23:11

13 a protocol that is used with various different 09:23:14

14 communication systems, including push-to-talk 09:23:18

15 radios, and allowing endpoints to talk to -- in the 09:23:22

16 push-to-talk radios. For example, to talk to the 09:23:32

17 network, to talk to the control architecture, 09:23:34

18 controller, et cetera. 09:23:37

19 MS. FREDERICK: 09:23:38

20 Q. Okay. Now, let's take the example of two 09:23:38

21 push-to-talk radios. How does SIP -- how is SIP 09:23:46

22 implemented? 09:23:49

23 MS. MISHAGA: Objection. Form. 09:23:50

24 THE WITNESS: Is there a specific location in 09:23:53

25 my declaration that you're pointing to? Is there -- 09:23:58

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1	or is it more of a general question?	09:24:01
2	MS. FREDERICK:	09:24:02
3	Q. It is a general question.	09:24:03
4	A. I'll bring you, actually, to a example of	09:24:12
5	what I have in figure 2 on page 36 of my declaration	09:24:15
6	where figure 2 is by one of the prior arts known as	09:24:22
7	a Keller. And in there, they -- as shown in the	09:24:30
8	diagram various different components in there or	09:24:42
9	blocks in that figure 2 are communicating with each	09:24:46
10	other and are using a protocol -- or a broadcast	09:24:51
11	protocol, which is -- in this case is SAP, for	09:24:55
12	example. In figure 2, I'm showing the protocols	09:24:59
13	that are the endpoints talking to the group entity	09:25:01
14	and the proxy and so forth.	09:25:07
15	Q. You just mentioned SAP.	09:25:12
16	A. SIP. SIP.	09:25:17
17	Q. Oh, I thought --	09:25:18
18	A. I meant SIP, sorry. I meant SIP, yes.	09:25:18
19	Q. Okay. Are you familiar with session	09:25:23
20	announcement protocol?	09:25:25
21	A. Session --	09:25:27
22	MS. MISHAGA: Objection.	09:25:28
23	THE WITNESS: Sorry, session what?	09:25:28
24	MS. FREDERICK:	09:25:30
25	Q. Session announcement protocol.	09:25:30

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1	A. In general, yes.	09:25:40
2	Is there a particular, again, location in	09:25:43
3	my declaration that I talk or is it general	09:25:44
4	question?	09:25:47
5	Q. It's a general question.	09:25:49
6	A. Yes, I am. Not the details of it at this	09:25:53
7	point on top of my head.	09:25:56
8	Q. I'd like to introduce the next exhibit.	09:25:59
9	Let's go ahead and let me get --	09:26:01
10	Okay. It should be up.	09:26:39
11	For the record, this is -- Exhibit 2 is	09:26:41
12	U.S. publication number 2004/0133683 to Keller.	09:26:46
13	It's Exhibit 1024 in the present IPR proceeding.	09:26:52
14	Are you familiar with this document?	09:27:04
15	A. Yes, ma'am. It is the Keller patent ending	09:27:10
16	in 683, which is a patent application, actually, by	09:27:14
17	Keller.	09:27:18
18	Q. And this was the figure that you referenced	09:27:20
19	in your declaration as from this --	09:27:21
20	A. Yes, it is.	09:27:26
21	Q. -- publication, okay.	09:27:27
22	Keller discloses the use of SAP as well as	09:27:44
23	SIP. Are you familiar with that aspect?	09:27:48
24	MS. MISHAGA: Objection. Form.	09:27:55
25	MS. FREDERICK:	09:28:00

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1 Q. And you can take time to review, certainly, 09:28:00
2 as well. 09:28:02

3 A. Yes, Keller talks about both SAP and SIP. 09:30:04
4 SIP, session initiation protocol, and SAP. I did 09:30:07
5 not go into details of it in my declaration, but as 09:30:13
6 Keller also talks about it in figure 3, the 09:30:22
7 signal -- the session performs controlling the 09:30:27
8 signaling, terminating the sessions, et cetera, with 09:30:35
9 the SIP, SAP, and another protocol, SDP. 09:30:38

10 Q. So how does SIP work differently than SAP? 09:30:52

11 MS. MISHAGA: Objection. Scope. 09:30:57

12 THE WITNESS: I didn't go into any analysis of 09:31:24
13 SIP versus SAP in my declaration anywhere in there. 09:31:27
14 And if you like me to talk about the difference 09:31:34
15 between them, I need to look at the -- what Keller 09:31:36
16 talks about specifically in terms of that. 09:31:40

17 MS. FREDERICK: 09:31:42

18 Q. Okay. You had mentioned earlier that SIP 09:31:42
19 is a well-known -- is a -- get this correct -- it's 09:31:44
20 a well-known protocol term of art used for 09:32:03
21 communications between two blocks. 09:32:05

22 A. SIP. 09:32:09

23 Q. Correct, SIP. 09:32:10

24 A. Yes. 09:32:11

25 Q. Does -- I guess the question is, does SAP 09:32:15

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1 fall into the same -- is it similarly well-known or 09:32:17
2 is it -- you would have to -- I understand you would 09:32:22
3 have to take time to review. 09:32:27
4 MS. MISHAGA: Sorry, were you done with your 09:32:35
5 question? 09:32:36
6 MS. FREDERICK: I was done with the question. 09:32:36
7 MS. MISHAGA: Objection. Form and scope. 09:32:38
8 THE WITNESS: In -- in general, SIP and SAP are 09:32:43
9 protocols, and depending on the -- in communication 09:32:48
10 systems. And depending on the application and the 09:32:52
11 preference of how the system is configured within 09:32:59
12 that system, they could be used in various different 09:33:01
13 forms. So I can't talk about the more general 09:33:06
14 hypothetical form unless we have any specifics we 09:33:10
15 can discuss. 09:33:13
16 MS. FREDERICK: 09:33:14
17 Q. Okay. Keller -- the system of Keller uses 09:33:15
18 a proxy; correct? 09:33:22
19 A. Yes, it has a proxy. 09:33:29
20 Q. What is the purpose of the proxy? 09:33:31
21 MS. MISHAGA: Objection. Form. 09:33:33
22 THE WITNESS: With respect to this IPR and also 09:33:50
23 the patent '852 and what Keller discusses, it is 09:33:59
24 that in the operation the proxy, which is also on 09:34:06
25 figure 2 of Keller shown as the block number 216, it 09:34:11

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1 inserts itself into the message between endpoints 09:34:21
2 through the use of appropriate SIP's Record-Route 09:34:29
3 header to ensure that any future SIP request from 09:34:37
4 either endpoint will be routed through the proxy 216 09:34:46
5 as shown in figure 2, so -- 09:34:54
6 MS. FREDERICK: 09:35:03
7 Q. I want to direct your attention to 09:35:04
8 paragraphs 41 through 46 of Keller. And in the 09:35:07
9 middle of paragraph 41, Keller states that "Each 09:35:17
10 individual proxy is instantiated by the individual 09:35:24
11 proxy manager 218 on behalf of the requested 09:35:29
12 session." 09:35:31
13 Are you with me? 09:35:33
14 A. Yes, I am, yeah. 09:35:34
15 Q. "[as read] And has a life cycle equal to 09:35:35
16 the session. The individual proxy must insert 09:35:37
17 itself into the SIP route set of an individual 09:35:41
18 directed session to insure that all session 09:35:46
19 controlling signaling passes through the individual 09:35:48
20 proxy 216 for possible handling by the underlying 09:35:50
21 session controller 206." 09:35:55
22 Would you agree that the individual proxy 09:36:04
23 that the -- strike that -- that a session controller 09:36:09
24 206 controls a section -- controls the session 09:36:15
25 through the individual proxy? 09:36:19

