

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

NETWORK SYSTEM TECHNOLOGIES,) CAUSE NO. 2:22-CV-481-JRG
LLC., ()
Plaintiff, ()
vs. ()
SAMSUNG ELECTRONICS CO., LTD., ()
et al.,) MARSHALL, TEXAS
(APRIL 9, 2024
Defendants.) 9:00 A.M.

MARKMAN HEARING

BEFORE THE HONORABLE RODNEY GILSTRAP
UNITED STATES CHIEF DISTRICT JUDGE

SHAWN McROBERTS, RMR, CRR
100 E. HOUSTON STREET
MARSHALL, TEXAS 75670
(903) 923-8546
shawn_mcroberts@txed.uscourts.gov

Shawn M. McRoberts, RMR, CRR

Federal Official Court Reporter

A P P E A R A N C E S

FOR THE PLAINTIFF: NIXON PEABODY, LLP
70 W. MADISON ST., STE 5200
CHICAGO, ILLINOIS 60602-4378
(312) 977-4130
BY: MR. DANIEL STRINGFIELD

THE DAVIS FIRM, PC - LONGVIEW
213 NORTH FREDONIA STREET
SUITE 230
LONGVIEW, TEXAS 75601
(903) 230-9090
BY: MR. WILLIAM DAVIS

FOR THE DEFENDANTS: KIRKLAND & ELLIS, LLP - NYC
601 LEXINGTON AVENUE
NEW YORK, NEW YORK 10022
(212) 446-4800
BY: MR. ALAN RABINOWITZ

KIRKLAND & ELLIS, LLP -
WASHINGTON DC
1301 PENNSYLVANIA AVENUE, NW
WASHINGTON, DC 20004
(202) 389-5000
BY: MR. CHRISTOPHER MIZZO

GILLAM & SMITH, LLP
102 N. COLLEGE, SUITE 800
TYLER, TEXAS 75702
(903) 934-8450
BY: MR. TOM GORHAM

OFFICIAL REPORTER: SHAWN M. McROBERTS, RMR, CRR
100 E. HOUSTON STREET
MARSHALL, TEXAS 75670
(903) 923-8546

1 THE COURT: Be seated, please.

2 All right. This is the time set for claim construction
3 in a patent case pending before the Court. The case is
4 Network System Technologies versus Samsung Electronics
5 Company, Limited, et al. This is Civil Case No. 2:22-CV-481.

6 The Court will ask for announcements on the record at
7 this time.

8 What says the Plaintiff Network System Technologies?

9 MR. DAVIS: Good morning, Your Honor. Bo Davis and
10 Dan Stringfield on behalf of Plaintiff. And we're ready to
11 proceed.

12 THE COURT: All right. What's the announcement from
13 the Samsung Defendants?

14 MR. GORHAM: Good morning, Your Honor. Tom Gorham
15 on behalf of the Samsung Defendants. With me here today is
16 Alan Rabinowitz, Chris Mizzo, and we have three of Samsung's
17 clients--Andrew Huh, Seungbum Chung, and Kyungun Lee.
18 Samsung's ready to proceed, Your Honor.

19 THE COURT: All right. Thank you, counsel.

20 As the parties are aware from email communications
21 generated yesterday, the parties in this case, the 481 case
22 against Samsung, proposed the Court construe several terms
23 that had previously been construed by Judge Robert Schroeder
24 in the 482 case, Network System Technologies versus Texas
25 Instruments, and the Court has made it clear to the parties

1 that, having reviewed the briefing in this case with regard to
2 those terms, having reviewed Judge Schroeder's claim
3 construction order as to those terms in the 482 case, and
4 carefully considered everything that's before the Court, that
5 the Court believes that the adoption of Judge Schroeder's
6 constructions as to those common terms presented for
7 construction in both the 482 and this, the 481 case, should be
8 adopted by this Court. So I am adopting in total the prior
9 constructions entered by Judge Schroeder in Document 150 in
10 the 482 case as to those terms that were common to that case
11 and this case and proposed for construction here.

12 That leaves us three additional terms that were not
13 construed in the 482 case, which the Court's prepared to go
14 forward on, and I intend to hear argument this morning and
15 enter new constructions as to those terms from various of the
16 patents-in-suit.

17 With that, the first term that has not previously been
18 construed that the Court's going to take up for argument today
19 is 'mapping means for mapping the requested at least one
20 communication service' from the '052 Patent. And I'm happy to
21 hear argument at this time from the parties in that regard.

22 Let me begin with the Plaintiff, and then I'll hear
23 argument from the Defendant.

24 MR. STRINGFIELD: Good morning, Your Honor. Dan
25 Stringfield of Nixon Peabody here on behalf of Plaintiff

1 Network System Technologies.

2 May I proceed?

3 THE COURT: Good morning, Mr. Stringfield.

4 You may proceed.

5 MR. STRINGFIELD: Thank you, Your Honor.

6 The first term for construction is 'mapping means'. Here
7 on slide 4 of NST's presentation we have on the left the term
8 as it's presented in the claim, in the middle is NST's
9 construction, and on the right is Samsung's construction.

10 THE COURT: Why is it your position that this is not
11 subject to § 112, ¶ 6 given the 'means for' that creates the
12 presumption that the Circuit has told us we have to
13 recognize?

14 MR. STRINGFIELD: Yes, Your Honor.

15 So our position is that because the 'mapping means' is
16 described in the claims as a constituent element of the
17 integrated circuit -- so there's an integrated circuit that's
18 defined in the preamble, and then the rest of the claim
19 defines what is included within that integrated circuit. The
20 parties have agreed on the construction of 'integrated
21 circuit', and they have agreed that an integrated circuit is a
22 structural physical element.

23 And so it is our position, backed up by Federal Circuit
24 case law that we've cited in our brief, that when a claim
25 describes an integrated circuit and a person of ordinary skill

1 in the art looks at the elements of that integrated circuit,
2 they understand that these are all physical elements, these
3 are sub-elements of circuitry that are embodied within that
4 larger integrated circuit.

5 And so, therefore, it's NST's position that these
6 constituent elements, such as the 'mapping means' and the
7 other terms that the Court has already ruled upon are physical
8 structural elements just by nature of how integrated circuits
9 are designed.

10 A designer of an integrated circuit will define the
11 circuitry overall in terms of functionality, and then they
12 rely on programs that help them generate the layout of the
13 circuitry and what the specific micromachinery of that circuit
14 looks like. An integrated circuit, Your Honor, is -- it's a
15 hardware element. It is little gates and microscopic
16 transistors that direct the flow of electrons. This is
17 machinery, just on a microscopic level, but it's so minuscule
18 and so tiny that the human mind can't comprehend it, and so
19 the designers relied on software tools to design it, and when
20 they see a 'mapping means', they understand what that means.
21 And so that's our motion for why that's a structural element.

22 THE COURT: And so clarify for me. Are you saying
23 that the presumption created by the means for language has
24 somehow been overcome, or are you telling me that, despite the
25 guidance as to the creation of a presumption, when language

1 like 'means for' is implemented, that somehow this doesn't fit
2 that scenario and there is no presumption in the first place?
3 Which of the two is it?

4 MR. STRINGFIELD: I'm sorry, Your Honor. There is a
5 presumption; absolutely, Your Honor. And our position is that
6 the presumption is overcome, like in the *Skky* case that we
7 cited in our brief.

8 THE COURT: Okay. All right. Please continue with
9 your argument.

10 MR. STRINGFIELD: Thank you, Your Honor.

11 And so if the term -- or if the Court, rather, concludes
12 that § 112, ¶ 6 does apply, the parties identify the same
13 function for means-plus-function. There's no dispute there.
14 The gist of the parties' dispute is the structure.

15 So NST's position in its briefs has been that the
16 structure is a circuit. However, in light of the Court's
17 email yesterday indicating that the Court was adopting Judge
18 Schroeder's rationale where, in that opinion, Judge Schroeder
19 rejected similar arguments for 'dropping means' and for
20 'communication manager' and the other terms, NST has proposed
21 an alternative structure that's in our slide.

22 We emailed counsel for Samsung last night after receiving
23 the Court's email indicating to them that we intended to argue
24 this alternative structure for § 112, ¶ 6. And so the
25 structure that NST proposes is "the alternative embodiments

1 disclosed in the '052 Patent at figures 1 through 4 and the
2 associated text at column 5, line 6 through 12; column 6,
3 lines 39 through 64; and column 8, lines 7 through 25."

4 THE COURT: All right.

5 MR. STRINGFIELD: Your Honor, moving to slide 6 of
6 our presentation. So there are four figures in the '052
7 Patent that disclose what the 'mapping means' is. And so I
8 guess I should have -- shouldn't have skipped over slide 5.
9 Slide 5 is claim 1, and shown on slide 5 highlighted is the
10 'mapping means' term. And underlined is the 'mapping means'
11 language. And as the Court can see, the patent uses a letter
12 'A' to define the 'mapping means'.

