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

FINESSE WIRELESS,LLC.,	(	CAUSE NO. 2:21-CV-316-JRG
	)	(LEAD CASE)
Plaintiff,	(	
	)	CAUSE NO. 2:21-CV-317-JRG
vs.	(	(MEMBER CASE)
	)	
AT&T MOBILITY, LLC., et al.,	(	MARSHALL, TEXAS
	)	JULY 20, 2022
Defendants.	(	1:30 P.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

Here we have an apparatus claim, and the '134 Patent does describe that the steps that are -- or the components that are used to perform these steps can be implemented in hardware, and so when that's the case we need to know what the structure is.

Furthermore, Mr. Grinstein continues to say that there are an abundance of limitations in claim 3 that provide structure. However, as we noted previously, all of these are functional limitations, and they're also very similar to those in claim 2, which we know is a means-plus-function claim.

And, finally, the paragraph that you had brought up previously of Doctor Mahon's deposition, it does go much more beyond a conclusory testimony. It not only looks at just a sampling unit, but the sampling unit to sample at a desired frequency, a pass band that perceives signals to create a bit stream, and it's unclear what Plaintiff's counsel is expecting to see in terms of analysis when these terms simply have no meaning in the art.

Thank you, Your Honor.

THE COURT: Thank you, counsel.

Okay. Let's go on to 'oversampling' from claim 20 of the '134 Patent.

Let me hear from the Plaintiff first this time.

MS. GRIFFITH: Thank you, Your Honor. Meg Griffith for Plaintiff Finesse.

THE COURT: Please proceed.

MS. GRIFFITH: Thank you.

The -- what this dispute about 'at a low resolution' comes down to is where whether Defendants should be able to import from the claim specification their desired construction of less than or equal to four bits.

To save us some time, I think that even Defendants agree they are looking throughout the specification to look at the embodiments and conclude that these are one- or two-bit samples, that they mentioned one or two bits here, that there's others that mention one bit, and then up to four-bit samples. We don't dispute that that is mentioned throughout the patent; however, we dispute the fact that the idea that 'at a low resolution' requires construction at all. Rather, this isn't one of those cases where the patent language reads 'sufficiently low', 'substantially lower', or any of those general terms that would imply that some level of sufficiency was required.

Instead, as our expert Doctor Wells opined, 'low' is a relative term meaning not high. And, of course, Defendants respond and say, Well, we know that 'low' means not high, so that's a circular argument and that means that you don't really have a boundary for 'low'. But I think that it's important to remember that the '134 Patent is from the early 2000s, and if we're expecting that low resolution at the time

that the patent was prosecuted in a field where resolution that's available is rapidly increasing, where in the time since the patent was published in 2008 the iPhone has gone from 16 megabytes of storage to 512 megabytes, the idea that 'low' must be bound to something that was considered low at the time almost ignores the role of what a person of skill in the art would do or would understand it to mean.

Instead, what's important here is that the inventor knew that resolution was connected to sampling rate. As we heard Defendants' counsel argue earlier, it's true that one of the inventions that's described here in the '134 Patent involves sampling at a low rate but -- sorry -- at a low quantization but a high rate, then passing back that streamed through filters, and being able to use the fact that there was a high rate of sampling to get a greater resolution than one would have with a simple low resolution on its own. The inventor did give specificity about what the sampling rate had to be. The inventor described this as -- the Nyquist rate as the minimum sampling rate that was there, and that's on --

Ms. Vela could you please go to slide 44?

So the inventor knew when he wanted a specific minimum rate how to say that, and that's what we see in the patent language in column 4 and throughout that the low resolution sampling -- what's important about the low resolution sampling is that it's connected with a sufficiently high enough rate.

Finesse is not arguing that rate and quantization mean the same thing, we are not arguing that low resolution means that the sampling rate has to be at some level; rather, we do recognize these two terms are connected, and that while the inventor chose to specify the minimum rate of aliasing in here, the inventor also understood that somebody with the requisite skill in the art would know what low resolution meant in different contexts.

Ms. Vela, could you please go to slide 52?

The problem that we have with going to four bits as the maximum of what could be meant for the four-bit resolution, all of the examples that the Defendants point to have to do with specific embodiments. The inventor specifically stated that the number of bits could vary in various embodiments depending on what the use could be. And that's matched by the idea by the fact that the patent describes four bits in some portions of the patent as low resolution and in other areas as medium resolution. Defendants' stance equating four bits or lower as low resolution does not make sense when other parts of the patent state that four bits is a medium resolution, unless one understands that the definition of what is low resolution is highly context specific.

