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UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, D.C.
-----x
In The Matter of : Investigation
CERTAIN MOBILE PHONES : No. 337-TA-1375
COMPONENTS THEREOF, AND, : No. 337-TA-1376
PRODUCTS CONTAINING SAME : No. 337-TA-1387
-----x

CONFIDENTIAL
QUALCOMM CONFIDENTIAL BUSINESS
INFORMATION - SOURCE CODE

VIDEOTAPED DEPOSITION OF HARRY V. BIMS, PhD
Palo Alto, California
Friday, May 31, 2024

9:04 a.m.
Job No.: 538758
Pages: 1 - 131
Stenographically reported by:
JENNY L. GRIFFIN, RMR, CSR, CRR, CCRR, CRC
CSR No. 3969

1 Exhibit 7 for now. Hopefully, that concludes you 13:48:20
2 needing the computer. 13:48:23
3 I see that we've been going for about an 13:48:31
4 hour. So, Dr. Bims, if you would like a break, I'm 13:48:33
5 happy to take a break. 13:48:35
6 A. Sure. 13:48:36
7 THE VIDEOGRAPHER: We are going off the 13:48:38
8 record at 13:48. 13:48:39
9 (Recess taken.) 13:59:35
10 THE VIDEOGRAPHER: And we are back on the 13:59:44
11 record at 13:59. 13:59:46
12 BY MR. VERBONCOEUR: 13:59:48
13 Q. Dr. Bims, do you understand that in order 13:59:51
14 for a patent application to be entitled to its 13:59:54
15 provisional application priority date for purposes 14:00:01
16 of being prior art, there must be support for the 14:00:04
17 subject matter relied upon for the invalidity 14:00:08
18 arguments in that provisional application? 14:00:15
19 A. Yes. Yes. 14:00:19
20 Q. Are you familiar with a document called 14:00:23
21 5G-ENSURE? 14:00:27
22 A. Yes. 14:00:30
23 Q. What is 5G-ENSURE? 14:00:32
24 A. 5G-ENSURE is a document that I rely upon in 14:00:38
25 a prior art combination for its disclosure of an 14:00:44

1	ECIES.	14:00:49
2	Q. Do you agree that 5G-ENSURE was a -- at	14:00:55
3	least in part -- European Union-funded initiative to	14:00:58
4	enhance security in the 5G standard?	14:01:03
5	A. From what I remember, it is a document that	14:01:14
6	I relied on for a prior art combination. The	14:01:16
7	publisher of the document, I am not sure if I	14:01:24
8	remember that.	14:01:27
9	Q. Do you recall who authored 5G-ENSURE?	14:01:32
10	A. I do not remember the author or publisher	14:03:23
11	of 5G-ENSURE.	14:03:28
12	Q. You also are relying on a reference called	14:03:34
13	Togawa?	14:03:36
14	A. Yes.	14:03:38
15	MR. VERBONCOEUR: We can mark as Exhibit 8	14:04:18
16	Patent Number 8,005,219 to Togawa.	14:04:20
17	(Exhibit 8 was marked for	14:04:30
18	identification and is attached to the	14:04:30
19	transcript.)	14:04:30
20	BY MR. VERBONCOEUR:	14:04:40
21	Q. Dr. Bims, do you recognize Togawa that's	14:04:41
22	been marked Exhibit 8?	14:04:45
23	A. Yes. I believe it's also marked Lenovo	14:04:47
24	Exhibit 1006.	14:04:52
25	Q. Do you understand that Lenovo has filed an	14:04:55