13 So now if we go to slide 6, we see in the box of text
14 excerpted from the specification, it refers to 'adapter unit
15 A'. So in the specification the 'mapping means' and adapter
16 unit A' are used synonymously.

17 And so here in figure 1 of the patent, it shows one
18 embodiment of where the mapping means may be located. In the
19 specification passage that we cite here, which is column 5,
20 lines 6 through 12, it describes two alternative locations for
21 the adapter unit or mapping means. In one alternative, the
22 adapter unit or mapping means may be located between the
23 master or slave modules and the network interfaces, and then
24 in another embodiment described here the adapter unit or
25 mapping means may be a part of or inside of the network

1 interface. And so that's what's described in the
2 specification passage shown here on slide 6.

3 On slide 7 is the second set of figures in the patent,
4 figures 2A and 2B, and then on the right is a passage from the
5 specification that describes what is depicted in figures 2A
6 and 2B. And again -- the specification passage, rather, is
7 column 6, lines 39 through 55. And in this passage, again it
8 refers to adapter units A and describes one example embodiment
9 of the mapping means or the adapter units.

10 Moving to slide 8 is figure 3 of the patent, which is
11 another embodiment of the adapter means or mapping means. On
12 the right is the specification passage at column 6, lines 56
13 through 64, that describes what is shown in figure 3 and,
14 again, refers to the adapter units. In this embodiment, as
15 the Court will observe, this is a box that's labeled 'NI',
16 which is the network interface, and within that box on the
17 left side are the adapter units. One is labeled AXI, the
18 other is labeled DTL, both -- and in the hyphen A, that
19 indicates those are the adapter units.

20 And finally, Your Honor, figure 4 from the patent also
21 shows the mapping means. In figure 4 there is the network
22 interface that's highlighted with a dotted box to the left of
23 it. In this embodiment the mapping means is included within
24 the network interface, and in that dotted box it explains that
25 here the translation is between an address range on the left

1 side of each -- or each colon in the dotted box on figure 4
2 and on the right side those are mapped to connection IDs. So
3 it's one address range to connection ID 0, the second address
4 range to connection ID 2, and so forth. And that's described
5 in the specification passage, which is shown on the right side
6 of slide 9, which is column 8, lines 7 through 25.

7 So NST's position for the structure of -- if this -- if
8 § 112, ¶ 6 applies, are those four figures that we just walked
9 through and the associated specification passages that
10 describe those figures that are shown on the preceding slides.

11 THE COURT: Let me ask you this, counsel. Following
12 that same train of thought, assuming for purposes of
13 discussion the Court does find that this is subject to
14 treatment under § 112, ¶ 6, as you've noted the function is
15 really not in dispute, it's all about the structure, tell me
16 why the proposed structure from the Defendant is erroneous
17 and, in particular, how you find it to be improper.

18 MR. STRINGFIELD: Yes, Your Honor.

19 So that's on slide 10. It's incomplete, Your Honor, is
20 the issue. So in the top box on slide 10 is what Samsung
21 proposes for the structure. They propose specification
22 passages, column 5, line 58, through column 6, line 3; column
23 6 lines 30, through column 7, line 14; and only figures 1, 2A
24 and 2B.

25 Their proposal for the structure excludes, inexplicably,

1 figure 3 and figure 4. And then shown on the right side of
2 slide 10, their construction excludes the specification
3 package description of figure 1, which, again, is at column 5,
4 lines 6 through 12; and their citation for structure excludes
5 the specification's description of figure 4, which is shown
6 column 8, line 7 through 25.

7 So, again, our position is that their casting of the
8 structure is incomplete. They seem to ignore, for example,
9 embodiments where the adapter unit is inside the network
10 interface, and they focus only on figures that show the
11 adapter unit outside of the network interface, and we don't
12 believe that's an accurate construction.

13 THE COURT: All right. What else do you have for
14 me?

15 MR. STRINGFIELD: On this term, nothing, Your Honor,
16 unless the Court has any questions.

17 THE COURT: No, I think you answered my questions so
18 far.

19 MR. STRINGFIELD: Thank you, Your Honor.

20 THE COURT: Let me hear response or argument from
21 the Defendant.

22 MR. MIZZO: Good morning, Your Honor. Chris Mizzo
23 from Kirkland & Ellis for the Samsung Defendants.

24 May I proceed?

25 THE COURT: Good morning.

1 You may proceed.

2 MR. MIZZO: Thank you, Your Honor.

3 THE COURT: Why don't we drill down to where we
4 left off with the Plaintiff's counsel. Let's see what you can
5 persuade me with regard to the proper structure assuming that
6 this is subject to § 112, ¶ 6 treatment.

7 MR. MIZZO: Yes, Your Honor.

8 And I -- you did correctly seize on that the presumption
9 would apply, and counsel acknowledged that. And I think for
10 the same reasons that you've adopted the rationale for the
11 constructions of 'dropping means' and 'interface means' by
12 Judge Schroeder, that presumption would continue to apply
13 because in that opinion he rejected NST's argument that
14 because something -- because a claim begins with a preamble of
15 integrated circuit, it must be structural. I think the same
16 logic applies, and, therefore, the presumption holds.

17 So turning now to the corresponding structure --

18 THE COURT: Well, I haven't told you I'm going to
19 treat this under § 112, ¶ 6, but all the questions I've asked
20 are based on that presumption, so that ought to give you an
21 idea where I'm leaning anyway.

22 MR. MIZZO: Understood, Your Honor. And if you have
23 any questions regarding the presumption, I'm happy to address
24 that.

25 THE COURT: Okay.

1 MR. MIZZO: But with regards to the claimed
2 structure, now, I think it's clear that under the law the
3 claimed structure has to be all the structure that is recited
4 for performing the claimed function. Counsel's correct for
5 NST that there is no dispute with regard to the claimed
6 function. So then it comes down to what is disclosed in the
7 '052 Patent for performing the mapping function. And here on
8 slide 15, we see excerpts from the specification.

9 And let's drill down. I think there are two primary
10 disputes NST has raised. First, they have an issue with the
11 number of specification cites we have, and then they say our
12 structure we identify is too narrow. The structure we
13 identify is correct. The structure that is identified are the
14 adapter unit shells in figures 2A and 2B, which are shown here
15 on slide 15. As you can see from this image, those adapter
16 units are shells. And I say 'adapter units are shells'
17 because the patent uses the phrase 'adapter unit' and 'shells'
18 interchangeably and, therefore, sometimes if I say 'adapter
19 units' or I say 'shells', I'm really talking about the same
20 thing. And that is the rectangle that's identified by a
21 highlighted 'A' in figures 2A and 2B.

22 If you look at those figures, you'll see that each shell
23 contains a box labeled SEQ, which is a sequentializing unit,
24 and they also include a box designated DESEQ, which is a
25 Desequentializing unit. So each shell that is shown in the

1 specification has both a sequentializing unit and
2 desequentializing unit. Further, they have certain inputs and
3 outputs that are shown in this figure.

4 This is the structure that you can see on the right-hand
5 side of slide 15 in column 6, lines 39 through 53, that
6 performs the mapping function. It says, for example, that
7 these adapter units 'A' may also be considered shells to map
8 the communication services of an IP block.

9 Continuing further down, the shells 'A' comprise a
10 sequentializing unit, SEQ, and desequentializing Unit, DESEQ,
11 respectively.

12 And then it goes on to talk about the basic operation of
13 the shells, the sending of the messages, and this is the
14 structure that performs the claimed function.

15 Now, in the specification cites and the slides that
16 counsel walked you through, I don't think there's any
17 disagreement that what is shown in figures 2A and 2B are
18 what is the structure. In fact, counsel acknowledged in his
19 argument that the 'adapter unit' and 'mapping means' are used
20 synonymously in the '052 Patent.

21 THE COURT: Let me ask you this, counsel. It seems
22 that you and opposing counsel are not far apart with regard to
23 whether or not figures 1 and 2A and 2B ought to be included in
24 the structure, but Plaintiff's made it clear that they believe
25 figure 3 and figure 4 should also be included in the

1 appropriate structure and to leave them out is improper.
2 You've obviously not included them in your proposed structure,
3 so that seems to be the rub here.

4 Why don't you tell me why Plaintiff's wrong with regard
5 to the inclusion of figures 3 and 4 in the structure.

6 MR. MIZZO: Absolutely, Your Honor.

7 And the short of it is, and I'll show you based on their
8 slides, is those figures and the surrounding text don't add
9 anything beyond what is shown in figures 2A and 2B, and that
10 is because the way this patent is structured, these shells can
11 be either outside the network interface or inside the network
12 interface, but these shells are what does the claimed
13 function.

