

EXHIBIT 2013

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

_____)

ONEPLUS TECHNOLOGY

(SHENZHEN) CO., LTD.,

Petitioner,

IPR2025-00756

vs.

U.S. Patent No.
10,764,803

PANTECH CORPORATION,

Patent Owner.

_____)

VIDEOTAPED DEPOSITION OF
APOSTOLOS K. KAKAES, PH.D.

February 28, 2026

8:57 a.m. Central Time

Reported by: Lori J. Goodin, RPR, CRR, RSA,
California CSR #13959

1 REMOTE VIDEOTAPED DEPOSITION of
2 APOSTOLOS "PAUL" K. KAKAES, PH.D.,
3 in the above-titled action, held on Saturday,
4 February 28, 2026, commencing at approximately
5 8:57 a.m. before Lori J. Goodin, RPR, CRR, RSA,
6 California CSR #13959, Registered Professional
7 Reporter, Certified Realtime Reporter, Realtime
8 Systems Administrator, and Certified Shorthand
9 Reporter, and Notary Public of the State of
10 Florida, State of California, and District of
11 Columbia.

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(Previously marked exhibits retained by counsel.)

1 SATURDAY, FEBRUARY 28, 2026, 8:57 a.m.

2 PROCEEDINGS

3 * * *

4 THE VIDEOGRAPHER: Today is
5 Saturday, February the 28, 2026. The time is
6 8:57 a.m. Central Time.

7 We are here for the video and oral
8 deposition of Apostolos Kakaes, Ph.D.

9 This deposition is being held
10 remotely. I am Kevin DeRita, a legal
11 videographer from Digital Evidence Group.
12 Our court reporter today is Lori Goodin, also
13 from Digital Evidence Group.

14 Will counsel please introduce
15 themselves for the record.

16 MR. KIM: My name is Daniel Kim,
17 from Mayer Brown, representing patent owner,
18 Pantech. With me is Clark Bakewell, also of
19 Mayer Brown.

20 MR. MUELLER: This is Wesley Mueller
21 from Leydig, Voit and Mayer in Chicago,
22 representing the petitioner in this matter,

1 OnePlus Technology (Shenzhen) Company,
2 Limited.

3 THE VIDEOGRAPHER: Will the court
4 reporter please swear in the witness.

5 * * *

6 Whereupon,

7 APOSTOLOS K. KAKAES, PH.D.,
8 a witness called for examination, having been
9 first duly sworn, was examined and testified as
10 follows:

11 * * *

12 EXAMINATION

13 BY MR. KIM:

14 Q. Good morning, Doctor.

15 A. Good morning.

16 Q. My name is Daniel Kim. I will be
17 doing the depo today.

18 A. If you would do us a favor to speak
19 up a little louder?

20 Q. Yes. Can you hear me better?

21 A. Let's try.

22 Q. Okay. I will try to speak louder so

1 you can hear me well.

2 A. Thank you.

3 Q. So, where are you located right now?

4 A. In Chicago.

5 Q. In Chicago. And, is there anyone in
6 the room with you?

7 A. Yes, Mr. Mueller is.

8 Q. Do you have any physical documents
9 with you?

10 A. Yes, I do.

11 Q. What do you have?

12 A. I have copies, a copy of my expert
13 report, along with all of the relevant exhibits.
14 And yeah, and so I have a big binder that has all
15 of my exhibits, but then I have a smaller binder
16 that has just my report, so it is easier to
17 manipulate it.

18 And I also have another binder that
19 has a couple of patents in it.

20 Q. And, in that binder, do you also
21 have Exhibit 2012?

22 A. I have to check. I don't remember

1 off the top of my head. 2012, you said?

2 Q. Exhibit Number 2012, yes. If you
3 don't, it is not a big deal. We can just share.

4 A. Yes. It appears to be here at the
5 very end, yes.

6 Q. Okay. Perfect.

7 And, are these documents marked up
8 in any way?

9 A. I'm sorry. Are these documents
10 what?

11 Q. Are these documents marked up in any
12 way?

13 A. No, they are not marked up.

14 Q. Okay. And do you have any other
15 electronics located near you, other than your
16 laptop?

17 A. No. I have a big screen that I am
18 looking at and also there is a laptop that is
19 mirroring the screen.

20 Q. Do you have any applications open in
21 your laptop?

22 A. No.

1 Q. Okay.

2 A. It is not my laptop. Leydig set it
3 all up here, so --

4 Q. Have you been deposed before?

5 A. Yes, I have.

6 Q. Approximately how many times?

7 A. I would say probably between 20 and
8 50. I think, that estimate is correct, but I
9 might be off.

10 Q. What type of cases were those?

11 A. One of them was a class action
12 lawsuit. Many of them were related to patent
13 litigation in District Court or in IPR
14 proceedings such as this one, or the IPC.

15 Q. When was the most recent time you
16 were deposed?

17 A. I don't remember.

18 Q. So, it has been a while, I suppose?

19 A. I mean, within the past year, but I
20 don't remember when.

21 Q. Got it. To refresh your memory,
22 let's briefly go over some basic guidelines for

1 today's depo.

2 As you know, the court reporter is
3 transcribing everything we say. So, it is
4 important that you give verbal responses. Nods
5 or shake of head cannot be recorded accurately.

6 So, please respond with yes or no
7 instead. Understood?

8 A. Yes.

9 Q. Next up, please wait until I finish
10 my entire question before you begin your answer.
11 This will help ensure we have a clean record.

12 Also, if I ever cut you off while
13 you are answering, or you feel you weren't able
14 to fully respond, please let me know.

15 Is that agreeable?

16 A. Yes.

17 Q. If you do not understand a question,
18 please let me know and I will rephrase it.

19 If you answer a question, I will
20 assume you understood it.

21 Is that fair?

22 A. You can assume that I have an

1 understanding of it.

2 Q. Your lawyer may object from time to
3 time. But, unless he specifically instructs you
4 to not answer based on privilege or court order,
5 you still need to answer the question.

6 Understood?

7 A. Yes.

8 Q. If at any point you need to take a
9 break, please let me know. The only thing I ask
10 is that if there is a question pending, you
11 answer the question before we take a break.

12 Is that acceptable?

13 A. Yes.

14 Q. Lastly, is there any reason that you
15 can't testify truthfully and accurately today?

16 A. No, not that I know of.

17 Q. What did you do to prepare for
18 today's depo?

19 A. I reviewed my declaration, along
20 with all of the relevant documents.

21 Q. So, you also reviewed the exhibits?

22 A. Yes. I reviewed exhibits to varying

1 degrees of detail as I felt was needed.

2 Q. Approximately how many hours did you
3 spend preparing?

4 A. I don't remember the exact hours
5 that I have recorded, but probably I would say
6 between 20 and 30.

7 Q. Did you review with anyone or did
8 you review by yourself?

9 A. Both.

10 Q. With attorneys for the petitioner?

11 A. Both by myself, as well as with
12 attorneys for petitioner.

13 Q. And how much time did you spend with
14 the attorneys preparing for the depo?

15 A. I would say between 10 and 15,
16 16 hours.

17 Q. And when did you meet with them?

18 A. Yesterday and the day before
19 yesterday.

20 Q. Anybody from OnePlus?

21 A. No.

22 Q. When did you first hear about this

1 IPR proceeding?

2 A. I'm not sure I understand the
3 question.

4 Q. So, when did you first hear about
5 this particular IPR proceeding?

6 A. I don't remember when I first heard
7 it, but --

8 Q. Was it over a year ago? Six months
9 ago?

10 A. I filed the report, let me look at
11 my report, on May 18th, 2025.

12 So, I must have heard about the IPR
13 proceeding some time before that. I can't
14 remember if it was one month or two months, some
15 time in early 2025, I suppose, but I'm not
16 certain.

17 Q. A couple of months before, okay.

18 A. It might have been sooner that I
19 heard about it, but then I didn't do anything.

20 So, I just don't remember when I
21 first heard about it.

22 But, for sure, it was before May,

1 2025.

2 Q. And then you said you started
3 working on this case about a couple months before
4 May 2025?

5 MR. MUELLER: Objection.

6 THE WITNESS: No, that is not what I
7 said.

8 BY MR. KIM:

9 Q. Could you repeat what you said?
10 When did you first start working on this case?

11 A. I said I don't remember when I first
12 started working. But, since I filed the report
13 on May of 2025, my guess as I sit here today is
14 that I must have started -- I certainly started
15 before May, 2025.

16 And my guess is a few months before
17 it, whether it was one month, two months,
18 three months more, I just don't remember.

19 Q. Understood. Have you done any work
20 for OnePlus before this IPR proceeding?

21 A. I'm not sure what you mean, done
22 work for OnePlus?

1 Q. Have you written any expert
2 declaration for OnePlus before May 2025, other
3 than this particular case?

4 A. I wrote expert reports and I
5 testified in court. I'm not sure if I would
6 characterize it as doing work for OnePlus.

7 I was retained as an expert to
8 provide expert opinions which is what I did.

9 Q. For OnePlus?

10 A. On behalf of OnePlus.

11 Q. Before this proceeding? For
12 other --

13 A. Yes.

14 Q. Okay. And can you explain the
15 nature of your prior work with OnePlus? How many
16 cases or is that all related to similar art?

17 A. It was Federal District Court in
18 Texas related to the patents that are generally
19 related to the same subject matter as this,
20 namely wireless communications.

21 Q. Before being retained for this case,
22 were you aware of the patent owner, Pantech

1 Corporation?

2 A. Yes, I was.

3 Q. And, what did you know about them?

4 A. Like I was saying, I was retained in
5 the case in Texas. So, I knew that Pantech and
6 OnePlus were at trial in Texas.

7 I didn't know much more about them
8 than that.

9 Q. So, you learned about Pantech
10 through prior work with OnePlus?

11 A. I -- to the best of my recollection,
12 yes. I might have heard of Pantech before
13 working from that litigation.

14 But, I'm not certain that I did or
15 that I didn't.

16 Q. If you did, you don't have any
17 particular impression about Pantech or you don't
18 recall anything specific?

19 A. I'm sorry, could you repeat that?

20 Q. So, if you did know about Pantech
21 prior to your previous litigation with OnePlus,
22 you don't recall anything specific about them; is

1 that what you said?

2 A. Yes. I don't recall anything,
3 knowing anything specific about Pantech.

4 Q. Okay. And you mentioned you have
5 the binders having your declaration.

6 Could you turn to your declaration
7 and go to Appendix A?

8 (Whereupon, previously marked
9 Exhibit 1003,
10 first referral.)

11 THE WITNESS: Okay.

12 BY MR. KIM:

13 Q. Is this an accurate and current
14 version of your resum ?

15 A. It appears that one page is missing.

16 Q. What page, which page?

17 A. One page.

18 Q. Okay. Other than the page that you
19 are noticing, everything else is accurate?

20 A. I haven't read everything word for
21 word, but I suspect it is.

22 Q. Can you turn to the section titled

1 Employment History?

2 A. Okay.

3 Q. Is this generally a complete list of
4 your employment history?

5 A. Yes, I think it is.

6 Q. So, your resum states you have been
7 President of Cosmos Communications Consulting
8 Corporation since 1988; is that correct?

9 A. Yes.

10 Q. Is this a company associated with
11 your expert consulting work?

12 A. It is a company that I am the
13 President of and founder. And I have done that
14 capacity, a lot of work, as I included here in my
15 resum , including testifying as an expert.

16 Q. And can you describe the nature of
17 your communications consulting?

18 A. Well, as I described it there, I
19 developed and presented a variety of courses,
20 seminars and various lectures on fixed and mobile
21 communications to various companies, governmental
22 entities, such as the Federal Communications

1 Commission, U.S. Marshal's Office, and a large
2 number of telecom companies around the world.

3 And, I consulted on
4 technology-related issues with all of their pros
5 and cons, to again various different companies
6 that were expanding their wireless -- their
7 communications in presence of various
8 governmental agencies as well as international
9 organizations. For example, I did some
10 consulting for the United Nations.

11 And I can go through the rest of the
12 bulleted items summarizing them, but I'm not sure
13 you want to do that or not.

14 Q. No. I think your answer is
15 sufficient.

16 Have you ever offered an opinion on
17 behalf of a patent owner as well, throughout your
18 career?

19 A. I'm sorry, could you repeat the
20 question?

21 Q. Of course. Have you ever offered an
22 opinion on behalf of a patent owner?

1 A. Yes, I have.

2 Q. Has your work as a consultant
3 involved 3GPP specifications?

4 A. Could you repeat that?

5 Q. Has your work as a consultant
6 involved 3GPP specifications?

7 A. Yes, it has.

8 Q. What areas of 3GPP?

9 A. My work involved wireless
10 communications before 3GPP was even, before 3GPP
11 even came into existence.

12 I was doing work related to the GSM
13 system which was developed by ETSI, the European
14 Telecommunications Standard Institute.

15 And then ETSI, along with other
16 entities, globally, formed the Third Generation
17 Partnership Project that developed technical
18 specifications for what was called the Third
19 Generation System and continues to this day.

20 And I was involved in the
21 specifications working -- in work related to the
22 specifications that the 3GPP developed over the

1 course of many years.

2 Q. So, while you were working with
3 those 3GPP specifications, have you worked with
4 handover between cells?

5 A. Yes. That is part of a feature of
6 mobile communications.

7 Q. Both macro and small, I suppose?

8 A. I'm not sure what you mean.

9 Q. Both macro cells and small cells?

10 A. Yes. All mobile communications.

11 Q. Do you have any industry experience
12 with the 3GPP specifications?

13 A. Yes, I have.

14 Q. At what companies?

15 A. I have done consulting to, oh, many
16 companies: AT&T, Verizon, T-Mobile, both in the
17 United States and abroad, in Germany, in the UK
18 and Singapore. I worked for Singapore Telecom.
19 To just name a few.

20 Q. And you mentioned you were working
21 on the subject matter even before the 3GPP
22 technology.

1 So, when was your first experience
2 with 3GPP?

3 MR. MUELLER: Objection, form.

4 THE WITNESS: I'm not sure what you
5 mean by my first experience with 3GPP.

6 3GPP is an organization.

7 BY MR. KIM:

8 Q. I mean specific -- I meant 3GPP
9 technology.

10 A. 3G -- the technology developed by
11 3GPP, the original technology developed by 3GPP
12 was what was called a Third Generation System,
13 which was based on using spread spectrum
14 technology for mobile communications.

15 And I had been involved with spread
16 spectrum technology even before 3GPP, because the
17 spread spectrum technology had been used in the
18 United States in the system that was called
19 IS-95, that was developed by Qualcomm.

20 And even before that, I worked on
21 spread spectrum technology as part of my Ph.D.
22 dissertation.

1 So, there is no one specific point
2 in time that I can say, oh, today, I started
3 working on technology related to 3GPP.

4 It goes all of the way back to my
5 Ph.D. days, before 3GPP was ever, had ever
6 existed.

7 Q. Got it. Can you now turn to the
8 Page 115 of the declaration, the very last page.

9 A. Okay.

10 Q. Is that your signature on the last
11 page?

12 A. Yes. My signature is on the last
13 page.

14 Q. And, this document appeared to be a
15 true and accurate copy of your declaration, dated
16 May 18th, 2025?

17 A. That is my understanding.

18 Q. Does this declaration contain all of
19 your opinions related to the validity of the '803
20 patent?

21 A. It contains all of the opinions that
22 I offered regarding the validity of the '803

1 patent.

2 Q. Did you write all of this report
3 yourself?

4 A. Yes. I wrote the report and I did
5 talk with the attorneys in terms of what needed
6 to be included and the like, but the report is
7 mine.

8 Q. Could you briefly go over your
9 drafting process?

10 A. It is the usual process. I reviewed
11 a whole bunch of documents. I felt that certain
12 documents were more relevant than others.

13 And in conjunction with discussions
14 with attorneys, I made the decision of what
15 exactly to include and what was already
16 superfluous or not necessary.

17 Because, as I had put it, we are
18 killing a dead horse. So, we don't need more.
19 So, we have included whatever we decided to
20 include.

21 Q. About how many hours did you spend
22 reviewing materials and drafting this report?

1 A. I'm sorry, how many hours I spent --

2 Q. Reviewing materials and drafting
3 this report?

4 A. Oh, I don't remember. I would have
5 to go back and check my records. I don't
6 remember.

7 Q. Did you spend more than 50 hours?
8 More than 100 hours?

9 A. Like I said, I would be pulling
10 numbers out of the hat. I just don't remember.

11 Q. What levels of education do you
12 think is needed to understand the technology at
13 issue with '803 patent?

14 A. So, I will refer back to my report.
15 I am trying to find this in my report, but I'm
16 not finding it, where I have -- I remember having
17 put in a distribution of what I would consider a
18 person of ordinary skill in the art, what
19 education to have.