1	IPR against the '817 patent?	14:05:01
2	A. That's my understanding.	14:05:14
3	Q. Did you help prepare the IPR that Lenovo	14:05:17
4	filed against the '817 patent?	14:05:20
5	A. I don't remember doing so.	14:05:32
6	Q. It's correct that you did not personally	14:05:42
7	submit a declaration in support of Lenovo's IPR	14:05:45
8	against the '817 patent?	14:05:50
9	A. I'm just not remembering. I've filed a	14:05:58
10	number of IPRs recently. I don't remember if that	14:06:00
11	was one of them.	14:06:03
12	Q. Looking at Exhibit 8, Togawa, can you tell	14:06:11
13	me what Togawa is about?	14:06:18
14	A. From Figure 8?	14:06:28
15	Q. I apologize. Togawa is marked as	14:06:31
16	Exhibit 8.	14:06:35
17	A. Oh.	14:06:35
18	Q. Looking at Exhibit 8, which is Togawa, can	14:06:35
19	you tell me what Togawa is about?	14:06:38
20	A. So looking at Exhibit 8, Togawa is about an	14:06:45
21	encryption apparatus and a decryption apparatus for	14:06:52
22	encrypting and decrypting data in accordance with an	14:06:58
23	encryption specification whereby information on the	14:07:02
24	encryption specification is embedded within	14:07:06
25	transmitted data as shown in Figure 13.	14:07:10

1 Q. Do you agree that Togawa involves embedding 14:07:30
2 encrypted data in voice signals? 14:07:34

3 A. Togawa is not limited to encrypting data in 14:07:46
4 voice signals, although encrypting data embedded in 14:07:50
5 a voice signal is one example embodiment. 14:07:55

6 Q. Other than encrypting data in voice 14:08:02
7 signals, are there any other uses of encryption in 14:08:04
8 Togawa? 14:08:08

9 A. Togawa mentions, in the summary of the 14:09:59
10 invention section, multiple aspects of the 14:10:03
11 invention, starting in Column 2 at line 29, and 14:10:08
12 proceeding to Column 3 at line 40. 14:10:15

13 And in those multiple aspects that are 14:10:25
14 described in this passage, the Togawa reference 14:10:28
15 discloses encryption and decryption of data without 14:10:35
16 saying the data is embedded within a voice call. 14:10:41

17 And this is further confirmed in the 14:10:48
18 independent claims of Togawa; in particular, 14:10:53
19 Claims 1 and Claim 10. In fact, dependent Claim 2, 14:10:58
20 which is, according to Claim 1 -- further adds the 14:11:06
21 limitation of data communications by voice data or 14:11:10
22 image data in a phone call. 14:11:15

23 And, similarly, in Claim 12, which is 14:11:18
24 according to Claim 10, it says that the first 14:11:22
25 communication path is a communication path for data 14:11:26

1 communications by voice data or image data in that 14:11:30
2 phone call. 14:11:35

3 So Togawa is not limited to the encryption 14:11:37
4 of data within a voice call. 14:11:41

5 Q. Is there anything in Togawa that references 14:11:45
6 the encryption of subscriber identifiers? 14:11:47

7 A. Togawa describes in Column 1, starting at 14:13:01
8 line 20: 14:13:03

9 "To decrypt encrypted data, 14:13:06
10 information on an encryption key used 14:13:09
11 in encryption of the data must be 14:13:12
12 shared between an encryption apparatus 14:13:15
13 that encrypts the data and a decryption 14:13:18
14 apparatus that decrypts the data. To 14:13:23
15 attain this 14:13:26
16 information-on-encryption-key sharing, 14:13:26
17 with small-scale hardware, a technique 14:13:29
18 of transmitting information on an 14:13:32
19 encryption key by embedding the 14:13:35
20 information on the encryption key in a 14:13:38
21 random number has been developed." 14:13:41

22 It goes on to say: 14:13:47

23 "When information on an encryption 14:13:48
24 key is transmitted from a data 14:13:51
25 encryption apparatus to a data 14:13:53

1 decryption apparatus through the same 14:13:56
2 communication path as that used in 14:13:58
3 transmission of encrypted data, the 14:14:00
4 encrypted data and the information on 14:14:03
5 the encryption key can be intercepted, 14:14:06
6 which can result in decipherment of the 14:14:09
7 data." 14:14:13
8 And that is why Togawa goes on to say: 14:14:16
9 "To this end, a technique of 14:14:19
10 transmitting encrypted data through a 14:14:21
11 communication path different from that 14:14:23
12 for an encryption key, thereby 14:14:27
13 preventing deciphering of the encrypted 14:14:30
14 data has been developed." 14:14:34
15 So Togawa is saying in this 14:14:35
16 passage at Column 1 that the encryption 14:14:39
17 of an encryption key was known to a 14:14:42
18 person of ordinary skill in the prior 14:14:45
19 art. 14:14:48
20 Q. Dr. Bims, nothing in the excerpt you read 14:14:56
21 from Togawa references subscriber identifiers; 14:14:59
22 correct? 14:15:03
23 A. So I would consider a subscriber identifier 14:15:50
24 to be user data. 14:15:55
25 Q. Is it your testimony, Dr. Bims, that a 14:16:05

