Exhibit E

1	IN THE UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF TEXAS			
2	TYLER DIVISION			
3		,		
4	WI-LAN, INC.)	DOCKET NO. 6:10cv521	
5	-vs-)	Tyler, Texas	
6	ALCATEL-LUCENT USA, INC., ET AL)	9:01 a.m. July 12, 2013	
7	***************			
8	WI-LAN, INC.)		
9	·)	DOCKET NO. 6:10cv52 Tyler, Texas 9:01 a.m. July 12, 2013 ****************** DOCKET NO. 6:13cv25 CT JUDGE, AND A JURY EA SLOAN DY WERLINGER Ferguson Texas 75702 Loan@txed.uscourts.gov	
10	HTC CORPORATION,			
11	ET AL)		
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	TRANSCRIPT OF TRIAL MORNING SESSION			
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15	UNITED STATES CHIEF DISTRICT JUDGE, AND A JUR			
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21	211	211 W. Ferguson Tyler, Texas 75702 shea_sloan@txed.uscourts.gov		
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24	Proceedings taken by Machine Stenotype; transcript was			
25	produced by a Computer.			

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1 PROCEEDINGS
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- 2 (Jury out.)
- 3 COURT SECURITY OFFICER: All rise.
- THE COURT: Please be seated.
- 5 All right. I understand the parties have
- 6 a matter before we bring the jury in.
- 7 MR. HILL: That's correct, Your Honor.
- 8 There is some issue with regard to Dr. Lanning --
- 9 THE COURT: With who?
- 10 MR. HILL: Dr. Lanning, who will be the
- 11 next witness for the Defendants.
- 12 THE COURT: Okay. All right.
- 13 MR. BORGMAN: Yes, Your Honor, as part of
- 14 our meet-and-confer on the demonstratives, we --
- 15 THE COURT: Why don't you go to the
- 16 microphone, if you would.
- 17 MR. BORGMAN: Sorry Your, Honor. Steve
- 18 Borgman.
- 19 As part of the meet-and-confer on the
- 20 slides for the demonstratives for the various witnesses,
- 21 there were a couple of issues we had with the slides for
- 22 Mr. Lanning, and I think we've resolved our objections
- 23 to those, but we haven't resolved our underlying
- 24 objection to some of the slides, which involves the
- 25 combination of two separate references for purposes of

- 1 anticipation.
- 2 And, essentially, there's a paper called
- 3 the Tiedemann paper. And Mr. Lanning, we expect, will
- 4 testify that that paper incorporates by reference the
- 5 IS-95 standard or the IS-95-A standard, which are two
- 6 different standards.
- 7 And our position is that the Tiedemann
- 8 reference does not incorporate by reference either of
- 9 those two prior standards.
- 10 The Tiedemann reference does mention
- 11 IS-95, but it doesn't incorporate by reference. And
- 12 under the Advanced Display Systems versus Kent State
- 13 case, deciding whether or not a reference incorporates
- 14 by reference another prior art reference is a question
- 15 of law for the Court. And Advanced Display Systems also
- 16 says that in order to do that, there has to be some
- 17 language indicating that to one of skill in the art; and
- 18 also that to incorporate by reference, the document
- 19 that's supposedly incorporates by reference, another
- 20 document has to point out with specificity what's being
- 21 incorporated. And Tiedemann just doesn't do that, Your
- 22 Honor.
- 23 THE COURT: Okay. So your objection
- 24 to -- it is with regard to anticipation but not as to
- 25 obviousness?