20 But, I'm not finding it. And
21 speaking off memory, I might not state it
22 exactly, correctly. So, the --

1 I can try to tell you the best I can
2 from memory, but I think it was at least a
3 Bachelor's degree in electrical engineering. It
4 was a few years of wireless communications,
5 including knowledge of the relevant 3GPP
6 standards.

7 And speaking of memory, I think that
8 is close to what my opinion is.

9 Q. Thank you. And what is the basis
10 for the definition?

11 A. The basis for that definition is the
12 content of the '803 patent.

13 Q. But why specifically a few years in
14 the industry, or maybe just a Bachelor's degree
15 would suffice.

16 Or, you must have had some ground?

17 A. Like I said, the reason is that the
18 patent was related to wireless communications and
19 specifically to certain aspects of wireless
20 communications that would be defined by the 3GPP
21 specifications.

22 So, having some experience with

1 those 3GPP specifications would be useful.

2 Q. Do you satisfy this definition of --

3 A. Sorry?

4 Q. Do you satisfy this definition of a
5 person of ordinary skill?

6 A. I satisfy it and significantly
7 exceed it.

8 Q. I would like to start with some
9 basic background on 3GPP systems.

10 You have said you have been working
11 with 3GPP specifications for decades, correct?

12 A. I don't understand the predicate to
13 your question.

14 Q. So, have you been working with 3GPP
15 specifications for decades?

16 A. I have been working with the 3GPP
17 specifications for a long time.

18 But, you said with 3GPP systems.
19 So, I don't know what you meant by 3GPP system.

20 Q. I meant the 3GPP specifications.

21 A. Okay. So, you want to repeat the
22 question so I'm clear on what the question is?

1 Q. The question is, have you been
2 working with 3GPP specification for decades?

3 A. I don't know that decades is
4 correct, but ever since and before it is founded.

5 So, I have been working this for
6 decades. That includes work that I did even
7 before 3GPP was founded.

8 Q. And when were they founded?

9 A. I would have to check that. I don't
10 remember.

11 Q. In a handover where the connection
12 to cell A terminates before the connection to
13 cell B is established, is there any moment where
14 the WTRU or the user equipment is simultaneously
15 connected to both cells?

16 MR. MUELLER: Objection to form.

17 THE WITNESS: Are you talking about
18 the specific system, the specific protocol
19 or --

20 I'm not sure I understand the scope
21 of your question.

22 BY MR. KIM:

1 Q. I'm asking in a hypothetical
2 scenario, in a handover where the connection to
3 cell A terminates before the connection to cell B
4 is established, is there any moment where the
5 user equipment is simultaneously connected to
6 both cells?

7 MR. MUELLER: Objection to form.

8 THE WITNESS: Your hypothetical goes
9 all of the way back to the AMPS system, the
10 Advanced Mobile Phone System that was used in
11 the United States. And it includes other
12 systems.

13 So, it is too broad of a question
14 for me to try to address.

15 BY MR. KIM:

16 Q. So, either there exists the moment
17 where the WTRU has active data connection to both
18 cells simultaneously in this scenario, or there
19 is no such moment.

20 Which is it?

21 MR. MUELLER: Objection to form.

22 THE WITNESS: Well, you said in this

1 scenario, and I'm not sure what this scenario
2 refers to.

3 BY MR. KIM:

4 Q. The scenario where the connection to
5 Cell A terminates before the connection to Cell B
6 is established.

7 A. Well, by definition, the connection
8 to Cell A terminates and is no longer present,
9 and the connection to Cell B starts at some point
10 later in time.

11 Then there is no point at which the
12 mobile is connected to both A and B, by the very
13 definition of what you have described.

14 Q. So, is there anything in the laws of
15 physics or the 3GPP specifications that would
16 allow a WTRU to be simultaneously connected to
17 two cells when the connection to one terminates
18 before the connection to the other is
19 established?

20 MR. MUELLER: Objection to form.

21 THE WITNESS: The law of physics
22 allows lots of things.

1 But, what you have just described is
2 tautologically impossible, because if you
3 require that the connection be terminated --
4 the first connection be terminated before the
5 second connection is established, and then
6 one connection is terminated before the other
7 connection is established.

8 By definition, the two don't exist
9 at the same time, unless you create some
10 other scenario where the first connection is
11 reestablished, so the laws of physics would
12 allow reestablishing the first connection.

13 So, again, it is a very broad sense
14 of the word. You could reestablish the first
15 connection and then have the first connection
16 and the second connection exist
17 simultaneously.

18 But then it is not clear that the
19 first connection still exists. Is it a
20 reestablished version of the first
21 connection -- still the first connection, or
22 is it the third connection.

1 So, the problem that you are posing
2 is so vague that it is either very clear that
3 one is terminated before the other one is
4 established, in which case they don't both
5 exist.

6 Or, one gets reestablished and then
7 they both do exist. So, either way could be
8 the case.

9 BY MR. KIM:

10 Q. So, let's turn to Ericsson
11 Exhibit 1007. Ericsson describes an activation
12 time --

13 A. Hold on. Give me a chance to get to
14 107.

15 Q. Sure. I wasn't referring to the
16 particular pages, just general description, but
17 you can get to the exhibit.

18 A. Which exhibit is it? I'm sorry
19 again?

20 Q. 1007.

21 A. 1007.

22 Q. Is Ericsson; is that right?

1 A. Not according to what I have here.

2 Q. Do you have exhibit for Ericsson?

3 A. I have a whole bunch of tabs here
4 that I can search through and find the Ericsson
5 one.

6 Q. That is okay. But, you are aware of
7 the Ericsson exhibit, right?

8 A. I am sorry?

9 Q. But you are aware of the content of
10 Ericsson since you reviewed it?

11 A. So, by Ericsson, I assume you mean
12 the specific Ericsson document?

13 Q. Right. The prior art that you
14 referenced writing your declaration.

15 A. Yes, I am familiar with it.

16 MR. MUELLER: I believe it is 1005.

17 It is in that stack.

18 (Whereupon, previously marked
19 Ericsson Exhibit 1005,
20 first referral.)

21 THE WITNESS: Oh, okay. Yes, I do
22 have it. Thank you, Mr. Mueller.

1 BY MR. KIM:

2 Q. So, Ericsson describes an activation
3 time for the high speed downlink share channel
4 cell change, correct?

5 A. I'm sorry. Could you repeat that
6 question?

7 Q. Does Ericsson describe an activation
8 time for the high speed downlink share channel
9 cell change?

10 A. Yes, the Ericsson document does
11 discuss the transition from source to the target
12 High-Speed Downlink Share Channel cell is
13 performed synchronized, i.e. at a given
14 activation time.

15 Q. Okay. And before the activation
16 time, which cell is the user equipment receiving
17 the High-Speed Downlink Share Channel
18 transmission from?

19 A. From what Ericsson calls the source.

20 Q. And after the activation time, which
21 cell is the user equipment receiving transmission
22 from?

1 A. It is what Ericsson calls the
2 target, the target cell.

3 Q. Is there any moment where the user
4 equipment is receiving HS-DSCH transmission from
5 both cells simultaneously?

6 A. In the Ericsson document --

7 Q. The Ericsson?

8 A. -- no, there isn't.

9 Q. So, how can a system where the user
10 equipment receives from Cell A until the
11 activation time, then receive from Cell B after
12 the activation time, satisfy the claim requiring
13 connections to both cells to exist at the same
14 time?

15 MR. MUELLER: Objection to form.

16 THE WITNESS: I don't know what
17 claim you are talking about.

18 BY MR. KIM:

19 Q. The claim reciting a primary cell
20 and one or more non-primary cells that the WTRU
21 is configuring to communicate with.

22 MR. MUELLER: Objection to form.

1 THE WITNESS: I assume you are
2 talking about Claim 1 of the '803 patents.
3 Is that assumption a correct assumption?

4 BY MR. KIM:

5 Q. Yes.

6 (Whereupon, previously marked
7 Exhibit 1001,
8 first referral.)

9 THE WITNESS: So, could you again
10 repeat the question with respect to which
11 claim of the '803?

12 BY MR. KIM:

13 Q. Sure. So, how can a system,
14 Ericsson, where the user equipment receives from
15 Cell A until the activation time, and receives
16 from Cell B after the activation time, satisfy a
17 claim requiring connection to both cells to exist
18 at the same time?

19 MR. MUELLER: Objection to form.

20 THE WITNESS: I don't see anywhere
21 in Claim 1 or any other claim, the '803, what
22 you have just described.

1 So, if you can point me to what
2 portion of the claim you are thinking of,
3 then make I can answer the question.

4 BY MR. KIM:

5 Q. Sure. So, Claim 1 of the '803, do
6 you have it handy?

7 A. I do.

8 Q. And does it say: While a primary
9 cell is associated with a wireless network node,
10 and one or more non-primary cells are associated
11 with the wireless network node.

12 Do you see that?

13 A. Yes. I don't think you read it
14 exactly right, but yes, I do see it.

15 Q. Okay. So, does Ericsson support
16 this claim?

17 MR. MUELLER: Objection to form.

18 THE WITNESS: Ericsson does support
19 the primary cells associated with the
20 wireless network node and one or more
21 non-primary cells are also associated with
22 the wireless network node.

1 So, yes. Ericsson does support
2 that.

3 BY MR. KIM:

4 Q. Did you say it does or it doesn't?

5 A. I said it does.

6 Q. Could you explain how it supports
7 it?

8 A. It supports it because both the
9 source cell and the target cell are associated
10 with the same wireless network node.

11 Q. But, I guess we established that if
12 a connection --

13 So, Ericsson describes an activation
14 time. And, between the source cell and the
15 target cell, there is no simultaneity when user
16 equipment is receiving transmission; is that
17 right?

18 MR. MUELLER: Objection to form.

19 THE WITNESS: You are mixing up --
20 there is no single connection. The claim
21 requires the primary cell is associated with
22 a wireless network node and one or more

1 non-primary cells are associated with a
2 wireless network node.

3 And Ericsson does show both the
4 source cell and the target cell are
5 associated with a wireless network node.

6 That is what the claim requires and
7 that is what Ericsson discloses.

8 BY MR. KIM:

9 Q. But you agree that it does not
10 maintain connection simultaneously?

11 MR. MUELLER: Objection to form.

12 THE WITNESS: You are throwing in a
13 new word here "maintain connection". The
14 claim says what the claim says.

15 The claim requires that the two
16 cells, the primary cell and the one or more
17 non-primary cell are both, that they both be
18 associated with a wireless network node.

19 And Ericsson does disclose that the
20 source cell is associated with the wireless
21 network node, as is the non-primary, the
22 target cell.

1 BY MR. KIM:

2 Q. So, is it your position that
3 Ericsson's activation time base cell change is
4 not inconsistent with the claim requiring --

5 MR. MUELLER: Objection --

6 BY MR. KIM:

7 Q. -- requiring simultaneous connection
8 to multiple cells?

9 MR. MUELLER: Objection, form.

10 THE WITNESS: I don't understand the
11 question. What I opined on is that the
12 Ericsson document does disclose what the
13 claim requires.

14 BY MR. KIM:

15 Q. Right. But if the claim requires
16 the user equipment to be connected to Cell A and
17 Cell B simultaneously, does Ericsson describe a
18 system that is connected to Cell A, then Cell B,
19 of the activation time, does that sequential
20 architecture satisfy the simultaneous
21 requirement?

22 MR. MUELLER: Objection, form.

1 THE WITNESS: You put in new words
2 that don't exist in the claim. The claim
3 doesn't require that it be connected
4 simultaneously.

5 The claim requires that --

6 BY MR. KIM:

7 Q. But, if it does, if there is a claim
8 that does.

9 A. Well, that is a hypothetical that I
10 have not analyzed.

11 Q. Do you analyze --

12 A. -- the claims, then I will analyze
13 those other claims.

14 Q. So, if there is a claim requiring
15 the WTRU to be connected to Cell A and Cell B
16 simultaneously, does that sequential architecture
17 satisfy the simultaneous requirement with the
18 Ericsson?

19 MR. MUELLER: Objection, form.

20 THE WITNESS: That is a hypothetical
21 that I have not analyzed.

22 BY MR. KIM:

1 Q. I understand that. Could you think
2 about it now with your expert opinion who has
3 been working on this for decades?

4 A. I mean, I can't analyze a
5 hypothetical claim without knowing what the full
6 hypothetical claim is, what it says, what the
7 specification of the patent --

8 Q. That is --

9 A. -- if a claim exists.

10 So, no, I can't analyze hypothetical
11 claims.

12 Q. That is the full, that is the full
13 claim. There is no other factor. If there is a
14 claim requiring the WTRU to be connected
15 simultaneously. I don't think we need any other
16 parameters or specifications.

17 A. That cannot possibly be the full
18 claim. I would need to see the claim and the
19 context in which the claim is provided, what the
20 support of the claim has, to understand what the
21 scope of the claim is.

22 And then I would decide what

1 documents do or don't show that.

2 So, your hypothetical doesn't make
3 any sense to me.

4 Q. How does it not make sense? There
5 could be a claim requiring WTRU to be connected
6 to Cell A and B simultaneously.

7 Is that not possible in the 3GPP
8 world?

9 A. The -- sure, that is possible, but
10 that wouldn't be the full claim.

11 I would need to see what the claim
12 is, in the context and who that claim is
13 provided.

14 Q. So, if there isn't a full claim, why
15 doesn't it make sense?

16 MR. MUELLER: Objection to form.

17 THE WITNESS: I don't know what this
18 hypothetical claim says other than what you
19 just said.

20 BY MR. KIM:

21 Q. I told you what it says. The claim
22 says the WTRU to be connected to Cell A and

1 Cell B simultaneously.

2 A. Again, I have to analyze a
3 hypothetical claim and I don't have it. I would
4 have to see what the inventor of, that says that
5 is an invention, what the inventor characterized
6 as meaning connected. Connected can mean
7 different things in different contexts.

8 So, I would have to look at that
9 claim through its entirety. I would have to look
10 at all of the claim language and all of the
11 specification that led to that claim being
12 issued.

13 Q. I understand that in order to make a
14 decision whether that is simultaneous or not, you
15 would need the full context.

16 But, I am giving you the definition
17 already. So, I don't understand why you can't
18 give your opinion based on the analysis.

19 A. You are not giving me the
20 definition, because you aren't giving me the
21 specification of the patent in which that
22 hypothetical claim exists.

1 You are not giving me the file
2 history that includes that hypothetical claim
3 resulted from.

4 So, no, I don't have the full
5 context.

6 Q. So, you are making a statement,
7 basically if you have a black box, you are not
8 able to -- unless you know how everything
9 operates, you are not able to just, in and out,
10 and you are not able to use it; is that what you
11 are telling me?

12 MR. MUELLER: Objection, form.

13 THE WITNESS: I don't understand
14 what you mean.

15 What I'm telling you is exactly what
16 I told you which is that if you are creating
17 a hypothetical claim, using terms, words in
18 the claim that, whose meaning has to be
19 interpreted in the context of the patent's
20 specification which that hypothetical claim
21 is present, along with the file history that
22 led to the issuance of that hypothetical

1 claim, absent all of that, I can't make a
2 decision of what the claim covers or doesn't
3 cover, or what any other art does or doesn't
4 cover that claim.

5 BY MR. KIM:

6 Q. So, you are saying unless you know
7 the full file history and the inventor, that
8 would make a difference?

9 MR. MUELLER: Objection to form.

10 THE WITNESS: I didn't say that.

11 BY MR. KIM:

12 Q. If it doesn't make a difference,
13 then why can't you give an -- why can't you think
14 about it and give it an opinion?

15 A. Because -- and I'm going to repeat
16 myself.

17 I do not only need to see the entire
18 claim, I need to see the entire patent
19 specification that led to the issuance of that
20 claim, including the file history, to understand
21 the scope of that claim.

22 I didn't say anything about knowing

1 the inventor, as you have previously said. So, I
2 don't care if I know the inventor or not. I do
3 need to see the specification of that
4 hypothetical patent -- hypothetical claim, as
5 well as the file history that led to the issuance
6 of that hypothetical claim.