14 And so if I can transition to the document camera,
15 please.

16 Okay. So here this is slide 8 from NST's presentation
17 and this is figure 3. This is exactly what I'm talking about,
18 Your Honor. This is -- right here, this box is the network
19 interface, and here's an adapter unit or shell, and there's
20 another one. Okay? The shells are within the network
21 interface. And if you look at the description, what they
22 emphasize, and rightly underline, is that it's the adapter
23 units or the shells that are going to be doing the mapping
24 function, which is consistent with us pointing to figures 2A
25 and 2B.

1 Now, with regard to figure 4, and this is on slide 9 of
2 NST's presentation, they want to point to the network
3 interfaces as performing a claim function, and the Court --
4 part of the specification they point to is this line. I think
5 this is what they're pointing to is the start of this where it
6 says, "the network interface NI associated to the master M may
7 map the communication to the first slave S1."

8 The issue here is the network interface, as you can see
9 here, is a black box, and under *Augme Techs.*, a black box is
10 not sufficient structure. The only thing that's identified as
11 doing the mapping function is the adapter units that are shown
12 in figures 2A and 2B. And that's consistent with figure 4
13 because it's the shells that are doing the mapping function in
14 figure 4.

15 THE COURT: What makes that a black box, in your
16 view?

17 MR. MIZZO: Because if you look at the text here
18 in column 8 that they've quoted, the network interface is
19 described by the function that it performs, that it maps,
20 but it doesn't describe what the structure is of the network
21 interface that's doing the mapping; as opposed to the shells
22 in figures 2A and 2B which show the sequentializing/
23 desequentializing units, the inputs and outputs, that's the
24 structure that's doing it, not this black box.

25 And if you look, Your Honor, let's flip to figure 1.

1 It's the same black box that's shown in figure 4. Here's
2 figure 1, and we have network interface here but we have the
3 adapters here. Okay? And those adapters right there are
4 black boxes, but we know from figures 2A and 2B what is
5 contained in that box. And that's critical.

6 But returning back to figure 4, I think what's also
7 important is if you look, Plaintiff cites column 8, lines 7
8 through 25. All right? And they proposed this construction
9 last night, Your Honor, and so, you know, I, of course, had to
10 then look at the patent to see where the specification cites
11 were coming from --

12 THE COURT: Well, in all fairness to both sides, you
13 didn't get the indication from me about the adoption of Judge
14 Schroeder's constructions until yesterday afternoon, so I
15 suspect both sides were scurrying around a little bit. So I'm
16 not going to fault either side for reacting within the time
17 frame I've given you.

18 MR. MIZZO: And let me clarify, Your Honor. I
19 didn't mean that to suggest anything other than that required
20 me to go back to look at the specification to see what else is
21 said about figure 4 that is not within their cited portions of
22 the specification, and that is exactly what I did.

23 And if we look -- so I'm zooming in on column 8 of the
24 '052 Patent, and what I've bracketed here is the language that
25 they cite. It's column 8, lines 7 through 25. But if you

1 look at the next paragraph, which goes from 26 down to about
2 36, you'll see what I'm saying, which is, The above-described
3 mapping of address ranges can be applied using a shell. And
4 it continues with "producer and consumer modules read and
5 write the streams via a shell using an identifier. The
6 address generation and synchronization is performed in the
7 shell."

8 So, Your Honor, certainly you can include figures 3 and
9 4 and the corresponding text that goes with those figures as
10 part of your construction, absolutely you can, but at its
11 core, the corresponding structure are the shells that are
12 figures 2A and 2B.

13 THE COURT: All right. What else?

14 MR. MIZZO: That is it, Your Honor, unless you'd
15 like to talk about the presumption.

16 THE COURT: No, I think that's probably not
17 necessary.

18 MR. MIZZO: Thank you.

19 THE COURT: Anything further from Plaintiff before
20 we move on?

21 MR. STRINGFIELD: Your Honor, nothing further on
22 this term, unless the Court has questions.

23 THE COURT: All right. Then let's do this. Let's
24 transition to 'arranging the first and second information
25 comprising' from claim 4 of the '9893 Patent.

1 Defendants argue that this is indefinite. Let me hear
2 from Plaintiff as to why it's not.

3 MR. STRINGFIELD: Thank you, Your Honor.

4 I'm on slide 12 of NST's presentation.

5 So as the Court indicated, Samsung contends that this
6 term is indefinite. We don't believe that they've met the
7 burden of demonstrating indefiniteness, and I'll talk about
8 that in a moment. In the middle is NST's construction, and in
9 our construction we've proposed to correct what we view as a
10 clear and obvious typographical error in the claim language,
11 and that error being on the left you can see the claim
12 language which says 'comprising', and we believe that was a
13 typographical error--that's clear from the context, and I'll
14 talk about that in a moment--and it should say 'comprised in'.
15 And so that's NST's construction is to fix that single typo.

16 On slide 13, we have a slide illustrating what that
17 correction looks like. So in the top right quadrant of slide
18 13, you see the language as it is, which is "arranging, at
19 said address translation unit, the first and the second
20 information comprising said issued message as a single
21 address." And below that is NST's correction via its
22 construction, which would read, "arranging, at said address
23 translation unit, the first and the second information
24 comprised in the said issued message as a single address."

25 On the left side of slide 13 is the claim language of

1 claim 4 with some highlighting added. So at the top in the
2 yellow highlighting in the preamble, we see the language "a
3 message issued by an addressing module M comprises:", 'first
4 information' shown in blue, and 'second information' shown in
5 pink.

6 Then when we go down to the 'arranging' step, which is
7 step (b) with 'arranging' highlighted in green it says, "the
8 first information in blue and the second information in pink
9 comprising said issued message." And we believe this is a
10 typographical error.

11 From the preamble in the first portion of the claim, the
12 first information and second information are inside of the
13 message, so it says the message comprises the first and second
14 information. However, when you get down to limitation (b), it
15 says the first information and second information comprising
16 the message. So there it looks like the message is inside the
17 first and second information. So we believe that was a
18 typographical error, a swap of 'comprising' and 'comprised
19 in'.

20 Here also on slide 13 is the legal standard that says
21 that correction of a typographical error is only permissible
22 where it is clearly evident from the specification, drawings
23 and prosecution history. And in the last highlighted passage
24 it says it's appropriate if "it would have been apparent to
25 the interested reader that an error was made, such that it

1 would be unfair to enforce the error."

2 And so here on this slide we've shown how the claim
3 language supports the conclusion that this was an inadvertent
4 and obvious error. On slide 14, we have additional support
5 from the specification that also confirms that it was a
6 typographical error.

7 THE COURT: From what I see in the briefing--and
8 maybe I misread it--but from what I see in the briefing it
9 doesn't look like there's a big argument between the parties
10 about there is an error here; it's, you know, what kind of an
11 error, can it be fixed, if it can't be fixed, is the term
12 indefinite. But there doesn't seem to be a big dispute, there
13 is an error; no, there's not an error. That's just not what
14 I'm seeing in the briefing.

15 MR. STRINGFIELD: I don't think the parties dispute
16 that there's an error. I think that there is a little bit of
17 ships passing in the night here as far as what is the main
18 thrust of Samsung's indefiniteness argument.

19 So when we read Doctor Madisetti's declaration, starting
20 at paragraph 82 of his declaration he mentions this error as
21 one contributing -- this typographical error as contributing
22 to his belief that the claim is indefinite. And so we address
23 that in our opening brief, and we went through the examples
24 that I'm prepared to talk about here as to why that this was a
25 typographical error that could be corrected.

1 Doctor Madisetti also talks about the 'arranging' word
2 itself, and he says that he doesn't understand what that means
3 and a person of ordinary skill in the art wouldn't understand
4 what that means.

5 And so in our opening brief we believe that the primary
6 thrust, given that he mentioned it first, was this
7 typographical error, and that's what we addressed in our
8 opening brief. When we received Samsung's reply brief, they
9 say NST talks about this typographical error, but that's not
10 what we're arguing--I'm paraphrasing--but in the first line of
11 their argument it says something about that effect--we're not
12 arguing about the typographical error; we're talking about the
13 'arranging' word, and then they go into the 'arranging' word.
14 And so then we address that in our reply brief, so we respond
15 to that.

16 So if that's what the Court is referring to, it is a
17 little bit of ships passing in the night. We did meet
18 arguments on -- at least on the arranging part. I don't
19 believe that Samsung has disputed in any way, shape, or form
20 our proposed correction of this error. We indicated it was
21 an error, we proposed a correction for it, we provided a basis
22 and rationale for that correction, and all of that is
23 unrebutted in their briefing.