- 1 MR. BORGMAN: Correct, Your Honor.
- THE COURT: All right. Response?
- MR. APPLEBY: Your Honor, Mr. Lanning
- 4 will be testifying that the Tiedemann reference itself,
- 5 within the four corners of the document, anticipates the
- 6 claims of the asserted patents.
- THE COURT: Without having to rely upon
- 8 the incorporated reference?
- MR. APPLEBY: Without having to rely on
- 10 the incorporated reference. We are going to discuss the
- 11 incorporated reference, and he's also going to opine
- 12 that it would have been obvious to combine the two
- 13 references, given the fact that the Tiedemann reference
- 14 expressly references the IS-95 standard.
- So, basically, Tiedemann says as an
- 16 extension on IS-95 -- the -- the elements of the
- 17 asserted claims are expressly disclosed in Tiedemann.
- 18 We believe it can be properly
- 19 incorporated by reference. Essentially, Tiedemann says
- 20 it is IS-95, but Mr. Lanning will rely on the Tiedemann
- 21 reference itself, and he will opine that it would have
- 22 been obvious to combine that with the IS-95 standard.
- 23 MR. BORGMAN: Your Honor, if they stick
- 24 with the obviousness instead of the anticipation and
- 25 they stick with the IS-95-A reference, then we're fine

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1 with that. But Mr. Appleby just referred to the IS-95
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- 2 standard, which came a year and a half before the
- 3 Tiedemann article. The IS-95-A standard came about a
- 4 year after Tiedemann. So there's no way that you can --
- 5 you can put those together.
- You can't put IS -- well, if you want to
- 7 talk about IS-95 by itself, that's outside the scope of
- 8 Mr. Lanning's report and his testimony. All of his
- 9 report deals with the IS-95-A standard.
- 10 So if Mr. Appleby and Mr. Lanning want to
- 11 talk about the combination of Tiedemann, plus IS-95-A
- 12 for purposes of obviousness, we're okay with that. We
- 13 have no objection there.
- 14 THE COURT: Is that what you're doing?
- MR. APPLEBY: Sir, what Mr. Lanning will
- 16 do is he will go through IS-95-A and show some
- 17 disclosure in IS-95-A. We will then go through
- 18 Tiedemann and rely on the four corners of the document
- 19 to show the elements are found in Tiedemann. He will
- 20 then also opine that it would have been obvious to
- 21 combine those two documents.
- MR. BORGMAN: And as long as they stick
- 23 with IS-95-A and Tiedemann for their combination, we're
- 24 fine with that, Your Honor.
- 25 THE COURT: Okay. Very well.

1 Q. Okay. Now I want to turn to -- kind of set

- 2 the stage for your invalidity analysis.
- 3 And you had mentioned that we're looking at
- 4 something called prior art, which is what is known
- 5 before the patents; is that right?
- 6 A. Yes.
- 7 Q. So I think the first thing I'd like to do is
- 8 talk about what that date is when the patents first
- 9 arrived at the scene.
- 10 When were the Airspan patents first filed?
- 11 A. This is the earliest date for the Airspan
- 12 patents on the timeline, which is December 1996.
- Q. So when we're looking at prior art, we're
- 14 looking at things that existed prior to December of
- 15 1996; is that right?
- 16 A. Yes, that were published and known.
- 17 Q. Sir, let's set the stage here. I'd like to
- 18 talk about what was generally known before this date.
- 19 And where I'd like to start is -- is --
- 20 obviously, this case is about cellular systems.
- 21 Were there commercial CDMA cellular systems in
- 22 use before December of 1996?
- 23 A. Yes, there were.
- Q. And can you give us an example of one of
- 25 those?

- 1 A. Specifically, it's the IS-95 system.
- Q. And what is the IS-95 system?
- MR. BORGMAN: Your Honor, may we
- 4 approach?
- THE COURT: Yes, you may.
- (Bench conference.)
- 7 MR. BORGMAN: This is the exact same
- 8 issue we talked about earlier, IS-95-A.
- THE COURT: IS-95-A.
- MR. APPLEBY: I can say A.
- THE COURT: Okay.
- MR. BORGMAN: Thank you.
- 13 (Bench conference concluded.)
- Q. (By Mr. Appleby) So let's go back to where we
- 15 were.
- MR. APPLEBY: Can we put the slide back
- 17 up?
- 18 Q. (By Mr. Appleby) I see on the slide it says
- 19 IS-95-A. What was the IS-95-A system?
- 20 A. The IS-95-A system was a first revision to the
- 21 IS-95 system.
- Q. And was the IS-95-A system in commercial use
- 23 before December of 1996?
- 24 A. Yes, it was.
- 25 Q. And, in fact, if we look at this -- the cover