I'd like to walk through just a couple of cases that came up in the briefing for Your Honor. The first cited by Finesse is *Bennett Regulator Guards*. And the mere fact that a patent

cites high or low -- for example, in the *Bennett* case these were relative terms talking about a high pressure gas source or a low pressure gas source. If it's available to somebody in the art to understand what these mean, if the idea -- excuse me, Your Honor. If there -- there can be relative terms that do not necessarily require specific bounded language. And in this field where higher resolution is available at a cheaper price, where at the time of the patent the inventor knew that cell phone technology was improving, that other communications technology was improving, it would not make sense to give anything other than examples, the embodiments that he describes, for the number of bits.

And, finally, I'd like to talk about the *Core Wireless* case that Defendants cite. We believe this is of no import here. While that case does use the word 'low', the actual language that was in that case was the term 'sufficiently low'. We don't have that here; rather, we just have the term 'low resolution.'

And then, finally, Your Honor, in Defendants' brief we saw this argument from them that without their construction, 'low resolution' would become an indefinite term of degree. Indefiniteness was not disclosed to us as part of the claim construction process. We respectfully submit that to the extent that is Defendants' argument, they've waived it. But regardless, we believe that 'low resolution' is context

specific and it does not make sense to bound 'low resolution' to 'four bits or less'.

THE COURT: All right.

MS. GRIFFITH: If you have no questions.

THE COURT: Not at this juncture. Thank you, counsel.

MS. GRIFFITH: Thank you, Your Honor.

THE COURT: Let me hear from Defendants and Intervenors.

MR. KHANNA: Your Honor, Rajat Khanna for Defendants and Intervenors.

THE COURT: Please proceed.

MR. KHANNA: Thank you.

So as a threshold matter, I think that -- what I wanted to do is just frame the dispute. The dispute -- there are two issues here. One is whether or not the term 'resolution' refers to the number of bits used to represent each sample, and the second issue is whether the specification provides any guidance for determining what constitutes a low resolution.

Now, counsel for Finesse suggested that they are not conflating 'sampling rate' with 'sampling resolution', but if you look at their proposed construction, that's exactly what's happening--'oversampling at a resolution that avoids aliasing'.

And certainly while the specification refers to, as I

explained here, as we discussed earlier, Your Honor, sampling at a high rate but a low resolution and then performing filtering afterwards to achieve higher resolutions, there is absolutely no connection between the sampling rate and the sampling resolution in the spec, as Ms. Griffith suggested. So let me start with --

THE COURT: You're talking about Plaintiff's alternative construction. Tell me what your position is with their plain and ordinary meaning construction, which is really their main one. They've just given me this other as an alternate.

MR. KHANNA: Sure.

For the plain and ordinary meaning, I think the first question is Plaintiff seems to suggest that unless there's an express definition or a disavowal, you must apply the plain and ordinary meaning for a claim term, and that any alternative would be importing embodiments into the claim language. Well, that's not -- that's just not the law. For example, if we look at the Columbia case at 1364 that was cited in our brief, there's a discussion --

And Mr. Jackson, if you could pull up the Columbia case at 1364.

THE COURT: You don't need to read it to me; just tell me what it says.

MR. KHANNA: Fair enough.

The bottom line is that the presumption of a plain and ordinary meaning is overcome if the claim term may be redefined by implication in the specification. And that's really the core issue here.

We can go --

That's really the core issue here. There is absolutely no indication, absent Defendants' construction, what a low resolution would be. And the first -- so that's our response as far as the plain and ordinary meaning argument is concerned.

And if we look at the specification, the claim language clearly says 'oversampling at a low resolution', and the question is whether that's discussing the sampling rate or the resolution. Both experts agree that it's very, very clear that the resolution is referring to the number of bits used to represent each digital sample. That's -- first and foremost, it's referring to the number of bits used to represent a digital sample, not the rate. So there is no connection between the sampling rate and the sampling resolution. Those two things are independent.

And then, of course, as we discussed earlier, in every single instance throughout the specification, the reference to a low resolution is less than or equal to four bits. It's always less than or equal to four bits. Now, of course, there are instances, as we discussed in the specification, where

there is some ambiguity whether or not the threshold of four is low to medium or is it medium to high, but at the very least we know that a low resolution is less than four bits. It may be up to four, but it's less than four bits.