1 person of skill in the art, reading Togawa Column 1, 14:16:10
2 would understand that Togawa was intending to 14:16:14
3 encrypt subscriber identifiers? 14:16:18
4 A. A person of ordinary skill, reading 14:16:27
5 Column 1, would understand that Togawa is intending 14:16:29
6 to encrypt user data. And a subscriber identifier 14:16:35
7 is part of user data. 14:16:42
8 Q. But, sitting here today, you can't give a 14:16:56
9 single example in Togawa where it expressly 14:16:59
10 references subscriber identifiers? 14:17:02
11 MR. HAYES: Objection. Asked and answered. 14:17:07
12 THE WITNESS: Well, again, Togawa mentions 14:17:47
13 user data repeatedly within which his data, such as 14:17:53
14 a subscriber's ID. 14:18:00
15 BY MR. VERBONCOEUR: 14:18:02
16 Q. Dr. Bims, I understand your position that a 14:18:02
17 subscriber identifier is a subset of user data. 14:18:06
18 My question is whether the reference Togawa 14:18:10
19 expressly references subscriber identifiers in 14:18:14
20 particular. 14:18:18
21 A. When Togawa describes its invention, it 14:18:24
22 does not separate subscriber IDs from the user data 14:18:27
23 in its description. 14:18:34
24 Q. When was the first time you read the 14:18:48
25 '817 patent, Dr. Bims? 14:18:50

1	A.	When I was engaged in this matter.	14:19:00
2	Q.	When did you become engaged in this matter?	14:19:03
3	A.	Earlier this year.	14:19:08
4	Q.	Do you remember which month you became	14:19:13
5		engaged in this matter?	14:19:15
6	A.	I would have to double-check.	14:19:20
7	Q.	Do you know if it was before or after April	14:19:25
8		of 2024?	14:19:27
9	A.	It was prior to April of 2024.	14:19:30
10	Q.	Do you know if it was before or after	14:19:33
11		March 2024?	14:19:34
12	A.	It was prior to March of 2024.	14:19:40
13	Q.	How long did you spend drafting your	14:19:47
14		opening expert report?	14:19:51
15	A.	Well, the opening expert report required	14:20:01
16		quite a bit of effort. From what I recall, there	14:20:05
17		were three grounds in my opening report.	14:20:09
18		And in addition to that -- and in addition	14:20:18
19		to that, there was also an analysis of secondary	14:20:39
20		considerations of nonobviousness.	14:20:52
21		So I would say that a fair amount of time	14:20:57
22		was spent on this report. Maybe at least 100 hours.	14:21:05
23	Q.	It's your testimony, Dr. Bims, that you	14:21:13
24		spent at least 100 hours preparing your opening	14:21:15
25		expert report?	14:21:20

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25	the work done to formulate opinions expressed in my	14:23:48
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1 noninfringement report. 14:23:54