- 1 construction of TDM techniques.
- 2 Could you -- could you tell us what that is?
- 3 A. Yes. The TDM techniques are creating time
- 4 slots or an interval of time within a specified frame
- 5 period.
- 6 I think the next slide I've provided gives a
- 7 more specific example of the TDM techniques, as the
- 8 Courts construed. And you see the Court's construction
- 9 at the bottom of the slide.
- 10 Q. So moving to the next slide, can you explain
- 11 what we're looking at here?
- 12 A. Again, this is another figure and page out of
- 13 the IS-95-A specification, and it shows us two or three
- 14 pieces of information.
- 15 If you look at the top where it says 2047 and
- 16 then goes 0, 1, 2, 3, those are the different slots that
- 17 are defined in the paging channel.
- Now, the paging channel has a frame, and
- 19 there's two different frames that we can use for this
- 20 claim.
- 21 The one frame you see by the arrow, and then
- 22 it's highlighted with the 12 -- 1.28 seconds, and then
- 23 there's even a longer frame that's shown by the line at
- 24 the top for all 2048 frames.
- Now, a paging channel slot shows 6 in the

- 1 middle that you can see in the middle here. And it also
- 2 explains that a phone here is assigned a specific paging
- 3 channel slot based on its identification.
- 4 Q. So if we take a step back to the previous
- 5 slide, did you find within IS-95-A techniques for
- 6 allocating an interval of time within a predetermined
- 7 frame period to a data item?
- 8 A. Yes.
- 9 So the interval of time would be the slots. A
- 10 predetermined frame period would be the frame period --
- 11 one of those two frame periods. You can take your pick.
- 12 There's two different frame periods there that
- 13 would meet the claim.
- And the data item, based on one or more
- characteristics, the one or more characteristics of the
- 16 data item is the phone's identity, which is the most
- 17 important thing if you're trying to page a mobile.
- 18 And maybe -- I don't know if I should explain
- 19 a little bit about what the paging channel is for.
- 20 Maybe you have that. But I just realized
- 21 maybe --
- Q. Well, what is the paging channel for?
- 23 A. I just dropped into that mode where I realized
- 24 what that is, and I don't know if y'all do. But the
- 25 paging channel is used by the base station to page the

- 1 mobile when you receive a call. And that's how your
- 2 phone knows it's receiving a phone call.
- 3 So if someone calls you on your mobile phone,
- 4 the base station sends a message to the mobile phone.
- 5 In this case, for IS-95, it sends it in a
- 6 specific slot of your mobile phone so the mobile phone
- 7 only has to look at one or more of those slots. It
- 8 doesn't have to sit there and wait all the time to look.
- 9 Q. And I think you mentioned that characteristics
- 10 associated with the data item you found was the mobile's
- 11 identity?
- 12 A. That's correct. It would be the -- one of the
- 13 pieces used is called equipment serial number, the
- 14 serial number of the phone when you buy it.
- 15 Q. And in IS-95-A, the base station will use the
- 16 mobile's identity to determine the time slot in which to
- 17 allocate data for a particular mobile; is that right?
- 18 A. That's correct. It's not only the base
- 19 station but the mobile. Both of them have to get
- 20 together and agree on the slot; and they choose the
- 21 slot, using a consistent method.
- Q. So let's return to our timeline. And we see
- 23 here that IS-95-A was available in 1995; is that right?
- A. Yeah, that's correct.
- 25 Q. Now, you also have on this timeline something

- 1 called IS-95 and 93. What is that?
- 2 A. That was the initial version of the standard
- 3 in 1993. The dash A just denotes that there were some
- 4 modifications made to that standard.
- 5 If you were to look at the IS-95 standard and
- 6 if I were to hold it up, they both look essentially the
- 7 same. There were just some editorial-type changes and
- 8 more information provided to make -- for clarity
- 9 purposes.
- 10 Q. And in the course of your work, you've worked
- 11 with both the IS-95 and the IS-95-A standard?
- 12 A. Yes.
- And generally, could you describe what
- 14 differences, if any, exist between the IS-95-A and the
- 15 IS-95 standard?
- MR. BORGMAN: Your Honor, may we
- 17 approach?
- THE COURT: Yes, you may.
- (Bench conference.)
- MR. BORGMAN: This is outside the scope
- 21 of his report. He didn't address the differences
- 22 between IS-95 and IS-95-A apart from the fact that it's
- 23 a revision and it's an updated standard.
- MR. APPLEBY: In his --
- THE COURT: Speak into the mic.