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1 MS. MISHAGA: Objection. Form. 09:36:23

2 THE WITNESS: I did not quite follow your 09:36:41

3 question. If you don't mind, again repeat it. 09:36:42

4 MS. FREDERICK: 09:36:45

5 Q. Sure. 09:36:46

6 My question is, does the -- does the 09:36:46

7 session controller 206 control the session through 09:36:50

8 the proxy 216? 09:36:57

9 MS. MISHAGA: Objection. Form. 09:37:01

10 THE WITNESS: So what I would agree with is 09:40:02

11 that using SIP, which I earlier mentioned in terms 09:40:03

12 of the session control -- session initiation 09:40:12

13 protocol to communicate with a interoperability 09:40:16

14 server, it would receive a determination that the 09:40:24

15 proxy from the interoperability server is to be 09:40:28

16 dynamically inserted to connect the endpoints to a 09:40:32

17 virtual talk group via the processor that is within 09:40:35

18 the interoperability server. 09:40:44

19 MS. FREDERICK: 09:41:04

20 Q. My question was -- I'm -- I'm asking about 09:41:04

21 Keller here. And does -- Let's see. Let me direct 09:41:14

22 your attention to paragraph 43 of Keller. 09:41:19

23 Paragraph 43 states -- Are you there with 09:41:31

24 me? 09:41:34

25 A. Yes, I am, yeah. 09:41:35

Page 18

1 Q. "All individual directed session requests 09:41:36
2 are intercepted by the individual proxy 216, which 09:41:38
3 interacts with the session controller 206 to 09:41:42
4 determine if the session should be established or 09:41:45
5 denied." 09:41:47
6 It goes on to say "The individual proxy 216 09:41:55
7 passes information" to -- "on the requested session, 09:41:58
8 as described by the payload of the SIP request, to 09:42:01
9 the session controller 206." 09:42:04
10 Would you agree that the session controller 09:42:11
11 206 utilizes the proxy 216 to determine if the 09:42:16
12 session should proceed? 09:42:25
13 MS. MISHAGA: Objection. Scope, form. 09:42:31
14 THE WITNESS: So this is a little different 09:42:46
15 question than the previous one you're asking. My 09:42:48
16 answer to this would be that the proxy using SIP, it 09:42:54
17 would determine that a proxy is to be dynamically 09:43:17
18 inserted in the communication between the endpoints 09:43:21
19 or not. That is the goal of the proxy. And that's 09:43:25
20 what they -- when I'm talked about, you know, 09:43:29
21 operability server, part of that interoperability 09:43:31
22 server is the processor within that also, which is 09:43:39
23 performing this determination that the proxy is to 09:43:43
24 be dynamically inserted. 09:43:46
25 MS. FREDERICK: 09:43:50

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1 Q. I -- I am not -- the question was 09:43:50
2 specifically with reference to Keller. Does the 09:43:57
3 session controller 206 utilize the proxy to 09:44:02
4 determine if the session should proceed? 09:44:05
5 MS. MISHAGA: Objection. Scope, form. 09:44:08
6 THE WITNESS: To answer that, I need to look at 09:44:35
7 the patent closely. But in respect to -- with 09:44:37
8 respect to the '852 patent and how it's done, I've 09:44:41
9 been pretty clear about that in my declaration. So 09:44:45
10 if you like me to look at what the Keller says in 09:44:48
11 other embodiments and so on, I have to read that and 09:44:51
12 look at it and see what it's talking about. 09:44:55
13 MS. FREDERICK: 09:44:56
14 Q. Sure. 09:44:56
15 My question is not about the '852 patent, 09:44:57
16 my question is about Keller, and specifically the 09:44:59
17 session controller interacting with the proxy. You 09:45:02
18 can take time to review as needed. 09:45:07
19 A. All right. So this is more general 09:45:16
20 question in terms of what I have opined in my 09:45:18
21 declaration. You're talking -- 09:45:22
22 Q. No, this is -- this is asking about the 09:45:24
23 proxy in Keller, which is what you have opined on in 09:45:26
24 the declaration. 09:45:31
25 MS. MISHAGA: What is the question? 09:45:34

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1	MS. FREDERICK:	09:45:35
2	Q. The question is, does the session	09:45:36
3	controller 206 utilize the proxy 216 to determine if	09:45:43
4	the session should proceed?	09:45:50
5	MS. MISHAGA: Objection. Scope and asked and	09:45:54
6	answered at this point.	09:45:56
7	THE WITNESS: So my answer is what I had also	09:52:44
8	said before, which is what I'm using Keller is	09:52:46
9	combination with Shaffer. And in here, what I	09:52:51
10	discuss is the use of SIPs in order to the proxy	09:52:59
11	216, which inserts itself into the message path	09:53:06
12	between the endpoints by using the appropriate user	09:53:09
13	SIP and working with a interoperability server, IS.	09:53:13
14	So within interoperability server, there is	09:53:26
15	a processer and a controller in there. And as	09:53:29
16	Keller also talks about this, it says that possibly	09:53:37
17	with that controller. But in general, a person of	09:53:42
18	skill in the art would know that there may be other	09:53:44
19	components that can be used within Keller to perform	09:53:48
20	that interaction with the interoperability server to	09:53:52
21	insert the proxy between the endpoints.	09:53:54
22	MS. FREDERICK:	09:54:01
23	Q. Dr. Kiaei, are you familiar with the	09:54:18
24	Record-Route header?	09:54:22
25	MS. MISHAGA: Objection. Form.	09:54:24

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1 THE WITNESS: With -- I am in general, yes. 09:54:28