24 So we believe that that should be adopted, our -- NST's
25 proposed construction, which fixes that typographical error.

1 If the Court concludes that the term is not indefinite, then
2 NST's construction with that typo correction should be
3 adopted.

4 THE COURT: Let me ask you this, counsel. It seems
5 clear to me that Samsung's position is that, typographical
6 error or no typographical error, corrected or not corrected,
7 the gravamen of their indefiniteness argument is the
8 'arranging' term, but set that aside for the time being.
9 Since we're focusing on the typographical error, just in a
10 hypothetical sense let me ask you, in -- as an alternative or
11 as a perhaps different way to accomplish the same result,
12 other than changing 'comprising said issue' to 'comprise in
13 said issue', as you propose, what would your reaction be to
14 addressing the typographical error in a different manner by
15 saying "arranging the first and second information, comprising
16 said issued message, as a single address"? Does offsetting
17 the 'comprising' phrase by commas fix the typographical or the
18 unintended error, in your view, and if it does, which of the
19 two ways is the best way to address it; or is it your view
20 that those offsetting commas would not correct what needs to
21 be corrected here?

22 MR. STRINGFIELD: Your Honor, I don't believe so. I
23 don't believe that the offsetting commas would, because as I'm
24 imagining that construction, it would seem that it would still
25 read that the -- you know, the -- it would be "the first and

1 second information, comprising said issued message," and I
2 think that would still, you know, convey the concept of that
3 message being inside the first and second information, when,
4 in fact, the first part of the claim and the remainder of the
5 specification talks about the opposite. It talks about the
6 message comprising that first and second information inside of
7 it. So I don't believe that the commas would ameliorate this
8 error. I think it should be replacing 'comprising' with
9 'comprised in' as we proposed.

10 THE COURT: Well, given there's not a lot of dispute
11 that there's an error here that needs to be corrected, I will
12 just be candid with you--the Court's looked for ways that
13 correct the error but do as little changing to the language of
14 the claim as possible, and inserting commas seems to be a less
15 invasive way of addressing this rather than changing
16 'comprising' to 'comprised in'. That's why I asked for your
17 view on this alternative approach.

18 Okay. Why don't we do this. Why don't you transition
19 to what appears to be the gist or the gravamen of Defendants'
20 argument and tell me why 'arranging' does not bring us to a
21 position where this is indefinite on a clear and convincing
22 basis.

23 MR. STRINGFIELD: Certainly, Your Honor.

24 So it's our position that 'arranging' is, you know,
25 candidly, a readily understandable term. NST's expert Doctor

1 Chmelar explains that a person of ordinary skill in the art
2 would readily understand how to arrange two units of
3 information as a single address. That's in his declaration
4 which is Docket 100-7 at paragraph 156.

5 He goes on to cite various operations for arranging that
6 would be, in his opinion, well-known to a person of ordinary
7 skill in the art; also in paragraph 156. He then provides two
8 simple examples of 'arranging' and 'unarranging' information.

9 And to be clear, Samsung faults Doctor Chmelar for
10 pointing to unarranging and saying that he requires that to be
11 part of the claim. He doesn't say that. He has two example
12 illustrations of 'arranging' and 'unarranging'; not, you know,
13 trying to import those into the claim, but just pointing out
14 how a person of ordinary skill in the art would understand the
15 concepts of 'arranging' and 'unarranging'.

16 On the side we have Doctor Madisetti who says he doesn't
17 understand 'arranging', or a person of ordinary skill in the
18 art wouldn't understand 'arranging', and so it's a -- you
19 know, a conflict of experts is where we're at where one expert
20 says yes and one expert says no, and in our opinion that
21 doesn't rise to clear and convincing evidence to rebut the
22 presumption of validity.

23 You know, here the language 'arranging' we think is
24 career. It says, you know, where the arranging is
25 happening--it's happening at the address translation unit.

1 It's saying what is arranged--it's the first and second
2 information. It's saying how it's arranged--as a single
3 address. So this isn't even the word 'arranging' in
4 isolation; it's in the -- you know, in the context of the
5 claim language. And so on slide 15 we've highlighted that
6 language.

7 And on slide 16 we have the standard for indefiniteness.
8 Again, it's clear and convincing evidence to overcome the
9 presumption of validity. And in the *Halliburton* case that we
10 cite in our brief, there it's instructed that if the meaning
11 of the claim term is discernible, and even if reasonable
12 persons, such as Doctor Chmelar and Doctor Madisetti, will
13 disagree, that doesn't equate to indefiniteness. It's an
14 exacting standard, again requiring clear and convincing
15 evidence that, you know, no one could discern the boundaries
16 of the claim from the claim language, the specification, the
17 prosecution history, and here, most importantly, the knowledge
18 of a person of ordinary skill in the art.

19 Doctor Chmelar explains how such a person would
20 understand based on their extensive educational and work
21 background what 'arranging' means in the context of this
22 claim.

23 So that's why we believe it's not indefinite. Samsung
24 has not met their burden of clear and convincing evidence.

25 THE COURT: All right. Thank you, counsel.

1 MR. STRINGFIELD: Thank you, Your Honor.

2 THE COURT: Let me hear from Samsung in response,
3 please.

4 MR. RABINOWITZ: Good morning, Your Honor. Alan
5 Rabinowitz with Kirkland & Ellis for the Samsung Defendants.

6 THE COURT: Good morning.

7 Please proceed.

8 MR. RABINOWITZ: Thank you, Your Honor.

9 So you correctly noted, Your Honor, that the issue here
10 is really a question of indefiniteness. Samsung does not have
11 a strong position one way or another on the typographical
12 issue. Whether the Court resolves that by commas or by some
13 other means does not impact our arguments and our issue
14 because correcting that does not address the real problem here
15 which is the scope of the claim.

16 Counsel mentioned that a person of ordinary skill in the
17 art would understand 'arranging' and that there would not be
18 -- he didn't use this phrase, Your Honor, but he did point to
19 the *Halliburton* case, and his argument essentially seems to be
20 that the term's not insolubly ambiguous, but that is not the
21 standard, Your Honor.

22 THE COURT: Not anymore.

23 MR. RABINOWITZ: Not anymore. And the *Halliburton*
24 case is pre-*Nautilus*. And the issue here is there -- is there
25 a reasonable scope that a person of ordinary skill in the art

1 would be able to ascertain with reasonable certainty, and the
2 issue here, driven largely by NST's own expert, is that there
3 isn't. It's not clear what would be within the scope of
4 arranging first and second pieces of information as a single
5 address and what operations and modifications and
6 manipulations a designer could undertake that would take them
7 outside the scope of the claim such that they're doing
8 something else entirely.

9 And so --

10 THE COURT: It seems like what you're saying is that
11 if the parties can't come to or if the experts don't agree on
12 the scope of the language then it's indefinite, but it's clear
13 you do bear an elevated burden here of clear and convincing
14 evidence. It doesn't have to be insolubly ambiguous anymore,
15 but where you have competing experts who differ on what a
16 person of ordinary skill in the art would understand, don't
17 you really have a factual dispute that would make it very
18 difficult to rise to the level of clear and convincing
19 evidence?

20 MR. RABINOWITZ: Respectfully, Your Honor, I think
21 that this is a legal dispute. I think this is in line with
22 the *02 Micro* case where we've got a dispute about the scope of
23 the claim, what is within the scope of 'arranging', as that
24 term is used in the patent, and if we can't determine that
25 based on the patent itself, then the claim is indefinite.

1 THE COURT: Well, is the dispute the actual scope of
2 the claim or is the dispute what a person of ordinary skill in
3 the art would understand, which seems to me more of a factual
4 question than a legal question.

5 MR. RABINOWITZ: So Your Honor I think it's the
6 scope of the claim, and I can walk through some examples of
7 why I think that's the case.

8 THE COURT: Okay. Please do.

9 MR. RABINOWITZ: Yes. And so why don't I jump
10 ahead, Your Honor. I'm going to go to slide -- Samsung's
11 slide 27.

12 THE COURT: They're your slides. Jump around any
13 way you need to; just address my question.

14 MR. RABINOWITZ: Absolutely, Your Honor.

15 And so counsel referenced this portion of Mr. Chmelar's
16 declaration--I'm sorry; Doctor Chmelar--and what he says is
17 that "'arranging' may encompass concatenation, addition,
18 subtraction, integer multiplication, XOR, indexing a look-up
19 table, and so on." And actually I apologize, Your Honor. I'm
20 going to go back one.

21 And he just gives these as examples. He just says, "and
22 so on." There are any number of operations that he says you
23 could perform, both on the first and second information and to
24 the second first and second information that are within the
25 scope of the claim. And the issue is that this ultimately

1 reads out any limitation on 'arranging'.