7 Q. So, going back to my first question.
8 I had a hypothetical in a handover and I don't
9 recall you having issue accepting the premise and
10 giving your opinion.

11 But, what is different with this
12 question and the first question?

13 MR. MUELLER: Objection to form.

14 THE WITNESS: I don't understand the
15 question.

16 BY MR. KIM:

17 Q. So, you are refusing to analyze,
18 because you are saying you don't have the full
19 context and you would need to analyze the file
20 history, inventor, and the full language of the
21 claim; is that correct?

22 A. I said the file history. The

1 inventor, I am not sure what you mean by analyze
2 the inventor. I never said that I would analyze
3 the inventor.

4 Q. Including the inventor.

5 A. I'm sorry?

6 Q. I said including the inventor.

7 A. Well, including the inventor, I'm
8 not sure I understand what that means.

9 Q. It means -- okay.

10 So, if the source cell's HS-DSCH
11 connection is terminated at the activation time,
12 could you explain how that source cell could
13 simultaneously perform the indication function?

14 MR. MUELLER: Objection to form.

15 THE WITNESS: So, I'm not sure I
16 understand the question. So, if you could
17 rephrase it or repeat it, maybe I would
18 understand it again. I'm not sure.

19 BY MR. KIM:

20 Q. Yeah. So, if the source cell's
21 HS-DSCH connection is terminated at the
22 activation time, can you explain how that source

1 cell could simultaneously perform the indication
2 function?

3 MR. MUELLER: Objection to form.

4 THE WITNESS: I never said it would
5 simultaneously perform the indication
6 function. So, I don't know where you are
7 getting that from.

8 If you could point me to something
9 specific, I can try to understand your
10 question.

11 BY MR. KIM:

12 Q. That is the question. I didn't say
13 you said that. That is my question.

14 If the source cell's connection is
15 terminated at the activation time, can you
16 explain as an expert how that source cell could
17 simultaneously perform the indication function or
18 could it not?

19 MR. MUELLER: Objection, form.

20 THE WITNESS: So, perform the
21 simultaneous indication function, I'm not
22 sure simultaneously would work.

1 BY MR. KIM:

2 Q. The source cell performing the
3 indication function. Do you understand that part
4 of the question?

5 A. The source cell?

6 Q. Uh-huh.

7 A. Provides an indication.

8 Q. Function. Right?

9 A. For, for the, for the target cell.

10 Q. Right. So, wait. So, source cell
11 performs the indication function, right?

12 A. The source cell is the one that
13 tells the mobile device where the target cell
14 would be.

15 Q. And, if the source cell's connection
16 is terminated at the activation time, could that
17 also perform the function of indication?

18 A. I don't understand the question.
19 The source cell indicates what the target cell
20 is, effective at the given activation time. And
21 the given activation time, the connection of the
22 mobile continues with the target cell. It is as

1 simple as that.

2 Q. Right. The source cell indicates
3 the target cell.

4 But, if the connection is terminated
5 at the activation time, could it also perform
6 that?

7 A. Could it also perform that?

8 Q. Perform the indication?

9 A. What is the that?

10 Q. The indication.

11 A. Yes. That indication has taken
12 place before the activation time.

13 Q. So, you are saying if the source
14 cell's connection is terminated at the activation
15 time, it can still perform the indication
16 function because it happens before --

17 MR. MUELLER: Objection.

18 BY MR. KIM:

19 Q. -- termination.

20 A. It can still perform, I don't know
21 what the word "still" means in that context.

22 Is it the temporal word or is it an

1 invent word, the use of the word "still"?

2 Q. Because, I guess under, if things
3 are terminated, in common sense, it is done and
4 it cannot perform any functions in a layman term?

5 A. Well, as I said, and it's common
6 sense, the indication -- chronologically the
7 indication takes place.

8 It indicates an activation time, at
9 which time the connection to the source is
10 terminated and the connection to the target is
11 activated. It is as simple as that.

12 Q. But could you repeat that?

13 A. Yes. At some point in time, the
14 source -- excuse me.

15 At some point in time, the source
16 indicates a later point in time for the
17 activation time, at which point the mobile device
18 no longer communicates with the source, but it
19 communicates with a target cell.

20 Q. So, the source cell that is
21 terminated at the activation time performed that
22 function that you just mentioned?

1 A. The source cell is not terminated.

2 Q. If the source cell is terminated at
3 the activation time.

4 I thought we covered the -- we
5 covered that source cell is terminated because it
6 is a hard --

7 A. You are saying the source cell is
8 terminated. The source cell is not terminated.
9 The connection with the source cell is
10 terminated.

11 Q. Right. The connection. Right, the
12 source cell's connection is terminated, yes.

13 A. Okay.

14 Q. So, if the source cell's connection
15 is terminated at the activation time, could it
16 also perform the indication function?

17 A. Yes. It would have performed the
18 indication function.

19 Q. Before termination?

20 A. As I said earlier, at some point
21 that indication is transmitted from the source
22 cell to the mobile device. And then given

1 activation time, the connection to the source
2 cell is terminated and the connection to the
3 target cell takes place.

4 Q. Okay. And when WTRU is connected to
5 Cell A and Cell B, simultaneously, does Ericsson
6 describe a system that could work with the
7 situation, where Cell A and Cell B is connected
8 simultaneously?

9 MR. MUELLER: Objection, form.

10 THE WITNESS: This particular,
11 Ericsson document I used to explain how that
12 document meets the limitations of Claim 1, in
13 particular, of the '803 patent.

14 What else that document does or does
15 not disclose I have not opined on this.

16 There is many other things that are in that
17 document that are not relevant to Claim 1 or
18 to any claim of the '803 that I have not
19 opined on.

20 BY MR. KIM:

21 Q. Well, I didn't ask in relation to
22 '803. I just asked in terms of technology.

1 If there is a situation where user
2 equipment receives from Cell A, and Cell A
3 simultaneously, is that technology covered by
4 Ericsson?

5 MR. MUELLER: Objection, form.

6 THE WITNESS: I don't know that it
7 is or it isn't, because that was not
8 something that I provided an opinion on,
9 because it was not relevant to the '803
10 patent.

11 BY MR. KIM:

12 Q. So, you are saying whether Cell A
13 and Cell B are connected simultaneously was not
14 relevant when you were analyzing for '803 patent?

15 A. Was not relevant to the claims that
16 I was analyzing from the '803.

17 Q. Right. It was not relevant to the
18 claims you were analyzing?

19 A. Right.

20 Q. So, simultaneity was not relevant
21 when you were analyzing Claim 1 and Claim 7?

22 MR. MUELLER: Objection to form.

1 BY MR. KIM:

2 Q. Is that correct?

3 A. I'm sorry, could you repeat that? I
4 couldn't hear a few words. Could you speak a
5 little louder, please?

6 Q. Sure. So, simultaneity was not
7 relevant when analyzing Claim 1 of '803?

8 A. Simultaneous connection was not
9 relevant. You just said simultaneity.
10 Simultaneity of what?

11 And I'm clarifying simultaneous
12 connection was not required in any of the claims
13 of the '803 patent.

14 Q. In order to make the decision
15 whether it is required or not required. You need
16 to make a decision hence it is relevant; is that
17 incorrect?

18 A. I'm sorry, say that again?

19 Q. In order to make a relevancy
20 decision, don't you need to consider it, whether
21 simultaneous connection for Cell A and Cell B
22 covers Claim A of the '803 patent?

1 MR. MUELLER: Objection to form.

2 BY MR. KIM:

3 Q. So, you need to consider that -- by
4 virtue of consideration it is relevant because
5 that is a factor that you need to consider when
6 analyzing '803, Claim 1?

7 A. I analyzed the claims of the '803
8 and all the limitations of the claim.

9 And I provided my opinions as to how
10 those claims are met and by Ericsson in
11 particular, as well as the other documents that I
12 have provided in my report.

13 Q. Okay. So you mentioned the '803
14 patent.

15 So, the '803 patent, is it solving a
16 soft buffer corruption problem that exists in 3G
17 systems which with a HARQ, Hybrid Automatic
18 Repeat Request?

19 MR. MUELLER: Objection to form.

20 THE WITNESS: Well, the title of the
21 patent is Enhanced Uplink Operation In Soft
22 Handover. And it describes -- the patent

1 describes various scenarios of soft handover.

2 And, and the patent states, the background
3 section and I am reading from the patent to
4 make it easier in Column 2, Line 54, it
5 states: The current 3GPP standards do not
6 define specific protocols to transfer
7 necessary information which are imperative in
8 operation of EU.

9 And I will insert the parenthetical
10 that EU stands for enhanced upward, during
11 soft handover.

12 Therefore, it is necessary to define
13 the protocol for transferring WTRU-specific
14 information and other EU related information,
15 among an RNC, a Node-B, and a WTRU so that if
16 Node-B is enabled to schedule radio resources
17 and EU connections are handed over properly
18 during soft handover.

19 So, that is what the patent alleges
20 to have addressed.

21 And, of course, the claim is totally
22 divorced from enhanced uplink. The word

1 "enhanced uplink" doesn't appear in the
2 claim. The word "soft handover" doesn't
3 appear in the claim.

4 BY MR. KIM:

5 Q. We are not at the claim yet. We
6 were just going over the background.

7 A. I'm sorry?

8 Q. And we are not at the claims yet.
9 We were just going over the background.

10 MR. KIM: And I think we are a
11 little bit over an hour. Would you like to
12 take a break or would you like to keep going?

13 THE WITNESS: A break would be good.

14 MR. KIM: Okay. Let's go off the
15 record and take a five to 10-minute break.

16 THE VIDEOGRAPHER: Stand by. The
17 time is 10:10 a.m., we are off the record.
18 I'm stopping the recording.

19 (Recess taken -- 10:10 a.m.)

20 (After recess -- 10:22 a.m.)

21 THE VIDEOGRAPHER: The time is
22 10:22 a.m., we are back on the record.

1 BY MR. KIM:

2 Q. We will proceed. So, the '803
3 patent we have been talking about is solving soft
4 buffer corruption problem that exists in 3G
5 systems; is that correct?

6 MR. MUELLER: Objection to form.

7 THE WITNESS: The '803 patent, I
8 believe mentions buffer corruption issue.
9 But, the claim is what the claim is.

10 BY MR. KIM:

11 Q. But, the specifications, does that
12 go over the soft buffer corruption problem that
13 exists in 3G system with the Hybrid Automatic
14 Repeat Request?

15 A. Could you point to me exactly what,
16 where in the '803 patent you are reading from?

17 Q. I'm asking since you have reviewed
18 this patent and you wrote a declaration.

19 So, is the '803 patent about solving
20 a soft buffer corruption problem that exists in
21 3G systems with HARQ?

22 A. Like I said, I believe those words

1 appear somewhere in the specification of the '803
2 patent.

3 And I provided my opinions on the
4 asserted claims or at least on the claims that I
5 provide the opinions on.

6 So the words that you have just read
7 I do think they appear somewhere in the
8 specification.

9 But, if you can point me to them,
10 then I can make any additional comments or reply
11 to any questions that you may have.

12 Q. So, in your expert opinion, what is
13 '803 patent about?

14 MR. MUELLER: Objection to form.

15 THE WITNESS: The title of the '803
16 patent is the Enhanced Uplink Operation In
17 Soft Handover.

18 BY MR. KIM:

19 Q. And, the content?

20 A. The content is about 12 columns of
21 specification, including the claims. That is
22 what the content is.

1 Q. What is the content? Could you
2 repeat that, please?

3 A. About 12 columns of specification,
4 including the claims, as well as ten figures, and
5 of course the abstract and related disclosures of
6 reference cited. That is what the patent is.

7 Q. I think that could be said about
8 many patents.

9 So, specifically in your expert
10 opinion, what technology is '803 describing?

11 MR. MUELLER: Objection to form.

12 THE WITNESS: The '803 patent
13 describes Enhanced Uplink Operation in Soft
14 Handover, that is what the title is. The
15 claims are pretty much divorced from that
16 title.

17 But, the specification talks about
18 soft handover and the claims are what the
19 claims are. And the claims don't tie in to
20 soft handover.

21 BY MR. KIM:

22 Q. Okay. So, it talks about the soft

1 handover.

2 And does it also talk about the soft
3 buffer corruption?

4 MR. MUELLER: Objection to form.

5 THE WITNESS: The claims doesn't --
6 none of the claims talk about the soft buffer
7 corruption.

8 BY MR. KIM:

9 Q. I think I said the patent. Excuse
10 me if I said claims. But, I meant the patent,
11 '803 patent.

12 Does it discuss the soft buffer
13 corruption?

14 A. If you could point me to something
15 specific in the '803 patent that would help me
16 address your question.

17 Q. So, could you turn to Column 2, and
18 go to the paragraph starting Line Number 4.

19 And could you read the paragraph and
20 see if that is relating to the soft buffer
21 corruption?

22 A. So, that paragraph, let me just read

1 it: One of the problems with Node-B-controlled
2 HARQ, which stands for hybrid ARQ, in soft
3 handover is the link imbalance.

4 Since the associated uplink and
5 downlink control signalling does not benefit from
6 the soft handover gain, it might be error prone
7 and require significant power offsets. In the
8 downlink direction, the WTRU may not be able to
9 receive the acknowledge, ACK, or non-acknowledge,
10 NACK, signals from all involved Node-Bs. In the
11 uplink, not all involved Node-Bs may be able to
12 receive the associated control signalling from
13 the WTRU which may lead to soft buffer
14 corruption.

15 So, that is discussed in the
16 background. And, that is it. That is discussing
17 the background.

18 Q. Is that discussing the soft buffer
19 corruption?

20 MR. MUELLER: Objection to form.

21 THE WITNESS: In that paragraph that
22 I just read, it does mention the conditions

1 that may lead to soft buffer corruption. And

2 it is totally divorced from the claims.

3 BY MR. KIM:

4 Q. Okay. And outside of this specific
5 patent, does the soft buffer corruption problem
6 occur with the 3G systems?

7 MR. MUELLER: Objection to form.

8 THE WITNESS: I didn't analyze
9 anything about soft buffer corruption, if you
10 could point me to something in my report that
11 relates to soft buffer corruption, then I
12 would be able to answer any relevant
13 question.

14 BY MR. KIM:

15 Q. So, with your decades of expertise
16 in this communications field, you are not able to
17 give me a definition of soft buffer corruption
18 without referring to the specific documentation?

19 A. The patent, in the paragraph I just
20 read, talks about some instances, some causes of
21 what may lead to soft buffer corruption.

22 I didn't perform any further

1 analysis of the potential problem and solution of
2 soft buffer corruption because it wasn't needed.

3 Q. So, the soft buffer corruption
4 outside the context of '803, what do you know
5 about them?

6 MR. MUELLER: Objection to form.

7 THE WITNESS: I haven't offered any
8 opinions on the soft buffer corruption
9 problem.

10 So, I'm not prepared to give you a
11 tutorial on soft buffer corruption now.

12 BY MR. KIM:

13 Q. So, you do not know what soft buffer
14 corruption is?

15 A. I didn't say that.

16 Q. So, if you do know, could you tell
17 me what it is?

18 A. Like I said, I have not offered any
19 opinions on soft buffer corruption issues. And,
20 offering an opinion and a tutorial on something
21 that has nothing to do with why we are here, I'm
22 not prepared to do.

1 Q. So, you just read -- this paragraph
2 contained the word "soft buffer corruption"; is
3 that correct?

4 A. I just read it, yes.

5 Q. But you also said this patent has
6 nothing to do with soft buffer corruption. Is
7 that also correct?

8 A. No, it is not.

9 Q. So, you never said this patent has
10 nothing to do with soft buffer corruption?

11 A. If I said that, I misspoke. What I
12 think I said is that the claims have nothing to
13 do with soft buffer corruption.

14 Q. How about the specifications?

15 A. The specification mentions that soft
16 buffer corruption potential problem in this
17 paragraph that I just read.

18 Q. So, in preparation, you thought
19 about soft buffer corruption when you were
20 writing your opinion and declaration; is that
21 right?

22 A. I'm sorry, could you repeat that?

1 Q. When writing up your declaration in
2 May of last year, have you looked into the matter
3 of soft buffer corruption at all?

4 A. In writing my declaration, the soft
5 buffer corruption potential issue didn't come up
6 at all, because it is not relevant to the claims.