2 Q. Not including the overlap between your 14:24:04

3 opening report and your rebuttal report, how much 14:24:07

4 time did you spend preparing your rebuttal expert 14:24:10

5 report? 14:24:14

6 A. Well, I believe the timeframe between the 14:24:22

7 filing of my opening report and the filing of my 14:24:25

8 rebuttal report was between April 30th, 2024, and 14:24:30

9 May 14th, 2024, which is a two-week period. 14:24:36

10 In that two-week period, I may have worked 14:24:45

11 40 to 60 hours. 14:24:55

12 MR. VERBONCOEUR: I'd like to introduce as 14:25:17

13 Exhibit 9 the Nair application. It's Publication 14:25:18

14 Number US 2018/0324585. 14:25:29

15 (Exhibit 9 was marked for 14:25:37

16 identification and is attached to the 14:25:37

17 transcript.) 14:25:37

18 BY MR. VERBONCOEUR: 14:25:53

19 Q. Before we discuss Nair, Dr. Bims, if we 14:25:54

20 could quickly go back to the '817 patent. 14:25:57

21 If you look at the second page of the 14:26:04

22 '817 patent, at the very top, do you see there is 14:26:06

23 related US application data? 14:26:10

24 A. Yes. 14:26:15

25 Q. Do you agree for purposes of this 14:26:15

1 investigation you are not challenging the priority 14:26:17
2 date of the '817 patent as July 25th, 2017? 14:26:20
3 A. That's correct. 14:26:25
4 Q. If we could go back to Exhibit 9, please, 14:26:27
5 Nair, N-A-I-R. 14:26:33
6 Based on the first page of Exhibit 9, Nair, 14:26:42
7 do you agree the publication date of Nair is 14:26:46
8 November 8, 2018? 14:26:49
9 A. Yes. 14:26:54
10 Q. Nair references an earlier application, and 14:26:54
11 that application was filed on October 26, 2017. 14:26:59
12 A. Yes. 14:27:05
13 Q. Nair additionally references a provisional 14:27:07
14 application, Number 62/502,266, that was filed on 14:27:10
15 May 5th, 2017. 14:27:17
16 A. Yes. 14:27:23
17 Q. Is it your understanding, Dr. Bims, that in 14:27:24
18 order for this Nair document, labeled Exhibit 9, to 14:27:26
19 be prior art to the '817 patent, every bit of 14:27:32
20 subject matter on which you rely for your invalidity 14:27:35
21 arguments needs to be found in the provisional 14:27:40
22 application that is filed on May 5th, 2017? 14:27:42
23 A. Yes. 14:27:45
24 Q. This isn't the first case, Dr. Bims, in 14:28:46
25 which you've appeared as an expert witness; correct? 14:28:59

1	A.	That is correct.	14:29:03
2	Q.	How many cases have you appeared as an	14:29:04
3		expert witness?	14:29:07
4	A.	When you say "appeared," do you mean in a	14:29:11
5		deposition?	14:29:13
6	Q.	Let me reask the question.	14:29:15
7		In how many cases have you been retained as	14:29:16
8		an expert witness?	14:29:18
9	A.	I would say probably 50 or 60 times.	14:29:31
10	Q.	When did you first start working as an	14:29:36
11		expert witness?	14:29:38
12	A.	About 21 years ago.	14:29:44
13	Q.	What percentage of your annual income is	14:29:55
14		based on your work as an expert witness?	14:29:58
15	A.	It depends year to year.	14:30:10
16	Q.	Can you answer for the last three years,	14:30:14
17		what percentage of your annual income was based on	14:30:17
18		your work as an expert witness?	14:30:20
19	A.	I would say about 75 to 80 percent.	14:30:48
20	Q.	Other than your work as an expert witness,	14:30:56
21		what are your other sources of income?	14:30:58
22	A.	So my wife does engage in some	14:31:18
23		income-generating activities, including investment	14:31:25
24		activities.	14:31:28
25	Q.	When you were referring to 75 to 80 percent	14:31:34

1 of your annual income being based on your work as an 14:31:37
2 expert witness, you were including your marital 14:31:41
3 income; is that correct? 14:31:43
4 A. Yes. 14:31:46
5 Q. So if we just look at you as an individual, 14:31:48
6 would it be correct to say that 100 percent of your 14:31:50
7 annual income comes from your work as an expert 14:31:53
8 witness? 14:31:56
9 A. I would say in the last three years, that 14:32:14
10 would be the case. 14:32:19
11 Q. Would that be the case for the last 10 14:32:25
12 years? 14:32:27
13 A. I believe within the last 10 years -- and 14:32:41
14 this may be stated in my CV -- I would say, in the 14:32:45
15 last 10 years, my income has come from testifying as 14:34:32
16 an expert. 14:34:40
17 MR. VERBONCOEUR: Thank you. 14:34:44
18 I would like to introduce another 14:34:52
19 electronic exhibit. This one is at Tab 5. 14:34:55
20 Can you please let me know, before you 14:35:00
21 share it, whether it is text searchable? If not, I 14:35:01
22 can provide a different version. 14:35:06
23 THE VIDEOGRAPHER: Okay. One second. 14:35:08
24 BY MR. VERBONCOEUR: 14:35:31
25 Q. Dr. Bims, while we are waiting on the 14:35:33