As far as the argument that's -- and this is the one point that I wanted to make why there is this clear distinction between the sampling rate and the sampling frequency. As Doctor Mahon explained in Docket 86-4 in paragraph 70 of his report, while the rate at which a continuous signal is sampled is important as to whether or not any aliased artifacts appear in the sampled digital signal, the resolution at which a signal is sampled is not relevant to that question. And then he provides a very, very helpful example here. He says, For example, depending on a camera's sampling mechanism, a spinning helicopter blade may appear in video to be spinning very slowly, or perhaps may even appear still. Now, you can watch that video on a very, very high definition fancy television that can use many, many bits to represent each digital sample in every frame, but that aliasing artifact is still going to appear. That helicopter blade is still going to look like it's spinning very slowly or it's still. So there is a complete disconnect as far as sampling rate and sampling frequency -- sorry -- sampling rate and sampling resolution are concerned. They're independent questions. So this --

THE COURT: You keep coming back to the Plaintiff's alternative construction.

MR. KHANNA: Sure.

THE COURT: I don't think that's a real good use of our time.

MR. KHANNA: Okay. I think -- well, I think as far as the plain and ordinary meaning question is concerned, You know, again, we asked -- for example, their own expert, we asked Doctor Wells, you know, Whether or not there is a standard by which you can measure the number of bits that would fall within low resolution, as that term is recited in claim 20. And the answer is, I understand that low is not high. There's a difference between the two. Where that boundary is, I don't know. Right?

So ultimately what they're saying is, Afford it the plain and ordinary meaning, one of ordinary skill in the art knows exactly how to figure that out, it's a relative term. Relative to what, we don't know; just it's relative to something that's high. What is high? We don't know what that is. So it's a complete circular argument. It's just -- it's low if it's not high and it's high if it's not low. And, of course, the specification also has a few references to medium. So how far is medium from low? Halfway between low and high? Sixty percent of the way? You know, nobody knows. So the issue is -- and that is --

THE COURT: We don't have an indefiniteness challenge here, though, do we?

MR. KHANNA: Well, -- so we don't. What we're saying is that plain and ordinary meaning won't work simply because the way the specification is written, the way this technology is described -- and so that's both the intrinsic evidence and the extrinsic evidence--for example, Doctor Wells himself--one of ordinary skill in the art can't tell what low is. Right? They don't know how to figure that out.

So you look at the specification and you look for guidance. It's a term of degree. Low is a term of degree. It is relative to something. We don't know what. So the specification -- the only guidance in the specification are these examples, and that's what saves the claim term from being indefinite.

So we did -- yes, we did not propose that the claim term is indefinite. We, in fact, studied the specification and provide a clear boundary that is consistent with the specification and all of the embodiments.

THE COURT: I agree with you context matters here.

MR. KHANNA: Exactly.

THE COURT: The question is, is the context from the specification limiting and is it something that's got to be applied in all cases post the issuance of this patent in 2008 until it expires.

MR. KHANNA: Well, we submit that it would because the specification provides no other guidance. Right? For example, if the specification said, All of my examples are just examples; here is a general principle that you follow, that's how -- then Doctor Wells presumably could have applied that general principle or the Plaintiff in their briefing could have elucidated what that general principle is.

If you read all of their briefing, they don't tell you, Well, it is relative to this or it's relative to that or here is the general term that you can use. If read their opening brief, if you read their reply brief, all you get is a criticism of our proposal that, well, we're importing a limitation in the embodiment. So the flip-side question is, All right. Then what's the standard? How do you know it's low? How do you know its medium? Or at least how do you know it's not low. Right? So it's medium or high, it's just not low, or it is low. There is no standard. There is no general principle -- guiding principle in the separation.

So even though, Yes, time has gone on, technology has evolved, the specification is the specification, and the inventor chose not to provide any general principles that would allow you to come up with a reasonable boundary for what low is, other than the examples provided.

So our position is that that absent following that guidance, the claim term is meaningless, particularly as

evidenced by Plaintiff's own expert when asked if he could provide some kind of standard by which you could measure the number of bits that would fall within low resolution, he couldn't.

So that would be our response, Your Honor.

THE COURT: All right. Thank you.

Anything further on this?

MS. GRIFFITH: Unless Your Honor has specific questions.

THE COURT: I don't. Thank you, counsel.

MR. KHANNA: Thank you very much, Your Honor.

THE COURT: Okay. Let's go to 'a transmitter and a receiver' from the '775 Patent.