7 Q. So, you have not considered the soft
8 buffer corruption at all in the course of
9 preparing for this proceedings?

10 A. That is not accurate.

11 Q. Could you state that accurately?

12 A. Yes. I read the entirety of the
13 patent, including this paragraph that refers to
14 the soft buffer corruption.

15 And then I analyzed the claims and I
16 provided my opinions on the claims.

17 Q. So, could you also read the
18 Column 2, Line 21 starting with: The soft buffer
19 corruption?

20 A. So, Column 2, Line 21, the complete
21 sentence starts midline.

22 Q. Right.

1 A. And reads: Chase combining is a
2 special case of an incremental combining. The
3 soft buffer corruption causes misalignment of an
4 HARQ, hybrid ARQ, protocol state among different
5 Node-Bs and leads to loss of the soft handover
6 gain. It would be desirable to achieve efficient
7 hybrid ARQ operation without the problems
8 associated with prior art systems.

9 Q. Okay. Could you also go to
10 Column 3, Line 7.

11 A. Okay. Do you want me to read that?

12 Q. Yes, please.

13 A. Soft buffer corruption is avoided by
14 controlling hybrid ARQ during soft handover only
15 by the primary Node-B. Alternatively, an RNC may
16 control enhanced uplink operation during soft
17 handover including hybrid ARQ. In this case, an
18 RNC generates final ACK/NACK decision based on
19 the error check results from the Node-Bs.

20 Q. Okay. And could you go to Column 4
21 and Line 24.

22 A. So, this is in the section of

1 Detailed Description of the Preferred Embodiment.

2 And it reads: This scheme, and this scheme
3 refers towards what is discussed in Line 19.

4 So, for complete context, I will
5 read from Line 19: The primary Node-B 104a
6 employs incremental combining, while non-primary
7 Node-Bs 104b may or may not use incremental
8 combining. If the non-primary Node-Bs 104b do
9 not use incremental combining, the non-primary
10 Node-B 104b may use simple ARQ and may always
11 refresh their buffers and not perform any
12 combining.

13 This scheme eliminates the problem
14 of soft buffer corruption in soft handover. If
15 both the primary Node-B 104a and non-primary
16 Node-Bs 104b perform incremental combining, soft
17 buffer corruption may be eliminated with a new
18 data indicator or the sequence number in physical
19 control signalling sent by the WTRU 102 to inform
20 Node-Bs 104a, 104b which data packet is being
21 transmitted.

22 And thereby the Node-Bs 104a, 104b

1 can manage soft buffer without corruption.

2 Q. Okay. Now that you read that, do
3 you agree that the '803 patent is solving a soft
4 buffer corruption problem that exists in 3G
5 systems with H-ARQ?

6 MR. MUELLER: Objection to form.

7 THE WITNESS: I don't know what you
8 mean by the patent solves a problem.

9 The patent discusses a problem.

10 BY MR. KIM:

11 Q. Okay. So, does -- so, the patent
12 discusses a problem and is providing a solution
13 to solve that problem?

14 A. I haven't opined on any such
15 solution because nothing related to this soft
16 buffer corruption is in the claims.

17 Q. So, outside of the context of this
18 '803 patent, you do not have sufficient knowledge
19 to testify today on what soft buffer corruption
20 is; is that correct?

21 MR. MUELLER: Objection to form.

22 THE WITNESS: The claims don't

1 address soft buffer corruption. So, you can
2 point me to my report as to what it is that
3 you want to ask me about in my report, I can
4 answer it.

5 But, the soft buffer corruption
6 issue discussed in the specification is not
7 related to the claim which deals with, among
8 other things, downlink channel transmission
9 from the indicated, at least one of the one
10 or more non-primary cells, that is the end of
11 the claim.

12 So, anyway, that is.

13 BY MR. KIM:

14 Q. As I recall, you reviewed this
15 patent in entirety, not just the claims; is that
16 right?

17 A. I reviewed the patents in entirety,
18 yes.

19 Q. You did that while you were giving
20 your opinion for declaration?

21 A. I'm sorry, say that again?

22 Q. Did you review the patent in

1 entirety, not just the claims, when you were
2 writing your declaration?

3 A. Yes. I reviewed the patent in its
4 entirety.

5 Q. And as you read, the soft buffer
6 corruption comes up multiple times.

7 And how did you understand it if you
8 do not have sufficient knowledge?

9 MR. MUELLER: Objection to form.
10 Mischaracterizes the testimony.

11 THE WITNESS: I never said I don't
12 have sufficient knowledge. Those are your
13 words.

14 I said that the relevant, the claims
15 that I had to provide opinions on had nothing
16 to do with soft buffer corruption.

17 BY MR. KIM:

18 Q. So, you said you never said you
19 don't have sufficient knowledge.

20 So, you mean you do have sufficient
21 knowledge regarding soft buffer corruption?

22 A. Yes. I know what soft buffer

1 corruption is and how that has been handled.

2 And, it was totally irrelevant to the claims.

3 Q. Okay. And does a soft buffer
4 corruption occur because H-ARQ stores data in
5 soft buffers for incremental combining?

6 A. I don't understand the question.

7 Q. Why does soft buffer corruption
8 occur?

9 A. Soft buffer corruption could occur.

10 Q. Yes. When could they occur?

11 A. I did not form opinions on when soft
12 buffer corruption could occur. So, if I did,
13 could you point me to where in my declaration I
14 have addressed that, because I don't think I
15 have.

16 Q. So, you mentioned you know what soft
17 buffer corruption is. So, you must know when
18 they occur.

19 A. I know a lot of things that I did
20 not offer opinions on, because they are not
21 relevant.

22 Q. I know you did not write your

1 opinion, but I am asking your opinion now.

2 A. Ask my opinion about what?

3 Q. When does soft buffer corruption
4 occur?

5 A. I'm not going to form opinions here
6 on the fly.

7 There is various circumstances in
8 which soft buffer corruption could occur and
9 other mechanisms to prevent that from occurring
10 that have been used in the industry.

11 Q. I'm not asking for an opinion. I'm
12 asking for the definition based on your
13 expertise.

14 A. Like I said, I didn't provide any
15 opinions on the definition of soft buffer
16 corruption, and I'm not going to come up with a
17 definition now.

18 Q. Do you know what soft buffer
19 corruption is?

20 A. I have an understanding of it.

21 Q. Could you elaborate?

22 A. It is not an opinion that I offer.

1 So, I generally -- my rule of thumb is I don't
2 form opinions during a deposition.

3 I provide explanation of my
4 opinions. And that is not an area that I had to
5 provide any expert testimony about because it
6 wasn't relevant.

7 Q. But, you said you know what soft
8 buffer corruption is. So, it is not formed
9 during this deposition, right? You knew about it
10 beforehand. And this is just a term.

11 A. Well, yes. Soft buffer corruption
12 is a potential problem when doing soft combining.

13 But like I said, I'm not prepared to
14 offer a tutorial on soft buffer corruption
15 problem and potential solutions.

16 Q. I'm just asking for your
17 understanding of the term, not the tutorial.

18 A. Well, my understanding of the term
19 is that it could be soft buffer corruption.

20 Q. Do you know when it could occur?

21 A. Again, I didn't offer any opinion on
22 all of the circumstances or some of the

1 circumstances when it could occur.

2 The patent talks about some
3 instances of when that would occur. And that is
4 when a patent identifies those instances and that
5 is fine.

6 But, I did not offer any opinions,
7 because they weren't part of the task that I was
8 tasked with which is to analyze and present my
9 opinions related to the claims.

10 Q. So, do you disagree to the following
11 statement: Soft buffer corruption occurs because
12 HARQ stores data in soft buffers for incremental
13 combining?

14 MR. MUELLER: Objection to form.

15 THE WITNESS: I have not formed any
16 opinions on agreeing or disagreeing with that
17 statement. I would have to understand what
18 the context of that statement is, and then
19 agree or disagree.

20 I would need more information.

21 BY MR. KIM:

22 Q. So, this is a definition of the

1 term. So, what context would you need to form
2 your opinion?

3 A. Like I said, I haven't formed an
4 opinion on that and I haven't offered an opinion
5 on that.

6 Q. Do you have knowledge of soft buffer
7 corruption?

8 A. Yes, I do.

9 Q. Can you explain your knowledge?

10 A. Like I said repeatedly, I did not
11 offer any opinions on soft buffer corruption
12 because it wasn't relevant to the claims.

13 And if I have, please point to where
14 in my declaration I have.

15 Q. I didn't ask for an opinion. I
16 asked for your knowledge as an expert.

17 A. I know lots of things about soft
18 buffer corruption but they are not relevant to
19 this case and I have not offered those opinions.

20 And in a deposition, I don't
21 formulate opinions during the deposition to offer
22 them on things that are not relevant to my

1 declaration.

2 Q. So, you do not know the answer to
3 this statement, whether soft buffer corruption
4 occurs because HARQ stores data in soft buffers
5 for incremental combining.

6 So, you do not have sufficient
7 knowledge to answer this question at the moment?

8 A. You are mischaracterizing my
9 testimony. I said I did not form any opinions on
10 that.

11 What you just read is a potential
12 problem. And that is the end of it. And I have
13 not formed any opinions on that problem or
14 related solutions of that problem because they
15 have nothing to do with the claims of the '803
16 patent.

17 Q. So, why is it an opinion if you are
18 speaking about a factual matter?

19 A. I'm sorry, could you repeat that?

20 Q. Yes. Why is it an opinion if you
21 are just speaking of a factual matter?

22 A. I don't understand what you mean.

1 Q. I don't need to form an opinion to
2 see that you have a suit on. It is not -- I can
3 see it. It is a fact.

4 So, is it a fact that soft buffer
5 corruption occurs under certain conditions by
6 definition?

7 A. That is a good point. You don't
8 know if I have a suit or not. Maybe my pants are
9 shorts and not suit. So, you are inferring
10 things.

11 So, the soft buffer corruption is a
12 potential problem with varying solutions that
13 have been implemented. And I could give a
14 one-day tutorial on soft buffer corruption
15 issues.

16 But I am not prepared to give any
17 part of that hypothetical tutorial in a
18 deposition that has nothing to do with the soft
19 buffer corruption because the claims have nothing
20 to do with it.

21 Q. So, without the soft buffers, can
22 there be soft buffer corruption?

1 A. If I heard you correctly, if you
2 don't have soft buffers, could the nonexistent
3 soft buffers be corrupted? I think the answer to
4 that is a logical no.

5 You don't have to be an expert to
6 decide whether something that doesn't exist
7 cannot be corrupted.

8 But, that has nothing to do with the
9 claims once again.

10 Q. So, does the 2G GPRS use soft
11 buffers?

12 A. I would have to go back and refresh
13 my memory on GPRS. I don't remember with
14 certainty.

15 Q. So, off the top of your head, you do
16 not know whether 2G GPRS uses HARQ with soft
17 buffers?

18 A. I, like I said, I would have to go
19 back and check the development of GPRS and has it
20 evolved and see at some point introduce the soft
21 combining. I just don't remember.

22 So, the answer is I don't recall. I

1 would have to check the standards, the relevant
2 standards to see if that has been introduced in
3 GPRS or not.

4 Q. So, without checking, you do not
5 have, currently, knowledge to answer the question
6 whether 2G GPRS uses HARQ with soft buffers?

7 A. Those standards or specifications
8 have thousands and thousands of pages. And I
9 just don't -- I'm under oath and I don't want to
10 be inaccurate.

11 I don't remember if GPRS does or
12 doesn't.

13 Q. And unless you look through the
14 document, you are not sure whether GPRS system
15 does or does not have soft buffers, even with
16 your expertise?

17 MR. MUELLER: Objection.

18 THE WITNESS: Looking at what
19 document?

20 BY MR. KIM:

21 Q. I'm asking even with your decades of
22 expertise in 3GPP, without going through the

1 documentation, you cannot answer a question
2 whether the 2G GPRS uses soft buffers?

3 A. The question doesn't make any sense.

4 Q. You have been working in this field
5 for decades, and this particular question I'm
6 asking you, without looking up the documentation,
7 you are not able to answer?

8 A. Well, like I said, your question
9 doesn't make any sense, because you are talking
10 about GPRS and you are talking about 3GPP
11 specifications.

12 GPRS was developed before 3GPP ever
13 existed.

14 Q. So, which part of my question didn't
15 make sense for you?

16 A. The part that you said GPRS
17 specification, I forget exact wording. I would
18 have to look back at the record to read it.

19 But, you said something about GPRS
20 being developed by 3GPP and that just doesn't
21 make sense.

22 Q. No. I mentioned 3GPP, just talking

1 about your long expertise with this
2 communications.

3 I'm just asking you whether 2G GPRS
4 system can experience soft buffer corruption?

5 A. And like I said, GPRS generally is
6 considered 2.5G, perhaps, and the enhanced
7 version of GPRS was EDGE.

8 And whether the soft combining was
9 produced in GPRS or in EDGE, I don't remember
10 with certainty. I could guess, but I don't guess
11 in depositions. I answer what I do not remember
12 and if I don't remember, I just don't remember.

13 Q. So, do you remember Sebire, the
14 prior art that you cited, writing your
15 declaration?

16 A. I remember that I used Sebire as one
17 of the prior art documents.

18 Q. And as you mentioned, you spent
19 about 20 hours or more preparing for this
20 deposition and you did not review Sebire. Is
21 that not one of the prior arts that you reviewed?

22 A. It is.

1 Q. Okay. And does Sebire describe a 2G
2 GPRS system?

3 A. So, Sebire does describe a GPRS
4 system and it states: The GPRS standard has
5 generally been proposed in the context of the GSM
6 standard.

7 The GSM standard allows
8 communication while the GPRS standard allows
9 packet system communication.

10 Q. Okay. And with the knowledge of a
11 person of ordinary skill, can you explain if 2G
12 GPRS system has solved buffer?

13 A. I don't understand what you mean as
14 solved buffer, I don't understand what you mean.
15 Solving the buffer, it doesn't make sense to me.

16 Q. Sorry, could you repeat? Could you
17 repeat what didn't make sense to you?

18 A. I heard you say does GPRS solve the
19 buffer. I don't understand what you mean by
20 solved buffer.

21 Q. Soft buffer.

22 A. Solve buffer.

1 Q. Soft, soft buffer.

2 A. Oh, soft. I'm sorry.

3 Q. Yes.

4 A. Okay.

5 Q. Can you point to anything in Sebire
6 that discusses soft buffer corruption?

7 A. So, as I explain in my declaration,
8 Sebire discloses a handover related issues in
9 GPRS, a system that was based on GSM and was
10 developed after GSM.

11 It is a system that provided data
12 communication capabilities which the original GSM
13 system essentially did not provide for.

14 While Sebire's focus is on handover,
15 similar to the focus of the '803 patent, it
16 discloses additional aspects that are relevant to
17 the operation of a wireless communication system
18 such as the UMTS system.

19 And then I included from Sebire what
20 I needed to include in ground, in Ground 3 of my
21 declaration, where I use Sebire in conjunction
22 with Ericsson and TS 25331 to show that Claims 5,

1 6, 11, and 12 are invalid.

2 And Claims 5, 6, 11 and 12, none of
3 them have anything to do with soft buffer
4 corruption.

5 Q. So, my question was can you point to
6 anything in Sebire that discusses soft buffer
7 corruption?

8 A. I didn't point to anything in Sebire
9 related to soft buffer corruption because soft
10 buffer corruption is not related in any way to
11 any of the claims, and specifically to Claims 5,
12 6, 11 or 12, but I used Sebire in my invalidity
13 analysis.

14 Q. So, have you reviewed Sebire in its
15 entirety?

16 A. Yes, I have.

17 Q. So can you point to anything in
18 Sebire that discusses soft buffer corruption?

19 A. Like I said, and I am going to
20 repeat myself, I did not point to anything Sebire
21 discusses soft buffer corruption, because soft
22 buffer corruption was not part of any of the

1 claims that I analyzed and used Sebire for.

2 Q. So, Sebire contains content
3 regarding soft buffer corruption?

4 MR. MUELLER: Objection.

5 THE WITNESS: Are you asking me a
6 question or are you making a statement?

7 BY MR. KIM:

8 Q. Yes. Does Sebire contain a language
9 regarding soft buffer corruption?

10 A. I did not point to anything in
11 Sebire regarding soft buffer corruption, because
12 I didn't need to, because soft buffer corruption
13 was not an issue in the relevant claims.