1 exhibit, if you could please go to your opening 14:35:35
2 expert report. For example, at paragraph 164, 14:35:38
3 page 66. 14:35:43
4 A. Okay. 14:35:57
5 Q. Do you agree, Dr. Bims, that you are 14:36:04
6 relying on paragraph 42 from the Nair later 14:36:07
7 application to support your opinions on invalidity? 14:36:11
8 A. I would agree that in paragraph 164, I cite 14:36:23
9 to a paragraph in the Nair publication which is also 14:36:27
10 in the Nair provisional. 14:36:42
11 Q. Is it your opinion, Dr. Bims, that Nair 14:36:45
12 paragraph 42 is found in the Nair provisional? 14:36:50
13 A. It's my opinion that Nair -- the Nair 14:36:54
14 provisional discloses an encryption scheme 14:36:59
15 identified by a privacy indicator as a null 14:37:03
16 encryption scheme. 14:37:09
17 MR. VERBONCOEUR: I guess if we could 14:37:26
18 please introduce as Exhibit 10 the Nair provisional 14:37:27
19 in electronic form: 14:37:31
20 (Exhibit 10 was marked for 14:37:34
21 identification and is attached to the 14:37:34
22 transcript.) 14:37:34
23 BY MR. VERBONCOEUR: 14:37:43
24 Q. Dr. Bims, do you recognize Exhibit 10 as 14:37:43
25 the Nair provisional in which you rely for your 14:37:46

1	opinions on invalidity?	14:37:49
2	A. Yes.	14:38:09
3	Q. Are you familiar with the Ctrl F function	14:38:12
4	that can be used in Adobe PDF?	14:38:15
5	A. I'll try it, yes.	14:38:21
6	Q. Can you please search for me in Exhibit 10,	14:38:25
7	the Nair provisional, for any mention of the word	14:38:28
8	"null scheme."	14:38:32
9	Dr. Bims, can you confirm that the word	14:38:32
10	"null scheme" does not appear anywhere in the Nair	14:38:57
11	provisional based on your Ctrl F search?	14:39:01
12	A. The term "null scheme" is not expressly	14:39:05
13	disclosed in the Nair provisional.	14:39:10
14	Q. If you could also please search in	14:39:13
15	Exhibit 10, the Nair provisional, for the word	14:39:15
16	"implicit." Please let me know whether the term	14:39:19
17	"implicit" appears anywhere in the Nair provisional.	14:39:25
18	A. The word "implicit" is not expressly	14:39:40
19	written in the Nair provisional.	14:39:44
20	Q. I would also like you to search for the	14:39:52
21	word "field." And can you confirm for me that the	14:39:55
22	word "field" is used four times in the Nair	14:39:59
23	provisional?	14:40:03
24	A. Yes.	14:40:23
25	Q. The first use -- sorry. Let me reask that.	14:40:25

1	The first use of the word "field" in the	14:40:29
2	Nair provisional refers to the subject matter field.	14:40:32
3	Do you agree?	14:40:36
4	A. Yes.	14:41:05
5	Q. The next use of the word "field" occurs on	14:41:12
6	page 8 of the Nair provisional, and that is in the	14:41:16
7	sentence:	14:41:18
8	"If the subscription identifier is	14:41:19
9	encrypted, the size of the message	14:41:21
10	field for the encrypted IMSI may be	14:41:25
11	different from today's 4G IMSI field	14:41:28
12	(depending on the solution class	14:41:32
13	chosen)."	14:41:33
14	Do you agree?	14:41:35
15	A. That's what it says.	14:41:37
16	Q. And the next two uses of the word "field"	14:41:43
17	appear to be -- sorry. Let me reask that.	14:41:48
18	The final use of the word "field" appears	14:41:50
19	in the patent application forms.	14:41:52
20	Agree?	14:41:56
21	A. Yes.	14:41:57
22	Q. Do you agree, Dr. Bims, that the word	14:42:00
23	"field" does not appear in any sentence referring to	14:42:03
24	a privacy indicator?	14:42:06
25	A. That's correct.	14:42:11