And let me hear from the Plaintiff on this first.

MS. GRIFFITH: Thank you, Your Honor. Meg Griffith again for Plaintiff.

May I proceed?

THE COURT: You may.

Your position is plain and ordinary meaning is sufficient here?

MS. GRIFFITH: Yes, Your Honor.

THE COURT: I'd like you to tell me your views on the portion of the Defendants' proposed construction that includes 'but not associated with'.

MS. GRIFFITH: Yes, Your Honor.

I think to answer that, Ms. Vela, could you please go to slide 67?

Our understanding from Defendants' argument is that the 'but the not associated with the transmitter' language comes from these definitions in column 6 of the '775 Patent, and specifically we -- I think both sides agree -- Finesse would be satisfied if 'co-located' meant 'located in the vicinity', or if the definition of 'co-located receiver' read as the definition is set forth in column 6 of the patent.

However, what Defendants have done is replaced the 'self-communications terminal' with the word 'transmitter'. We think the problem with that is that the self-communications terminal is defined to be not only a transmitter but also the receiver, and Defendants' position would be reading out the receiver part of it. It would be potentially conflating which transmitter belongs in the self-communications terminal versus the transmitter that is co-located with the receiver.

If Defendants were willing to use the definition that was set forth in the patent, then we could accept that. We cannot accept changing the words to be something that they're not.

THE COURT: All right.

MS. GRIFFITH: The other issue that we have with Defendants' proposal is they propose that anywhere the term 'co-located' appears in the '775 Patent, it must mean that something is located in the vicinity but not associated with

something else. We believe that the fact that this term here, 'co-located receiver', is placed together, it's clear that if those terms that appear in that order, that is what the inventor is referring to, 'co-located' is already a well-understood term in the art, and it's used even throughout press releases from the Defendants and the Intervenors.

'Co-located' is generally understood to be in the vicinity of something else--for example, where two towers are located near each other, where two transmitters or receivers may be located near each other. What we think is important about sticking to the definition that the inventor wanted when the term 'co-located receiver' appears versus when 'co-located' appears on its own is based on the understanding in the patent that there is a separate self-communications terminal. And, respectfully, we think that Defendants' proposal erases that.

I think one argument that I saw in Defendants' briefing that was a little strange to me, we heard from them that having to use the word 'self-communications terminal' would mean that then we'll have to tell the jury, Okay, well a self-communications terminal means this--the receiver and transmitter of the target system. Respectfully, we don't see that as ran to scratch out the words that are in the definition, but we also believe that as the word 'co-located' appears in the claims at issue, we think that the plain and

ordinary meaning should apply.

THE COURT: All right. Thank you.

MS. GRIFFITH: Thank you, Your Honor.

THE COURT: Let me hear from Defendants and Intervenors, please.

MR. KUBEHL: Good afternoon, Your Honor.

THE COURT: Welcome back, Mr. Kubehl.

MR. KUBEHL: Thank you. Doug Kubehl for Intervenors and Defendants.

THE COURT: Go ahead.

MR. KUBEHL: Thank you, Your Honor.

So, Your Honor, we do have three related claim terms here, and I think we have two issues--one, do these terms refer to the same thing; and then, secondly, what is that thing that they refer to.

With respect to whether they refer to the same thing, we submit that they do, and I think you can look at claim 24 as an example. We have two of the terms in there. We have 'a receiver co-located with the transmitter', that's one of our claim terms, and then later in the claim it refers to 'the co-located receiver'. That's another one of the claim terms.

In these claims, as a matter of grammar, as a matter of claim construction principles, the two terms mean the same thing. In this term 'the co-located receiver' as a matter of antecedent basis refers back to 'a receiver co-located with

the transmitter'. The two terms are used interchangeably in the patent; they mean the same thing. If they didn't, the term 'the co-located receiver' wouldn't have any antecedent basis.

The same example can be shown in claim 4. Claim 4 says 'a receiver co-located with a transmitter', and then dependent claim 15 recites 'the co-located receiver'. The only antecedent basis for dependent claim 15 for 'the co-located receiver' is 'a receiver co-located with the transmitter'. Those two terms are used interchangeably; they mean the same thing.

And so each time this term applies, whether it's 'the co-located receiver' or 'receiver co-located with a transmitter', those mean the same thing. Those are interchangeable in this patent.