14 Q. So, when you say you didn't need to,
15 it sounds like if you needed to, you could have.
16 Could you have?

17 A. It doesn't sound like that. I'm
18 saying what I'm saying. It doesn't sound like
19 anything else.

20 Q. So, is there anything in Sebire that
21 discusses soft buffer corruption?

22 A. The same question with the same

1 answer. I did not need to point to Sebire or to
2 anywhere else, any material related to soft
3 buffer corruption, because soft buffer corruption
4 was not relevant to any of the relevant claims.

5 Q. So, when you reviewed Sebire in its
6 entirety, I know you mentioned you didn't need
7 to, but did it have any content regarding soft
8 buffer corruption?

9 A. I don't recall if it did or it
10 didn't. I don't -- I do know that I did not need
11 to point to anything and I did not point to
12 anything in Sebire related to soft buffer
13 corruption because soft buffer corruption was not
14 an issue in any of the claims.

15 Q. And, you read the title of the '803
16 patent.

17 So, in the '803 patent addresses a
18 problem in the 3G enhanced uplink, correct?

19 MR. MUELLER: Objection.

20 THE WITNESS: As we stated earlier,
21 the title of the '803 patent is Enhanced
22 Uplink Operation in Soft Handover.

1 BY MR. KIM:

2 Q. Does it address problems in 3G
3 enhanced uplink?

4 A. I'm sorry, can you repeat that a
5 little louder.

6 Q. Does the '803 patent address this
7 problem in 3G enhanced uplink?

8 A. The patent in general does. The
9 claims of the patent are totally divorced from
10 it.

11 Q. So, if Sebire doesn't disclose
12 anything regarding soft buffer corruption, what
13 problem in Sebire would motivate a POSITA in 2004
14 to look there for a solution to the '803
15 patent's, you know, 3G enhanced uplink problem?

16 MR. MUELLER: Objection to form.

17 THE WITNESS: So, a person of
18 ordinary skill in the art would recognize
19 that Ericsson DS 25.331 and Sebire, they all
20 represent analogous art concerning the claims
21 of the '803 patent, each addressing similar
22 challenges and wireless communication

1 protocols and handovers in particular.

2 So, the technical disclosures within
3 each reference directly pertain to the same
4 problems faced by the inventor, particularly
5 developing protocols for efficient management
6 of radio resources with the wireless
7 communication resources, including during the
8 handover process.

9 These references are certainly
10 combinable since they are all directed
11 towards protocols governing the radio
12 interface management between the user
13 equipment at the base stations.

14 Therefore, a person of ordinary
15 skill in the art would naturally apply the
16 benefit of combining the various different
17 aspects of 25.331, Sebire, to Ericsson's
18 teachings, to enhance the operation of the
19 wireless system, including the handover
20 procedures that are discussed in the claim of
21 the '803 patent.

22 BY MR. KIM:

1 Q. Could you point to a specific
2 problem in Sebire that would motivate a POSITA in
3 2004 to look there for a solution to the 3G
4 issue?

5 MR. MUELLER: Objection to form.

6 THE WITNESS: I don't know what you
7 mean by the solution of the 3G issue. What
8 3G issue?

9 BY MR. KIM:

10 Q. The '803 patent's 3G problem.

11 A. I still don't understand, '803
12 patent 3G problem.

13 That is a vague term. The patent
14 talks about lots of things that are not even --

15 Q. 3G HAR --

16 A. The claim talks about what the claim
17 talks about.

18 Q. The 3G HARQ architecture for purpose
19 of solving soft buffer corruption?

20 A. Sebire does not address the soft
21 buffer corruption any more than the claims of the
22 '803 don't address soft buffer corruption.

1 Soft buffer corruption is totally
2 divorced from the, from the claims of the '803
3 patent.

4 Q. So, in one or two sentences, can you
5 describe what '803 patent is trying to solve?

6 MR. MUELLER: Objection to form.

7 THE WITNESS: No. One or two
8 sentences cannot possibly describe everything
9 that is in the patent, including the claims.

10 BY MR. KIM:

11 Q. In general, could you summarize it
12 in a couple of sentences or, a little bit more,
13 but briefly?

14 A. Any summary that would be provided
15 would inherently be incomplete.

16 So, I think that the answer is no, I
17 cannot.

18 Q. Can you explain why?

19 A. Because it would be inherently
20 incomplete.

21 Q. So, you are unable to summarize a
22 purpose of '803 patent?

1 MR. MUELLER: Objection to form.

2 THE WITNESS: No, I cannot summarize
3 the purpose of the '803 patent. I don't even
4 know what the purpose of the '803 patent,
5 what that phrase means.

6 The '803 patent is what the '803
7 patent is.

8 It is its specifications, its
9 figures, its claims. That is what the patent
10 is. And any summary of two or more -- like I
11 said, a summary therefore would be inherently
12 incomplete.

13 BY MR. KIM:

14 Q. So, what is the main problem that
15 '803 patent is trying to solve?

16 MR. MUELLER: Objection.

17 THE WITNESS: Did I identify a main
18 problem in my expert report of the '803
19 patent? Because if I did, please point me to
20 it.

21 I don't think that is an answerable
22 question.

1 BY MR. KIM:

2 Q. I'm asking your expert opinion on
3 the patent that you wrote your declaration on.

4 I'm asking, could you, in your own
5 words, describe what this patent is trying to
6 solve?

7 A. Well, I could read the entire
8 specification, which is what the patent says,
9 including the claims. That is what the patent is
10 trying to do.

11 And the claims are what the claims
12 are.

13 Q. So, you are unable to summarize the
14 patent in general sense what it is about?

15 MR. MUELLER: Objection to form.

16 THE WITNESS: The patent in general
17 is about enhanced uplink operation in soft
18 handover. That is what the patent is about.

19 BY MR. KIM:

20 Q. What about the enhanced uplink
21 operation in soft handover?

22 MR. MUELLER: Objection to form.

1 THE WITNESS: Like I said, if I
2 provide a new opinion in summarizing the
3 opinion of what the patent is about, please
4 point me to it.

5 But, other than that, again, the
6 patent specifications talk about a number of
7 different things. The patent claims talk
8 about other things. And, I don't think that
9 there is a way to summarize that in one or
10 two or three sentences.

11 BY MR. KIM:

12 Q. Okay. And the '803 patent claim
13 requires an acknowledgment or a
14 non-acknowledgment to be received only from the
15 primary cell, correct?

16 MR. MUELLER: Objection.

17 THE WITNESS: So, Claim 6 of the
18 '803 patent is a dependent claim. It depends
19 on 5, which depends on 1.

20 But, Claim 6 specifically talks
21 about the WTRU of Claim 5, where the
22 transceiver and the processor are configured

1 to close a WTRU to process an
2 acknowledgment/negative acknowledgment to the
3 uplink transmission received only from the
4 primary cell.

5 So, that language is in Claim 6.

6 BY MR. KIM:

7 Q. Now that you read that, so the claim
8 you just read requires a acknowledgment or
9 non-acknowledgment to be received only from
10 primary cell, correct?

11 A. You said some of the words. I read
12 the entire claim. So, you are reading your words
13 in the context of the claim. That is what the
14 claim says.

15 Q. And do you rely on LG Exhibit 1008
16 to teach this only from primary cell limitation?

17 A. I don't know. I heard you say NG,
18 or maybe I misheard.

19 Could you repeat it?

20 Q. Yes. In your declaration you
21 discussed LG, in connection with the ACK/NACK
22 limitation; is that correct?

1 A. Where in my declaration?

2 Q. So, in 3G soft handover, the WTRU
3 maintains connection to multiple cells
4 simultaneously, correct?

5 A. Could you repeat that?

6 Q. In 3G soft handover, the WTRU
7 maintains connections to multiple cells
8 simultaneously; is that correct?

9 A. Are you reading from my report or
10 are you just asking generally?

11 Q. General knowledge of the soft
12 handover?

13 A. Yes. During soft handover, the
14 mobile device is in simultaneous communication
15 with both -- with two cells who could transmit
16 the same information.

17 The transmission of information is
18 the same in both cells, enabling the receiver to
19 combine the two versions and getting a better
20 reception than either one of them is.

21 Q. And can that be called
22 microdiversity, just for easier way to call this

1 multiple cells providing, that you have just
2 mentioned?

3 MR. MUELLER: Objection.

4 BY MR. KIM:

5 Q. How you referred to that?

6 A. I am not sure I am -- I don't like
7 to abbreviate things for simplicity, because
8 simpler is better, but then becomes wrong.

9 So, let's just stick to whatever it
10 is we need to talk about.

11 Q. So, WTRU maintaining connections to
12 multiple cells simultaneously, in this
13 environment, can multiple cells transmit
14 acknowledged/non-acknowledge signalling to the
15 WTRU?

16 MR. MUELLER: Objection, form.

17 THE WITNESS: I, I don't know where
18 you are reading from. And can they -- you
19 know, I don't know if they can or not
20 depending on what the system is, what the
21 situation is.

22 So, I don't know what the correct

1 answer is, because I don't know the complete
2 scenario that you have in mind.

3 If you are reading from my report,
4 please point me to it, so I can know what
5 context we are talking about.

6 BY MR. KIM:

7 Q. So, when WTRU maintains connections
8 to multiple cells simultaneously, can multiple
9 cells transmit acknowledgment signal --
10 acknowledged signals to the WTRU?

11 MR. MUELLER: Objection to form.

12 THE WITNESS: It depends on what it
13 is, what the situation is, what the standard
14 is, what the specifications say, what the
15 options are.

16 So, it depends on many things. I
17 don't know the answer to that because I don't
18 know the full context.

19 BY MR. KIM:

20 Q. But is it possible?

21 MR. MUELLER: Same objection.

22 THE WITNESS: The laws of nature

1 allow that, so it is possible. The laws of
2 nature, not whether a specific situation,
3 specific protocol does or doesn't allow it.
4 I wouldn't know the specific protocol.

5 BY MR. KIM:

6 Q. Can you identify any prior art from
7 before 2004 that describes restricting
8 acknowledgment/non-acknowledgment signalling to
9 only the primary cell in 3G soft handover system?

10 MR. MUELLER: Objection, form.

11 THE WITNESS: I provided my
12 invalidity -- excuse me.

13 I provided my invalidity analysis in
14 my report.

15 BY MR. KIM:

16 Q. So, can you identify any prior art?

17 A. I did identify a prior art related
18 to the relevant claims.

19 Q. Not relating to restricting
20 acknowledgment/non-acknowledgment signalling to
21 only the primary cell?

22 A. So, as I explained in my expert

1 report in Paragraph 254: Transmitting
2 information and receiving acknowledgment and the
3 non-acknowledgment, which I abbreviate as
4 ACK/NACK, is a result of the data communications
5 itself.

6 And then I proceed to point out
7 that, for example, a classical book on GSM by
8 first author B. Mouly explains that all three
9 protocols use HDLC-like mechanisms for backward
10 error correction with the choice of two modes.

11 And one of these mode being the
12 acknowledged mode, ensuring correction or
13 erroneous frames by repetition.

14 And then I go on in my report and I
15 provide additional information on how ACK/NACKs
16 were well known, in various different textbooks.

17 And the fact that the ACK/NACK would
18 be received from a primary cell and it would
19 receive -- it would be received only from the
20 primary cell, because the mobile is only talking
21 to the primary cell at the time of transmission
22 of that message.

1 Q. So, can you identify any prior arts
2 before 2004 that describes restricting ACK/NACK
3 signalling to only the primary cell?

4 A. Yes, I did.

5 Q. Which one is it?

6 A. Well, I identified Ericsson, in
7 combination with 25.331, and in combination with
8 the textbook by Mouly, which is one of the
9 exhibits.

10 Also another textbook by a Dimitri
11 Bertsekas and Robert Gallager which was published
12 in 1992.

13 And those are examples. So,
14 something that was very well known that ACK/NACK
15 would be transmitted, it is.

16 Q. So, the prior to art you mentioned
17 from 1992 describes restricting ACK/NACK
18 signalling to only the primary cell in a 3G soft
19 handover system?

20 A. The claim, Claim 6 requires that the
21 WTRU of Claim 5, putting the transceiver and the
22 processor are farther configured, farther

1 referring to other configurations that have
2 already has in the previous claims, that caused a
3 WTRU to process an acknowledgment/negative
4 acknowledgment to the uplink transmission
5 received only from the primary cell.

6 So, it doesn't talk about any soft
7 handover or anything. It just requires that the
8 ACK/NACK to the uplink transmission be received
9 only from the primary cell.

10 And, when the mobile is talking to
11 only the primary cell, the ACK/NACK has to come
12 from the primary cell.

13 And the ACK/NACK coming from the
14 receiver was well known and -- was well known in
15 the art. But I also provide very specific
16 references to at least two texts, two books that
17 describe in detail the ACK/NACK procedures that
18 were well known at the time.

19 MR. KIM: It has been about an hour.

20 Would you like to take another break or do
21 you want to proceed?

22 THE WITNESS: Yeah, that is a good

1 idea.

2 MR. KIM: Okay. Let's go off
3 record.

4 THE VIDEOGRAPHER: Stand by. The
5 time is 11:31 a.m., we are off the record.

6 (Recess taken -- 11:31 a.m.)

7 (After recess -- 11:46 a.m.)

8 THE VIDEOGRAPHER: The time is
9 11:46 a.m., we are back on the record.

10 BY MR. KIM:

11 Q. Let's pick up where we left off
12 before the break.

13 Is there any pre-2004 evidence
14 motivating the specific combination of the
15 TS 25.331 and Sebire, or is the combination
16 derived by working backward from the '803 patent
17 claims?

18 MR. MUELLER: Objection, form.

19 THE WITNESS: I don't even
20 understand what you mean by working
21 backwards.

22 BY MR. KIM:

1 Q. In hindsight.

2 A. No, it is not in hindsight. Those
3 are the documents that a POSITA would naturally
4 see as being relevant, as I discussed earlier,
5 and would combine them.

6 Q. So, if that would happen naturally,
7 could you point to a single 3GPP document from
8 2004 or earlier that suggests combining 2G GPRS
9 single cell signalling with 3G multicell
10 feedback?

11 A. A person of ordinary skill in the
12 art would be aware of the development of mobile
13 communications, mobile digital communications
14 specifically, with GSM and with the derivatives
15 of GSM, which in fact became the basis of the
16 UMTS system.

17 So, a person of ordinary skill in
18 the art would be knowledgeable in both
19 GSM/GPRS/EDGE as well as the then newly developed
20 air interface of 3GPP, which by the way for the
21 core networking of the 3GPP system, they used the
22 core networking that existed in GSM and GPRS.

1 So, there is an overlap there. And
2 the person of ordinary skill in the art would be
3 aware of that overlap and would therefore be
4 motivated to combine the knowledge and the
5 teachings of those different standards.

6 Q. So, is there a 3GPP document from
7 2004 or earlier that suggests combining 2G to 3G?

8 A. I would have to look for that and
9 see if such a document exists. I don't know the
10 answer to that question.

11 Q. Is there any pre-2004 evidence
12 motivating the specific combination of TS 25.331
13 and Sebire?

14 A. I believe you asked me that question
15 before the break, too.

16 And as I explained previously, the
17 person of ordinary skill in the art would have
18 recognized that the motivation to combine Sebire,
19 Ericsson and 25.331, was there because of their
20 alignment in the technological scope and
21 objectives.

22 Q. So, would combining of the TS 331

1 and Sebire produce a functional system that
2 person of the ordinary art in 2004 would have
3 pursued?

4 A. Could you repeat, read the question
5 back?

6 Q. Yes. You mentioned the person of
7 skill in the ordinary art in 2004 would have
8 motivation to combine; is that correct?

9 A. To combine?

10 Q. To combine 25.331 and Sebire?

11 A. And Ericsson, yes.

12 Q. And Ericsson.

13 And would those combining, produce a
14 functional system, given the knowledge of person
15 of ordinary skill in the art in 2004?

16 A. Yes, it would.

17 Q. Could you describe how that combined
18 system would work?

19 A. Well, specifically with respect to
20 Claim 6, which requires that the processor -- the
21 transceiver and the processor are configured to
22 cause the WTRU to process an

1 acknowledgment/negative acknowledgement to the
2 uplink transmission. That is how it worked.

3 The mobile makes an uplink
4 transmission. And then the question of receiving
5 an acknowledgment or a negative -- or a negative
6 acknowledgment.

7 And the person of ordinary skill in
8 the art would recognize that TS25.331 and
9 Ericsson are directed to transmitting such
10 messages.