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1
                  MR. APPLEBY: In his report, he discusses
 2 IS-95. Because of his work, he knows IS-95 and
 3 IS-95-A --
                  THE COURT: You need to speak up.
                  MR. APPLEBY: In his report, he discusses
 6 IS-95 generally. That includes IS-95 and IS-95-A. He
   knows from his own personal work that the two versions
    have very limited modifications. I think it's a fair
   question.
10
                  MR. BORGMAN: Your Honor, if I might
11 respond?
12
                  THE COURT: Yes.
13
                  MR. BORGMAN: That was not in his report,
14 the distinction.
                  THE COURT: Okay. Objection's sustained.
15
16
                  He needs to stick to 95.
                  MR. APPLEBY: Thank you, Your Honor.
17
                   (Bench conference concluded.)
18
19
             (By Mr. Appleby) So as I was saying, IS-95
20
    came out in 1993; is that right?
21
         Α.
             That's correct.
22
         Ο.
              Okay. And IS-95-A is a subsequent version of
23
    that standard; is that right?
         A. Yes, that's correct.
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Q. Okay. So let's -- let's move on.

24

- 1 in this Tiedemann paper.
- 2 Did you find that Tiedemann describes CDMA
- 3 using orthogonal codes and orthogonal code generators?
- 4 A. Yes, I did.
- 5 Q. Can you explain that?
- 6 A. As shown on this slide, you see the text
- 7 that's highlighted, and it says the orthogonal covering
- 8 codes are a set -- are the set of 64-ary Walsh
- 9 functions. In English, that means that there are 64
- 10 squared, or they're a square box of 64, and that's the
- 11 same 64 Walsh codes that I showed you on the slide.
- 12 So that 64-ary is probably not a common word
- 13 many of us use, but that's what is meant by that.
- Q. And did you also find that TDM -- or that
- Tiedemann described TDM techniques?
- A. Yes, I did.
- 17 Q. And could you explain that?
- A. Yes. And if this looks similar, this is very
- 19 similar to the language that I showed you for the
- 20 IS-95-A specification. And here at the top,
- 21 Mr. Tiedemann is describing the paging channel that I
- 22 talked about. It's divided into slots of 80
- 23 milliseconds' duration.
- So this is the interval of time, are those
- 25 80-millisecond slots. And then he describes that there

- 1) is a period of repetition, and that would be the frame.
- 2 And those are assigned slots.
- And then he discusses that there's hash
- 4 functions that are used on the paging channel for a
- 5 specific slot that the mobile and the base station are
- 6 to use. The mobile is to monitor.
- So you can see -- and that is almost the exact
- 8 language out of the IS-95-A specification.
- 9 Q. And so did you find that the Tiedemann
- 10 document itself described TDM techniques under the
- 11 Court's construction?
- 12 A. Yes.
- 13 Q. And did you also find that Tiedemann described
- 14 overlay codes?
- 15 A. Yes.
- 16 Q. And could you explain that?
- 17 A. As you can see -- as you can see, it's pretty
- 18 easy to find. It actually says there is a technique
- 19 called overlay encoding, and overlay encoding adds
- 20 additional orthogonal channels.
- 21 And then he actually refers to an overlay
- 22 encoder block to show how he's modifying IS-95, or
- 23 extending it to support these new PCS system
- 24 requirements.
- 25 Q. And so there is a diagram in Tiedemann, Figure