So what does that term mean? It doesn't have an ordinary meaning. In this case the parties agree that the patentee was a lexicographer with respect to this term. We've shown you on slide 84 here a section from Plaintiff's brief. They submit that Finesse was acting as a lexicographer, provided a definition of this term, and we agree. If you look to the specification at column 5, line 63, beginning there there's a definition section, and the term 'co-located receiver' appears in that definition section. It's defined as 'a receiver located in the vicinity of the self-terminal but not

associated with the self-terminal'.

So, of course, there's a reference to another term. We have to understand this 'self-terminal' concept, and the patent defines that. Again, not a term with an ordinary meaning, but a lexicography term in this patent, the self-terminal is a receiver and a transmitter of the target system or the central system to discussion.

So I think we all agree that the definition of 'co-located receiver' or 'receiver co-located with a transmitter', that these are defined terms and that the definitions here control. What Plaintiff would have us do is to nest into the 'co-located receiver' definition, the definition of 'self-communication terminal', and then the jury would be presented with a construction that would say that it's a receiver located in the vicinity of the receiver and transmitter of the target system or the central system to discussion, et cetera, with the jury being given no guidance as to what's the target system, what is this central system in discussion. We posit that you don't have to do that because the claim itself gives us context and can help us understand how this definition applies in the context of the claim.

For example, claim 24--I'm looking at slide 87--we have the term 'the co-located receiver' here. That's a defined term. We know what that is. The specification tells us that's got to be something that is located in the vicinity of

but not associated with a particular transmitter and receiver.

The claim itself tells us which transmitter we're talking about here. In the beginning of the claim we know that the receiver is co-located with the claimed transmitter. So 'the receiver co-located with the transmitter', also known here as 'the co-located receiver', that's simply is receiver that's located in the vicinity of but not associated with the claimed transmitter. So the claim itself solves this for us.

Now, it's true we haven't mentioned here 'a receiver', because it is true that the self-terminal does have not just a transmitter but also a receiver, but what you see in claim 24 is there isn't a reference to this other receiver, this self-terminal receiver. And we'd submit that if you use their definition and you start talking about receivers of self-terminals, it's going to cause a lot of confusion.

On slide 89 we've tried to illustrate what some of that confusion might be. The beginning of the claim, of course, we have 'a receiver co-located with the transmitter'. Okay? We've got one transmitter recited -- I'm sorry -- one receiver recited. Then in the next element we see that it recites 'the co-located receiver'. And if we're going to accept Finesse's definitions, well, that co-located receiver in the second instance that we've highlighted in purple, that may or may not be the same thing as the receiver co-located with the transmitter in the first one. But one thing we do know from

their proposed definition is that the one we've highlighted in purple, 'the co-located receiver', that's got to be one that is associated with but not -- I'm sorry -- that is in the vicinity of but not associated with yet another receiver that we've highlighted in blue here, 'the receiver of the target system'.

So under their construction you've got potentially three different receivers. The first one recited could be one receiver, the second one under theirs could be some other receiver, and then certainly there is at least one other receiver that is the receiver of the self-terminal that cannot be associated with the one we've highlighted in purple, 'the co-located receiver'.

Later in the claim there is a recitation to sending copies of signals to the receiver. Now the jury's got to figure out which receiver. Is it the first recited one? Is it the second recited ones? Is it this other one that's not even in the claim perhaps? A lot of confusion here. And that's why we didn't put the concept of the receiver of the self-terminal into our construction because it breeds unnecessary confusion.

If you go with our construction, the claim reads sensibly. If it means 'a receiver located in the vicinity of but not associated with the claimed transmitter', all the receivers in the claim refer to the same refer, as we think is

proper. The antecedent basis a satisfied; there is no ambiguity as to what the later claimed receiver is referring to.

So that is why our construction proposed 'in the vicinity of but not associated with', which is required by the definition and why we said 'the transmitter' and we didn't pack in another receiver in, if Your Honor felt it was necessary and had to reference yet another receiver, that could be done, I suppose. You could say 'the receiver located in the vicinity of but not associated with the transmitter or a receiver associated with that transmitter'. That would be consistent with what the specification says, but then the jury's got to deal with this other receiver that's not recited elsewhere in the claim.

So that's where our construction comes from. It's really following the lexicography and it's within the context of the claim.

THE COURT: All right. Thank you, counsel.

MR. KUBEHL: Thank you, Your Honor.

THE COURT: Anything further from Plaintiff on this?

MS. GRIFFITH: No, Your Honor.

THE COURT: Okay. All right. Let's move to the last disputed claim term for construction involving 'a composite transmitter signal', again from the '775 Patent.