1 MR. VERBONCOEUR: Okay. I think we are 14:42:21
2 done Ctrl F'ing for now. So feel free to put the 14:42:40
3 computer away if you'd like. 14:42:44
4 I'd like to turn your attention to your 14:42:45
5 reference on Forsberg, F-O-R-S-B-E-R-G. 14:42:47
6 I would like to mark as -- we are on 14:43:13
7 Exhibit 11 now, I believe -- Exhibit 11, Forsberg, 14:43:16
8 which is Publication Number US 2013/0003971. 14:43:20
9 (Exhibit 11 was marked for 14:43:20
10 identification and is attached to the 14:43:20
11 transcript.) 14:43:20
12 BY MR. VERBONCOEUR: 14:43:43
13 Q. Dr. Bims, do you recognize what's been 14:43:43
14 marked as Exhibit 11? 14:43:45
15 A. Yes. 14:43:46
16 Q. Is this Forsberg reference, marked as 14:43:53
17 Exhibit 11, the same Forsberg that is listed on the 14:43:55
18 very first page of the '817 patent? 14:43:59
19 A. Yes. 14:44:19
20 Q. Do you agree that the US patent examiner 14:44:27
21 considered the Forsberg reference before deciding to 14:44:30
22 allow the claims of the '817 patent? 14:44:33
23 A. I believe that, according to the 14:44:51
24 '817 patent -- that the Forsberg reference was 14:44:54
25 considered during the prosecution of the 14:45:01

1	'817 patent.	14:45:05
2	Q. Is there anything in particular that you	14:45:10
3	think the US patent examiner got wrong when deciding	14:45:11
4	to issue the claims of the '817 patent over the	14:45:14
5	Forsberg reference?	14:45:18
6	A. The Forsberg reference, as I've used it in	14:45:24
7	my invalidity report, is part of an obviousness	14:45:28
8	combination for Ground 1 and for Ground 2 in my	14:45:35
9	invalidity opinion.	14:45:42
10	From my recollection, the examiner did not	14:45:45
11	consider Ground 1 and Ground 2, as presented in my	14:45:49
12	invalidity opinion, in the prosecution of the	14:45:55
13	'817 patent.	14:45:58
14	Q. I'd like to turn your attention to	14:46:26
15	paragraph 101 of your opening report.	14:46:29
16	A. Okay.	14:46:51
17	Q. Actually, if we could please turn to	14:46:59
18	paragraph 104, which appears to be a part of that	14:47:01
19	same section. I apologize.	14:47:05
20	A. Yes. Okay.	14:47:13
21	Q. Is it correct, Dr. Bims, that you are	14:47:14
22	relying on Forsberg in the ground where Nair is in	14:47:17
23	combination with Forsberg, Togawa, and 5G-ENSURE for	14:47:21
24	its public key identifiers?	14:47:27
25	A. Yes.	14:47:31

1	Q. Do you agree that Nair does not disclose	14:47:33
2	public key identifiers?	14:47:35
3	A. Nair does not expressly disclose public key	14:47:45
4	identifiers.	14:47:49
5	Q. If you could please turn to paragraph 113	14:48:05
6	of your opening report.	14:48:14
7	Is it correct that you are relying on Nair,	14:48:19
8	in combination with Forsberg, Togawa, and 5G-ENSURE,	14:48:24
9	where Togawa provides the encryption scheme	14:48:29
10	identifier?	14:48:32
11	A. Yes.	14:48:32
12	Q. Do you agree that Nair does not expressly	14:48:32
13	disclose an encryption scheme identifier?	14:48:40
14	A. Yes.	14:48:45
15	Q. Do you agree that Forsberg does not	14:48:47
16	expressly disclose an encryption scheme identifier?	14:48:49
17	A. Yes.	14:48:53
18	Q. Earlier you mentioned that you are an	14:49:21
19	expert in 5G technology; is that correct?	14:49:23
20	A. Yes.	14:49:27
21	Q. Do you also consider yourself to be an	14:49:27
22	expert in 5G security?	14:49:31
23	A. I would say 5G technology generally, but	14:49:40
24	not specifically 5G security as the only area within	14:49:43
25	5G.	14:49:51