- 1 A. Yes, and I pointed to it. I'll point to it
- 2 again. That would be the Walsh code generator that you
- 3 see right there in blue.
- 4 Q. So can I check the orthogonal code generator?
- 5 A. Yes.
- 6 Q. And did you find a first encoder? This is the
- 7 first encoder element in the Tiedemann reference?
- 8 A. Yes. And I'll circle this one, and it is a
- 9 circle with a plus in it. That's the encoder. You see
- 10 the arrow that goes from the Walsh code generator,
- 11 that's where it goes down and it's encoded with other
- 12 codes. That's what that means.
- 13 Specifically, it's an exclusive -- or a gate,
- 14 but we did put a circle with a plus in there. That
- 15 means it's included.
- 16 Q. And may I check that element?
- 17 A. Yes.
- 18 Q. And did you find a TDM encoder arranged to
- 19 apply time division multiplexing techniques in the
- 20 Tiedemann reference?
- 21 A. Yes. As I explained earlier, this slide shows
- 22 that this is the TDM techniques that they're explaining
- 23 here; that it has all three components.
- 24 It has -- it has the interval of time; it has
- 25 the predetermined frame; and it has one or more

1 characteristics associated with the data item, which

- 2 would be the actual identification of the cell phone.
- 3 Q. And so can I check that off?
- 4 A. Yes.
- 5 Q. Now, moving down the Claim 2, did you find --
- 6 MR. APPLEBY: Can I have the slide back
- 7 up?
- 8 Q. (By Mr. Appleby) Did you find an overlay code
- 9 generator in the Tiedemann reference?
- 10 A. One more slide. There it is.
- 11 Yes. If we can look -- if we look at this box
- 12 in purple, it actually says overlay code encoder as
- 13 required by the claim.
- Q. So may I check that box?
- 15 A. Yes.
- I should be clear. This box has both the
- 17 overlay code generator, which is the first part of Claim
- 18 2, and it has the second encoder, which is the overlay
- 19 encoder.
- Q. So I can check both of those?
- 21 A. Yes.
- Q. And Claim 2 is a preamble, a transmission
- 23 controller as claimed in Claim 1. Do we have that?
- 24 A. Yes, because we have the same transmission
- 25 controller in Claim 1 that I described.

- 1 cellular network is like.
- 2 And they also need to be familiar with the
- 3 second-generation and third-generation cellular --
- 4 cellular networks. And this hypothetical person of
- 5 ordinary skill also has access to all the prior art.
- 6 It's like that they have a knowledge and know
- 7 that that prior art exists.
- 8 Q. So let's turn to Claim 9 and -- of the '326
- 9 patent and Claim 11 of the '819 patent.
- And are those dependent claims?
- 11 A. Yes. Yes, they are.
- 12 Q. And Claim 9 of the '326 patent depends on
- 13 Claim 5?
- 14 A. That's correct.
- And we've already found that Claim 5 has all
- 16 the elements that Tiedemann shows, all the elements of
- 17 Claim 5; is that right?
- 18 A. That's correct.
- Q. So what does Claim 9 require?
- 20 A. Claim 9 requires that a -- that the control
- 21 channel, or the acquisition channel, as specifically
- 22 listed here, includes overlay codes instead of time
- 23 slots, or TDM encoders, or that TDM techniques as we
- 24 describe.
- Q. And is that disclosed by Tiedemann?

- 1 A. No, it's not.
- Q. And why do you say that?
- A. Tiedemann applies the overlay codes only to
- 4 the traffic channels for increasing the data-rate or
- 5 slowing the data-rate down on the traffic channels that
- 6 I described that were used for either data connections
- 7 or voice connections. Tiedemann does not describe
- 8 applying overlay codes to a paging channel.
- 9 Q. Why do you believe Claim 9 -- I should say do
- 10 you believe that Claim 9 would be obvious in light of
- 11 Tiedemann?
- 12 A. Yes. This is the first test. This would be
- 13 (just a single reference, obviousness.) One of ordinary
- skill in the art, reading Claim 9 in Tiedemann, would
- understand that it would be obvious to modify Tiedemann
- 16 to just apply the overlay codes to the paging channel,
- 17 because that -- or instead of the TDM encoder because
- 18 overlay codes are already being used. All the circuitry
- 19 is there. As you saw, that circuitry was in the block
- 20 diagram.
- Q. And so is it your conclusion that Claim 9 is
- 22 obvious in light of the Tiedemann reference?
- 23 A. Yes.
- Q. So let me move to Claim 11 of the '819 patent.
- And Claim 11 depends from Claim 7 of that