Defendants have argued that this is indefinite. I'd like

to hear their argument first, please, Defendants and Intervenors.

MS. STRAKA: Brianne Straka again for the Defendants, Your Honor.

THE COURT: Please proceed.

MS. STRAKA: Thank you.

With respect to this convolving term, I'm going to try to be relatively brief in my argument here.

As you've noted, the Defendants have argued that this term is indefinite, and I think it's really important when looking at this term -- these two terms, 'convolving a composite transmitter signal set with compression curve function' and 'the combined signals convolving with the standard non-linear compression curve' to read them in the context of the claims. It's within the context of the claims that these claim limitations are indefinite.

So looking here, for example, at claim 10, claim 10 is a dependent claim. It depends from claim 4. And claim 10 includes one of the limitations that we're talking about--'convolving a composite transmitter signal set with a compression curve function'. Claim 10 discusses how the ICSes, the cancellation signals are generated. And, again, it depends from claim 4. And claim 4 also discusses how these ICSes are indefinite. As we go through the evidence here, this is going to be a key reason why this 'convolving' term is

indefinite.

So I wanted to start by discussing what our argument is not. So in paragraph 81 of his declaration, Doctor Mahon described what 'convolving' means. He said, "While a person of ordinary skill in the art would understand that convolving two signals together is equivalent to filtering one signal with another through a mathematical process, the context of the claim terms is ambiguous as to how this is specifically accomplished and what two signals should be convolved." So our argument -- Defendants' argument is not that the word 'convolution' itself is the reason why this claim limitation is indefinite.

Instead, looking again at the exemplary claim 10, Doctor Mahon described also in paragraph 81 of his declaration that there is ambiguity in claim 10 based on -- for two separate reasons. And the first one is it's not clear what the composite transmitter signal set is. So the composite transmitter signal set could have two separate possibilities. Claim 4 refers to three signals--signal 1, signal 2 and signal 3, S1 S2, S3. And the question is whether the composite signal set just means that you take those three signals and you add them together and that's the composite signal set, or, instead, if -- the composite signal set is the result of the math that's described in claim 4. So looking at claim 4, it describes digitally multiplying and filtering S1, S2, and S3

through a specific combination of operations, the first one requiring S1 times S1 times S2; the second one requiring S1 times S2 times S2. And so the ambiguity here is whether that composite transmitter signal set is either the input to that function S1, S2, and S3, or if it's the output of that function, the resulting signal after you perform that digital multiplying and filtering.

If it's the former, then it's not clear which way you're supposed to perform the math. So if you read, again, claim 4 and claim 10 together in conjunction with one another, it's not clear whether or not you're supposed to use the three signals S1, S2, and S3, to generate the ICSes by the digital multiplying and filtering that's described in claim 4, or whether, instead, you're supposed to perform the convolution operation that's described in claim 10.

Similarly, if it's the output, then it's not clear why you need to perform a convolution on the composite transmitter signal set to generate an ICS when the resulting operation from claim 4 already is the ICS.

The other reason that this claim limitation is indefinite is because it's not clear what a compression curve function means in this context. So the first point is--and I'm citing now to Doctor Mahon's declaration at paragraph 78--he explains that the term 'compression curve function' never appears within the specification or the prosecution history. In fact,

this term 'compression curve function' was not in the original claims in the patent; it wasn't added until the June 26, 2014, office action where all the original claims were canceled and new claims were added. And so there is no support in the original written description for what a compression curve function is.

THE COURT: Let me ask you to look at figure 5 of the '775 Patent. Does that not depict a compression curve--the the 45 degree line?

MS. STRAKA: So, Your Honor, I think it's not clear whether or not this is a compression curve, and it's particularly not clear whether or not this is the compression curve that's claimed, and I can explain why. So this is a response for --

THE COURT: Well, if it's a compression curve that's not claimed, I don't know why it's in figure 5 of the patent.

MR. STRAKA: So figure 5 describes the typical LNA for a ground terminal, and so the typical LNA, it's talking about a low noise amplifier. And this is part of the argument with respect to it not being clear what the compression curve function is supposed to model.

So compression curves in general -- again, our argument is not that a compression curve is not well-understood in the art or that a person of ordinary skill would not understand what a compression curve means. But compression curves are

understood in relation to active devices like amplifiers.

And so to the extent that figure 5 illustrates a compression curve function, it doesn't call it a cession curve function. But to the extent that the line is a compression curve, it's a compression curve function for an active device, an amplifier.