2 MS. FREDERICK: 09:54:33

3 Q. How does it work? 09:54:37

4 MS. MISHAGA: Objection. Form. 09:54:38

5 THE WITNESS: Well, as the name itself says, 09:54:44

6 it's a record -- a header in general which is 09:54:50

7 attached to the SIP initiation protocols. It's part 09:54:55

8 of the SIP protocol. And with respect specifically 09:55:00

9 to what I use in terms of Keller in my declaration, 09:55:04

10 I have described that in my declaration. 09:55:09

11 MS. FREDERICK: 09:55:28

12 Q. Going back to Exhibit 1, your declaration. 09:55:58

13 I believe you're referencing paragraph 174. 09:56:03

14 A. Yes, I am, yes. 09:56:11

15 Q. As the description of the Record-Route 09:56:12

16 header. 09:56:14

17 So you state that the Record-Route header 09:56:15

18 "lists each of the servers that signal" -- "that the 09:56:22

19 signal from the endpoint traverses when attempting 09:56:25

20 to establish" a "communication." And I know you've 09:56:29

21 mentioned the SAP protocol. 09:56:33

22 Can you walk through the process of how the 09:56:38

23 Record-Route header is added to the -- how it's 09:56:41

24 utilized. 09:56:46

25 MS. MISHAGA: Objection. Form. 09:56:51

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1 THE WITNESS: As I also mentioned in the -- my 09:57:10
2 declaration and I also have the figure from the -- I 09:57:12
3 believe it's a book by -- I forgot the author's 09:57:19
4 name, but there's a book that I also have in one of 09:57:25
5 my exhibits in there, and I have shown -- and I'm 09:57:28
6 showing the figure from that book in page 89 of my 09:57:34
7 declaration. 09:57:40

8 What I discuss is that the -- would have 09:57:42
9 been obvious that for a POSITA, a person of skill in 09:57:49
10 the art, that the SIP message received by the 09:57:52
11 endpoint after initiating a call to a virtual tag 09:57:54
12 point, VTG, would include the Record-Route header, 09:58:00
13 which lists each one of the servers that the signal 09:58:04
14 from the endpoint traverses when attempting to 09:58:07
15 establish communication with a virtual tag group as 09:58:14
16 shown below, and I show that in the figure below. 09:58:18

17 THE REPORTER: Before you move on, let me just 09:58:34
18 make sure I got one word right, virtual tag or -- 09:58:35

19 THE WITNESS: Virtual tag -- virtual -- sorry, 09:58:38
20 virtual talk group. 09:58:39

21 THE REPORTER: Talk group. Thank you. 09:58:41

22 THE WITNESS: Yes, I'm glad you talk -- you got 09:58:41
23 me there. Virtual talk group. 09:58:41

24 MS. FREDERICK: I went ahead and let's 09:58:42
25 introduce another exhibit. It should be up. 09:58:43

1 For the record, this is the Daniel Collins 09:58:56
2 text. It's Exhibit -- in the IPR proceeding, it's 09:59:00
3 Exhibit 1022. 09:59:08
4 Q. I believe, Dr. Kiaei, that this is the 09:59:11
5 reference you were alluding to you. 09:59:12
6 THE REPORTER: And now it will be Exhibit 3. 09:59:18
7 MS. FREDERICK: Correct. Did I say -- 09:59:20
8 THE REPORTER: (Indicating.) 09:59:21
9 MS. FREDERICK: And it's as Exhibit 3. 09:59:22
10 THE WITNESS: Yes, I have downloaded that 09:59:33
11 exhibit, so -- 09:59:34
12 MS. FREDERICK: 09:59:35
13 Q. Okay. So let's go to page 24 of the .pdf, 09:59:36
14 which is page 194 of the text. 09:59:50
15 A. Yes, I'm there. 10:00:03
16 Q. This section, Proxy State, the third 10:00:04
17 paragraph down that starts with "Two important 10:00:07
18 headers in figure 5-12 are the Record-Route: and the 10:00:09
19 Route: headers." 10:00:15
20 Towards the end of that paragraph, it 10:00:17
21 states "[as read] A proxy might require that it 10:00:26
22 remain in the signaling path for all subsequent 10:00:29
23 requests. For example, a proxy might need to remain 10:00:32
24 in the signaling path in order to provide some 10:00:34
25 advance service. A proxy can ensure that it remains 10:00:36

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1 in the signaling path through the use of the 10:00:46
2 Record-Route: header." 10:00:48
3 It goes on to state "Each proxy that wants 10:00:57
4 to remain in the signaling path for future requests 10:00:59
5 inserts its address in the Record-Route: header 10:01:02
6 field of the INVITE." 10:01:04
7 So the way the Record-Route header works, 10:01:10
8 it appears that the proxy decides that it wants to 10:01:13
9 remain in the signaling path and inserts the 10:01:16
10 Record-Route header; is that correct? 10:01:20
11 MS. MISHAGA: Objection. Form. 10:01:26
12 THE WITNESS: I would say that the figure 512 10:01:27
13 in page 22 .pdf is a -- it shows the communications 10:01:30
14 between -- the example between the Boss and Daniel 10:01:41
15 going through the proxy in between, which is the SIP 10:01:46
16 server. And as also I discussed earlier that the 10:01:52
17 SIP message that is received by the endpoint after 10:02:10
18 initiating a call to a virtual talk group would 10:02:13
19 include a Record-Route header which lists each one 10:02:18
20 of the servers that the signal from the endpoints 10:02:23
21 traverses when attempting to establish a 10:02:29
22 communication with the virtual talk group. 10:02:33
23 So in this Exhibit 3, it also shows that in 10:02:35
24 terms of the arrows showing the -- the arrows are 10:02:40
25 showing the signaling that's coming in from one 10:02:53

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1 endpoint to another endpoint, which are labeled as 10:02:59
2 Boss and Daniel, which is going through the -- a 10:03:02
3 proxy server in the middle. And the first few lines 10:03:10
4 of each one of these messages coming in has the 10:03:16
5 header which this header has the -- shows the 10:03:20
6 signaling as it's traveling through that proxy. 10:03:29

7 For example, at points A, where the signal 10:03:37
8 is sent to Daniel, and then acknowledgment back in 10:03:42
9 point D and E and so on and so forth, each one of 10:03:46
10 them goes through the middle -- the proxy in the 10:03:50
11 middle and the router header -- the Record-Router 10:03:53
12 header is the first -- is within those messages that 10:03:58
13 are going back and forth. 10:04:05

14 So as an example -- you asked for example 10:04:07
15 earlier is that in the signal coming to Daniel, it 10:04:11
16 shows the signal coming from -- it's a SIP signal 10:04:19
17 invitation and it has all the details of this thing 10:04:26
18 and it has the Record-Router which is coming through 10:04:29
19 the server, and it says it would originat- -- 10:04:31
20 originat- -- originating endpoint is, which is the 10:04:35
21 Boss -- from Boss, et cetera, and then the reply 10:04:39
22 back below going again through the proxy -- sorry, 10:04:50
23 proxy -- proxy server, which is sending the signal 10:04:56
24 back to the -- from Daniel to Boss again. 10:05:02

25 And this is to reinstate what I was saying 10:05:28

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1 earlier in terms of that the SIP message received by 10:05:30
2 endpoint would include a Record-Route header, which 10:05:38
3 lists the server that the signal travels to 10:05:42
4 establish a communication with a VTG in my 10:05:49
5 declaration. 10:05:54
6 MS. FREDERICK: 10:05:54
7 Q. Got it. 10:05:54
8 So in the figure 512 here, which is the 10:05:55
9 figure that's in the declaration, the Record-Route 10:05:58
10 header is first added at step B, correct, as it's 10:06:02
11 sent from the server to Daniel? 10:06:07
12 MS. MISHAGA: Objection. Form. 10:06:12
13 THE WITNESS: I guess the correct answer there 10:06:21
14 would be looking at this is that from Point A at the 10:06:23
15 chart on the left going to Point B, Point A is 10:06:29
16 invitation from Boss going there and then to Daniel 10:06:32
17 with the ID and all that stuff. And then what's 10:06:41
18 received from the -- it goes to the SIP server, and 10:06:45
19 what's received from the SIP server is the 10:06:48
20 signaling -- is the SIP signal or the SIP initiation 10:06:54
21 protocol there, which has the Point B which has all 10:06:57
22 the details in there, including the Record-Route 10:07:00
23 coming through the server from Boss, et cetera, to 10:07:05
24 Daniel and the invitation. 10:07:10
25 MS. FREDERICK: 10:07:22