- 1 patent; is that right?
- 2 Yes, that's correct.
- Now, looking at Claim 7, are -- the elements
- 4 in Claim 7, have we seen those elements already today?
- 5 A. Yes. These are all of the elements -- these
- 6 elements are in Claim 5 of the '326, I believe. Yes.
- 7 And we have already found all of those
- 8 elements in the Tiedemann reference; is that right?
- 9 A. That's correct, yes.
- 10 Q. And Claim 11, what does Claim 11 add to Claim
- 11 7?
- A. Claim 11 is like the opposite of Claim 9.
- And if we can read it, it says: A TDM encoder
- 14 arranged to apply time division multiplexing techniques,
- 15 TDM techniques, to data items sent over the traffic
- channel.
- Well, remember Tiedemann puts TDM on the
- 18 paging channel, but he doesn't put TDM on the traffic
- 19 channels. He put overlay codes.
- So this is somewhat just the reverse of Claim
- 21 9.
- Q. And so did you find Claim 11 disclosed by
- 23 Tiedemann?
- A. No, I did not.
- Q. And why not?

- A. Because Tiedemann does not have a TDM encoder
- 2 that would be used for the traffic channels. He uses
- just the overlay encoder.
- Q. Do you believe that Claim 11 would have been
- 5 obvious in light of Tiedemann?
- A. Yes, I do.
- 7 Q. And why is that?
- 8 A. Because, again, the same circuitry is all
- 9 there. If one of ordinary skill in the art wanted to
- 10 add that TDM functionality, all those slots that we saw
- 11 on the paging channel, if they wanted to just add slots
- 12 on the traffic channels, they would just simply use the
- 13 same circuitry to do that.
- 14 Q. And what would the motivation or purpose of
- one of ordinary skill in the art have for modifying
- 16 Tiedemann that way?
- 17 A. If they wanted to actually divide the traffic
- 18 channels into different slots so that they could support
- 19 different users for each overlay code, that would be the
- 20 motivation to --
- 21 Q. And --
- 22 A. -- make that modification.
- Q. If Tiedemann shows that TDM encoder on a
- 24 control channel, why would it have been obvious to one
- 25 of skill in the art to use that on a traffic channel?

- A. Again, for the same reasons you have the TDM
- 2 encoder on the paging channel, so that you can actually
- 3 divide that orthogonal channel up into multiple time
- 4 slots.
- 5 Q. If -- would one of ordinary skill in the art
- 6 recognize that if you could use a Tiedemann -- TDM
- 7 encoder on a paging channel, that you could also use it
- 8 on a traffic channel?
- 9 A. Yes. It's -- everything is the same
- 10 essentially. It's just the choice, do I want to engage
- 11 this encoder or this encoding circuitry for my traffic
- 12 channels.
- 13 Q. In looking back at Claim 9, would one of
- 14 ordinary -- Claim 9 of the '326 patent, would one of
- ordinary skill in the art recognize that if you did
- 16 overlay coding on a traffic channel, you could also use
- 17 that on a control channel?
- A. Again, it's all the same circuitry. Tiedemann
- 19 has described how you do it on a traffic channel. If
- 20 there was a reason that I wanted to divide up the
- 21 channel for the paging channel using overlay codes, I
- 22 could do the same thing with the same circuitry, same
- 23 block diagram.
- Q. Okay. So now I'd like to move to another
- 25 reference.