And if we look back here what we're modeling here, this is a method or for canceling passive intermodulation products. And so the intermodulation products are the result of passive components within the system, and Doctor Mahon explains, again in paragraph 87 of his declaration, that the patent discloses that 'passive IMPs' are signals created in passive components, usually created by imperfections and physical characteristics like wave guides, and these are typically components without gain.

And so to the extent that figure 5 does show a compression curve for an amplifier, it's not clear what such a compression curve function would be for a passive component because the passive component doesn't have this same type of gain characteristic like an amplifier does.

THE COURT: What would you say to the statement that this is really more an enablement issue than it is a question of indefiniteness?

MS. STRAKA: So I think that there may be an enablement issue here, but I still think that it is indefinite

because it's just not clear -- I mean, at least for the previous reason--it's not clear what the two signals are that have to be convolved, and so it's still not clear what the composite signal set is, even if it's clear to a person of ordinary skill in the art, generally speaking, what a compression curve is. And, then again, here, because we don't know which particular device we are modeling, there is no information in the specification for the person of ordinary skill in the art to figure out what this compression curve function is supposed to be.

And so I think that there may also be an enablement issue here, but I don't think that means that the claim is sufficiently definite because it's still ambiguous to a person of ordinary skill in the art what map is required.

THE COURT: What level of ordinary skill do you claim a person of ordinary skill in the art would have here?

MS. STRAKA: Your Honor --

THE COURT: How do you describe a person of ordinary skill in the art?

MS. STRAKA: I haven't memorized this. I do believe Doctor Mahon has an opinion on that.

THE COURT: Doesn't he say it would be somebody with a Master's degree in electrical engineering?

MS. STRAKA: I believe that's right, Your Honor.

THE COURT: Okay.

MS. STRAKA: So with respect to this last point I made about it not being clear what the compression curve function would be in relation to a passive non-linear device, this was another question that we asked Doctor Wells, Plaintiff's expert, during his deposition, and we asked him specifically, "You don't know if you could describe a passive non-linear device using a compression curve function, then?"

And he responded, "Yeah, I don't know. I haven't thought about that."

And with respect to this compression curve function point, that's our main point here is that for a passive component it's just not clear at all what a compression curve function would be to a person of ordinary skill in the art.

THE COURT: So you're equating 'I haven't thought about it' with 'it can't be done'. I mean, the witness here clearly hadn't thought about it. There are lots of things I'm asked that I haven't thought about that later I come to an answer in my own mind. I assume you understand that.

MS. STRAKA: Yes, Your Honor.

THE COURT: Okay. What else do you have for me?

MS. STRAKA: That's all, unless you have any other questions, Your Honor.

THE COURT: No, I don't. Thank you, counsel.

Let me hear from the Plaintiff, please.

MS. GRIFFITH: Thank you, Your Honor. Meg Griffith

again for Plaintiff.

May I proceed?

THE COURT: Yes, please.

MS. GRIFFITH: Your Honor, I think that you touched on one of the questions that I had when I saw that this term had been proposed as indefinite. It sounds as if Defendants' and Intervenors' expert Doctor Mahon understands what 'convolving' means and understands what 'a compression curve function means', but says that because this isn't a new scenario to him, that the two terms together are indefinite.

And from the first stance of -- the burden that Defendants have here to prove this is indefinite is clear and convincing evidence. We disagree that they've shown that, first because neither of the terms, 'convolving' nor 'compression curve function', are indefinite in the art, but also based on the claim language here the terms are not indefinite in combination.

I'm not going to spend time, unless Your Honor would like me to, on 'convolution', as it appeared that Defendants concede that 'convolution' is not an indefinite term on its own. But let me know if you'd like --

THE COURT: No, I think that's fine. My understanding is Defendants' main argument rests on the compression curve function.

MS. GRIFFITH: Yes, Your Honor.

So for that, I'd like to start --

Ms. Vela, could you please go to slide 79?

So this is the abstract, which is -- which sets forth that one of the key parts of the inventions taught in the '775 Patent is the digital generation of the IMP cancellation signals using a process based on a power series description of a non-linear process. And as I'll walk through in each of the claims where this language about 'compression curve functions' and 'convolving' appears, each of those claims relates back to a claim that does involve a power series description.

So, Ms. Vela, if you could go to page 81 -- slide 81.