2 And you can see this in his figure below, this
3 generalization of 'arranging' where what he seems to be saying
4 is, as long as I start with first and second information as
5 inputs and I end up with a single address, I'm within the
6 scope of the claim. But what that does, Your Honor, is that
7 rewrites the claim from "arranging first and second
8 information as a single address" to "using first and second
9 information to generate a single address," and those things do
10 not mean the same thing.

11 Now, the reason we have this dispute is not because you
12 could not come up with a reasonable interpretation of
13 'arranging'; the issue is where does that stop.

14 And to give a non-technical example, you can think of
15 arranging books on a shelf. Now, you can arrange books by the
16 author's last name, you can arrange them by subject matter,
17 you can arrange them by color, but at the end of that process
18 you still have each of the books on the shelf that are readily
19 identifiable on the shelf and you can go pick them out.

20 What Doctor Chmelar appears to be seeing is that, I can
21 take the books off the shelf, tear the pages out of the
22 bindings, throw them up in the air, mix them all up, put them
23 back in different bindings, and put them back on the shelf and
24 that's still arranging, because I started off with books and I
25 ended up with books on shelves. And that's what 'arranging'

1 means. That's not the reasonable scope of 'arranging'. I
2 don't have a dictionary definition on the screen I can show
3 you, but they generally refer to 'arranging' as positioning or
4 putting in a proper order, and that is --

5 Doctor Madisetti, Samsung's expert, mentioned a possible
6 reasonable interpretation which might be concatenating these
7 two pieces of information so that you have one of them next to
8 each other or maybe there's something intervening like a
9 period or some other piece of information. But the idea that
10 you can take these pieces of information and then do whatever
11 you want to them reads 'arranging' out of the claim.

12 And the reason this is an issue, Your Honor, is because
13 -- and the reason it's an issue of scope is because a person
14 of ordinary skill in the art, or a technical person who's
15 trying to design a chip that specifically does not practice
16 this claim, they're going to want to look at this claim and
17 say, What can I do to be outside the bounds of this claimed
18 invention.

19 So this claim tells me arrange first and second -- the
20 first and second information as a single address. Well, one
21 thing I can do, Your Honor, is I can change what's being
22 arranged. I can perform modifications and manipulations of
23 this first information and the second information and I can
24 change it so what I'm arranging is something else. Doctor
25 Chmelar says, No, that's still arranging the first and second

1 information.

2 You can say, Okay, well, no matter what I do with the
3 first and second information, it's going to -- if I put them
4 next to each other or if I arrange them, that will still be
5 within the scope according to Doctor Chmelar, so why don't I
6 do something else; why don't, instead of arranging this these
7 first and second information, I multiply them, or, to use his
8 example, I use them as an index to a look-up table. So I have
9 axis X that I use for the first information and I use axis Y
10 is the second information, and using those two points I find a
11 single address.

12 Now, you haven't done any arranging at all under any
13 reasonable interpretation of that word; all you've done is
14 used the first and second information to, in this case, not
15 even generate but obtain a single address. And what we --
16 our position is that this interpretation just totally reads
17 the word 'arranging' out of the claim and makes the scope
18 entirely unintelligible to a person of ordinary skill in the
19 art, and that's, Your Honor, why we think it's indefinite. We
20 also think it's inconsistent with the intrinsic evidence.

21 THE COURT: Let me ask this question. So I hear
22 your arguments about scope and, you know, tearing all the
23 pages out of the books and putting them back in --
24 higgledy-piggledy order may be a little bit of creative
25 example here, but within the universe of all possible types

1 and degrees of scope, is that not still bounded or informed by
2 what a person of ordinary skill in the art would understand?
3 I mean, if you talk about arranging six books on a shelf, no
4 POSITA is going to think tearing all the pages out, mixing
5 them up, and sticking them back in the bindings and then
6 putting them back on the shelf is arranging.

7 So is there no limitation on the, you know, infinite
8 number of examples that might relate to the issue of scope, or
9 is scope, at least to some extent, still bounded by what a
10 POSITA would understand and recognize? You know, you either
11 have something that has no limitations at all or you have
12 something with some limitations, and then within those
13 somewhat constricted limitations is it something that's
14 understandable or is it indefinite. It seems like there's two
15 different questions here.

16 And I'm not necessarily persuaded that there is no
17 boundary to the possible different iterations of scope.
18 It seems to me that whatever those possible iterations of
19 possible scope are somehow bounded by what a person of
20 ordinary skill would understand.

21 Now, within that lesser, more cabined grouping of
22 different possibilities, are those such that nobody can really
23 understand which is which and, therefore, it's indefinite, or
24 within that more cabined group of scope possibilities is it
25 really understandable and, therefore, not indefinite. That

1 seems to me more of the question.

2 I mean, if you want to take the pages out of the books
3 and tear them all out and mix them up and put them back in,
4 why don't you just convert the books to their composite number
5 of atoms and mix all the atoms up and put it back on the
6 shelf? You know --

7 MR. RABINOWITZ: I'm sorry. I didn't mean to
8 interrupt you.

9 THE COURT: No, that's fine. I think you understand
10 what I'm asking.

11 MR. RABINOWITZ: Yes, Your Honor. And I'll take
12 that in two parts.

13 First, according to Doctor Chmelar, NST's expert, there
14 is no limit; it is anything. And to use your example, I
15 wasn't going to go so far as constituent atoms; I was just
16 going to go to recycling where you could theoretically take
17 the pages out, recycle them, print entirely new books, and he
18 would say that's arranging.

19 THE COURT: If you're going to go, go as far as you
20 can go.

21 MR. RABINOWITZ: Yes, Your Honor.

22 But you can see this from his declaration where he
23 says -- you know, he's just providing examples here. He's not
24 allowing for any possible limit on what kind of operations
25 would be within the scope.

1 And where I was going to go next, Your Honor, was on
2 the second piece of this. I do think -- this is not -- we're
3 not under the insolubly ambiguous standard. I do think there
4 is a reasonable interpretation that a person of ordinary skill
5 in the art would recognize, and it's guided -- we have some
6 guidance here on -- based on the intrinsic evidence.

7 And to go back first to the claim, one thing -- so we
8 haven't had an opportunity to walk through this. The claim
9 recites "issuing from an addressing module a message request,
10 including the" first -- "said first and second information to
11 an address translation unit."

12 And earlier in the preamble the claim tells us what's in
13 this first and second information. That doesn't matter for
14 this issue. So then we get to our limitation, which is
15 "arranging at said" first -- address translation unit the
16 first and the second information as a single address."

17 THE COURT: Could you slow down --

18 MR. RABINOWITZ: I apologize, Your Honor.

19 THE COURT: -- just a little bit, Mr. Rabinowitz?

20 MR. RABINOWITZ: I will, Your Honor.

21 And so -- and step B, which is our claim term, the
22 address translation unit arranges that first and second
23 information as a single address. And then in the last two
24 steps, the same address translation unit determines which
25 message receiving module is being addressed based on said

1 singled address, and further determines the particular
2 location within that module based on said single address.

3 And during prosecution, the applicants explained what
4 this meant. In response to a rejection by the Patent Office,
5 they described the invention and explained that the
6 translation means -- the address translation means--which is
7 the same thing as the address translation unit--"is adapted to
8 determine which module S is being addressed in the received
9 message based on the first information of said single
10 address," and is further determined -- "and further determine
11 the selected location of the address module based on the
12 second information of the single address."

13 And so I think what this is saying, consistent with the
14 dictionary definitions I mentioned earlier, is that a
15 reasonable scope of arranging the first and second information
16 would be positioning them relative to one another in a larger
17 unit such that they are still discernible so that the address
18 translation unit can see in the single address, Oh, I see,
19 that is the first information, that is the second information,
20 I can still parse that.

21 By contrast--and counsel referenced this earlier--Doctor
22 Chmelar says that in applying his understanding of
23 'arranging', you might need to unarrange in order to discern
24 the first and second information and determine where it is
25 this message needs to go, and that is not consistent with the

1 intrinsic evidence. The intrinsic evidence tells us that you
2 need to be able to discern the first and second information in
3 the single address. And so an example of positioning this
4 that's mentioned by Doctor Madisetti is perhaps concatenation
5 where you take first piece of information, second piece of
6 information, and you put them together and now you have a
7 single address. And that, Your Honor, I think is one way you
8 could identify a reasonable scope for this. The problem --
9 the issue here is that NST rejects that limitation entirely
10 and they say it could be anything under the sun, and our
11 position Your Honor is that is not correct.