- 1 Can you describe what we're looking at here on
- 2 Slide 28?
- 3 A. This was a patent that was -- the inventor is
- 4 Gitlin, Richard Gitlin. You've heard of Dr. Richard
- 5 Gitlin. He was part of the Bell Labs or the Alcatel --
- 6 I should say Lucent. I think it was in the Lucent days.
- 7 He was an employee of Bell Labs. He's one of the
- 8 pioneers.
- 9 And this is a patent that describes how
- 10 CDMA -- how to combine CDMA with TDM.
- 11 Q. So let's look forward -- move ahead one slide.
- 12 And can you describe what Gitlin -- what
- 13 Gitlin disclosure exists, if any, about CDMA plus TDM
- 14 techniques?
- 15 A. All right. If we look -- so the CDMA or the
- 16 orthogonal codes, the CDMA, is shown here. And it's
- 17 labeled code space and it's C0 through C7. Those refer
- 18 to 7 -- 8 different codes. Since we start at 0, there's
- 19 8 different codes.
- 20 Then he also has time slots going sideways on
- 21 the horizontal from S0 to S6. So he's combining codes
- 22 with slots. CDMA plus TDM.
- Q. And did you find TDM techniques as construed
- 24 by the Court?
- 25 A. Yes.

- 1 Q. Could you explain that?
- 2 A. You have TDM techniques. So there's a frame.
- So we need three pieces, right? We need a --
- 4 we need this slot, or we need the increment of time.
- 5 And we see all kinds of different slots. This
- 6 would be the slots (indicating) that are shown from SO
- 7 to S6. And then the frame period would be from S0
- 8 through S6. That's the frame period.
- And the third thing we need for that
- 10 construction -- for the Court's construction for TDM
- 11 techniques is a characteristic of the data. Well, if
- 12 you look down at the bottom of Gitlin, you'll see that
- 13 the characteristics of data have to do with whether you
- 14 have high-speed users, medium-speed users, or low-speed
- 15 users, and also the user ID.
- So there's two different characteristics
- 17 associated with the data item.
- 18 Q. And why would the users need different speeds?
- Users have different speeds, want to pay
- 20 different amounts, or they may only want to send a fax
- 21 part of the time, and then want lower speed for voice
- 22 calls or lower speed data connections at other times.
- Q. Okay. So let's look quickly at the claim --
- 24 actually, yeah, let's look quickly at the claim
- 25 language.

1 And did you find a -- the preamble satisfied

- 2 by -- actually, it says Gitlin plus Tiedemann. Why
- 3 would you combine Gitlin and Tiedemann?
- A. Because Gitlin doesn't have the overlay codes.
- 5 So, essentially, for at least the reason -- there's two
- 6 different reasons; but the main reason is that Gitlin
- 7 doesn't describe overlay codes. But as I showed you
- 8 earlier, Tiedemann does.
- 9 So in combining Gitlin with Tiedemann, Gitlin
- 10 gives us the CDMA plus TDM; Tiedemann gives us the
- 11 overlay codes.
- Additionally, Tiedemann also gives us the
- 13 Walsh codes, if we need to show for the orthogonal codes
- or CDMA. I have it in two places. Both Gitlin and
- 15 Tiedemann gives it -- gives us the orthogonal codes.
- 16 Q. Okay. So does the Gitlin plus Tiedemann
- 17 combination disclose the preamble of Claim 1?
- 18 A. Yes.
- 19 Q. And may I check that?
- 20 A. Yes.
- 21 Q. And does -- did you find in Gitlin an
- 22 orthogonal code generator -- let me start over.
- 23 Did you find in a combination of Gitlin and
- 24 Tiedemann an orthogonal code generator and a first
- 25 encoder?

- 1 A. Yes.
- Q. And can you explain that?
- 3 A. That -- well, we can look at it two ways, but
- 4 it's at least in Tiedemann. As I've already explained,
- 5 that there is an orthogonal code generator and the first
- 6 encoder.
- 7 And if you remember, it's the box with Walsh
- 8 encoder or Walsh generator, and then the circle with the
- 9 plus in it.
- 10 Q. And we saw C -- CDMA in Gitlin, right?
- 11 A. Yes. And Gitlin is for CDMA as well.
- 12 Q. Okay. May I check those?
- 13 A. Yes.
- 14 Q. And did we find a TDM encoder arranged to
- 15 apply time division multiplexing techniques in Gitlin?
- 16 A. Yes, we did.
- 17 As you can see with the slots that are here,
- 18 this would be the TDM encoder. We also find a TDM
- 19 encoder in Tiedemann for the paging channels. So we've
- 20 doubled up there as well for the TDM encoder.
- Q. And may I check that?
- 22 A. Yes.
- Q. And the elements of Claim 2, the overlay code
- 24 generator and the second encoder, where do we find
- 25 those?