11 And, of course, Sebire explicitly
12 provides for the ACK/NACK to be received and --

13 So, a person of ordinary skill in
14 the art would fully recognize the obviousness and
15 the reason to look at Sebire to address a
16 question of receiving the ACK/NACK.

17 Q. And can you point me to where
18 TS 25.331 discloses that the WTRU receives
19 ACK/NACK only from the primary cell?

20 A. During the handover procedure, when
21 the WTRU is only communicating with a primary
22 cell, the ACK/NACK can only come from the primary

1 cell.

2 Q. So, could you point me to the 3GPP
3 standard, TS 25.331 where it would suggest that
4 WTRU receives ACK/NACK only from the primary
5 cell?

6 A. Yes, 25.331 is a technical document
7 and it specifies the RSC procedures.

8 It does not specify the ACK/NACK.
9 That is specified elsewhere in the 3GPP
10 standards, but Sebire explicitly teaches the well
11 known concept of the receiving an ACK/NACK.

12 And sometimes this language gets
13 very messy in the transcription, so I will slow
14 down.

15 The mobile device is well known to
16 receive an ACK/NACK to a transmission that is
17 previously engaged in, from receiving that
18 ACK/NACK from the intended receiver of the
19 message which would be the base station.

20 Sebire explicitly teaches that. And
21 a person of ordinary skill in the art would not
22 only see Sebire teaching that, but would know

1 that ACK/NACKs are transmitted in response to a
2 message that has been previously transmitted.

3 And the ACK/NACK is therefore
4 received.

5 So, the, to -- Ericsson and TS25.331
6 address the handover procedures. And the RSC
7 protocols is defined in TS25.331, with all of the
8 messages rules the allocation of resources. And
9 a POSITA would look at Sebire to clearly spell
10 out the reception of the ACK/NACK.

11 And that reception of the ACK/NACK
12 could only be received from the primary cell,
13 because at that point the mobile device is only
14 communicating to the primary cell.

15 Q. And that fact is not disclosed in
16 TS 25.331?

17 A. TS 25.331 is titled Technical
18 Specification Group Radio Access Network.
19 Evolved universe of the radio access and evolved
20 universe of the radio access network -- I'm
21 sorry, I'm looking at the wrong document 331.
22 Here it is.

1 And, in particular Radio Resource
2 Control, in parentheses, RRC, Protocol
3 Specification.

4 So, that document talks about the
5 RRC messages, and the RRC messages will not
6 disclose -- do not discuss the ACK/NACK aspects
7 that we were just talking about.

8 So, the specific transmission of the
9 ACK/NACK messages is not a Layer 3 function which
10 is what 25.331 deals with.

11 Q. Got it. So, 25.331 does not deal
12 with the WTRU receiving ACK/NACK?

13 A. The objective of the subject matter
14 that TS25.331 deals with is the RRC protocol, the
15 Radio Resource Control protocol which is a
16 Layer 2 functionality -- I'm sorry, it is a
17 Layer 3 functionality.

18 The ACK/NACK that we are discussing,
19 in particular of the context of hybrid ARQ, is a
20 hybrid between Layer 1 and Layer 2.

21 And the TS25.331 is obviously just
22 one aspect of the overall communication system.

1 And a person of ordinary skill in
2 the art would understand that that document, in
3 conjunction with Ericsson and Sebire, teach a
4 well known fact that transmitted messages are
5 generally -- can generally be acknowledged as --
6 transmitted messages either are in acknowledged
7 mode or unacknowledged mode.

8 And acknowledge mode was well known
9 in which ACK/NACK was transmitted. And 25.331 is
10 not the document for the ACK/NACK details would
11 be provided.

12 But, the POSITA would recognize that
13 that ACK/NACK is transmitted based on both a
14 POSITA's knowledge, but specifically I point to
15 Sebire for additional support.

16 Q. Is it basically --

17 A. And if I just may add --

18 Q. Go ahead.

19 A. -- 25.331 does recognize in
20 Section 3.2 the fact that both acknowledged mode
21 and unacknowledged mode exists as I was
22 discussing a minute ago.

1 And so, 25.331 does recognize the
2 existence of the acknowledged mode in which
3 ACK/NACKs are transmitted. And Sebire explicitly
4 discloses how that operation is performed.

5 Q. But, 25 -- but, 25.331 does not
6 disclose ACK/NACK being restricted to only one
7 primary cell?

8 A. 25.331 does disclose the existence
9 of ACK/NACK, because it does disclose the
10 acknowledged mode operation and it does not
11 explicitly disclose that that is received only
12 for the primary cell.

13 But, as I explained in my report,
14 the same way as in Claim 5, the mobile device,
15 the WTRU in the patent is communicating only with
16 the primary cell.

17 The transceiver and the processor
18 are configured to receive the acknowledgment,
19 negative acknowledgment from the primary cell and
20 only the primary cell, for the same reasons that
21 that is the case with Claim 5.

22 Q. Is it physically possible for a WTRU

1 to communicate with a cell if it does not know
2 that cell's scrambling code?

3 A. Could you repeat the question?

4 Q. If a WTRU does not know the cell's
5 scrambling code, is it physically possible for a
6 WTRU to communicate with a cell?

7 A. It would have to know the scrambling
8 code.

9 Q. Scrambling codes configure how the
10 WTRU decodes transmissions from a cell, correct?

11 A. No.

12 Q. So, without a scrambling code, the
13 WTRU cannot distinguish one cell's transmission
14 from another's, correct?

15 A. It reads the -- the WTRU reads the
16 scrambling code that the transmitter of the base
17 station uses in order to spread the received
18 signal.

19 Q. So, without a scrambling code, can
20 WTRU distinguish one cell from another -- one
21 cell's transmission to another cell's
22 transmission?

1 A. As I said a minute ago, the WTRU
2 would need the scrambling code that is used by
3 the base station to scramble all of its
4 transmission or all of its transmissions in order
5 to spread the received signal.

6 Q. And, timing parameters configure
7 when the WTRU listens for a signals from a cell,
8 correct?

9 MR. MUELLER: Objection to form.

10 THE WITNESS: I'm sorry. Repeat
11 that. Could you repeat the question?

12 BY MR. KIM:

13 Q. Timing parameters configure when the
14 WTRU listens for signals from a cell; is that
15 correct?

16 MR. MUELLER: Objection, form.

17 THE WITNESS: I don't know what
18 timing parameters you are referring to.

19 BY MR. KIM:

20 Q. What other timing parameters are
21 there?

22 MR. MUELLER: Objection to form.

1 THE WITNESS: And you said what

2 other timing parameters, so --

3 BY MR. KIM:

4 Q. Yeah. Under the context of the '803
5 patent, could you describe what timing parameters
6 are?

7 MR. MUELLER: Objection to form.

8 THE WITNESS: The '803 patent does
9 not discuss any specific timing parameters
10 that I can remember.

11 But, if I'm wrong, please point out
12 to me where it is I am not remembering.

13 BY MR. KIM:

14 Q. But as you mentioned, the person of
15 the ordinary art and skill can fill the gaps.
16 And what would the POSITA --

17 How would the POSITA interpret
18 timing parameters?

19 MR. MUELLER: Objection, form.

20 THE WITNESS: The POSITA would
21 interpret whatever timing parameters it gets
22 according to whatever protocols, the relevant

1 protocols say about the timing parameters.

2 BY MR. KIM:

3 Q. For the soft handover, what are --
4 could you list out some potential timing
5 parameters?

6 A. The patent doesn't show any timing
7 parameters.

8 Q. So, would it be possible for WTRU to
9 communicate with the cell without timing
10 parameters?

11 A. WTRU communicates with the base
12 station. It receives information from the base
13 station before ever receiving any timing
14 parameters.

15 So, the answer is yes. Some
16 communication would be possible without any
17 timing parameters.

18 Q. Can channel assignments configure
19 which resources the WTRU monitors for a cell,
20 correct?

21 A. I'm sorry, say that again?

22 Q. Channel assignments.

1 A. What assignments?

2 Q. Channel?

3 A. Oh, channel assignments, uh-huh.

4 So, I'm sorry, I couldn't hear your question.

5 Q. No, no.

6 Channel assignments configure which
7 resources the WTRU monitors for a cell; is that
8 correct?

9 MR. MUELLER: Objection to form.

10 THE WITNESS: Yes. Channel
11 assignments are made by channelization codes.

12 And those are important parameters
13 in use by the mobile to receive the necessary
14 information.

15 But, relevant to that is the fact
16 that during prosecution, as I explained in
17 Paragraph 120, during prosecution the then
18 pending Claims 1, 7, and 13, were rejected
19 from the 102e rejection as being anticipated
20 by Ranto-Aho, which is part of patent number
21 7,606,205.

22 And the examiner said that the

1 claims were unpatentable over Ranto-Aho.

2 And on January 26, 2020, the
3 applicant filed a response to that office
4 action without amending the claims.

5 And the applicant argued that in
6 Ranto-Aho, quote: The BTSs or Node-Bs
7 receiving the MBMS content then transmit the
8 content using multicast messages to one or
9 more terminals using a common channel MBMS
10 transmission.

11 And the terminals compare pilot
12 signals on CPICH and perform selection on a
13 common channel based on the result of the
14 channel comparison.

15 And then continues to say that,
16 quote: Although Ranto-Aho describes an
17 architecture having multiple base stations or
18 Node-Bs, Ranta-Aho is silent on the concept
19 of a handset receiving configuration
20 information for a primary cell in one or more
21 non-primary cells as recited in the pending
22 independent claims.

1 So, if one looks at Ranto-Aho, which
2 patent owner says is silent on the concept of
3 a handset receiving configuration
4 information.

5 And you mentioned the channel, that
6 would be configuration information.

7 Ranta-Aho describes -- for example,
8 looking at Ranta-Aho on Column 1, Line 40:
9 This invention proposes a method and system
10 for handover, preferably soft handover, which
11 do not require BTS synchronization and do not
12 impose any extra timing requirements for the
13 terminal, e.g. the user equipment or network.

14 It goes on to explain that one of
15 the purposes of this invention is to present
16 a system and method for providing soft
17 handover for multicasting content.

18 One of the preferred solution is
19 based on the use of DSCH and selection
20 diversity.

21 It goes on to teach that in any
22 case, one of the key ideas from the invention

1 is that in case of multicast content
2 information, parentheses, cell information,
3 which may be transmitted in SIBs, DCCH,
4 dedicated control channel, et cetera, is
5 provided also on the other cells which have
6 the same multicast content.

7 It goes on, and it explains in
8 Column 4, Line 52 ish: In step S21, which
9 refers to Figure 2, a terminal number 4, e.g.
10 a UE, which is a model, decides to join a
11 multicast service and registers thereto
12 service joining.

13 The terminal port reads SIBs and
14 notifications transmitted on the broadcast
15 channel. Notifications may also be sent on
16 another channel.

17 The SIBs contain cell information
18 including the channelization code with regard
19 to each of the cells which transmit the same
20 MBMS content.

21 So, this is very explicit teaching
22 of including the channelization codes which

1 we were discussing earlier as to which
2 channel it is.

3 It goes on in Column 5 where it
4 states: When the system detects in steps
5 S-26 that the cell transmitting the pilot
6 signal received better by the terminal does
7 not offer the same multicast content, a cell
8 reselection function or means may be
9 activated, in step S28.

10 The new cell received better by the
11 terminal 4 may be instructed by the network
12 management or a controller to transmit
13 additionally the MBMS content which the
14 terminal 4 wants to receive.

15 The SIBs are adapted accordingly so
16 as to additionally include or indicate the
17 cell information including the channelization
18 code of the new cell.

19 It goes on, and again, further down,
20 around Line 43, it says: The network
21 transmits the cell information on the cells
22 in the active set that transmit the same MBMS

1 content including the spreading codes, et
2 cetera.

3 The information can be transmitted
4 in SIBs or DCCH, dedicated control channel.

5 And it goes on, and talks about --
6 well, it is repetitive, including the, like,
7 here, I will read it, it is Line 48: In
8 steps S31 to S37 shown in Figure 3 are mostly
9 similar to the steps S21 to S27 of Figure 2.

10 The above description of these steps
11 therefore also applies to steps S31 to S37
12 with the following exception.

13 In step S32, SIBs or the information
14 sent on DCCH is read by the terminal 4 for
15 detecting the information on the cells, in
16 the active set, that transmit the same MBMS
17 content, including the spreading codes, et
18 cetera.

19 And, finally, in Claim 5, which
20 depends on Claim 1, so, I will read Claim 1:
21 A method comprising transmitting multicasted
22 content by multiple cells and transmitting

1 cell information by at least one of said
2 multiple cells on one or more other cells,
3 wherein cell information indicate which cells
4 transmit the same multicasting content.

5 So, Claim 1 teaches transmitting
6 cell information. And then Claim 5, which is
7 a dependent claim, states: The method
8 according to Claim 1 wherein the cell
9 information comprises channelization codes
10 with regard to each of the cells. And I will
11 repeat, with regard to each of the cells,
12 which transmit the same multicasting content.

13 So, a person of ordinary skill in
14 the art reading Ranta-Aho, and then reading
15 patent applicants of the '803 that says that
16 Ranta-Aho is silent on the concept of the
17 handset receiving configuration information
18 for a primary cell and one or more of a
19 non-primary cells would be at a loss as to
20 well, if the information that includes
21 channelization codes that define the channels
22 doesn't qualify as being the relevant

1 configuration information, what would be the
2 relevant configuration information.

3 And the '803 patent provides
4 absolutely no guidance as to what that
5 information might be.

6 BY MR. KIM:

7 Q. Would you agree that collectively
8 scrambling codes and channel assignments are
9 parameters that configure the WTRU's
10 communication with a cell?

11 A. I would say that the channelization
12 codes are definitely configuration information.

13 But, the patent owner says that it
14 is not. So, I'm at a loss as to what the patent
15 owner had in mind -- or it was the applicant at
16 the time.

17 Q. So, is it your testimony that
18 scrambling codes and channel assignments do not
19 configure the WTRU's communication with a cell?

20 MR. MUELLER: Objection, form.

21 THE WITNESS: Yeah, I don't know
22 what you mean by channel assignment.

1 The channelization code is what was
2 disclosed in Ranta-Aho and what the patent
3 applicant said that that is not relevant or
4 it is silent with the concept of
5 configuration information.

6 So, that according to patent
7 applicant is not configuration information.

8 So, I and the POSITA reading the
9 '803 patent in conjunction with the file
10 history actions and statements therein would
11 be at a loss at what patent applicant
12 considers to be configuration information
13 since it doesn't include the channelization
14 code.

15 BY MR. KIM:

16 Q. What do you mean by channelization
17 code?

18 A. What do I mean by channelization
19 code; is that what you said?

20 Q. Yes. Yes.

21 A. What I mean by channelization code
22 is the channelization code as explained in

1 Ranta-Aho and as would be understood by a person
2 of ordinary skill in the art at that time in the
3 3G system.

4 Q. A person of ordinary skill in the
5 art wouldn't understand what channel assignments
6 are?

7 A. There are different channels. And a
8 person of ordinary skill in the art would
9 understand what channel assignments are.

10 And channelization codes are used to
11 make channel assignments. But, the patent
12 applicant said once again that the channelization
13 code does not satisfy the configuration
14 information required by the claim of the '803
15 patent.

16 Q. So, you wouldn't call scrambling
17 codes and channelization, channelization code,
18 you said, channelization code, does that
19 configure the WTRU's communication with a cell?

20 MR. MUELLER: Objection to form.

21 THE WITNESS: I told you what
22 Ranta-Aho taught which is, among other

1 things, a channelization code specifically.

2 And what the '803 patent applicant
3 stated that that is not -- that does not meet
4 the requirement of disclosing configuration
5 information.

6 So, in the opinion of the patent
7 applicant, the channelization code is not an
8 example of configuration information.

9 So, again the person of ordinary
10 skill in the art reading the '803 patent,
11 along with his prosecution history, would be
12 at a loss at what patent applicant had in
13 mind when they said configuration information
14 in the claim.

15 BY MR. KIM:

16 Q. So, combination of the scrambling
17 code timing parameters and channelization code,
18 what would the person of ordinary skill in the
19 art use in 2004 to refer to them?

20 MR. MUELLER: Objection to form.

21 THE WITNESS: In the context of the
22 '803 patent and its prosecution history, a

1 person of ordinary skill in the art would be
2 at a loss as to what the patent owner
3 considered to be a configuration information,
4 because the patent owner in arguing for the
5 allowance of the then pending application,
6 said that the channelization code does not
7 constitute configuration information.