12 THE COURT: All right. What else?

13 MR. RABINOWITZ: That's it for me, Your Honor.

14 THE COURT: Thank you.

15 Anything further from Plaintiff?

16 MR. STRINGFIELD: Your Honor, very briefly rebuttal
17 on this term.

18 Back on slide 15 of NST's presentation, to address a
19 couple of points that the Court was making, there is a
20 boundary and there is a boundary to the scope here and that's
21 in the claim language itself. Here, again, highlighted on the
22 right slide of slide 15 is the claim language. It says where
23 the arranging is happening--at the address translation unit;
24 it's saying what is arranged--the first and second
25 information; and how it's arranged as a single address.

1 Doctor Chmelar talks about different ways that things can be
2 arranged, but ultimately that is confined by the claim
3 language itself. It's arranging first and second information
4 as a single address.

5 The claim language goes on and it uses that single
6 address. In step (b) you determine at the translation unit
7 based on that single address. And then -- it's not shown on
8 slide 15, but there's also a sub-step (d) that uses this
9 single address. So it's all confined by the scope of the
10 claims and the knowledge of a person of ordinary skill in the
11 art.

12 And in the context of the specific machine that they're
13 designing, the format of that single address might differ from
14 machine to machine. Counsel used an example where -- I think
15 he said, you know, the first address and second address have
16 to be right after each other. Could be. That could be how
17 the machine that the person of ordinary skill in the art is
18 designing their system, it uses that sort of format. There
19 could be another single address format for a different
20 machine.

21 The patentee wasn't required to limit his claims to a
22 specific single address format. A person of ordinary skill in
23 the art would understand that from this claim language you're
24 using the address translation unit and you have your first
25 information and your second information, and you're arranging

1 that as a single address to be used in the other steps of the
2 claim, using whatever format that that machine might be use
3 and understandable to it. A person of ordinary skill in the
4 art would be able to determine what type of a specific
5 arranging is required in that context without it being
6 necessarily specified in the claim.

7 So that's the disagreement we have. We think that this
8 is sufficiently definite without further limiting what
9 specific type of arranging is required, and again, we don't
10 believe that Samsung has met its clear and convincing burden
11 on that.

12 THE COURT: All right. Thank you.

13 MR. STRINGFIELD: Thank you, Your Honor.

14 If I may proceed on the next term, Your Honor?

15 THE COURT: Let's get there. Just a moment.

16 MR. STRINGFIELD: Sure.

17 THE COURT: Next, it appears that the next term for
18 argument is 'each data package comprising N data elements'
19 from the '2893 Patent.

20 Here it looks like to the Court the real dispute comes
21 down to whether or not its 'data package' or 'every data
22 package'. But I'll hear argument beginning with Plaintiff and
23 then from Defendant.

24 Go ahead.

25 MR. STRINGFIELD: Thank you, Your Honor.

1 So here on slide 18 of NST's presentation we have the
2 parties' competing constructions, and on the left is the claim
3 language itself.

4 NST at bottom is advocating a plain and ordinary meaning
5 construction. We identify two sub-portions of the phrase that
6 we propose for construction because we think it would be
7 helpful for the jury. That is 'data package' as 'a fixed-size
8 arrangement of data'. I have a specification cite for that on
9 the next slide or maybe a couple of slides later that explains
10 where that is based in; and then 'data elements', which is --
11 we also base on the specification.

12 So for 'data package' we propose that that subpart should
13 be construed as 'fixed size arrangement of data', and 'data
14 elements' we propose is 'groups of data'; but again, overall,
15 plain and ordinary meaning for this term. We think that each
16 data package comprising N data elements is understandable to
17 jury.

18 Samsung for its construction replaces the word 'each'
19 with 'every'. We don't believe that's necessary or
20 appropriate, does not add any further clarity for the jury,
21 and is not an appropriate construction.

22 THE COURT: So you would not remove the word 'each';
23 you would just provide what you argue is a plain and ordinary
24 meaning of 'data package' to follow 'each', so it would be
25 'each fixed-size arrangement of data'?

1 MR. STRINGFIELD: Correct, Your Honor. Correct,
2 Your Honor.

3 THE COURT: Okay.

4 MR. STRINGFIELD: And the other mistake that we
5 identify in Defendants' construction is they take out the word
6 'comprising' and replace it with 'has'. Again, we don't
7 believe that that's helpful for the jury or necessary or
8 supported by the specification.

9 Slide 19, we have on the bottom left side the claim
10 language, language of claim 10 as one of the claims that
11 contains this limitation, and it -- the subject limitation
12 says, "each data package comprising N data elements."

13 Above that claim language is a passage from the
14 specification at column 10, lines 16 through 18, where the
15 patentee explains what the word 'comprising' means. He says,
16 "The word 'comprising' does not exclude the presence of
17 elements or steps other than those listed in the claim."

18 And then on the right side of slide 19 are four passages
19 from the specification. In each of these passages -- and I'll
20 provide the citations for the record. The first citation is
21 in the abstract; the second citation is column 2, lines 3
22 through 4; the third passage is column 3, and it says line
23 40 -- I think it is just line 40; and then the fourth passage
24 is column 4, lines 52 through 53. And in each of these
25 specification passages it refers to 'each data package' in all

1 of the instances, not every.

2 So again, the replacement of the words we don't believe
3 is warranted or supported by the specification.

4 Lastly, on slide 20 is where we have our support for
5 the two subparts of the construction--or of the claim phrase,
6 rather--that we propose for construction for the aid of the
7 jury. On the left is 'data package', which we say means
8 'fixed-size arrangement of data'. We find support for that in
9 column 2, lines 17 through 18, where it says the data packages
10 have a fixed-size of N data elements. On the bottom left side
11 is figure 2 with an annotation of an oval circling what a data
12 package is. It's that group of data elements.

13 On the right side of slide 20, we have 'data elements',
14 which 'data elements' are groups of data. How we determine
15 that is the specification at column 2, lines 22 through 26,
16 talks about one of those data elements being a header, and the
17 header has routing information, e.g., destination required
18 type of service. And so that is a group of data. Doctor
19 Chmelar tells us that at paragraph 166 of his declaration,
20 which is Docket No. 100-7.

21 And then, again, on the right side, bottom right side, we
22 have figure 2 annotated with that example 'data element'
23 circled with a red circle to illustrate where that fits in the
24 context of figure 2 as compared to 'data package' on the left
25 side.

1 So those are the two sub-constructions that we propose to
2 aid the jury for the overall phrase that, again, we believe
3 should have its plain and ordinary meaning.

4 THE COURT: Well, you said a second ago that
5 Defendants' proposal replaces the word 'each' with 'every'. I
6 don't know that I would say it replaces it; I'd say perhaps it
7 construes it within the context of this claim. But what's the
8 harm of construing or interpreting 'each' to be 'every' here,
9 in your view?

10 MR. STRINGFIELD: So there might not be. And I
11 think there might be a little bit of ships in the night
12 between the parties as far as what a data package means versus
13 a data packet. So a data package I think of like a pizza, and
14 the number N is how many slices it would have. So the data
15 elements are the slices of the pizza. So if you think about a
16 pizza as our data package and then it has N number of slices,
17 let's say N is three in the figure, that data package would
18 have a fixed-size of data elements; it would have three
19 slices.

20 THE PANEL MEMBER: It's not a very big pizza.

21 MR. STRINGFIELD: It's not a very big pizza, Your
22 Honor. We can make it even bigger. But for now we'll keep it
23 at three.

24 A packet would be a delivery of pizzas. You know, Maybe
25 you're having a party and you've got 12 pizzas, but each of

1 those pizzas would have three slices, would have a fixed
2 number of data elements.

3 So again, a package is a pizza that has a fixed number
4 of slices, and by keeping each pizza the same number of
5 slices, that preserves the timing and it allows you to use the
6 variable N to set your timing, just like is talked about in
7 the specification.

8 So if -- and in their briefing they do, you know,
9 faithfully talk about only data packages. So I think we're
10 okay if we're just talking about data packages. Our concern
11 was that they might be extrapolating this to data packets, the
12 delivery of pizzas, multiple pizzas that each have a finite
13 number of slices. That we believe is -- would be
14 inappropriate and wouldn't be supported. But if, again, we're
15 just talking about packages, we think we're okay here, and the
16 difference between 'every' and 'each' is probably just
17 semantics.

18 But any time, you know, a party switches one word for
19 another, you know, I automatically assume that there's
20 something behind that, and so that's where I think our minds
21 went and that was our concern with that switch.

22 THE COURT: All right. What else?

23 MR. STRINGFIELD: Unless the Court has any
24 questions, nothing further.

25 THE COURT: Let me hear from Samsung, please.

1 MR. RABINOWITZ: Thank you, Your Honor.

2 THE COURT: Go ahead, Mr. Rabinowitz.

3 MR. RABINOWITZ: Absolutely.

4 So I'd like to start here, Your Honor, with the claim
5 language itself. And this, as counsel said, is a -- it's not
6 a dispute of claim language; it is driven by claim language.
7 What Samsung's construction provides is the plain language.
8 It is just a clarification. There's no modification of the
9 scope of the claim. We see this from the language itself.