So here, for example, in claim 15, which is depending on claim 4, it explains that the calculation of the passive IMPs based on a power series description of a non-linear process in a transmitter hardware chain, and explains that it can be done in two ways--by standard non-linear amplitude control function or a compression curve. So each of those latter two in this highlighted section, standard non-linear amplitude control function or compression curve, those are describing -- further narrowing what a power series description could be, or which types of power series descriptions we have.

Unless I missed it, I don't think that Defendants are arguing anymore that we need to -- that Plaintiff needs to outline every single possible formula or compression curve that we would need to model, but we believe that the fact that

it's described as a power series description provides enough enablement to understand what 'compression curve' is referring to.

Ms. Vela, could you please go to the next slide?

So each of the claims that recite this language cites back to a prior power series description of a non-linear process. And I'd like to focus first on claim 4 and 10 that are up here on the screen.

So, first, based on the language that I've shown you in claim 15, we believe that the fact that the claims, like claim 10, that depend on the earlier claim are describing a more specific way of carrying out the calculation that's described in the independent claim. For example, here at the end of claim 10 it says, "To carry out the method of claim 4 by convolving a composite transmitter signal set with a compression curve function." This is relating back to claim 4, which talks about generating the ICSes based on the power series description. There shouldn't be a question here about which transmitter signal set we're talking about, what's going to be convolved; instead, this is -- each of these dependent claims are citing back and saying, No, it's not just a power series description; it's a more specific version of that; we're looking for a compression curve function.

The other point that I heard from Defendants today that I'd like to point out is that while these claims are directed

to passive intermodulation products, they aren't happening purely in non-linear passive devices. Specifically here, claim 4 refers to passive intermodulation products that are generated in the transmitter and receiver chain after a high power amplifier. And so an understanding how high power amplifier can be relevant here, an amplifier would further affect the intermodulation products and distortion that could occur.

Further, we take issue with the idea that a compression curve can only apply in the space of an amplifier or an active gain scenario; rather, non-linear distortions can occur in passive components as well, and rather than there being compression in the sense of gain being controlled, in passive components there is the opportunity for mixing and there is the possibility of attenuation of a signal rather than compression. But they still can be described in the same sense because both active and passive intermodulation products are the result of the non-linearity that exists. In active products -- I mean, sorry -- in active components, the non-Linearity is the result of the amplifier; in passive components, the non-linearity can be based on a rusty bolt or something else as interrupting the signal and allows the opportunity for mixing.

The -- Your Honor pointed to figure 5, which we believe underscores that somebody in this space, a person with the

requisite skill in the art, would understand what a compression curve is referring to in the sense that a compression curve recognizes that any time there is a non-linearity -- again, an amplifier, it's a limit that forces the compression, in passive components it can be an attenuation, but in either circumstance there's something that is causing the signal to have an opportunity to mix or to be otherwise distorted.

And then, finally, I'd like to go Ms. Vela, if we can, to slide 89. Actually 91.

So I think that we've shown -- or at least we agree with Defendants that 'convolution' is well-understood in the art. It appears that both experts understand what 'compression curve function' means even if it appears that Defendants are trying to limit that to active components.

So I kind of want to talk about what is really happening here. What's happening is instead of allowing Finesse to contend which components of Defendants' or Intervenors' products are performing these steps or identifying the methods instead of arguing, No, those don't infringe this after all, we're trying to get headed off with indefiniteness. And respectfully, Your Honor, we believe that that's something that should come at the next stage in the case. Both of these terms are well-understood to people in the art, and if Defendants want to contend that Finesse's expert is

identifying something that does not fit this definition, we believe it should be taken up then.

Thank you, Your Honor.

THE COURT: All right. Thank you.

Anything further from the Defendants and Intervenors?

MS. STRAKA: Just briefly, Your Honor.

THE COURT: All right.

MS. STRAKA: I just briefly want to address the last point.

So I think -- and, Mr. Jackson, can you pull up slide 98?

So I just want to reiterate this point that what the compression curve function is is really not clear here. We heard Plaintiff's counsel make an argument about, Well, these passive intermodulation products -- and I think it's very clear from claim 4 that these passive intermodulation products are supposed to come from components that are after the high-powered amplifier. That's just right there in the plain language of claim 4. And Plaintiff's counsel is making an argument about, Well, in these non-linear components it could be some sort of attenuation or it could be something else, and there's nothing in the specification to say that those passive components, you know, whatever non-linearities may be, that those are compression curve functions. And I think that's exactly what the issue is here.

Here on Defendants' slide 98, doctor Mahon puts it