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1 Q. Right. So the Record-Route header is added 10:07:23
2 at point B going to Daniel, I believe. 10:07:25
3 MS. MISHAGA: Objection. Form, asked and 10:07:34
4 answered. 10:07:35
5 THE WITNESS: Again, I wouldn't agree with that 10:07:43
6 statement. I already talked about this. So it is 10:07:44
7 added when you go from Point A to Point B, all the 10:07:46
8 different lines in there. 10:07:49
9 MS. FREDERICK: 10:07:50
10 Q. I mean, point A is the message from Boss to 10:07:50
11 the server. Do you -- is the Record-Route header 10:07:52
12 part of the message in Point A? 10:07:55
13 MS. MISHAGA: Objection. Form. 10:08:02
14 THE WITNESS: In Point A is the information 10:08:03
15 such as the invitation, using SIP from Boss going to 10:08:11
16 Daniel, et cetera, on call ID. And then Point B is 10:08:17
17 the details of what's received from the SIP server 10:08:21
18 to Daniel. 10:08:26
19 MS. FREDERICK: 10:08:27
20 Q. Correct. I don't think we're disagreeing, 10:08:27
21 I just -- clarifying that Point A doesn't include 10:08:37
22 the Record-Route header. 10:08:40
23 MS. MISHAGA: Objection. Asked and answered. 10:08:43
24 MS. FREDERICK: Okay. 10:08:46
25 Q. Switching back to Exhibit 2, Keller, 10:08:48

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1	paragraph 46.	10:09:32
2	Paragraph 46 states that "the individual	10:09:39
3	proxy 216 must either be in the session initiator's	10:09:41
4	initial route set, or through standard SIP routing	10:09:45
5	conventions, the proxy must add itself to the	10:09:49
6	dialog's route set through, for instance, the	10:09:51
7	appropriate use of SIP's RECORD-ROUTE header."	10:10:00
8	So we just talked through how a	10:10:07
9	Record-Route header is used, and here, once the	10:10:10
10	proxy realize it needs to be add -- added to the	10:10:14
11	route set, it inserts itself using the Record-Route	10:10:20
12	header; correct?	10:10:26
13	MS. MISHAGA: Objection. Form.	10:10:29
14	THE WITNESS: Two comments in here. The	10:10:35
15	specifics -- or some of the examples that Keller	10:10:40
16	shows here are examples for this particular	10:10:43
17	configurations that it's discussing. But in terms	10:10:49
18	of how it applies by the person of skilled in the	10:10:57
19	art in combination of Keller with Shaffer in terms	10:11:00
20	of using the SIP is that the SIP message that's	10:11:07
21	coming to the endpoint after initiating a call to a	10:11:19
22	virtual talk group, the SIP message that is received	10:11:28
23	by the endpoint would include a Record-Route header.	10:11:33
24	MS. FREDERICK:	10:11:37
25	Q. Okay.	10:11:38

1	A. That would be my statement.	10:11:40
2	MS. FREDERICK: Okay. We've been going for a	10:11:53
3	bit. Let's take a break.	10:11:54
4	THE VIDEOGRAPHER: This is the end of media	10:11:57
5	three. We are going off the record. The time is	10:11:58
6	10:12 a.m.	10:12:01
7	(Interruption in proceedings.)	10:12:02
8	THE VIDEOGRAPHER: The time is 10:29 a.m. We	10:28:45
9	are back on the record.	10:28:48
10	MS. FREDERICK:	10:28:48
11	Q. Okay. Dr. Kiaei, going back to Exhibit 1,	10:28:56
12	your declaration, in paragraph 172, you note that	10:29:00
13	Keller discloses -- make sure everything is	10:29:15
14	correctly -- Keller discloses informing the endpoint	10:29:19
15	that it is not in adherence with the floor control	10:29:23
16	mechanism.	10:29:27
17	What's the basis for your opinion that	10:29:31
18	Keller discloses that feature?	10:29:33
19	MS. MISHAGA: Objection. Form.	10:29:37
20	THE WITNESS: As -- this is the third item in	10:30:46
21	terms of discussing the -- going up to claim one,	10:30:54
22	which discusses the receive a first determination	10:31:11
23	from the IS that the endpoint is not in -- in	10:31:21
24	adherence with capabilities of the predefined	10:31:26
25	control mechanism. So what I discuss in here is	10:31:30

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1 that -- I discuss three points specific to this 10:31:36
2 claim element. 10:32:06
3 First, in paragraph 166, I talk about 10:32:09
4 Shaffer, which discloses that the proxy can be 10:32:11
5 dynamically inserted when an endpoint attempts to 10:32:16
6 connect to a virtual talk group, in terms of the 10:32:20
7 predefined control mechanisms that I talk in 10:32:28
8 paragraphs following that. 10:32:31
9 Second, I talk about the interoperability 10:32:36
10 server 102, that Shaffer explains that it can 10:32:39
11 connect two-way radios to other networks by 10:32:42
12 employing IP or Internet protocol technology 10:32:47
13 standard, be able to connect a -- the radios 10:32:51
14 together. 10:32:59
15 And I also discuss that -- at the time, 10:33:02
16 that '852 patent -- at the time of the '852 patent, 10:33:04
17 a well-known example of IP was for -- was used for 10:33:12
18 push-to-talk radio was session initiation protocol, 10:33:18
19 SIP. 10:33:22
20 And that -- third, which relates to that 10:33:23
21 claim element number 1C of the '852 patent, I talk 10:33:29
22 about the Shaffer doesn't disclose informing the 10:33:35
23 endpoint that it's not in adherence with a floor 10:33:41
24 control mechanism. That opinion is based on the 10:33:44
25 fact that the group entity in the figure we were 10:33:50

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1 discussing earlier, in figure 2, for example, it can 10:33:55
2 detect that the terminal is unable to communicate 10:34:01
3 with a floor controller 230 where a terminal here is 10:34:09
4 discussing the endpoints. 10:34:13

5 Then I talk about the fact that -- so this 10:34:18
6 is the one that specifically talks about is unable 10:34:19
7 to communicate with the floor control so that is 10:34:23
8 meeting that element of the fact that it is -- the 10:34:25
9 endpoint is not in adherence with the floor control 10:34:28
10 mechanism. Floor controller 230. 10:34:31