- 1 A. Those are found in Tiedemann and not Gitlin.
- Q. Okay. And why would it have been obvious in
- 3 your mind to combine Gitlin and Tiedemann?
- 4 A. Because both of these patents are in regard to
- 5 cellular systems, specifically, CDMA wireless systems.
- And Gitlin was from Bell Labs, AT&T Bell Labs.
- 7 Tiedemann was from Qualcomm. And as you've heard, in
- 8 the early 1990s, they were working together on CDMA
- 9 solutions.
- So there's multiple reasons why one of
- 11 ordinary skill in the art would combine Gitlin with
- 12 Tiedemann.
- 13 Q. Okay. So may I check the elements of Claim 2?
- 14 A. Yes.
- 15 Q. And so what is your conclusion about whether
- 16 Claim 2 of the '326 patent is obvious over Gitlin plus
- 17 Tiedemann?
- 18 A. The combination of Gitlin plus Tiedemann
- 19 invalidates Claim 2 of the '326 patent.
- Q. And if we look at Claim 5 of the '326, we
- 21 found all of these elements in Gitlin and Tiedemann
- 22 already; is that correct?
- 23 A. Yes, that's correct.
- Q. And would your opinion of obviousness,
- 25 combining Tiedemann and Gitlin, be to render obvious

- 1 he's way to the left. Gilhousen is way to the left in
- 2 1993 for these OVSF codes.
- 3 Q. And the Gitlin patent -- I don't know if I
- 4 asked you this -- but that was filed in 1994; is that
- 5 right?
- 6 A. That's correct.
- 7 Q. Now, you understand that Dr. Wells is
- 8 asserting that these OVSF codes contain an orthogonal
- 9 code and an overlay code. You understand that?
- 10 A. Yes.
- 11 O. Now -- and the jury will have to decide
- 12 whether an OVSF code, a single OVSF code, is an
- 13 orthogonal code and an overlay code. You understand
- 14 that?
- 15 A. Yes.
- 16 Q. If the jury were to conclude that a single
- 17 OVSF code was both an orthogonal code and an overlay
- 18 code, do you have an opinion as to whether Gitlin, in
- 19 combination with Gilhousen, would disclose all of the
- 20 elements of the asserted claims?
- 21 A. Yes. So let me go through it just briefly.
- If you agree with Dr. Wells that the OVSF tree
- 23 meets the limitations of the claims, then you also have
- 24 to reconcile in your own mind who really defined it
- 25 first. And this was three years, at least three years

- 1 before the Airspan patents.
- And then when you look at Dr. Gitlin from AT&T
- 3 Bell Labs, he has the CDMA plus the TDM here. And,
- 4 again, he's years before the Airspan patents.
- And, again, you have the combination of AT&T
- 6 Bell Laboratories and of Qualcomm, when they were
- 7 working together. And both of these are wireless
- 8 cellular systems.
- 9 Q. Okay. So, Mr. Lanning, can you just quickly
- 10 summarize your opinions?
- 11 A. All right. As you can see, the first four
- 12 claims, as on this table, which are specifically the
- 13 '326, Claim 2; the '211, Claim 2; the '211, Claim 5;
- 14 '326, Claim 5 are all anticipated by at least Tiedemann.
- 15 And they're also obvious based on other
- 16 references, as I described.
- 17 However, if you look at '326, Claim 9 and the
- 18 '819, Claim 11, you'll see that I have not put
- 19 anticipated there. Instead, I've said they're obvious
- 20 as I've described. And they're obvious by at least
- 21 Tiedemann and other combinations that I've described.
- MR. APPLEBY: No further questions.
- THE COURT: Thank you.
- 24 Cross-exam?
- MR. BORGMAN: Yes, Your Honor.