1	Q.	So it's more fair to say you are an expert	14:49:54
2		in 5G technology, and that expertise includes 5G	14:49:56
3		security as one facet of your expertise?	14:50:00
4	A.	Yes.	14:50:03
5	Q.	Have you contributed to any cellular	14:50:07
6		standards?	14:50:10
7	A.	In what way?	14:50:15
8	Q.	Do you have any ways in mind in which you	14:50:19
9		would have contributed to a cellular standard?	14:50:21
10	A.	For example, I have a patent issued, in	14:50:30
11		which I'm the sole inventor, describing a method for	14:50:34
12		the coexistence of a cellular standard with an IEEE	14:50:39
13		802 standard on the same channel frequency. And	14:50:48
14		I've also participated in discussions within the	14:50:52
15		IEEE 802 standards development working group	14:50:58
16		regarding methods for the coexistence of 4G and 5G	14:51:04
17		cellular technology with 802.11 wireless standards	14:51:16
18		on the same channel frequency.	14:51:22
19	Q.	Have you been a member of the IEEE 802	14:51:27
20		working groups?	14:51:31
21	A.	Yes.	14:51:33
22	Q.	Was there a particular company you were	14:51:35
23		representing during your work on the 802 working	14:51:37
24		groups?	14:51:41
25	A.	Yes. For most of the time I have been	14:51:45

1 affiliated with Bims Laboratories, although there 14:51:50
2 were times when I was affiliated with -- I was 14:51:54
3 affiliated with Apple computer and also affiliated 14:52:06
4 with gigabit wireless, which became I/O span 14:52:14
5 wireless. 14:52:29

6 Q. Have you ever participated in any 3GPP 14:52:30
7 meetings? 14:52:33

8 A. I have not attended a meeting hosted by the 14:52:40
9 3GPP organization. 14:52:42

10 Q. Is it fair to say that you generally keep 14:52:48
11 up-to-date on cellular technology? 14:52:50

12 A. Yes. 14:52:55

13 Q. Is it fair to say that you generally keep 14:52:56
14 up-to-date on deployments of cellular technology in 14:52:57
15 the United States? 14:53:00

16 A. No. I don't follow the carrier deployments 14:53:08
17 of 5G technology in the United States. 14:53:12

18 MR. VERBONCOEUR: I believe we've been 14:53:26
19 going for about another hour, and I can also use 14:53:27
20 some water. So if we can take a break, I would 14:53:30
21 appreciate that. 14:53:32

22 THE VIDEOGRAPHER: Okay. We are going off 14:53:34
23 the record at 14:53. 14:53:35

24 MR. VERBONCOEUR: Thank you. 14:53:38

25 (Recess taken.) 14:53:40

1	THE VIDEOGRAPHER: We are back on the	14:59:57
2	record at 14:59.	14:59:59
3	BY MR. VERBONCOEUR:	15:00:01
4	Q. Dr. Bims, in forming your opinions on	15:00:02
5	infringement and validity, did you apply the same	15:00:05
6	claim scope to both issues?	15:00:09
7	A. Yes.	15:00:11
8	Q. If you could please look at Forsberg.	15:00:11
9	Do you agree that Forsberg is a 4G	15:00:29
10	LTE-related reference?	15:00:33
11	A. So the Forsberg reference is a reference	15:01:48
12	related to a series of 3GPP technologies, starting	15:01:53
13	with the 2.5G GPRS technology and carrying forward	15:02:03
14	into 3G, 4G, and 5G.	15:02:12
15	Q. Dr. Bims, is it your opinion that when	15:02:23
16	Forsberg authored the Forsberg reference, they had	15:02:24
17	in mind 3GPP technology, carrying forward into 5G?	15:02:29
18	A. It is clear from the descriptions in the	15:02:37
19	Forsberg reference, that it describes technology	15:02:40
20	such as the IMSI technology, which appears in 2.5G,	15:02:46
21	3G, 4G, and 5G standards.	15:02:55
22	Q. Do you know when the 4G standard was	15:03:26
23	published?	15:03:28
24	A. The first version of what is commonly	15:03:35
25	called 4G, which in the standards is called	15:03:39