11 And then it describes the details later on 10:34:34
12 in that paragraph that is generating signals to the 10:34:38
13 non-dispatch endpoint to cause endpoint to direct 10:34:47
14 its media to the media manager, which is preferably 10:34:51
15 configured to impose talker arb- -- arbitrator floor 10:34:59
16 control on a full duplex system or non-dispatch 10:35:03
17 endpoint. 10:35:09

18 So what it's talking about here is that, in 10:35:10
19 this case, the group entity, when it detects that is 10:35:12
20 unable to communicate with the floor controller, 10:35:18
21 then it performs the -- it directs that endpoint to 10:35:19
22 talk to the media manager, which is then -- performs 10:35:25
23 the arbitration for floor control on a full duplex 10:35:33
24 device, which is a -- to a non- -- to the 10:35:38
25 non-dispatch point -- sorry, the full duplex device, 10:35:42

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1 which is a non-dispatch endpoint, is not a 10:35:46
2 push-to-talk radio, to a endpoint which is a 10:35:50
3 push-to-talk radio. So it's connecting these two 10:35:52
4 different devices together -- together. 10:35:54
5 MS. FREDERICK: 10:35:56
6 Q. You referenced generate -- it generates 10:36:05
7 signaling in your response there. Is it -- are you 10:36:08
8 saying that it -- the group entity, when it 10:36:13
9 generates signaling to the non-dispatch endpoint, 10:36:17
10 that that's the communication to the endpoint that 10:36:21
11 it's not in adherence with the floor control 10:36:24
12 mechanism? 10:36:28
13 MS. MISHAGA: Objection. Form. 10:36:29
14 THE WITNESS: That is afterwards. I mean, 10:36:35
15 they -- at the beginning of that paragraph, I talk 10:36:36
16 about the fact that it's already detected, the group 10:36:39
17 entity already detect that, that the terminal is 10:36:42
18 unable to communicate with floor control. 10:36:45
19 If it is unable to control -- to go -- to 10:36:46
20 communicate with the floor controller, after that, 10:36:50
21 it directs the -- it preferably generates signaling 10:36:55
22 to the non-dispatch endpoint, which is the 10:37:01
23 non-push-to-talk radio or full duplex system, to 10:37:03
24 cause that endpoint to direct its media to the media 10:37:15
25 manager. So it's routing that through the media 10:37:18

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1	manager.	10:37:20
2	THE REPORTER: What paragraph are you reading	10:37:22
3	from, please?	10:37:23
4	THE WITNESS: I'm reading paragraph 172 of my	10:37:25
5	declaration.	10:37:28
6	THE REPORTER: Thank you.	10:37:29
7	THE WITNESS: Which is citing to Exhibit 1023,	10:37:31
8	paragraph 123.	10:37:34
9	THE REPORTER: Thank you, sir.	10:37:37
10	MS. FREDERICK:	10:37:58
11	Q. In this example, how does the endpoint know	10:37:59
12	where to send its media?	10:38:01
13	MS. MISHAGA: Objection. Form.	10:38:10
14	THE WITNESS: Your question is not clear. What	10:38:22
15	do you mean by that? I mean, the -- the floor	10:38:24
16	controller is -- yeah, the question -- your question	10:38:28
17	is not clear in here.	10:38:36
18	MS. FREDERICK:	10:39:18
19	Q. In this paragraph, the sentence -- the	10:39:18
20	second sentence reads "In this case, the group	10:39:22
21	entity would preferably generate signaling to the	10:39:25
22	non-dispatch endpoint to cause the endpoint to	10:39:29
23	direct its media to the media manager."	10:39:31
24	How does the endpoint know where to send	10:39:34
25	its media?	10:39:39

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1 MS. MISHAGA: Objection. Form. 10:39:43

2 THE WITNESS: In general, a person of skill in 10:39:53

3 the art would know that when a endpoint is talking 10:39:57

4 to another endpoint or communicating to other 10:40:06

5 endpoint or is communicating via the radio network 10:40:09

6 and so on, we do have a control signaling as well 10:40:14

7 going on in the background, which is one of the 10:40:19

8 obvious methods that the person of skill in the art 10:40:23

9 would know that. 10:40:25

10 So the same way that a radio would know 10:40:27

11 which base station to talk to, a cell phone would 10:40:31

12 know which base station to talk to and so on. So 10:40:34

13 all of these are done through control signalings 10:40:37

14 which is going on in the background, not apparent to 10:40:40

15 the user, it's not within the talking, so -- 10:40:46

16 MS. FREDERICK: 10:40:52

17 Q. And that control signal would be telling 10:40:52

18 the endpoint where it's sending its media, that's 10:40:54

19 how it knows -- Okay. 10:41:00

20 Dr. Kiaei, what's the basis for your 10:41:29

21 opinion that the POSITA would modify the system of 10:41:31

22 Shaffer to include this determination from Keller, 10:41:36

23 this disclosing the endpoint that it's not in 10:41:42

24 adherence with the floor control mechanism? 10:41:44

25 MS. MISHAGA: Objection. Form. 10:41:47

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1 THE WITNESS: First of all, they -- Shaffer and 10:41:50
2 Keller are both talking about the communications 10:42:12
3 with disparate systems, talking about communication 10:42:19
4 systems such as public safety dispatch systems, and 10:42:22
5 Keller talks about the same thing. 10:42:26

6 And the figure 2, for example, it talks 10:42:32
7 about protocols that within the system as shown in 10:42:40
8 figure 2, how they're communicating together. And 10:42:44
9 then, when I discuss the motivation for combining 10:42:50
10 the -- Shaffer and Keller and why is it Keller -- I 10:42:56
11 use Keller as a combination there. As I said, 10:43:09
12 Shaffer goal is to provide a way of noncompatible 10:43:15
13 endpoints or disparate endpoints to talk with a 10:43:18
14 standard IP-based inter- -- IP-based technology. 10:43:22
15 But Shaffer doesn't go into specifics of standard 10:43:33
16 signaling technology. 10:43:36

17 By 2008 and well before that, the SIP 10:43:43
18 technology was a well-known standard. And it is 10:43:47
19 also used in a push-to-talk radio -- radios. So 10:43:52
20 motivation, in my opinion, is that the person of 10:44:02
21 skill in the art would have looked at the example of 10:44:05
22 a Keller, which is discussing similar technologies 10:44:11
23 for communication -- similar communication systems, 10:44:20
24 which is noncompatible endpoints, and uses a 10:44:24
25 standard SIP technology -- SIP technology in a 10:44:28