10 So we start off here, it says, "a data communication
11 network for communicating data packages between the functional
12 blocks." That's the setup. Then we get after the comma to
13 our claim term, which is, "each data package comprising N data
14 elements." So the 'each data package' of the claim term at
15 issue is referring back to the data packages communicated by
16 the data communication network.

17 And what the claim is telling us is that each one of
18 those data packages--and when it says 'each', it means every
19 one of those data packages--has a certain property. The
20 property it has, it is comprised of N data elements. And
21 counsel does not disagree that 'each' here means 'every'.
22 And that, Your Honor, can be the only meaning, because the
23 alternative, which counsel is not arguing for here but did
24 seem to suggest in their briefing, is that it could mean one
25 of the data packages or some of the data packages, and that's

1 not what the claim says; it says "each of the data packages."

2 THE COURT: How can 'each' mean 'some'?

3 MR. RABINOWITZ: I agree it cannot, but that was
4 what was suggested in their briefing.

5 THE COURT: Well, explain to me why we the parties,
6 we the Court, we the jury, potentially, benefit from replacing
7 'each' with 'every' here. What's the efficacy.

8 MR. RABINOWITZ: The efficacy, Your Honor, was there
9 was a dispute -- until just a moment ago there seemed to be a
10 dispute as to whether 'each' did, in fact, mean 'every', or
11 whether it could have been referring to some subset or a
12 plurality. And that is a dispute, because it has already been
13 brought to the Court's attention, we think needs to be
14 resolved, both because we need to make sure that the issue of
15 the dispute is resolved before it reaches the jury and so the
16 jury doesn't reach the -- this dispute on its own.

17 So the second issue here, Your Honor, is if we -- once we
18 reach the point of saying that each, meaning every one of
19 these data packages, has the property of having N data
20 elements, the question is what does that mean. And the --
21 counsel was referring to a concept not mentioned anywhere in
22 the patent of 'data packets' as being distinct from 'data
23 packages'. There's no concept of that, Your Honor.

24 And this goes to their constructions that we'll get to
25 in a little bit, but it's instructive here that the data

1 package -- the size of the data packages are crucial. This is
2 the key feature of the patent. And the reason the language 'N
3 data elements' is important is that it is used later in the
4 claim to determine the number of data storage elements that
5 will be inserted into a particular channel and the number of
6 cycles of delay that will result. And the key feature of the
7 patent, as we can talk about in the specification, is that
8 that amount corresponds to the size of the packages, and that
9 the size of the packages is always the same in a particular
10 network.

11 And the other thing, Your Honor, that counsel mentioned
12 while I'm still on the claim term is that it mentions
13 'comprising', and he said in the specification the patentee
14 made clear that 'comprising' is not limiting. So in addition
15 to whether this property applies to every or all of the data
16 packages communicated in the network, the question before the
17 Court, Your Honor, is is it limited to having N data elements
18 or is it at least N data elements; can it have some other
19 number. And --

20 THE COURT: That seems to me that may be the real
21 fight here.

22 MR. RABINOWITZ: I agree, Your Honor, that is
23 definitely an issue here.

24 And what the -- the language that counsel cited in the
25 specification is consistent with the Federal Circuit's

1 guidance on the word 'comprising' as used as a transition from
2 a preamble to the body of a claim. A preamble that says --
3 that transitions with the word 'comprising' and then lists
4 certain steps or elements can have additional steps or
5 elements. But here this 'comprising' that we're talking
6 about, it's not used as a transition from the preamble to the
7 body; it's used within the body. And what the Federal Circuit
8 has told us is that in that context the word 'comprising' does
9 not have the special interpretation given to it in the context
10 of a transition. In Samsung's slide 41 you can see here
11 -- I'm sorry. That citation I believe is incorrect. That
12 should be *Moleculon*. What the Federal Circuit -- and I will
13 get you that citation in a moment, Your Honor.

14 THE COURT: It's not *ResQNet*.

15 MR. RABINOWITZ: No, it's not *ResQNet*; it's
16 *Moleculon*.

17 And what the Federal Circuit told us is that
18 'comprising', when it's not used in a transitional phase, does
19 not have the special legal meaning of being open-ended and
20 meaning at least these elements; what it means is having, not
21 having it at least.

22 So when the claim says "the data packages comprising N
23 data elements," it means that the data packages have N data
24 elements, they have exactly that number--no more and no less.
25 And as we'll talk about from the specification, that is

1 actually a crucial element of the claim and of the patent
2 itself.

3 And Your Honor, just to get you the citation from
4 *Moleculon*, that is *Moleculon Research Corp v. CBS*, 793 F.2d,
5 1261, page 1272, note 8, and that is in Samsung's responsive
6 brief, Your Honor.

7 THE COURT: All right.

8 MR. RABINOWITZ: And so to explain why this is the
9 correct interpretation of the plain meaning of the claim, if
10 Your Honor will bear with me, I wanted to speak to what the
11 specification describes as the problem it was trying to solve
12 and its solution.

13 And what this patent is directed to is synchronizing slow
14 communication channels in a network with fast communication
15 channels. And one of the key elements here is that all of
16 these channels, slow and fast, are interconnected and they all
17 operate on the same clock. And the clock functions sort of
18 like the music in a game of musical chairs--when the music
19 stops, you need to have landed somewhere.

20 And so the same is true of the clock in an integrated
21 circuit. You need -- a data package traveling over the
22 network needs to be able to get from one place to another by
23 the time the clock runs out. And so if you have a channel
24 that takes longer to traverse because it's longer, physically
25 longer, then it will -- if a data package cannot traverse that

1 long channel within that clock cycle, you have two
2 alternatives--you can slow down the clock to accommodate the
3 slowest channel or you can implement something well-known in
4 the art described as a prior art solution in the patent called
5 pipeline. And what pipelining does is break up that longer
6 channel into smaller pieces. And basically you insert a way
7 station along the way, and so now that data package has
8 somewhere to rest when the clock runs out. And what that
9 allows you to do is keep the higher clock speed for the whole
10 chip, and then only on this channel do you insert a delay. It
11 wasn't going meet that faster clock speed anyway, so there's
12 no loss.

13 And what the patent tells us is that that solution is all
14 well and good for general purpose networks, but there's a
15 particular kind of network where when certain kinds of
16 information, routing information, arrives is critical. It
17 needs to arrive in a predefined cycle, and if it arrives
18 outside of that cycle, it will cause errors.

19 And so an example might be that if you have a clock cycle
20 that starts T , T plus 1, t plus 2, the routing information
21 always needs to arrive in T plus 3, so T plus 3 -- T , T plus
22 3, t plus 6, and if it arrives if T plus 1 or T plus 4, you
23 have an error.

24 And the problem that the patent identifies is that if you
25 add just one data storage element in this slow channel to

1 break it up, what's going to happen is that you're just going
2 to shift the timing by one clock cycle, and now all of the
3 data packages that travel over that channel, they're going to
4 arrive at the wrong time and you're going to create problems.

5 And so what the patent says is for these kinds of
6 particular networks where the predefined clock cycle for
7 receiving routing information is so crucial, we need a
8 specific and different kind of solution.

9 And to give a little more background there on why and how
10 these have a predefined clock cycle, the patent tells us--this
11 is Samsung's slide 34--that each of the data packages in that
12 network have a fixed size of N data elements. And the reason
13 that's important, Your Honor, is because the N data elements
14 determine how long it takes a data package to get from one
15 place to another.

16 The patent tells us in column 2 that because the data
17 packages have a fixed size of N data elements, the
18 communication of a complete package between two network
19 stations takes N clock cycles; the same number of clock
20 cycles, one data element per clock cycle. And so if the data
21 package has three data elements in it, it will take three
22 clock cycles; if it's got four data elements, it will take
23 four clock cycles.

24 And then if you look on the right-hand side, in column 6
25 what the patent tells us is these types of networks leverage

1 this fixed relationship between the size of the data packages
2 and the amount of time it takes for them to traverse channels
3 to set a particular cycle in which they expect to receive
4 routing information; a header, for example, the first data
5 element in a package. And they'll expect to receive that
6 routing information for -- after every N clock cycles, because
7 that's how long it takes to get from one place to another.

8 And to accommodate this very particular type of network
9 where the packages all have the same fixed size and the data
10 routers expect routing information to arrive at a particular
11 time, the patent tells us that the key element is -- when you
12 insert those way stations in the slow channels, what matters,
13 what's crucial is that the number of data elements corresponds
14 to a whole number multiple of the size of the data packages.