8 Because like I said, the patent
9 applicant said Ranta-Aho is silent on the
10 concept of a handset receiving configuration
11 information.

12 So, they are saying that the
13 channelization code is not configuration
14 information without ever saying what
15 configuration information is.

16 So, a person of ordinary skill in
17 the art would be, like I said, would just not
18 know what constitutes in the opinion of the
19 applicant, configuration information.

20 BY MR. KIM:

21 Q. So, what would person of ordinary
22 skill in the art would call a configuration

1 information?

2 MR. MUELLER: Objection to form.

3 THE WITNESS: A person of ordinary
4 skill in the art would consider a
5 channelization code as an example of
6 configuration information.

7 But, the patent owner said it is
8 not.

9 BY MR. KIM:

10 Q. So, outside --

11 A. -- or the applicant I should say,
12 because the applicant is not necessarily the same
13 as the owner. I don't remember the timeline.

14 So, because that was disavowed as
15 being configuration information, like I said the
16 person of ordinary skill in the art would be at a
17 loss.

18 Q. So, is there anything in the 3GPP
19 specification or the knowledge of a POSITA that
20 would prevent a reasonable engineer from calling
21 collection of parameters, including scrambling
22 codes, configuration information?

1 MR. MUELLER: Objection to form.

2 THE WITNESS: As you started this
3 line of questioning, you brought up the
4 question of channelization, knowing what
5 channel it is.

6 That would be the most apparent
7 piece of configuration information.

8 But, once the patent applicant
9 disavowed that as being configuration
10 information, the person of ordinary skill in
11 the art would look at the '803 patent for
12 some guidance as to what is configuration
13 information in the possession of the
14 inventors at that time.

15 And the patent provides no
16 information as to what that configuration
17 information is other than saying that the
18 channelization code is not configuration
19 information.

20 BY MR. KIM:

21 Q. So, is there any specific knowledge
22 that would prevent a reasonable engineer from

1 calling these collections of parameters

2 configuration information?

3 MR. MUELLER: Objection to form.

4 THE WITNESS: Like I said,

5 repeatedly, the person of ordinary skill in

6 the art would think of the channel -- excuse

7 me. Excuse me.

8 Would think of the channelization

9 code as being configuration information.

10 But, the fact that the applicant

11 disavowed that in order to get the patent --

12 the then pending application allowed, would

13 make the person of ordinary skill in the art

14 wonder what on earth does the inventor have

15 in his or their head as to what constitutes

16 configuration information.

17 And the inventors in the patent

18 specification provide absolutely no

19 indication of what constitutes configuration

20 information.

21 Again, other than the fact that the

22 channelization code is not configuration

1 information.

2 BY MR. KIM:

3 Q. But is it possible for WTRU to
4 communicate with a cell without configuration
5 information?

6 MR. MUELLER: Objection to form.

7 THE WITNESS: Would -- I don't even
8 know what that means, because I don't know
9 what configuration information means in the
10 context of the '803 patent, because there is
11 no indication of what configuration
12 information is in the '803 patent.

13 Again, other than the fact that it
14 is not channelization code, what is it?

15 BY MR. KIM:

16 Q. Configuration information and
17 knowledge general knowledge of a person -- a
18 POSITA, there are more than one parameter; is
19 that correct?

20 MR. MUELLER: Objection to form.

21 THE WITNESS: Generally
22 configuration information would just depend,

1 would depend on what it is that is being
2 configured.

3 BY MR. KIM:

4 Q. The WTRU to communicate with a cell?

5 A. One of the configuration
6 information -- let me just be precise here. So,
7 give me one second.

8 So, the claim requires that the
9 mobile device WTRU receives configuration
10 information for the primary cell and the one or
11 more non-primary cells.

12 Because, the configuration
13 information we are talking about is configuration
14 information for the primary cell as well as
15 configuration information for a non-primary cell.

16 What would cause that configuration
17 information for a primary cell would depend on
18 what it is that is being configured for.

19 And, in the case of handoff,
20 Ranta-Aho provided an example of that
21 configuration information in the independent
22 claim, just the information. And in the

1 dependent claim, they provide a very specific
2 example of the generalization code, which the
3 patent applicant disavowed and said, again, that
4 is, the Ranta-Aho is silent on that concept.

5 So, they said, that is no good.

6 So, again, a person of ordinary
7 skill in the art looking at that totality would
8 be at a loss as to what the patent inventors had
9 in mind, had conceived of and understood the
10 configuration information for doing -- for
11 performing the functions of the claimed
12 invention, what that configuration information
13 would be.

14 And the function, of course, of the
15 patent is to deal with handover. And what
16 configuration information for handover would be
17 required in the '803 patent, a person of ordinary
18 skill in the art would not be able to ascertain
19 that because there is no guidance in the file, in
20 the patent specification, in the claims, in the
21 file history, there is absolutely no guidance as
22 to what it is.

1 But, there is a guidance as to one
2 example where it is not which is the
3 scrambling -- I'm sorry, the channelization code.

4 Q. So, a person of ordinary skill in
5 the art would not be able to fill the gap on what
6 configuration informations are when it comes to
7 soft handovers?

8 MR. MUELLER: Objection, form.

9 THE WITNESS: Good point. It is a
10 gap. It is a glaring gap. It is a big gap.

11 And a person of ordinary skill in
12 the art would not be able to do that, to
13 ascertain that, in light of the
14 specification, which is only compounded by
15 the file history which says that the
16 channelization code is not configuration
17 information.

18 So, even if a person of ordinary
19 skill in the art were to somehow be able to
20 contemplate the first thing that one would
21 contemplate would be the channelization code,
22 which is exactly where we started this line

1 of questioning, because it makes sense that
2 you would need to know what the channel is,
3 and the channel is defined by the
4 channelization code.

5 And all of a sudden the person of
6 ordinary skill in the art would be faced with
7 a disavowing of that. And then the person of
8 ordinary skill in the art would not be able
9 to how to fill that gap, because the gap was
10 there, has just been enlarged by disavowing
11 something that could possibly be thought of
12 as being relevant.

13 BY MR. KIM:

14 Q. So, you mentioned the '803 patent
15 specifically teaches you that channelization code
16 cannot be configuration information?

17 A. When you say the patent teaches
18 that, as I think I explained clearly the
19 specification doesn't do that.

20 But, the file history does.

21 They examined or rejected the then
22 pending claim. The patent applicant came back,

1 did not amend the claim, and said hey,
2 Mr. Examiner, the prior art, Ranta-Aho, is silent
3 on the concept of a handset receiving
4 configuration information.

5 So, the applicant said that
6 Ranta-Aho is silent on the receiving
7 configuration information.

8 So, to the extent that the file
9 history is part of it, then yes, the person of
10 ordinary skill in the art would not know what
11 that is.

12 Q. So, for a cell to be added to WTRU's
13 active set, the WTRU must receive some
14 parameters, including scrambling code; is that
15 correct?

16 A. I'm sorry, say that again?

17 Q. For a cell to be added to a WTRU's
18 active set, the WTRU must receive parameters,
19 including scrambling code; is that correct?

20 MR. MUELLER: Objection to form.

21 THE WITNESS: This is in the
22 abstract, and the patent doesn't get

1 anywhere -- the patent specification doesn't
2 get anywhere close.

3 It is, it is silent as to what
4 configuration information might be.

5 BY MR. KIM:

6 Q. I said parameters. Are you
7 interpreting that as same word as configuration
8 information?

9 A. Well, I don't know what you mean by
10 parameters.

11 Q. Scrambling code is one of the
12 parameters I'm considering.

13 Is that a fair assumption?

14 A. I wouldn't call the scrambling code
15 a parameter. The scrambling code is that, a
16 scrambling code.

17 Q. So, you wouldn't include that as one
18 of the parameters nor one of the configuration
19 information even outside of the context of '803
20 patent?

21 A. Outside of the context of the '803
22 patent, lots of things are known.

1 The question is, what is the thing,
2 the scope of what the inventors of the '803
3 patent had understood and what was in their
4 possession in terms of the scope of the claim.

5 And, what the claim requires, which
6 is receiving the configuration information. The
7 claims, the specification, they are totally
8 silent on what was in the inventor's
9 understanding of what constitutes configuration
10 information.

11 So, without the knowledge that is
12 out there that might have known about, is not
13 reflected in the patent specification.

14 Q. So, under the context of the soft
15 handover -- so, is it your opinion that most
16 POSITA would not consider scrambling code to be
17 one of the configuration information?

18 A. I didn't say that.

19 Q. So, in the context of soft handover,
20 would POSITA consider scrambling code as one of
21 the configuration information?

22 A. Say that again.

1 Q. Under the context of soft handover,
2 would POSITA consider scrambling code to be one
3 of the configuration information?

4 A. The claim requires that the WTRU's
5 transceiver and processor, receive configuration
6 information for a primary cell and one or more
7 non-primary cells.

8 And that is not necessarily required
9 for -- you mentioned the scrambling code.

10 The scrambling code doesn't have to
11 be received by the primary -- by the mobile.

12 Q. I think the very first question we
13 started with, I believe, correct me if I'm wrong,
14 but I believe you mentioned it is, you require
15 scrambling code for WTRU to communicate with the
16 cell.

17 Is that incorrect?

18 A. I don't know what you mean by the
19 very first question.

20 But, the --

21 Q. I guess first question, line of
22 questioning I started with the configuration

1 information.

2 I think we started with, is it
3 physically possible for WTRU to communicate with
4 a cell if it does not know that cell's scrambling
5 code.

6 And I believe you answered it is
7 not.

8 A. That, to be complete, the mobile
9 device WTRU, yes, it would have to know the
10 scrambling code.

11 But, of course, the claim requires
12 something more specific. The claim requires that
13 the mobile receive configuration information for
14 a primary cell and the one or more non-primary
15 cells.

16 Q. So, I wasn't asking a question about
17 the claims. I was asking under the context of
18 soft handover.

19 Would POSITA consider scrambling
20 code to be one of the configuration information?

21 A. In general in order to communicate
22 with a base station, the mobile device, the

1 POSITA would understand that the mobile would
2 have to know what the scrambling code is and
3 would also need to know what the channelization
4 code is.

5 And then looking at the file history
6 of the '803 patent, the channelization code does
7 not qualify for that configuration information,
8 which would throw the entire question of what a
9 POSITA would understand to constitute necessary
10 configuration information up in the air, because
11 the disavowing of the channelization code
12 confuses, is probably the wrong word.

13 But, it makes it impossible for a
14 POSITA to know what is the understanding of the
15 inventors of what constitutes configuration
16 information as claimed.

17 Q. So, under the context of soft
18 handover, a POSITA would consider scrambling code
19 to be a configuration information; is that
20 correct?

21 MR. MUELLER: Objection, form.

22 THE WITNESS: I think we discussed

1 this a minute ago.

2 A POSITA would consider the
3 scrambling code to be configuration
4 information which the claim requires that
5 that be received by the device.

6 And a POSITA would not necessarily
7 think that it has to be received. It might
8 know what the configuration, what the
9 scrambling code is a priori.

10 But, equally importantly, the
11 scrambling code alone does not allow the
12 mobile device to receive the information.

13 It needs the channelization code as
14 well. And, Ranta-Aho described this broadly
15 but very specifically referred to the
16 channelization code which goes hand in hand
17 with the scrambling code.

18 And the patent applicant said no,
19 no, no, the channelization code is no good,
20 that that does not disclose any configuration
21 information.

22 So, what the POSITA would have

1 understood as the mobile needing to have
2 whether it is received or the mobile has
3 otherwise is still unknown.

4 But, in any case, that
5 channelization information does not qualify
6 for the configuration information.

7 So, a POSITA would be, again,
8 totally in the dark as to what the inventors
9 had in their mind as constituting
10 configuration information as claimed.

11 BY MR. KIM:

12 Q. As I mentioned, I was not
13 specifically asking for a claim. I was speaking
14 under the context of the soft handover.

15 Would POSITA consider scrambling
16 code to be one of the configuration information,
17 without reviewing this particular patent, just
18 knowing in the field of soft handover?

19 MR. MUELLER: Objection to form.

20 THE WITNESS: In the abstract, the
21 configuration information for soft handover
22 would have to be explained as to what

1 constitutes configuration information for
2 soft handover.

3 And whether that includes or doesn't
4 include any one particular aspect would just
5 depend on the specific -- on the specifics of
6 the situation.

7 So, if the '803 patent is that
8 specific situation and it does not provide
9 any guidance as to what configuration
10 information is except for -- and I know that
11 this is repetitive, but it is important to be
12 mentioned, other than the fact that the
13 channelization code is not an example of
14 configuration information.

15 BY MR. KIM:

16 Q. And is scrambling code one of the
17 examples of configuration information?

18 A. Well, if I am told that the
19 channelization code is not, I would say well, the
20 scrambling code is probably not, either. I don't
21 know.

22 But, if black is white, then white

1 is blue, then, who knows, maybe red is also
2 yellow.

3 Q. So, before you heard about the
4 channelization code, so you would have expected
5 scrambling code to be configuration information?

6 MR. MUELLER: Objection to form.

7 THE WITNESS: The channelization
8 information for what?

9 In the scrambling code and the
10 channelization code, code used in 3GPP to
11 communicate for mobile communication with
12 base stations.

13 BY MR. KIM:

14 Q. So, until you heard the fact that
15 channelization code was not part of the
16 configuration information, the POSITA, without
17 knowing that knowledge, would assume scrambling
18 code to be included in the configuration
19 information; is that standard knowledge under the
20 context of soft handover?

21 MR. MUELLER: Objection.

22 THE WITNESS: I don't know what

1 hypothetical you are creating.

2 I did the analysis of the '803
3 patent in light of the claims, the
4 specification and the file history.

5 And, that analysis, as I explained
6 repeatedly, provides that the patent
7 applicant was of the opinion that the
8 channelization code is not configuration
9 information.

10 At that point I had to take the
11 applicant's opinion at face value and say
12 well, if the channelization code does not
13 meet the requirement of configuration
14 information, what is configuration
15 information?

16 And the answer to that question by
17 any person of ordinary skill in the art
18 reading the patent, the patent specification,
19 and its file history, would say I have no
20 idea what it is.

21 BY MR. KIM:

22 Q. So, the way you are phrasing it,

1 because of this essential information that is
2 usually contained within configuration
3 information is specifically being told not
4 included was just throwing you off; is that
5 correct?

6 MR. MUELLER: Objection, form.

7 THE WITNESS: What I said is that
8 the patent applicant disavowed the
9 channelization code as being an example of
10 configuration information.

11 And the logical result to that
12 disavowment is that the person of ordinary
13 skill in the art would not have any idea of
14 what the patent inventors had in mind when
15 they said configuration information.

16 Because there is no example or
17 explanation or mention of what configuration
18 information is in the specification of the
19 patent, other than getting in the claim and
20 of course in the abstract which doesn't
21 really add anything.

22 BY MR. KIM:

1 Q. So, do POSITA not have general
2 information, general knowledge about what
3 configuration informations are under the context
4 of soft handover without reading the
5 specification?

6 A. A person of ordinary skill in the
7 art would understand much as Ranta-Aho
8 understood, the configuration information in soft
9 handover. And that is why I read that part,
10 portions of Ranta-Aho talking about soft handover
11 includes the channelization code.

12 But, patent applicant said no, you
13 are wrong, it doesn't include it.

14 So then a person of ordinary skill
15 in the art would be, once again, at a loss as to
16 what applicants had in mind when they recited
17 the -- when they included the limitation,
18 received configuration information for a primary
19 cell and the one or more non-primary cells.

20 Clearly the person of ordinary skill
21 in the art would understand that that
22 configuration information does not include

1 channelization code.

2 So then, what does it include? And
3 the answer to that would be I don't know.

4 Q. So, you mentioned as general
5 knowledge for a POSITA that channelization code
6 is one of the configuration information; is that
7 correct?

8 MR. MUELLER: Objection. Form.

9 THE WITNESS: A person of ordinary
10 skill in the art reading Ranta-Aho would
11 understand that Ranta-Aho provides an example
12 of configuration information in the
13 channelization code.

14 So would understand that the
15 channelization code is an example of
16 configuration information.

17 But, that is handled 80 degrees out
18 of whack with respect to what patent
19 applicant said, because patent applicant said
20 no, it is not.

21 Because patent applicant said that
22 Ranta-Aho is silent on the concept of the

1 handset receiving configuration information.