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1 push-to-talk radio. So it would have been -- in my 10:44:36
2 opinion, it would have been obvious for a person of 10:44:42
3 skill in the art to be able to combine them. At 10:44:44
4 that time, SIP was a well-known technology and 10:44:48
5 Keller shows how to use that in PTT, push-to-talk 10:44:51
6 radios. 10:44:55
7 MS. FREDERICK: 10:44:55
8 Q. So is it your opinion that the POSITA would 10:45:04
9 modify the system of Shaffer to include that 10:45:09
10 specific determination from Keller? 10:45:12
11 MS. MISHAGA: Objection. Form. 10:45:17
12 THE WITNESS: I will not use the wording 10:45:26
13 "modify" here. I would say that the POSITA would 10:45:27
14 use the IP-based -- Internet protocol based 10:45:39
15 technology such as SIP to be able to have a -- 10:45:41
16 non-compatible endpoints to talk to each other. 10:45:50
17 So it's able to add a SIP based on the fact 10:45:53
18 that Shaffer already discussed IP technology and SIP 10:45:57
19 would have been a addition to that IP-based 10:46:03
20 technology having a standard well-known protocol to 10:46:08
21 be able to use that. 10:46:14
22 MS. FREDERICK: 10:46:18
23 Q. How do you evaluate motivation to combine? 10:46:18
24 MS. MISHAGA: Objection. Form, calls for legal 10:46:23
25 conclusion. 10:46:25

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1	THE WITNESS: I guess -- as we both know, I'm	10:46:32
2	not a -- I'm not in a -- I'm not a lawyer. And I	10:46:37
3	know that there is a procedure for motivation to	10:46:46
4	combine and so on and so forth which is beyond my	10:46:51
5	expertise.	10:46:54
6	MS. FREDERICK:	10:47:00
7	Q. I'm sorry, I thought you just explained why	10:47:00
8	they would be combined.	10:47:04
9	A. I'm talking from a technology perspective,	10:47:07
10	not from a law perspective. So your question was	10:47:08
11	how do you know what is a motivation to combine.	10:47:12
12	Motivation to combine from a technology perspective	10:47:16
13	is -- is -- as I said was that, so --	10:47:19
14	Q. Okay. Understood.	10:47:26
15	I'd like to introduce another exhibit.	10:47:32
16	Okay. Exhibit 4 should be in	10:48:15
17	Exhibit Share. This is publication -- U.S.	10:48:17
18	publication number 2009/0298525 to Shaffer.	10:48:19
19	This is Exhibit 1015 in the IPR proceeding.	10:48:31
20	Dr. Kiaei, could you look to column four	10:48:44
21	starting at line 63, please.	10:48:47
22	I'm sorry, I misspoke. Wait one moment.	10:48:59
23	Paragraph 28 of Exhibit 4. Starting at the	10:50:00
24	top of page 3, about seven lines down, and you can	10:50:18
25	read the whole paragraph to get the full context,	10:50:25

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1	but I'm looking at the embodiment facilitating	10:50:30
2	communications between users of UHF radios and VHF	10:50:34
3	radios.	10:50:38
4	In that example that's provided, the	10:51:26
5	interoperability server facilitating communications	10:51:30
6	between UHF and VHF radios, would that embodiment	10:51:32
7	use SIP?	10:51:37
8	A. SAP?	10:51:42
9	Q. SIP.	10:51:42
10	A. SIP.	10:51:43
11	MS. MISHAGA: Object to scope.	10:52:06
12	THE WITNESS: So if I understand this	10:52:54
13	correctly, '525 patent by Shaffer, that's a patent	10:52:55
14	application that is on a -- yeah, was a patent	10:53:07
15	application.	10:53:41
16	I need to analyze the UHF and VHF radios in	10:55:47
17	order to be able to tell you -- UHF stands for ultra	10:55:50
18	high frequency radios and VHF stands for very high	10:55:55
19	frequency radios. These are relatively older radios	10:56:00
20	that was -- has been around for a long time. So	10:56:13
21	really, it depends on what type of a -- they're	10:56:17
22	operating at 2 different frequencies, radio	10:56:23
23	frequencies.	10:56:26
24	I don't recall what the modulation schemes	10:56:31
25	are between the two. I need to know that modulation	10:56:32

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1 schemes between the two and I need to know what type 10:56:35
2 of a compatibility they would need between the two 10:56:42
3 radios, specifically here, UHF and VHF. 10:56:51
4 For example, their -- a compatibility could 10:56:58
5 be as simple as changing the radiofrequency or could 10:57:01
6 be any other issues that needs to be there. So I -- 10:57:05
7 I wouldn't say that SIP may or may not be able to be 10:57:12
8 needed -- that the SIP may or may not be needed to 10:57:18
9 be employed especially for these technologies. So 10:57:23
10 from what I recall, these are both relatively older 10:57:40
11 technologies that use analog technologies and so on, 10:57:43
12 so -- 10:57:46
13 MS. FREDERICK: 10:57:56
14 Q. Okay. I want to turn back to Exhibit 1, 10:57:57
15 your declaration, paragraphs 38 and 53. You're 10:58:20
16 discussing the -- your understanding of the 10:58:38
17 obviousness -- you're discussing obviousness in 10:58:43
18 general, and you note that you are -- let's -- you 10:58:52
19 note that you understand the "POSITA provides a 10:59:04
20 reference point from which the prior art and claimed 10:59:07
21 invention should be viewed." And that "this 10:59:09
22 reference point prevents one from using his or her 10:59:13
23 own insight or hindsight in deciding whether a claim 10:59:18
24 is obvious." 10:59:22
25 And you go on in paragraph 53 to say "I 10:59:23

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1 understand in considering obviousness" that it's 10:59:25
2 "improper to determine obviousness using the benefit 10:59:28
3 of hindsight." 10:59:32
4 How do you avoid determining obviousness 10:59:36
5 without using hindsight? 10:59:40
6 MS. MISHAGA: Objection. Calls for legal 10:59:42
7 conclusion. 10:59:43
8 THE WITNESS: Can you elaborate more on that in 11:00:24
9 terms of what do you mean by hindsight in deciding 11:00:26
10 whether a claim is obvious or not? What do you mean 11:00:29
11 by hindsight here? 11:00:32
12 MS. FREDERICK: 11:00:33
13 Q. Well, I'm asking -- I mean, in your 11:00:33
14 declaration here, you say it's "improper to 11:00:36
15 determine obviousness using the benefit of hindsight 11:00:38
16 derived from the patent being considered." 11:00:42
17 A. Well, from my perspective, I look at the -- 11:00:45
18 at the time of the patent was -- or an invention was 11:01:09
19 declared, at the time of declaration of the patent, 11:01:15
20 a person of skill in the art would have a -- would 11:01:24
21 be looking at the prior art at the time of the 11:01:31
22 invention and they -- what is the prior art from 11:01:37
23 that time of invention. So from a perspective -- 11:01:47
24 technical perspective -- I'm not an attorney so I 11:01:53
25 can't go into the legal discussions of what that is, 11:01:56