1 long-term evolution or LTE, was published as 15:03:44
2 release 8 in the 3GPP standards. So the time frame 15:03:50
3 was roughly 2008. 15:03:57
4 Q. The date of the earliest application of 15:04:04
5 Forsberg is June 2006, if we look at the provisional 15:04:07
6 application. 15:04:14
7 Do you agree with that? 15:04:15
8 A. Yes. 15:04:18
9 Q. Do you know whether Forsberg authored this 15:04:22
10 document in contemplation of the development of 15:04:29
11 4G LTE? 15:04:34
12 A. So it's clear that Forsberg developed the 15:04:52
13 inventions described in the Forsberg document with 15:04:58
14 the awareness and understanding of 2.5G systems, the 15:05:03
15 IMSI, the MSIN inside the -- the MSIN inside the 15:05:11
16 IMSI; and furthermore, was aware of the same problem 15:05:17
17 that the '817 patent identified, which is the 15:05:25
18 problem of an IMSI catcher as well as the false base 15:05:29
19 station issue. 15:05:38
20 Q. So it's fair to say, Dr. Bims, that your 15:05:41
21 opinion is that the problems addressed in the 15:05:44
22 '817 patent, which includes IMSI catchers and false 15:05:47
23 base station issues, existed at least as of 15:05:51
24 June 2006, which is the provisional application date 15:05:55
25 for Forsberg? 15:05:59

1 A. It certainly existed as of the date of this 15:06:05
2 application. I don't have before me the original 15:06:15
3 provisional application to see if it appears in the 15:06:25
4 2006 provisional as well. 15:06:27
5 Q. Would it be fair to say that the problems 15:06:30
6 addressed in the '817 patent, which includes IMSI 15:06:35
7 catchers and false base station issues, existed at 15:06:38
8 least as of June 2007, when the application 15:06:41
9 underlying the Forsberg reference was filed? 15:06:46
10 A. So this application publication was filed 15:07:17
11 on September 13th, 2012. 15:07:19
12 So as of the filing date of this Forsberg 15:07:23
13 application, Forsberg was aware of the IMSI catcher 15:07:27
14 and false base station problems and proposed a 15:07:33
15 solution for those problems. 15:07:37
16 Q. So it's fair to say, at least as of 15:07:40
17 September 2012, the problems addressed in the 15:07:42
18 '817 patent, which includes IMSI catchers and false 15:07:45
19 base stations, were known to a person of skill in 15:07:48
20 the art? 15:07:53
21 A. Yes. 15:07:54
22 Q. Earlier you testified that both your 15:08:07
23 opening and rebuttal reports contained the complete 15:08:09
24 bases for your opinions in this investigation. 15:08:12
25 Do you recall that? 15:08:15

1	A. Yes.	15:08:15
2	Q. And do you stand by that? That your	15:08:16
3	opening and rebuttal reports contain the complete	15:08:21
4	bases for your opinions in this investigation?	15:08:23
5	A. Yes.	15:08:26
6	Q. Are you aware of any inaccuracies or errors	15:08:28
7	in your opening or rebuttal report in this	15:08:32
8	investigation that you would like to correct?	15:08:36
9	A. No.	15:08:37
10	Q. At any point during this deposition did you	15:08:56
11	speak with counsel about the substance of your	15:08:58
12	testimony?	15:08:59
13	A. No.	15:09:01
14	MR. VERBONCOEUR: Okay. I have no further	15:09:02
15	questions. Pass the witness.	15:09:07
16	MR. HAYES: No questions from us.	15:09:09
17	MS. CHANG: I have no questions.	15:09:20
18	THE VIDEOGRAPHER: This marks the end of	15:09:22
19	the deposition of Harry Bims.	15:09:23
20	We're going off the record at 15:09.	15:09:27
21	(Time: 3:09 p.m.)	15:09:34
22		
23		
24		
25		