15 That is the invention here, Your Honor. It is that when
16 you equip the communication channels with M times N data
17 storage elements to introduce a delay of M times N cycles onto
18 the communication channel with N corresponding to the size of
19 a data package. And M is described elsewhere as being a whole
20 number integer. So you always need to have a whole number
21 multiple of the size of the data packages. And in order to do
22 that, Your Honor, you need to know what the size of the data
23 package is.

24 And we can see this, for example, in one of the
25 embodiments depicted in figure 1 where the patent tells us,

1 "Network 100 shown in figure 1 is arranged to communicate data
2 packages with size $N=3$." That is, all of the data packages in
3 this network have size $N=3$.

4 And in the next sentence it says, "other values of N are
5 feasible." What it's saying there, Your Honor, is a different
6 network can use $N=4$ or $N=5$, but the fact remains that within a
7 particular network, all the data packages have the same size.

8 And you can see here on the right in the patent's figure
9 1 that there are four channels that are interconnected with
10 one another, and one of those on the right-hand side has been
11 identified as a slow channel. And in the figure they all look
12 to be the same length, but presumably this one is a longer
13 channel.

14 And the patent describes inserting M times N data
15 elements in that channel, and because this network
16 communicates data packages with a size of three, we see that
17 there are six data elements data storage elements in there.
18 That's $N=3$ with $M=2$, that gives us 6, and so the crucial
19 element of this patent is that the number of data storage
20 elements that you insert corresponds to the size of the
21 packages in a network. And this, Your Honor, this the right
22 in the claim, and you can see this in the second highlighted
23 portion--I'm sorry--the third highlighted portion on Samsung's
24 slide 32, "The data communication network further comprising M
25 times N data storage elements, M being a positive integer and

1 the data communication introducing a delay of M times N cycles
2 on the first communication channel."

3 And to return to counsel's argument, if N can
4 mean -- if the data package can include at least N, well, how
5 do we know what N is? How do we know how many data storage
6 elements to insert in the channel? How do we know how much
7 delay? And it's inconsistent with the patent's telling us
8 that the premise of this invention is all of the data packages
9 have the same size.

10 Now, I do want to also return quickly to the point of
11 'each' versus 'every'. I think Your Honor is -- seems to be
12 on the same page that 'each' here does mean 'every'; it does
13 not mean one or more or some smaller number. But a number of
14 Federal Circuit cases have addressed this issue and have found
15 that when the word 'each' modifies something in a claim term
16 it refers to every one of those things and it refers to each
17 and every one of those things.

18 And here this is *Apple v. Samsung* and also the *ResQNet* --
19 this is the proper place for that *ResQNet* citation. It's also
20 consistent with dictionary definitions which describe 'each'
21 as a distributive adjective pronoun which denotes or refers to
22 every one of something.

23 The other thing -- this is going back to the 'at least'
24 issue in their briefing. Counsel said that, "Indeed, the
25 variable N is a symbol conventionally used to represent any

1 real number." And so they start -- they try to approach this
2 from two different ways, Your Honor. They say, when it says
3 'comprising N data elements', it means 'at least the N data
4 elements'; and then also, to the extent you don't buy that, it
5 just means 'some number of data elements that is more than 2',
6 because the claim says N being an integer of at least 2. And
7 that would entirely rewrite the claim, it would render N
8 totally superfluous, and it would render the last part of the
9 claim which has the key feature here of a number of data
10 storage elements that corresponds to the size of the data
11 packages, it would totally disconnect the size of the data
12 storage -- the number of data storage elements from the size
13 and eviscerate the very purpose of this patent.

14 Your Honor, the other issue here is that if you were to
15 allow -- if the claim were to allow data packages with
16 different sizes, which is what counsel's arguing for, you
17 would run into the very problem that the patent was trying to
18 solve, because if you insert some number of data storage
19 elements and then you send a package down that pathway that
20 doesn't have a number of data elements that corresponds to
21 that that has a different size, that data package will arrive
22 at the wrong time and so will all the subsequent packages.
23 And so the key feature of the patent is that there is a known
24 quantity of data -- a known size for the data packages that is
25 used to determine how much storage you insert in a channel.

1 And if you -- if there were to be different -- a package with
2 a different size, it would break that solution and you would
3 have the very problem they were trying to solve.

4 Now, quickly I'd like to address the alternative
5 constructions proposed by NST. And the problem here is
6 something that counsel mentioned earlier. The patent tells
7 us that groups of data elements are called packages, data
8 packages. And you can see this on the slide. This is
9 explained in more detail in figure 4 where a data package
10 consisting of data elements h, d0, and d1 is sent. And this
11 is also shown on -- in figure 4 the data packages are groups
12 of data. The data elements are constituent parts of the data
13 packages. And what counsel's proposed construction would do
14 would entirely evaporate any distinction between data packages
15 and data elements.

16 And the patent tells us what it is about a data element
17 that makes it distinct, and the -- what it tells us is it's an
18 amount of data that can go from one place in the network to
19 another in a single clock cycle. So it's not any group of
20 data, it's not an arbitrary group of data; it is an amount of
21 data that goes from one place to another in a single clock
22 cycle. And you can see that here on slide 4 -- on figure 4
23 where the h data element transfers in time T, the d0 element
24 transfers in time T plus one. And that's consistent in the
25 all the figures and it's consistent throughout the patent,

1 and, frankly, Your Honor, it's the only way the patent makes
2 any sense--that you have data packages and the number of data
3 elements -- the amount of data in a data element is what it
4 takes to go from one place to other in a single clock cycle.
5 That's the formulation and that's the basis for the whole
6 patent and that's the basis for this patent's whole solution.

7 THE COURT: All right. Thank you, counsel.

8 Is there any follow-up by Plaintiff?

9 MR. STRINGFIELD: Very briefly, Your Honor.

10 Back to slide 18 of NST's presentation, just to address
11 the word 'comprising', because I think that might be a
12 sticking point.

13 I think that our construction of 'data package' probably
14 solves this already. Our construction of 'data package' is
15 'fixed-size arrangement of data', and so I think that would
16 not allow 'comprising' to be open-ended, as we just discussed.
17 And so I think if that were a sticking point and if the Court
18 was concerned about the word 'comprising', you know, leading
19 to something other than a 'fixed-size arrangement of data',
20 which is our sub-construction, we would be amenable to, you
21 know, further construction of 'comprising' to clarify that.
22 But I heard the Court sort of hit on that as a -- you know,
23 perhaps a key issue that the Court might have wanted to hear
24 addressed, so I just wanted to make that clarification.

25 THE COURT: So you're not opposed -- you're not

1 arguing for 'comprising' here meaning 'at least'.

2 MR. STRINGFIELD: No, Your Honor. Our
3 'data package' is 'a fixed-size arrangement of data'.

4 THE COURT: All right. What else?

5 MR. STRINGFIELD: Unless the Court has any
6 questions, nothing further.

7 THE COURT: All right. Thank you.

8 All right, counsel. We did have one other term that was
9 newly presented and not covered in the earlier construction by
10 Judge Schroeder in the 482 case. However, that term
11 'determination unit' from the '800 Patent claim 8 is
12 effectively moot because that claim is rendered ineffective by
13 Judge Schroeder's earlier finding of indefiniteness, which --
14 with regard to the word 'optimal' which I'm going to adopt.
15 So if the claim's indefinite, there is no need to argue over
16 'determination unit', and, therefore, I don't see any reason
17 for us to spend time on that this morning.

18 Those appear to be the terms from the asserted claims
19 that have not previously been construed or had a construction
20 applied, and I will take your arguments that you presented
21 this morning -- by the way, you both presented them very well.
22 The Court appreciates lawyers who know their material and go
23 to the podium, they can look me in the eye, they can make
24 their arguments without reading from their notes. That's what
25 advocacy is about, and you both did a good job. I'll note

1 that.

2 But I'll take your arguments into account, together with
3 the briefing on these terms newly to be construed. I'll get
4 you a construction order as soon as practical that, as I've
5 already indicated, adopts Judge Schroeder's constructions on
6 the common terms between the 481 and the 482 *Markman*
7 processes, but will give you my constructions on these new
8 terms that we've argued today.

9 These matters are under advisement. Thank you for your
10 able argument. You are excused.

11 And the Court stands in recess.

12 (End of hearing.)

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1 I HEREBY CERTIFY THAT THE FOREGOING IS A
2 CORRECT TRANSCRIPT FROM THE RECORD OF
3 PROCEEDINGS IN THE ABOVE-ENTITLED MATTER.
4 I FURTHER CERTIFY THAT THE TRANSCRIPT FEES
5 FORMAT COMPLY WITH THOSE PRESCRIBED BY THE
6 COURT AND THE JUDICIAL CONFERENCE OF THE
7 UNITED STATES.

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9 S/Shawn McRoberts

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