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1 but that is from a time that the invention was 11:01:59
2 presented, was disclosed, and the prior art related 11:02:10
3 to that and not the hindsight and -- Let me look at 11:02:14
4 paragraph 56. 11:02:29
5 Q. 53. 11:02:32
6 A. 53. 11:02:33
7 So what I discuss here is that it's 11:02:39
8 improper to determine obviousness using the benefits 11:02:41
9 of the hindsight derived from the patent being 11:02:45
10 considered. The person of skill in the art is 11:02:48
11 looking at the patent and evaluating the patent at 11:02:50
12 the time of the disclosure of the patent or time of 11:02:52
13 the patent and what was the prior art before that, 11:02:57
14 so -- 11:03:00
15 Q. So when you're evaluating the combination 11:03:01
16 of references, how do you avoid using hindsight? 11:03:04
17 MS. MISHAGA: Objection. Calls for legal 11:03:09
18 conclusion, asked and answered. 11:03:10
19 MS. FREDERICK: I don't think I got the answer. 11:03:15
20 MS. MISHAGA: You might not have got the answer 11:03:18
21 that you wanted, but you certainly not an answer. 11:03:21
22 MS. FREDERICK: Then let me rephrase it. 11:03:24
23 Q. You said that the person of skill in the 11:03:30
24 art looks at the patent and evaluates it at the time 11:03:35
25 of declaration. And my question is, when you're 11:03:41

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1	evaluating obviousness, when you're opining on	11:03:45
2	obviousness, how do you avoid using hindsight from	11:03:52
3	the benefit -- the benefit of hindsight from the	11:03:58
4	patent, the claims that we're considering?	11:04:03
5	MS. MISHAGA: Same objections.	11:04:07
6	THE WITNESS: My answer is the same, really.	11:04:16
7	Is that in assessing the claims of the patent and	11:04:20
8	the teaching of the prior art and identifying what	11:04:32
9	the person of skill in the art would be, a person of	11:04:37
10	skill in the art would undertake the perspective of	11:04:46
11	what was understood by POSITA, person of skill in	11:04:51
12	the art, reading the patent based on its priority	11:04:53
13	date and, of course, the prosecution history or the	11:04:59
14	file history of the patent as well as to make sure	11:05:04
15	that they are looking at the patent from the prior	11:05:08
16	art, from that perspective of that timeline.	11:05:12
17	So in my case, I -- I have been in this	11:05:17
18	field for a duration of -- gosh, since mid -- mid	11:05:25
19	'80s, for the last 40 years, so I do know the	11:05:33
20	various different technologies at different times	11:05:36
21	and so on, so I take the hindsight into	11:05:38
22	consideration when I'm looking at it, what was known	11:05:44
23	at the time and the priority date of these patents	11:05:48
24	that I'm discussing, specially '852 in this case.	11:05:52
25	Again, from a technology perspective, I'm not doing	11:06:02

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1 it from a legal perspective. That's my answer. 11:06:04

2 MS. FREDERICK: Thank you. 11:06:15

3 I'd like to take another quick break. 11:06:25

4 THE WITNESS: Great. 11:07:09

5 THE VIDEOGRAPHER: This is the end of media 11:07:10

6 four. We are going off the record. The time is 11:07:11

7 11:08 a.m. 11:07:13

8 (Interruption in proceedings.) 11:07:14

9 THE VIDEOGRAPHER: The time is 11:32 a.m. We 11:31:46

10 are back on the record. 11:31:48

11 MS. FREDERICK: 11:31:52

12 Q. Okay. Dr. Kiaei, let's look at Exhibit -- 11:31:53

13 sorry, Exhibit 4, the Shaffer reference. 11:32:08

14 A. Uh-huh. 11:32:18

15 Q. Looking at paragraph 34 as well as figure 11:32:22

16 2. In figure 2, the endpoint 104 includes a 11:32:30

17 negotiation component. What does that negotiation 11:32:39

18 component do? 11:32:45

19 MS. MISHAGA: Objection. Form. 11:32:46

20 THE WITNESS: So the -- the figure that -- and 11:35:00

21 the discussions on paragraph 34 are related to 11:35:08

22 figure 2, I believe, which is discussing the 11:35:11

23 endpoint 104. So within that, there are -- 11:35:22

24 describing the components in there and what those 11:35:36

25 components are. So it has a -- within the endpoint, 11:35:38

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1 it's discussing the information determination 11:35:41
2 component and the negotiation component. 11:35:47
3 And in paragraph 34, is talking that 11:35:55
4 negotiation component is employed to negotiate 11:35:57
5 capabilities of the endpoint with a interoperability 11:36:03
6 server, et cetera, et cetera. So it's talking about 11:36:12
7 the -- so this is discussing what are the 11:36:15
8 capabilities of this component, the negotiation 11:36:23
9 component 208. 11:36:27
10 MS. FREDERICK: 11:36:30
11 Q. Paragraph 34 -- I'm sorry, was -- 11:36:31
12 A. No, no, I'm finished. 11:36:32
13 Q. Okay. Paragraph 34 also states that "The 11:36:34
14 negotiation component 208 can negotiate a session 11:36:37
15 with an IS 102" -- the interoperability server -- 11:36:41
16 "over a private unicast" or a "multicast channel" -- 11:36:45
17 "and/or" a "multicast channel." 11:36:50
18 It's referring to a communication session; 11:36:54
19 correct? 11:36:58
20 A. It's referring in my -- per my 11:37:15
21 understanding looking at that paragraph and that 11:37:16
22 figure, it is referring to what those components are 11:37:22
23 and what are the capabilities of those components 11:37:24
24 are within the system that Shaffer describing in 11:37:30
25 that -- in this exhibit, so -- 11:37:32

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1 Q. Okay. So the -- Shaffer generally, in 11:37:39
2 paragraph 30 -- paragraphs 29 and 30, describe that 11:37:46
3 the endpoints are participating in communication 11:37:53
4 sessions between two or more endpoints 104. Is that 11:37:56
5 correct? 11:38:08
6 MS. MISHAGA: Objection. Form. 11:38:10
7 THE WITNESS: Did you say paragraph 29 and 30? 11:38:24
8 MS. FREDERICK: Right. 11:38:26
9 THE WITNESS: Okay. So again, paragraph 29 and 11:38:27
10 30, what it's discussing is that -- it's discussing 11:38:43
11 the embodiment and the interoperability server and 11:38:47
12 the endpoints and it's discussing the -- the 11:38:52
13 description of what these components' capabilities 11:38:58
14 are. 11:39:04
15 So what it's talking about, what are these 11:39:04
16 components. So it's talking about what is the IS of 11:39:06
17 102 that offers a framework based on IP services. 11:39:09
18 It describes a IS 102 can participate in one or more 11:39:15
19 communication sessions based on capability, 11:39:24
20 negotiations and so on. So what it's discussing is 11:39:26
21 that the capabilities of these different blocks, 102 11:39:29
22 and -- et cetera, interoperability server 102, the 11:39:34
23 endpoints, and the negotiation components 208. 11:39:39
24 MS. FREDERICK: 11:39:43
25 Q. So that negotiation component 208 in 11:39:51