2 So, if it is silent in that concept,
3 then clearly the channelization code is
4 not -- does not satisfy the configuration
5 information requirement.

6 BY MR. KIM:

7 Q. So, why would it confuse a POSITA
8 that channelization code is not one of the
9 configuration information if they don't believe
10 that is, that should be part of configuration
11 information?

12 MR. MUELLER: Objection to form.

13 THE WITNESS: Because a person of
14 ordinary skill in the art reading the
15 response to the examiner's rejection would
16 read the patent owner's opinion that that
17 channelization code is not what we mean, we
18 being the patent applicant, by configuration
19 information.

20 So, the patent applicant says that,
21 no, no, no, that is not what I mean, then the
22 person of ordinary skill in the art would

1 say, okay, that is no not what you mean, that
2 is fine. But, what do you mean?

3 And, the patent applicant never
4 explained what they do mean.

5 BY MR. KIM:

6 Q. So is it your opinion that POSITA
7 does not consider channelization information to
8 be normally included in configuration
9 information?

10 A. I didn't say that.

11 Q. So, do POSITA normally think
12 channelization code to be one of the
13 configuration information?

14 MR. MUELLER: Objection, form.

15 THE WITNESS: As I have explained, I
16 don't know by now, half a dozen times, a
17 POSITA would look at the patent specification
18 and would look at the patent's file history
19 and would recognize, would be informed that
20 the patent owner does not consider the
21 channelization code as being an example of
22 configuration information.

1 And the POSITA would have to
2 understand what the scope of the patent is
3 based on what the patent is.

4 And the patent owner, or applicant
5 at the time, explicitly said that the
6 channelization code is not what we mean by
7 configuration information.

8 So, a POSITA's information would be
9 modulated by what the patent owner of the
10 alleged invention says is and isn't.

11 And if the patent owner said that
12 this is not an example of configuration
13 information, the POSITA would have to accept
14 that position of patent owner. And then look
15 at what is it that patent owner had in mind
16 when patent owner stated received
17 configuration information.

18 And there is no guidance in the
19 patent as to what that is.

20 BY MR. KIM:

21 Q. So, a channelization code is not one
22 of the information that is considered to be

1 configuration information, then why would that
2 throw off the POSITA that it is not included?

3 If something that random is not
4 included then it wouldn't really throw off the
5 POSITA, right?

6 A. Yes, it would throw off a POSITA,
7 because a POSITA would want to know what it is,
8 given that it now has been informed what
9 configuration information is not.

10 Then a POSITA would really need to
11 figure out what the inventors had in mind and
12 would be unable to do so because there is no
13 information provided in the patent specification
14 as to what would constitute configuration
15 information.

16 Q. But assuming enablement, it still
17 needs to follow certain set of rules, because we
18 live under the law of physics and that is what
19 general knowledge of the POSITA comes in, right?

20 MR. MUELLER: Objection to form.

21 THE WITNESS: I don't understand
22 what the laws of physics have to do with a

1 POSITA's understanding.

2 Could you repeat the question or
3 rephrase it so that I'm clearer on it?

4 BY MR. KIM:

5 Q. So, even if a specification or the
6 file history suggests one of the configuration
7 information that is normally included in the
8 configuration information is not included this
9 time, they surely know rest of the other
10 information needs to be there for it to function.
11 That is why they are the expert in the field,
12 right?

13 MR. MUELLER: Objection to form.

14 THE WITNESS: What I, I don't know
15 what you mean by needs to be there.

16 Needs to be where, like --

17 BY MR. KIM:

18 Q. Scrambling information --

19 A. The claim specifically requires that
20 the mobile device, excuse me, receive
21 configuration information for a primary cell and
22 one or more non-primary cells.

1 So, the person of ordinary skill in
2 the art would not see anywhere in the patent
3 specification as to what configuration
4 information is and why is that transmitted by the
5 base station and received by the device.

6 There is no disclosure of that.

7 Q. So, under the context of soft
8 handover, what is the general knowledge of a
9 POSITA in terms of configuration information?
10 What does it constitute as a general information?

11 MR. MUELLER: Objection to form.

12 THE WITNESS: Well, it would include
13 such things as the channelization code. It
14 would include thresholds for evaluating how
15 good a particular cell is compared to how
16 good other cells are.

17 Those are just some examples of what
18 a POSITA would think before reading the
19 disavowment of the patent applicant.

20 BY MR. KIM:

21 Q. And would scrambling code be one of
22 them?

1 A. Knowledge of the scrambling code
2 would be one of them. But, the POSITA would also
3 understand that while the mobile device needs to
4 know the scrambling code, it doesn't need to
5 receive the configuration information.

6 It needs to receive what the
7 scrambling code is, needs to receive the
8 information by the scrambling code.

9 So, the claim is very specific. It
10 requires that the mobile device receive
11 configuration information.

12 So, if the mobile device, for
13 example, knows the scrambling code without having
14 received it, then, it knows the scrambling code,
15 and that is all that is needed.

16 Q. And you mentioned after
17 channelization code, you mentioned something like
18 trash wall? Could you repeat that? I couldn't
19 hear that well.

20 Evaluating how good the cell is,
21 what was that word?

22 A. Oh, thresholds.

1 Q. Thresholds, yes.

2 A. Sorry. My Greek accent is getting
3 in the way.

4 MR. KIM: I think we are almost at
5 break time for lunch.

6 We can pick it up after, after
7 lunch. Let's go off the record.

8 THE VIDEOGRAPHER: Stand by. The
9 time is 1:07 p.m., we are off the record.

10 (Recess taken -- 1:07 p.m.)

11 (After recess -- 1:39 p.m.)

12 THE VIDEOGRAPHER: The time is
13 1:39 p.m., we are back on the record.

14 BY MR. KIM:

15 Q. I recall that you mentioned that you
16 have Exhibit 2012 at the end of your binder.

17 (Whereupon, previously marked
18 Exhibit 2012,
19 first referral.)

20 BY MR. KIM:

21 Q. Could you turn to Exhibit 2012,
22 please?

1 A. Okay.

2 Q. Would you turn to Paragraph 57.

3 A. I think, did you say 5-7?

4 Q. Yes, 5-7.

5 A. Okay. Okay. I am there.

6 Q. Okay. Could you read the paragraph,
7 maybe starting in the middle with the, you can't
8 see the line number, but: Once the RNC selects
9 cells for the active set?

10 A. Okay. I now just get the context
11 and read from the beginning of the paragraph if
12 that is okay.

13 Q. Of course.

14 A. An RNC 1006 maintains an active set
15 of cells for handover. The RNC 1006 selects and
16 removes cells in the active set based on
17 measurements reported from Node-Bs, 104a, 1 -- I
18 should have said 1004a, 1004b, and with WTRU
19 1002, and on available radio resources.

20 Once the RNC 1006 selects cell for
21 the active set, the RNC 1006 sends messages to
22 the Node-Bs, 1004a, 1004b, and WTRU 1002 to

1 inform the selected cells for the active set to
2 support soft handover for EU.

3 The RNC 1006 also sends messages to
4 update the active set each time the RNC 1006 adds
5 or removes cell in the active set.

6 The messages may be transmitted
7 using existing RRC and NBAP/RNSAP active set
8 management procedures or new procedures.

9 Q. Okay. It says the RNC informs the
10 WTRU of selected cells in the active set.

11 Do you see that language?

12 A. I think that is part of the language
13 that I just read.

14 Q. So, when the RNC informs the WTRU of
15 a cell, the WTRU must receive technical
16 parameters enabling communications with that
17 cell; is that correct?

18 A. No.

19 Q. Why is it incorrect?

20 A. Because the RNC which sends messages
21 to update the active cell, by saying cell 5, 7
22 and 9 aren't in the active set. I am just using

1 arbitrary example here.

2 Q. So, the WTRU, does that need to
3 receive technical parameters?

4 A. For the, you are referring, it
5 doesn't have to receive technical parameters, and
6 I'm not sure what you mean by technical
7 parameters.

8 Q. We can call that configuration
9 parameters. Just parameters that enables it to
10 be connected.

11 So, when RNC informs the WTRU of
12 selected cells, the WTRU should receive some kind
13 of information those for cells, correct?

14 MR. MUELLER: Objection, form.

15 THE WITNESS: You are now using the
16 word "configuration parameters".

17 And again, it doesn't have to
18 receive, but RNC already know the parameters
19 or at least know some of the parameters.

20 BY MR. KIM:

21 Q. But when the RNC informs the WTRU is
22 when the WTRU would receive configuration

1 parameters.

2 Or are you saying it could have it
3 before RNC informs WTRU?

4 A. So, yes. It could have the
5 parameters that it needs to have to support soft
6 handover.

7 Q. Prior to RNC informing the WTRU?

8 A. Yes. Prior to that happening.

9 Q. Okay. In 3GPP specification, a slot
10 is a unit of time, correct?

11 MR. MUELLER: Objection to form.
12 Outside the scope.

13 THE WITNESS: Yes, which 3GPP
14 specification? There is 3G, there is 4G,
15 there is 5G. They are a lot of different
16 meanings.

17 So, I don't know what it is you are
18 talking about.

19 BY MR. KIM:

20 Q. Is one of the meaning, unit of time?

21 MR. MUELLER: Objection to form.
22 Outside the scope.

1 THE WITNESS: There was never any
2 question about what the slot is with respect
3 to the '803 patent. So, I have not offered
4 any opinions on it.

5 But, a slot generally, started with
6 some period of time. A time slot, I think
7 that is what you are referring to, a time
8 slot. But, I'm not sure.

9 BY MR. KIM:

10 Q. No. Like slot as in .667
11 milliseconds --

12 MR. MUELLER: Objection to form.

13 BY MR. KIM:

14 Q. -- are you familiar with that
15 terminology?

16 MR. MUELLER: Outside the scope.

17 THE WITNESS: I don't recall
18 specifically that length of time as being a
19 slot.

20 BY MR. KIM:

21 Q. So, a timing of set measured in
22 slots, unit slots, would be a measurement of

1 time, correct?

2 MR. MUELLER: Counsel, we are not
3 going to go down a path that is totally
4 unrelated to the '803 patent.

5 And so you can use that in some
6 other litigation in some other forum. I'm
7 just telling you. That is where this is
8 going.

9 If you can tell me how this relates
10 to the '803 patent, I will let you continue
11 with this.

12 But, if you can't, we are not going
13 to waste any of our times talking about
14 subject matter for which there is no opinion
15 in this case which relates to patents
16 unrelated to the patent at issue in this
17 case.

18 MR. KIM: I'm creating a mapping
19 between timing offset and timing delay, the
20 term.

21 MR. MUELLER: And where is that in
22 the claim?

1 MR. KIM: It is not in the claim but
2 it is --

3 MR. MUELLER: You are asking about
4 patents that are at issue in your ITC case.
5 That is what is going on here. And that is
6 totally inappropriate.

7 And we will get Mr. Bakewell on the
8 line, too, and he can weigh in on where this
9 line of questioning is going.

10 MR. BAKEWELL: Dan, this is where I,
11 this is -- do I have it correct, this is
12 going to priority?

13 MR. KIM: That is my understanding.

14 MR. BAKEWELL: Yes. Let's -- Wes, I
15 do think that there is a -- I think that Dan
16 is confused because there is really a good
17 faith basis on this one.

18 But, Dan, why don't you move onto
19 the next topic. You and I can confer at the
20 next break.

21 MR. MUELLER: Okay, fine. I'm not
22 trying to shut you down here on anything.

1 But this sounds a whole lot like other
2 patents that I have a vague recollection of
3 that I believe are at issue in your ITC case.

4 And I'm not going to let you get
5 into something that you are going to pull out
6 in a different forum and use for something
7 that is totally unrelated.

8 MR. BAKEWELL: I can absolutely
9 represent that that is not what is going on
10 here.

11 MR. MUELLER: Okay.

12 MR. BAKEWELL: But I am fine giving
13 you a more discrete answer after I confer
14 with Daniel.

15 MR. MUELLER: Okay.

16 MR. BAKEWELL: Dan, do you want to
17 just go onto the next module?

18 MR. KIM: Yes. Actually, can we
19 take a break for five minutes?

20 MR. MUELLER: Sure.

21 THE VIDEOGRAPHER: Stand by. The
22 time is 1:51 p.m., we are off the record.

1 (Recess taken -- 1:51 p.m.)

2 (After recess -- 2:00 p.m.)

3 THE VIDEOGRAPHER: The time is
4 2:00 p.m., we are back on the record.

5 BY MR. KIM:

6 Q. Could you go to the declaration,
7 Paragraph 112.

8 A. I'm sorry, which paragraph?

9 Q. 112 of your declaration, please.

10 A. Okay. I am there.

11 Q. Okay. And, section, I guess
12 Paragraph 12 to Paragraph 117 is a relevant
13 portion you have written regarding the priority
14 date of the '803 patent; is that correct?

15 A. What section cited priority date of
16 a challenged claim? So, which paragraphs discuss
17 the priority date issue?

18 Q. Again, let's go back to
19 Paragraph 115, please.

20 Let me know when you are there.

21 A. Okay. I am at 115.

22 Q. And can you read silently the

1 paragraph of 115, quickly?

2 A. Okay. Okay, I did, I read it.

3 Q. And the language of the --

4 A. A little louder, please.

5 Q. And the language that '803 patent
6 and its parent priority application is entirely
7 silent with respect to mobile device receiving
8 configuration information in basically the
9 paragraph you read.

10 Is that your opinion?

11 A. Yes. What is, what is here is what
12 you just read is part of my opinion.

13 Q. So, you believe that the priority
14 application is entirely silent?

15 A. I'm sorry, say that again?

16 Q. So, you believe that the '803 patent
17 and its parent priority patent, which is
18 Exhibit 2012, is it your opinion that it is
19 entirely silent for the purpose of the priority?

20 A. I'm not sure what you are saying.
21 But, it is my opinion that the teachings of the
22 '803 patent, as well as its parent priority

1 applications, is entirely silent with respect to
2 mobile devices receiving configuration
3 information for a primary cell and the one or
4 more non-primary cells as required in Claim 1.

5 Clearly, there is no such teaching
6 in the specification for softer handover.
7 Nowhere does it teach that.

8 And it certainly is way out of
9 reach, out of any hint of configuration
10 information or carrier aggregation as a patent
11 owner currently asserts that the patent covers.

12 So, there is no disclosure of
13 receiving configuration information for the
14 primary cell and the one or more non-primary cell
15 for softer handover.

16 And also, there is no disclosure nor
17 close to any such disclosure for carrier
18 aggregation as a patent owner currently opines or
19 suggests or says that it, that the claim covers
20 the carrier aggregation.

21 MR. KIM: Okay. I have no further
22 questions at this time pending questions from

1 opposing counsel.

2 MR. MUELLER: No questions.

3 THE VIDEOGRAPHER: With that, are we
4 finished?

5 MR. KIM: Yes.

6 THE VIDEOGRAPHER: Stand by, the
7 time is 2:06 p.m., we are off the record.

8 (Whereupon, signature not having been waived,
9 the deposition suspended at 2:06 p.m.)

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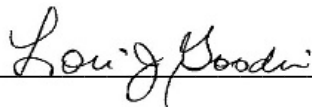
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CERTIFICATE OF NOTARY

* * * * *

I, LORI J. GOODIN, RPR, CRR, RSA,
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CA CSR# 13959

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My Commission expires: February 22, 2027

DISTRICT OF COLUMBIA, WASHINGTON DC
My Commission expires: June 1, 2026

1 Case: OnePlus Technology Co., Ltd. vs Pantech Corp.

2 Witness Name: Apostolos Kakaes, Ph.D.

3 Deposition Date: 02/28/2026

4

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6 Please be advised that the transcript in the above
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8 I do hereby acknowledge that I have read
9 and examined the foregoing pages

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14 me to the questions therein recorded.

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16 attached Errata Sheet, the same is a true,
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1 Errata Sheet

2 NAME OF CASE: OnePlus Technology Co., Ltd. vs Pantech Corp.

3 DATE OF DEPOSITION: 02/28/2026

4 NAME OF WITNESS: Apostolos Kakaes, Ph.D.

5 Reason Codes: 1. To clarify the record.

6 2. To conform to the facts.

7 3. To correct transcription errors.

8 Page _____ Line _____ Reason _____

9 From _____ to _____

10 Page _____ Line _____ Reason _____

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APOSTOLOS KAKAES, PH.D.

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