1 setting up a communication session, it negotiates 11:39:54
2 that session with the interoperability server 102. 11:39:56
3 MS. MISHAGA: Is that your question? 11:40:23
4 MS. FREDERICK: I'm thinking through. I'm not 11:40:25
5 complete yet. 11:40:26
6 Q. And then paragraph 29 states that the 11:40:49
7 interoperability server or the IS 102 can determine 11:40:55
8 if the endpoint is able to join the talk group. 11:40:59
9 So is the -- is the negotiation component, 11:41:08
10 when negotiating with the IS to join the -- to 11:41:09
11 negotiate the session, involve some back and forth 11:41:25
12 communication with the IS; is that your 11:41:29
13 understanding? 11:41:35
14 MS. MISHAGA: Objection. Form. 11:41:35
15 THE WITNESS: Again, my understanding looking 11:41:55
16 at 29 and 30 and also figures 1 and 2, it is 11:41:56
17 discussing the capabilities or the properties of 11:42:02
18 these blocks or components. It is saying that IS 11:42:08
19 102 is employing a system approach to offer a 11:42:15
20 framework for IP base -- IP -- sorry, to offer a 11:42:21
21 framework based on IP services. It is talking about 11:42:27
22 102 can allow endpoints to participate in one or 11:42:33
23 more communication sessions. It talks about 11:42:38
24 endpoint 104 can initiate a communication session 11:42:42
25 and advertises capabilities. And so on and the 11:42:46

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1 previous things I said. 11:42:51

2 All of these are the description of those 11:42:52

3 blocks. Is not going into discussing what are 11:42:56

4 the -- it's describing primarily the capabilities of 11:43:03

5 these -- these blocks, not the details of their 11:43:13

6 communications or what signaling is being sent and 11:43:19

7 so forth, or received, so -- 11:43:21

8 MS. FREDERICK: 11:43:23

9 Q. Okay. 11:43:23

10 A. It's at the high level describing what are 11:43:26

11 the properties of these blocks and how do they -- 11:43:28

12 what do they do, but not the details of their 11:43:33

13 communication signalings and so forth between them. 11:43:42

14 MS. FREDERICK: Okay. I think I'm finished. I 11:44:09

15 have no more questions. 11:44:11

16 MS. MISHAGA: You pass the witness? 11:44:14

17 MS. FREDERICK: Pass the witness. 11:44:15

18 MS. MISHAGA: And I have no questions. 11:44:16

19 THE VIDEOGRAPHER: We are off the record at 11:44:19

20 11:45 a.m. and this concludes today's testimony 11:44:21

21 given by Dr. Sayfe Kiaei. The total number of media 11:44:25

22 used was five and will be retained by Veritext Legal 11:44:29

23 Solutions. 11:44:31

24 (The aforementioned documents

25 are marked by the reporter as

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Exhibits 1 through 4 for
identification and are attached
hereto.)
(The proceedings concluded at 11:45 a.m.)

* * * * *

[illegible]

I, SAYFE KIAEI, Ph.D., hereby certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this _____ day of _____, _____, at _____, California.

SAYFE KIAEI, Ph.D.

1 Sayfe Kiaei, Ph.D.

2 sayfe@me.com

3 October 14th, 2024

4 RE: Motorola Solutions, Inc. v. Sta Group, LLC

5 10/11/2024, Sayfe Kiaei, Ph.D. (#6939967)

6 The above-referenced transcript is available for
7 review.

8 Within the applicable timeframe, the witness should
9 read the testimony to verify its accuracy. If there are
10 any changes, the witness should note those with the
11 reason, on the attached Errata Sheet.

12 The witness should sign the Acknowledgment of
13 Deponent and Errata and return to the deposing attorney.
14 Copies should be sent to all counsel, and to Veritext at
15 (Calendar-pnw@veritext.com).

16 Return completed errata within 30 days from
17 receipt of testimony.

18 If the witness fails to do so within the time
19 allotted, the transcript may be used as if signed.

20
21
22 Yours,

23 Veritext Legal Solutions
24
25

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Motorola Solutions, Inc. v. Sta Group, LLC
Sayfe Kiaei, Ph.D. (#6939967)

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Sayfe Kiaei, Ph.D.

Date

1 Motorola Solutions, Inc. v. Sta Group, LLC

2 Sayfe Kiaei, Ph.D. (#6939967)

3 ACKNOWLEDGEMENT OF DEPONENT

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

10

11

12 _____
Sayfe Kiaei, Ph.D.

Date

13 *If notary is required

14

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15

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[1 - a.m.]

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1 3:9 9:13 22:12 30:11 40:14 47:16 49:1 10/11/2024 52:5 1015 38:19 102 31:10 45:15 46:17,18 46:21,22 47:2 47:7,19,22 1022 24:3 1023 34:7 1024 14:13 104 44:16,23 46:4 47:24 10:12 30:6 10:29 30:8 11 1:17 2:3 4:1 4:6 11:08 44:7 11:32 44:9 11:45 48:20 49:4 123 34:8 14th 51:21 52:3 1500 2:16 4:18 166 31:3 172 30:12 34:4 174 22:13 18710 51:24 194 24:14 1c 31:21	2 3:11 13:5,6,9 13:12 14:11 16:25 17:5 28:25 32:1 36:6,8 39:22 44:16,16,22 47:16 20 9:25 54:15 2004/0133683 3:12 14:12 2008 36:17 2009/0298525 3:15 38:18 2024 1:17 2:3 4:1,6 51:21 52:3 206 17:21,24 18:7 19:3,9,11 20:3 21:3 208 45:9,14 46:23,25 216 16:25 17:4 17:20 18:8 19:2,6,11 21:3 21:11 29:3 218 17:11 22 25:13 230 32:3,10 24 24:13 28 38:23 29 46:2,7,9 47:6,16	3 3:13 15:6 24:6,9 25:23 38:24 30 46:2,2,7,10 47:16 52:16 312 2:12 314-1200 2:17 3300 2:11 34 44:15,21 45:3,11,13 36 13:5 372-1121 2:12 38 40:15 4 4 3:14 38:16,23 44:13 49:1 40 9:25 43:19 41 17:8,9 43 18:22,23 46 17:8 29:1,2 4655 2:3,16 4:18 48 3:9,11,13,14 5 5-12 24:18 512 25:12 27:8 525 39:13 53 40:15,25 42:5,6 56 42:4	6 3:4 60602 2:11 63 38:21 683 14:16 6939967 52:5 53:2 54:2 6950549 1:21 7 70 2:11 8 80s 43:19 852 16:23 20:8 20:15 31:16,16 31:21 43:24 858 2:17 89 23:6 9 9,319,852 1:12 3:10 92121 4:19 92121-3134 2:16 9557 1:25 2:5 51:4,24 9:07 2:2 4:1,6 9:08 5:11 9:13 5:13 9:18 9:8 9:20 9:10 a a.m. 2:2 4:1,6 5:11,13 9:8,10

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[back - communication]

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[communication - deposition]

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Federal Rules of Civil Procedure

Rule 30

(e) Review By the Witness; Changes.

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

(A) to review the transcript or recording; and

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

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

DISCLAIMER: THE FOREGOING FEDERAL PROCEDURE RULES ARE PROVIDED FOR INFORMATIONAL PURPOSES ONLY.

THE ABOVE RULES ARE CURRENT AS OF APRIL 1, 2019. PLEASE REFER TO THE APPLICABLE FEDERAL RULES OF CIVIL PROCEDURE FOR UP-TO-DATE INFORMATION.

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